

Walden University ScholarWorks

Walden Dissertations and Doctoral Studies

Walden Dissertations and Doctoral Studies Collection

2023

The Experiences of Middle-Aged Women in an Online Weight-Loss Community

Holly Fields Walden University

Follow this and additional works at: https://scholarworks.waldenu.edu/dissertations



Part of the Public Health Education and Promotion Commons

Walden University

College of Education and Human Sciences

This is to certify that the doctoral dissertation by

Holly Fields

has been found to be complete and satisfactory in all respects, and that any and all revisions required by the review committee have been made.

Review Committee

Dr. Summer Parrott, Committee Chairperson, Health Education and Promotion Faculty Dr. Kimberly Brodie, Committee Member, Health Education and Promotion Faculty

Chief Academic Officer and Provost Sue Subocz, Ph.D.

Walden University 2023

Abstract

The Experiences of Middle-Aged Women in an Online Weight-Loss Community

by

Holly Fields

MS, Virginia Tech, 2012

BS, Radford University, 1993

Dissertation Submitted in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Philosophy
Health Education & Promotion

Walden University

September 2023

Abstract

The obesity epidemic continues to be a public health crisis in the United States. The number of obese middle-aged women has risen dramatically over the past few decades. Despite multiple levels of support available, not all women are receiving the support they need to reduce overweight/obesity, as evidenced by the continuing rise in obesity. Using a qualitative phenomenological approach, this study examined middle-aged women's views on exercising, eating healthily, and social support in online weight-loss communities. For this study, the health belief model (HBM) and social learning theory (SLT) were used as conceptual frameworks to understand a person's behavioral intentions (HBM) and how they might be influenced by the behavior of others (SLT). The recruitment of participants who met the inclusion criteria was based on purposeful sampling. Fifteen virtual semi structured interviews were conducted, recorded, and transcribed in order to identify categories and themes; when saturation was achieved, data collection was completed. Participants in an online weight-loss community between the ages of 40 and 58 years were interviewed via virtual interviews. There were 10 emergent themes identified by using Dedoose software to analyze the data. Both narrative and thematic analysis were used to analyze data from the transcripts. Exercise, nutrition, and personal support in their community influenced their decisions and actions for reducing overweight/obesity. Identifying additional strategies for programming that are specific to this age group could contribute to positive social change through the outcomes of this study. With the support of others, reducing obesity can improve overall health and lead to positive social change.

The Experiences of Middle-Aged Women in an Online Weight-Loss Community

by

Holly Fields

MS, Virginia Tech, 2012

BS, Radford University, 1993

Dissertation Submitted in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Philosophy
Health Education & Promotion

Walden University

September 2023

Dedication

I dedicate this dissertation to my "swolemate" and nowfiancé, Luke, who has been with me every step of the way along this dissertation journey of over 6 years. In the moments when I doubted myself and wanted to quit, he always supported and encouraged me. I dedicate this to my children, Connor, and Carter, who are the lights of my life. As I have been inspired by both of you, I hope that one day you will also be inspired to reach beyond what you think is possible. My God in Heaven, I know I would not be able to do this without you, so I thank you for giving me strength. Also, I would like to dedicate this to my own father. He passed away at the end of my master's degree in 2011, before I began this dissertation journey. As a child, my dad always believed in me and thought mostly everything was spectacular. I know he would have been so proud of me becoming the first PhD in our family. While I could have used his encouragement, I could always hear him saying, "Holly, you've got this". To conclude, I dedicate this dissertation to all of the women I have coached on their fitness journeys and to those who trusted me to interview them and learn more about their experiences.

Acknowledgements

First, I thank the Lord for giving me the strength to make it through this journey.

Nothing is possible without Him, and I give Him the highest praise. I know that I only made it through this process because of my belief that He has given me courage to persevere through hard times in life.

Thank you to my doctoral chair, Dr. Summer Parrott, for her continuous support, motivation, and encouragement. She was invaluable in getting me through this grueling journey, which I wanted to quit many times. Thank you for always encouraging me and helping me bring this dissertation to fruition. I could not have completed this project without you. I want to also thank my second committee member, Dr. Kim Brodie. From the first feedback on my dissertation when you said how important this topic was, my entire outlook changed.

My journey would not have been possible without my friends and family. Thank you to all that listened to my stories and struggles through this process-you are amazing! Also, thank you to those who really didn't think I could make it. Yes, it takes what seems like forever, but being doubted is great fuel to push through the process.

Table of Contents

Ch	apter 1: Introduction to the Study	1
	Introduction	1
	Background	4
	Problem Statement	6
	Purpose of the Study	10
	Research Questions	10
	Conceptual Framework	11
	Social Learning Theory	12
	Health Belief Model	14
	Nature of the Study	15
	Definitions	19
	Assumptions	20
	Scope and Delimitations	21
	Limitations	22
	Significance of the Study	23
	Summary	24
Ch	Chapter 2: Literature Review26	
	Introduction	26
	Literature Search Strategy	28
	Conceptual Framework	29
	Social Learning Theory	30

	Health Belief Model	35
	Literature Review Related to Key Concepts	38
	Middle-Aged Women & Obesity	39
	Comorbidities of Obesity in Middle-Aged Women	40
	Consequences of Obesity in Middle-Aged Women	42
	Treatments for Overweight/Obesity	44
	Online Communities and Social Support Networks for Weight Loss	47
	Summary and Conclusion	54
Ch	napter 3: Research Method	56
	Introduction	56
	Research Design and Rationale	56
	Role of the Researcher	59
	Methodology	60
	Participant Selection	60
	Instrumentation	62
	Researcher Developed Instruments	64
	Recruitment, Participation, and Data Collection	64
	Data Analysis Plan	66
	Issues of Trustworthiness	69
	Ethical Procedures	74
	Summary	76
Ch	napter 4: Results	77

Introduction	77
Participant Demographics	78
Data Collection	79
Data Analysis	81
Evidence of Trustworthiness	83
Credibility	83
Dependability	86
Confirmability	87
Results	88
RQ1	89
SubRQ1	93
SubRQ2	98
SubRQ3	101
Summary	105
Chapter 5: Discussion, Conclusions, and Recommendations	106
Introduction	106
Interpretation of Findings	106
Theme 1: Seeking Social Support	107
Theme 2: Need to Lose Weight	108
Theme 3: Multiple Health Concerns	110
Theme 4: Nutrition Guidance Received	111
Theme 5: Unrealistic Nutrition Ideas	112

Theme 6: Helpful Nutrition Tips and Guidance		
Theme 7: Helpful Exercise Tips and Recommendations		
Theme 8: Exercise Recommendations not Personable		
Theme 9: Encouragement and Accountability		
Theme 10: Weight Loss Goal Discussions		
Summary of Key Findings		
Limitations of the Study		
Recommendations		
Implications		
Conclusion		
References		
Appendix A: Social Media Post		
Appendix B: Screening Survey		
Identification (age)		
Overweight/Obesity identification		
Knowledge of Study		
Contact Information		
Appendix E: Interview Script		

Chapter 1: Introduction to the Study

Introduction

There has been a tripling of obesity prevalence over the last four decades, resulting in a health crisis for millions of people worldwide (Loos & Yeo, 2021). Globally, at least 2.8 million people die every year from being overweight or obese, and overweight or obesity is responsible for an estimated 35.8 million (2.3%) of disability adjusted life-years (DALYs) (World Health Organization [WHO], 2023). In 2017, 4.7 million people died prematurely due to obesity, according to the Global Burden of Disease study (Richie & Rosen, 2017).

According to the 2017-2020 National Health and Nutrition Examination Survey, 41.9 percent of adults nationwide are obese. Approximately four out of ten Americans are obese, according to State of Obesity 2022: Better Policies for a Healthier America (Warre et al., 2022). Because obesity has been increasing over time and COVID-19 has added complications, the United States must implement long-term, evidence-based programs to reduce obesity. Collaboration across public and private sectors needs to be increased, bolder and better solutions need to be built, and more attention and action must be given to addressing the underlying conditions and structural and systemic inequities that undermine many Americans' health (Warren et al., 2022).

Women are significantly more likely to be severely obese than their male counterparts (Galvin, 2020). Weight disparities are particularly concerning among middle-aged women (ages 40-58 years), with a 43.3% rate of obesity in middle-aged women in the United States (Gao et al., 2019). Obesity puts middle-aged women at a

higher risk of health issues such as coronary heart disease and diabetes (Gao et al., 2019). The 40–58-year age range includes when most women are perimenopausal (Nguyen, 2022). Menopause occurs when the ovaries stop producing estrogen and progesterone hormones (Beadini et al., 2019). Women start losing muscle mass during this time frame, and fat storage tends to increase (Monteleone et al., 2018). This change in body composition puts women at a higher risk for metabolic diseases such as heart disease and diabetes (Beadini et al., 2019). Neurochemical changes during the menopausal transition are associated with other menopausal symptoms, such as hot flashes and mood changes (Monteleone et al., 2018). Decreased energy expenditure occurs due to muscle loss and decreased hormone production, even when nutrient intake and activity levels stay the same (Beadini et al., 2019). Therefore, middle-aged women are unique in their body chemistry and nutritional and exercise needs.

Regular physical activity helps increase energy levels, muscle strength, balance, flexibility, and stress management (Klemm, 2020). Physical activity helps to lower rates of obesity in middle-aged women; therefore, understanding how middle-aged women can improve upon activity levels is crucial for health practitioners. Physically active individuals tend to adopt healthier lifestyles, and research has shown that women tend to have a weight loss goal when they pursue healthier eating choices (Carraca et al., 2019). Women's physical activity seems essential for eating regulation, whether they are doing it to lose weight or for other reasons.

Weight-focused physical activity leads to higher eating motivation. In contrast, lower quality (introjected motivation) is related to a less intuitive eating style (Carraca et

al., 2019). Carrard et al. (2018) noted that in the CoLaus study (which studied middleaged women in 2009-2012) that, women in any age group (both 40-59 years and 60-80 years) had the desire to lose weight, regardless of their current BMI. Carrard et al. (2018) found that women with overweight/obesity, regardless of age, also expressed a desire to lose weight. Despite having standard body mass indexes, women desiring to lose weight may suffer from impaired psychological health (Carrard et al., 2018). Carrard et al. (2018)indicated that healthcare professionals should not consider this normal as a possible indicator of psychological health and dietary adherence. Goodman et al. (2018) found that middle-aged women with eating disorders are often undiagnosed. Women aged 50+ were examined for their associations with eating psychopathology with both weight suppression (WS) (current weight * highest weight) and weight elevation (WE), the opposite of WS (current weight > lowest weight) (Goodman et al., 2018). Goodman et al. (2018) found that people who scored higher on WS and WE were more likely to be in a weight loss program, dieting in the past five years, or have been in extreme lifetime caloric restriction. Binge eating, frequent weight checking, overvaluing shape and weight, and lifetime fasting were more common in individuals with higher WS. A higher WE were associated with a greater likelihood of reporting negative life impacts of eating and dieting. Skipping meals throughout a lifetime was associated with higher levels of WS and WE (Goodman et al., 2018). Making healthier food choices would benefit middleaged women (as well as most populations). The Centers for Disease Control (CDC) recommends choosing healthy foods to help prevent heart diseases (CDC, 2020).

Nutrient-rich foods also provide energy for middle-aged women, who also need an increase in protein consumption as they age (Silva et al., 2021).

Despite the need for appropriately tailored interventions, the needs of this at-risk population are not currently being addressed. Neither the CDC statistics nor the initiatives outlined in Healthy People 2030 focus on targeting specific age groups (Office of Disease Prevention and Health Promotion [ODPHP], n.d.). Thus, there is a need for an intervention specifically targeting middle-aged women to help decrease weight-related health disparities and increase the quality and quantity of life. The present study aimed to identify how women in the United States perceive obesity, targeting women 40-58 years old in an online weight loss community. Furthermore, this study seeks to make recommendations for future interventions among this at-risk population.

An overview of the impact of obesity on Americans as well as middle-aged women's struggles with overweight and obesity is provided in Chapter 1, along with information about how online weight-loss communities may be able to improve their lifestyles and long-term health. This chapter also presented the study's problem statement, purpose, and research questions. Finally, the nature of the study, definitions, assumptions, scope and delimitations, limitations, and significance was presented in Chapter 1.

Background

Weight gain and fat gain are increasing struggles for middle-aged women.

Abbaspoor et al. (2020) identified that weight loss can positively influence middle-aged women in many aspects of their lives, suggesting that multiple parameters can potentially

change psychological, physical, physiological, and anthropometric measures, even in a short-term weight loss program. One of the most common methods of reducing weight is through exercise and diet changes. Petridou et al. (2019) identified the importance of exercise in preventing excess weight gain and determined how exercise can reduce body weight and fat. Saghafi-Asl et al. (2020) established factors that influence weight management concerning the health belief model, which included perceived benefits, self-efficacy in exercise and dieting, and perceived threats. Given this information about self-efficacy and the benefits of exercise, middle-aged women are likely to benefit from this model as a critical component in a weight-loss program.

The social learning theory, also called the social cognitive theory, could also be a model used within an online community. In addition to providing education and program development, online weight-loss communities can offer middle-aged women a network of support that can help them stick to their programs and change their lifestyles for the long term. According to Shi et al. (2021), individuals either learn through actual doing (active learning) or by observing others (vicarious learning), and the positive outcomes they receive will serve as models for future behavior.

Wang and Willis (2018) provided insight that social support in online communities is promising but noted that social media and its impact on weight loss is still an underdeveloped area of study. Activity can be achieved through dedicated workout sessions and daily activities, including movement throughout the day and leisure activities. Feig et al. (2019) concluded in their study of 602 hospital employees that leisure-time activity leads to healthier food choices versus work-related physical activity.

Feig et al. (2019) acknowledge that wellness programs may need to be customized for adults to meet their unique needs. It should be addressed whether exercising can lead to greater food consumption. If exercising tends to lead to greater food consumption, this could be a focus of health practitioners in the design of weight loss programming.

West et al. (2017) also explored whether exercise motivation predicted engagement in unhealthy snack consumption and beliefs and attitudes toward unhealthy snacks. Carraca et al. (2019) expanded on the idea that being active in a program for losing or controlling one's weight appears to be linked to high eating motivation. Carraca et al. suggested other relevant variables besides eating motivations when associating physical activity and intuitive eating (Carraca et al., 2019).

Women of middle age may find that social support helps them stay motivated to make healthy eating choices and stick to an exercise program. Still, a weight loss program should also lead to lifestyle changes so the overweight/obesity pattern is not recurring throughout life. Health educators can use the results of this study to design online programs that will help middle-aged women combat overweight/obesity with the help of community networks. Obesity among middle-aged women must be conquered as it negatively affects their health and wellness on a long-term basis, as well as the health of their families.

Problem Statement

The obesity epidemic is a global health issue that threatens the sustainability of healthcare systems across the globe (Ferretti & Mariani, 2017). According to the World Health Organization (WHO), obesity rates globally have tripled since 1975, with more

than 1.9 billion adults (39%) being overweight and more than 650 million (13%) obese. The Organization for Economic Cooperation and Development (OECD, 2022), states that the obesity rate in the United States is increasing steadily, with 73.1% of Americans classified as overweight or obese.

It is well known that obesity increases the risk of many chronic diseases, negatively impacts quality of life, increases healthcare costs, and generally makes conditions more severe in the U.S. health care system (CDC, 2020). Amiri (2018) defined Health-Related Quality of Life (HRQOL) as an individual's subjective assessment of the quality of their wellness regarding their physical and mental health.

Yang et al. (2018) conducted a study focusing on HRQOL among middle-aged women. Although the study by Yang et al. was conducted on women in a South Korean community, the findings would be comparable among women worldwide, including this study's group in the United States. As compared to the normal-weight group, the overweight group scored significantly lower on the WHOQOL-BREF and some of the HPLP II subscales, including stress management (P = 0.029). The HPLP II subscales on stress management had a significant and positive effect on both WHOQOL-BREF and self-esteem IWQOL-Lite among the overweight sample (Yang et al., 2018). According to Yang et al., overweight middle-aged women showed low levels of health-promoting behavior for stress management, which could be strategically improved for improving general and obesity-specific HRQOL.

Prior studies have reported an adverse association between obesity and quality of life, primarily in the physical domain. Zhang (2019) reported that being overweight and

obese was negatively associated with HRQOL and said there was a need for focused interventions, mainly for women, to reduce the obesity effects associated with poor HRQOL. Even though regular physical activity may reduce obesity and its complications, many Americans do not engage in physical activity regularly; only 26 percent of men and 19 percent of women meet the relevant aerobic and muscle-strengthening guidelines (CDC, 2021).

Ling & Rönn (2019) stated that the prevalence of obesity is increasing at a rate that cannot be explained by genetic factors; noting that rather environmental factors are the likely driver (Ling & Rönn 2019). Given the obesity epidemic, our genes may be designed to store fat or to accumulate as much excess energy as possible (Ling & Rönn 2019). With the global improvement in living standards and an abundance of fast food and other energy sources, it is understandable that our bodies are finding it difficult to adjust to the new environment (Ling & Rönn 2019). Our genome has not changed so much in recent decades that it predisposes the entire world population to obesity. Environment, however, may have influenced human disease through interactions with our genome (Obri et al., 2020).

Environmental pollutants alter epigenomes, which in turn transmit obesity risk to the next generation (Obri et al., 2020). Supporting this information, Ling and Rönn (2019) also stated that through epigenetic mechanisms, environmental factors influence gene activity, thereby explaining obesity. Although environmental factors play an important role in obesity, along with sedentary lifestyles, energy dense diets, and reduced energy expenditure, a genetic basis for obesity is undeniable (Rohde et al., 2019). As

evidence accumulates that lifestyle and nutrition influence epigenetic inheritance of disease risk, this could explain the rapidly increasing obesity rates (Obri et al., 2020). Rohde et al. (2019) proposed that the ultimate goal of clinical obesity treatment and intervention is to identify individual risk profiles based on a combination of genetic and non-genetic factors. These profiles may be helpful for both predicting personal obesity risks and estimating how well treatment and interventions will work (Rohde et al., 2019). The epigenetic aspect of obesity goes beyond the scope of this study, but it is important to note the research related to this factor in the growing epidemic.

Despite the need for interventions to address weight-related health disparities among middle-aged women, research on programs targeting this demographic is limited (Devlin, 2019). Examining middle-aged women's perspectives in online weight-loss communities can help health practitioners develop appropriate weight-loss programs. These programs can help guide women's health choices and motivation to lose weight. Guided by the health belief model (HBM), this qualitative study aimed to understand the perspectives of middle-aged women toward exercise and nutritional choices from within an online weight-loss community.

As online weight-loss programs have grown in popularity, examining participants' quality of life, physical activity level, and weight status in these communities is vital. Further, considering the importance of health education programs in the fight against global obesity, it is crucial to understand the problem among adults who choose online communities to support their weight-loss journeys. Through the results of this study, health educators may be able to understand better how women in these

communities learn, stay motivated, and achieve their weight-loss goals through exercise, nutrition, and education. Additionally, future researchers may use the study's results to develop hypotheses to develop effective intervention programs for target participants health outcomes in online weight-loss communities.

Purpose of the Study

This study used an online weight-loss community to explore middle-aged women's lived experiences to develop more effective programs to reduce overweight and obesity in this group. The purpose of this qualitative study was to provide insights into middle-aged women's decision-making processes. A particular focus was on how involvement in an online community influenced nutrition and exercise choices, as well as how these women perceived the social support within the group. It was determined that these insights could help create lasting changes related to losing weight, improving these women's health, and eliminating problems that stem from obesity. Through interviews with middle-aged women, the research sought to uncover what aspects of an online weight-loss community are most helpful in the quest for better health and wellness, including specifics related to healthy food choices, exercise programs, and social support.

Using the findings of this study, researchers and healthcare practitioners may be able to develop more effective community experiences for middle-aged women who are trying to improve their health and wellness by understanding how middle-aged women perceive online weight loss communities.

Research Questions

The following research questions will guide the scope of this research:

RQ1: How do middle-aged women perceive their experiences within an online weight-loss community?

Sub RQ1: How do middle-aged women describe their experiences in an online weight-loss community toward their nutrition?

Sub RQ2: How do middle-aged women describe their experiences in an online weight-loss community toward their exercise?

Sub RQ3: How do middle-aged women describe their experiences with social support in an online weight-loss community?

Conceptual Framework

According to Varpio et al. (2020), the conceptual framework explains why a given study should be conducted. A conceptual framework identifies gaps in our understanding of a phenomenon or problem, describes the state of known knowledge, and outlines the methodological underpinnings of the research. The purpose of the study was to answer two questions: "Why is this research important?" and "How might this research contribute to existing knowledge?" (Varpio et al., 2020).

An individual's lived experiences in an online weight-loss community were the focus of the study of phenomenology, an approach to qualitative research (Neubauer et al., 2019). Neubauer et al. (2019) asserted that using phenomenology to explore challenging health problems is an effective research strategy. While there are multiple approaches to conducting a phenomenological study, the conceptual framework for this study was the social-learning theory. In this theory, the learners/participants gain knowledge via a social context (Chuang, 2021). Their online community\ experiences

help form their actions toward weight loss and health improvement behaviors. The concepts explored included what middle-aged women felt motivated them to exercise and make healthy nutritional choices.

Social Learning Theory

Because this research was derived from women within online communities, it was vital to understand how influences could occur from other members of the same community. In Bandura's theory of social learning (1977), people learn by observing others' behaviors and the consequences of those behaviors. Through direct experience or observation of others, individuals learn new behaviors in the social learning process (Bandura, 1977). Often, individuals face decisions that may or may not be governed by the most likely consequences.

In Bandura's (1977) theoretical framework of social learning, the reinforcement rules provide the individual with informative and incentivized functions, thereby strengthening their response resources. A person can determine whether the consequences of a behavior will be positive based on the informative feedback of the behavior. Individuals learn through this understanding through experiences, and their repercussions reinforce their behaviors. Reinforcements of behavior greatly influence the motivational effects of the individual (Bandura, 1977). The impact of social support on people's health related quality of life and subjective well-being is well documented among the social determinants of health (Phoenix et al., 2022).

The relationship between psychosocial resources and health-promoting behaviors has been extensively studied, according to Qin (2022). As an example, lower self-

efficacy is associated with earlier relapse of alcohol consumption and smoking (Simmons et al., 2013; Tate et al., 2008). Fjeldsoe et al. (2011) and Kelly et al. (2016) suggest that low self-efficacy is a major barrier to health behavior maintenance. In addition, McAuley et al. (2011) found that interventions aimed at enhancing self-efficacy were more successful in maintaining long-term physical activity participation. Additionally, social support from network members can influence individuals' engagement in health-promoting behaviors (Antonucci et al., 2013; Berkman and Glass, 2000).

According to Ahn et al. (2019), it is possible to acquire a desired behavior simply by observing a model demonstrating that behavior, without (the observer) personally experiencing the consequences associated with doing so (Bandura, 2005; Bandura, Ross, & Ross, 1963; S. K. Gibson, 2004b; Horn & Williams, 2004). Currently, research has identified a number of valued outcomes that provide such "rewards" according to Ahn et al. (2019): improved sense of belonging (Stout, Dasgupta, Hunsinger, & McManus, 2011; Rosenthal, Levy, London, Lobel, & Bazile, 2013); increased self-efficacy (Stout, Dasgupta, Hunsinger, & McManus, 2011); and increased achievement (Lin-Siegler et al., 2016).

Researchers have paid considerable attention to examine and identify outcomes (mostly favorable) when models are imitated in role model research (Ahn et al., 2019). Essentially, this process is similar to Bandura's "motivational process", in which favorable outcomes reinforce the likelihood of imitation. Accordingly, observers will perform the modeled behaviors for their rewarding outcomes (Ahn et al., 2019).

Health Belief Model

The HBM is an individual health model that helps determine why people will or will not act to prevent adverse health behaviors. The HBM is an established model for identifying behavior correlations and informing health educators about intervention design and evaluation (Glanz et al., 2015). The HBM recognizes health motivation as its central focus, so it is an appropriate model for addressing problem behaviors that evoke health concerns (Glanz & Rimer, 2018). It was expected that the middle-aged women in these online weight-loss communities might have received motivation from other members as they could identify what methods led to the most progress in the health-seeking behaviors of others.

The four primary constructs of HBM are perceived susceptibility, perceived severity, perceived benefits, and perceived barriers (Rosenstock, 1966; Sulat et al., 2018). According to this model, if an individual perceives potential benefits of target behaviors in reducing the emergence of health problems and perceives low barriers to adopting them, they will then be likely to adopt them (Champion & Skinner, 2008; Rosenstock, 1966; Sulat et al., 2018). Behavioral health research has extensively used HBM to design interventions and predict health behavior changes. Compared with other frameworks, it has been widely used for promoting health behavior change interventions for the past three decades (Sulat et al., 2018).

Health perceptions can be used to develop effective strategies for reducing overweight/obesity through HBM. To initiate behavior changes, this study aimed to connect where women value health information about being overweight and obese. By

applying this theory, I was able to identify themes from data collected via open-ended questions about participants' lived experiences with obesity within an online weight-loss community (Creswell & Creswell, 2017).

Nature of the Study

Despite a growing body of research that illustrates how genetics play a significant role in obesity, obesity can be treated and may be preventable, regardless of gender and ethnicity. To help clients with obesity, healthcare professionals need to understand, from a subjective point of view, the experiences of obesity and what measures need to be taken for weight loss to occur. Since the outbreak of Covid-19 in 2020, online weight-loss communities have become increasingly popular (PeerBoard, 2021). The purpose of this study was to explore the lived experiences of women seeking support and feedback within online weight-loss communities.

This research was a qualitative research study. Creswell & Creswell (2017) defines qualitative research as an inquiry process of understanding based on exploring a social or human problem. This research examined the relationship between perceptions of physical activity and nutritional choices. In this study, demographic information was collected to determine participants' age, physical activity, and background information, and semi structured interviews were conducted to obtain information about participants' diet and exercise experiences.

Qualitative designs focus on learning the participant's meaning of the phenomena, not the researcher's meaning. The objective of this study was to help health educators understand the experiences of middle-aged women in a weight loss community in terms

of nutrition and exercise, and create related interventions based on the information gathered. Purposive sampling was used to recruit participants.

Andrade (2020) states that research is also almost always conducted on purposive samples. The purpose of a purposive sample is to determine its characteristics following this study's objectives. Palinkas et al. (2016) note that sampling strategies for qualitative methods in implementation studies are less explicit and often less obvious, but qualitative inquiry is generally assumed to yield cases with "rich" information of inclusion and exclusion criteria, each serving a different purpose (Andrade, 2020).

A qualitative study may be conducted with a relatively small and carefully selected sample with the aim of gaining a deeper understanding (as opposed to breadth) (Campbell et al., 2020). A purposeful sampling strategy is a way to identify and select cases that will make effective use of limited research resources (Campbell et al., 2020; Palinkas et al., 2015) and select respondents whose responses are most likely to provide relevant and useful information (Kelly, 2010: 317).

Andrade (2020) noted that purposive samples have many advantages. These techniques include studying only the population of interest, making the sample homogeneous (reducing variance between subjects makes statistical significance easier to reach), or excluding subjects at risk for serious adverse events. As with convenience samples, the more purposive a sample is, the less external validity it will have (Andrade, 2020). This study consisted of online recruitment through social media outlets such as LinkedIn and Facebook.

Most qualitative research focuses on conceptual thematic hierarchies, usually represented as coding trees, according to Buckley (2022). A primary methodological consideration is saturation: the process of eliciting or extracting a sufficiently comprehensive range of lowest-level concepts to ensure a stable and efficient hierarchy of higher-level constructs and the validity of any proposed explanation model (Buckley, 2022).

To reach saturation, Weller et al. (2018) proposed that gaining more depth by probing and seeking the most salient ideas is a more productive focus. According to them, researchers should look for important or salient ideas rather than all the ideas and themes. The number of responses per person increases the likelihood of capturing more salient items. According to Weller et al., the first 10 interviews yielded 95% of the salient ideas.

The number of responses per person affect both saturation and the number of items obtained, according to Weller et al. (2018). It was found that more responses per person resulted in a greater yield of domain items. In a sample, bits of information can be approximated by the number of responses per person (list length) and the number of people (Weller et al., 2018).

Glaser and Strauss (1967) determined that the theoretical saturation of a category should be used to determine when to stop sampling the various groups within it. The term saturation refers to the fact that no further data are being found for the development of the category's properties. By observing similar instances repeatedly, the researcher becomes confident that a category is saturated. Just to ensure that saturation is based on the widest

range of data, he goes to great lengths to search for groups that stretch the diversity of data as far as possible (Saunders et al., 2017).

As far as sampling is concerned, the determining factor is the degree of development of a theoretical category in the analysis process. Dey (1999) concludes that saturation is therefore closely related to the notion of theoretical sampling—the idea that sampling is guided by 'the necessary similarities and contrasts required by the emerging theory, with Bryman (2012) adding that the researcher should combine sampling, data collection, and data analysis, rather than treating them as separate stages in a linear process (Saunders et al., 2017).

From a grounded theory standpoint, Urquhart (2013) defines saturation as: 'the point when no new codes appear in the data after you have coded the data'. As defined by Given (2016), saturation is the point at which new emergent themes cannot be created through additional data. Some others have taken the same position regarding the (non)emergence of new codes or themes, including Birks and Mills (2015) and Olshansky (2015) (Saunders et al., 2017). Rather than referring to the collection of new data, Urqhart (2013) and Birks and Mills (2015) related saturation to the termination of the analysis (Saunders et al., 2017). As defined by Starks and Trinidad (2007), theoretical saturation occurs when the complete range of constructs that make up the theory is sufficiently represented by data (Saunders et al., 2017).

Definitions

Individuals, communities, and healthcare professionals can benefit significantly from healthcare terminology definitions. Terms used in this qualitative study are defined below:

Body image: An individual's sense of self and physical body regarding appearance (Goodman et al., 2018).

Body Mass Index (BMI): A calculation using the weight and height of an individual, also correlating the amount of body fat. An adult with a BMI between 25 and 29 is considered overweight; an adult with a BMI of 30 or higher is considered obese (CDC, 2021).

Experience: knowledge or skill gained by the individual.

Menopause: No menstrual periods have occurred for at least one year (Yuan et al., 2023).

Middle age: In general, middle age is the period between the ages of 40 to 65, roughly defined as the period between youth and old age (Dohlberg & Ayalon, 2018).

Obesity: A BMI of 30kg/m2 or higher (CDC, 2021). Obesity is linked with abnormal or extreme fat accumulation contributing to health problems (CDC, 2021).

Online community: A group found via the internet. Online communities serve as supporting resources to increase information and emotional support (Johansson et al., 2021).

Overweight: A BMI between 25 kg/m2 and 30.0kg/m2 (CDC, 2021).

Perimenopause: The period of time before menopause, up to one year after the last menstrual period (Xing et al., 2023).

Social support network: A reinforcing/strong social support network (the number of contacts and their proximity) (Wu & Sheng, 2019).

Stigma: As a result of being overweight or obese, individuals are often subjected to verbal or physical abuse. In addition to negatively impacting physical health, weight stigma can also negatively affect psychological health (Wu & Berry, 2018).

Assumptions

In every study, underlying assumptions must be considered. The researcher conducting this study assumed that the participants shared their honest experiences with excessive weight while participating in an online weight loss community. By doing so, all narratives provided by the participants were explored honestly. When using purposive sampling, there is an assumption that the researcher will attain sufficient sampling to reach the saturation required for a reliable qualitative study. Coupé et al. (2019) identified one of the conditions for turning one's attention towards oneself and defining one's lived experience as epoché - or suspension of judgment - a central concept in the microphenomenological approach. In Greek, it means "paying attention to a particular phenomenon" (Coupé et al., 2019). Empirical science has made this process accessible to study subjective experiences (Coupé et al., 2019). By using the epoché approach, the researcher set aside all personal, preconceived notions, and biases about excessive weight. For this study, it was assumed that the interview guide would provide the most relevant qualitative information and that it would accurately collect the intended data.

Secondly, it was assumed that participants would answer interview questions with depth, openness, and honesty based solely on their experiences most directly related to the questions. The researcher hoped they would share insightful and meaningful responses about their experiences as members of an online weight-loss community. Thirdly, it was assumed that each individual only knew other community members from within their respective communities, not outside of those communities. Finally, the age and BMI information was self-reported and assumed to be correct, but not verified by the researcher.

Scope and Delimitations

The purpose of this study was to explore the subjective experience of obese or overweight middle-aged women participating in an online weight loss community. In this population, women between the ages of 40-58 years old were underrepresented and more likely to be obese. The study aimed to address these issues. This study was dependent on participants voicing their experiences with excessive weight. Additionally, researchers could use this information to develop group-focused weight loss, obesity treatment, and healthy behavior programs by exploring how social support networks contribute to a personal meaning associated with excessive weight. Only obese or overweight middleaged women were included in this study, providing information relevant to their beliefs and individual understandings. Researchers and health practitioners will be able to develop more effective treatment programs for middle-aged women who want to change their lifestyles.

Limitations

There are two potential limitations to this study. According to Jull et al. (2015), women often feel conflicted about their knowledge about weight loss and have difficulty communicating their experiences. It was possible that the language used by participants when describing their experiences may not capture the whole meaning of the experiences. Due to this limitation, all interviews were conducted anonymously through Zoom, using only audio. Conducting anonymous interviews were arranged to make it easier for the participants to share their stories and experiences." The relative anonymity of online interactions and the lack of shared social networks online" may promote self-presentation and authenticity compared to face-to-face meetings (Janghorban et al., 2014). In addition, being of a similar age could possibly allow the participants to feel a stronger connection to the researcher, making them more willing to share their experiences.

Secondly, the participants' recollections of their experiences were assumed as not always accurate. When describing our experiences, we often use filters. Participants were asked to take some time and reflect on their experiences before verbalizing, giving them time to think about all aspects of their experiences before sharing them. It was the researcher's intention to create an atmosphere of open, sharing dialogue with plenty of time allowed to answer questions, using probing questions if necessary.

The nature of the interview with each participant was designed to encourage sharing one's personal experiences. Therefore, conducting a qualitative study with obese or overweight and middle-aged women had considerable value in furthering this population's understanding of excessive weight.

Significance of the Study

The results of this research study could help fill a gap in the literature concerning how online weight-loss communities affect middle-aged women's implementation of a treatment decision-making plan. This study aimed to raise awareness about social influence within online weight-loss communities and the contribution to health disparities among women with overweight/obesity. The results were thought to highlight potential contributions to perpetuating public health inequities by speaking to the self-discovery of personal experiences regarding the impacts of online community programs/forums and the treatment of overweight/obesity in middle-aged women. According to the CDC, as of 2019, obesity was estimated to cost the United States nearly \$173 billion in medical expenses. There was an increase of \$1,861 in medical costs for obese adults as compared to people with a healthy weight (CDC, 2020). Individuals with more severe obesity have a greater impact on their health as well as on their health care costs. Health care professionals, payers, and policy makers must consider obesity's clinical, social, and economic implications as it becomes more prevalent (Massie et al., 2022). In response to obesity prevalence and burden in women, the increased risk of weight gain during midlife, the potential to prevent many chronic health conditions, and the evidence that behavioral interventions are beneficial to prevent weight gain with minimal harms, according to the Women's Preventive Service Initiative (2022). Among women aged 40 to 60, counseling may include an individualized discussion of healthy eating and physical activity (Chelmow et al., 2022).

The data generated from this research could help improve and develop policies within online communities, including ones implementing training of health professionals to help middle-aged women enhance their long-term health and wellness. This study had the potential to contribute to better health outcomes for middle-aged women, which can also significantly improve the lifestyles and health of the entire family unit. This study may also bring about positive social change for middle-aged women. Due to the potential benefit of increased awareness of this focused age/gender group, these women may benefit by being served more equally. There are gender differences that women experience due to hormonal changes and their body physiology that men and even other female age populations do not equally share. There is also potential for increased positive experiences with quality of care and health outcomes for these patients. The results of this study may lead to training focused on this specific population. Innovative protocols, practices, and policies can be implemented to address the overweight/obesity struggles within this population. Furthermore, specific new implementation standards and treatment approaches can be designed and implemented based on the findings of this research.

Summary

Chapter 1 provided background information on significant aspects of the study, including the severity of overweight and obesity amongst middle-aged women in the United States. This study's purpose, the problem statement, and the research questions were supported by the literature. Definitions were provided to ensure the accuracy of the

terminology used throughout the study. There was also a discussion of the nature of the study, its limitations, and its assumptions.

The literature review in Chapter 2 provided a comprehensive overview of this study's development. This broad overview was followed by an exhaustive literature review that summarizes relevant material and previous studies on the subject. The conceptual framework for this study was also outlined, explaining how the concepts apply.

Chapter 2: Literature Review

Introduction

The United States has an obesity epidemic, with most adults considered medically overweight (BMI of 25-29.9) or obese (BMI of 30 or above) (Robinson et al., 2020). The CDC published the age-adjusted prevalence of obesity in adults was 42.4% in 2017-2018. There were no significant differences between males and females among all adults or by age group. As compared with other age groups, severe obesity was most prevalent among adults aged 40-59 years, and among women, obesity prevalence was 43.3% (CDC, 2020). Women are significantly more likely to be severely obese than their male counterparts (Galvin, 2020). Women aged 40-59 years of age are often in the years of perimenopause. A woman's perimenopause, or transition to menopause, is the period leading up to her last period (Froeber & Greenberger, 2020). Klemm (2020) stated that during this period (of perimenopause), women start losing muscle mass, and fat storage tends to increase.

The primary cause of obesity is the imbalance of energy intake over energy expenditure (Petridou et al., 2018). Among women in the United States, cardiovascular disease (CVD) is the leading cause of mortality and morbidity post-menopause (Wang et al., 2019). Laakonen and colleagues argued that promoting health in this sub-population is essential as this group does not receive the 150 minutes of moderate to vigorous physical activity recommended by the WHO (Laakonen et al., 2017). A physically inactive lifestyle is associated with more severe menopausal symptoms, such as vaginal symptoms, urinary tract issues, sexual problems, fatigue, joint pain, mood swings, headaches, sleeping problems, and hot flashes (Laakonen et al., 2017).

Krusman and Marques-Vidal (2018) found that middle-aged and older women who wanted to lose weight had reduced nutritional intake, poorer psychological health, and reduced quality of life. They indicated that when age increases in women, slimming diets entail negative somatic consequences (Krusman & Marques-Vidal, 2018). A somatic symptom disorder is characterized by an excessive focus on physical symptoms, such as pain and fatigue, causing significant emotional distress and problems functioning (Mayo Clinic, 2018). Almenara (2019) stated that women make up 85% of the users who seek internet information regarding diet, weight loss, and fitness. Obese individuals frequently use the internet to lose weight (Almenara, 2019). Almenara (2019) noted that the problem with seeking information online is that such websites raise questions about the data's accuracy, quality, and impact.

Song et al. (2019) noted that prior research shows that social networking critically impacts people's health and health behavior. Their analysis yields important implications for health practitioners in online communities. Song et al. revealed a practical issue: how providers could drive users to utilize features in online communities. They found a "contagion effect" that indicates evidence of people being affected by their online health buddies (Song et al., 2019). The use of nutrition websites has raised questions about the accuracy and quality of health-related information and its impact on the seekers.

Initiatives for promoting healthy practices should have practitioners considering the association between social support and such websites. Organizations can design and promote online social communities that foster appropriate nutrition versus solely providing relevant nutritional information (Almenara et al., 2019). This study aimed to

fill a gap in the literature by exploring the lived experiences of middle-aged women in online weight loss communities.

This literature review examined, assessed, and compared information using studies on middle-aged women and their overall health, including exercise, nutrition, and experiences with obesity. An analysis of current and historical literature focused on obesity/overweight, including activity levels, health problems related to inactivity, nutritional choices, and social support when seeking behavior changes. Obese individuals deal with physical inactivity, low self-esteem, and public scrutiny. These life experiences affect their ability to change their health through everyday life. Seeking information in online health forums was a focus of this literature review. Before reviewing the literature, overviews of the literature search strategy, theoretical foundation, and conceptual framework were provided.

Literature Search Strategy

As part of the literature search strategy, a review of various databases was conducted through Walden University's online library, including EBSCO, MEDLINE, PsychInfo, and PubMed. A search of Google Scholar was also conducted. The search included the following keywords: middle-aged women, overweight, obesity, weight management, nutrition, exercise, social support network, online weight-loss communities, health belief model, menopause, social learning theory, and exercise. The studies chosen for this review were all published in peer-reviewed journals. Most of the studies were published between 2017 and 2022. They were chosen whenever older studies were included because they demonstrated a pattern over time, were seminal works, or were

particularly relevant. The organization of this literature review consisted of the discussion of various research articles which addressed the study's conceptual foundation, including the role of weight-loss communities in the experiences of middle-aged women with excessive weight.

With a specific focus on middle-aged women, Chapter 2 explored the historical background of obesity in individuals in the United States and globally. I evaluated the literature in the literature review to further understand middle-aged women's experiences in online weight loss communities. A primary focus of this research was the lived experiences related to health beliefs, social influences, social support, and outcomes from online interactions of these groups of women. The literature review examined books, scholarly articles, and other sources relevant to middle-aged women with overweight/obesity. Furthermore, it identified the relevant gap in this study, which is the experiences of these women in an online weight-loss community. This review summarized and evaluated such research.

Conceptual Framework

Research literature has documented various factors contributing to excessive weight, including demographic location, education, sedentary lifestyle, economic status, eating habits, and sociocultural factors. This study examined what it means to be overweight or obese in middle age, focusing on the role of online culture and social support networks. Data collection may help health providers, the media, and the communities where these women live better understand their daily challenges. The conceptual framework chosen for this qualitative study included both social learning

theory and HBM. Self-efficacy and social support are the essential constructs of social cognitive/learning theory to be effective and associated with obesity prevention (Adhikari et al., 2019). A study by Saghafi-Asl et al. (2020) determined that health education programs based on the HBM need to be integrated into preventive health programs and health intervention strategies to ensure adherence and well-being of the participants.

These constructs related to the online weight-loss communities studied in this research.

Social Learning Theory

Participants in this study consisted of women who were members of online weight-loss communities. It was crucial to understand how influences can emerge between women within these communities. According to Bandura's theory of social learning (1977), people learn from observing the behaviors of others, as well as the consequences of those behaviors. Through direct experience or observation of others, individuals learn new behaviors in the social learning process (Bandura, 1977). Often, individuals are faced with decisions that may or may not be governed by the most likely consequences.

In Bandura's (1977) theoretical framework of social learning, the reinforcement rules provide the individual with informative and incentivized functions, thereby strengthening their response resources. A person can determine whether the consequences of a behavior will be positive based on the informative feedback of the behavior. Individuals learn through this understanding through experiences, and their repercussions reinforce their behaviors. Reinforcements of behavior have a tremendous influence on the motivational effects of the individual (Bandura, 1977).

Self-efficacy is influenced by observing others' success and encouragement, according to Bandura (1991). In an online community, a person can learn about another member who succeeded in behavior from the personal stories shared on social media (Willis, 2016). As a result, social comparisons with others about certain behaviors can strengthen one's ability to perform similar behaviors (Bandura, 1991). Excessive weight may be caused by numerous factors, including demographics, education, sedentary lifestyles, economic status, eating habits, and sociocultural influences. This study examined what it means to be overweight or obese in middle age from an online culture or social support network. This study employed both social learning theory and the HBM.

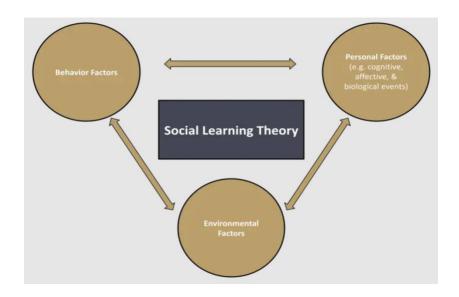
According to social learning theory, individuals acquire behavioral patterns and habits from their social environment, which includes their family, friends, work, and school. Bandura's social learning theory (1977) can be used to explain why people behave as they do. Researchers have found that middle-aged women have the highest obesity rates of any group of women. It is important to understand why middle-aged women experience excessive weight problems since many deaths associated with obesity could have been prevented. It is widely recognized that obesity is one of the biggest health concerns in the country. This study aimed to investigate how online culture and social support networks affect the lives of obese and overweight middle-aged women.

According to social learning theory, individuals learn from their environment and respond to it based on their learned behaviors. Observation and direct experience are both effective methods of learning new behavior patterns, according to Bandura (1977).

Healthy behaviors have been explained within obesity research using social learning theory. The conceptual diagram for SLT can be found below:

Figure 1.

Social Learning Theory (Bandura, 1977)



Social learning theory asserts that individuals learn social norms from their home, family, work environments, communities, and school, all of which affect their choices and ability to make individual decisions. Traditional learning theories typically define behavioral responses, which are directly experienced response consequences (Bandura, 1977). Behavioral responses are learned by observing others. The simple witnessing of affective reactions of others undergoing pleasure or painful experiences influences another individual's future behavioral responses. According to Bandura (1977), social learning theory assumes that role modeling influences produce learning through their informative functions.

It was found that intervening the constructs of social cognitive theory was effective in preventing obesity in a review by Adhikari et al. (2019). Logistic regression results showed that women exhibited more significant behavior change when media campaigns were combined with social cognitive theory. Self-efficacy and social support are the two most essential constructs of social cognitive/learning theory associated with obesity prevention, while others remain modest. Media campaigns and ecological components are reportedly integrated with constructs when interventions are implemented (Adhikari et al., 2019).

Rosenstock et al. (2018) identified that health belief models, social learning theories, self-efficacy, and locus of control have all been applied with varying success to solving problems of explaining, predicting, and influencing behavior. The interrelationships between these theories and variables remain confusing among researchers and practitioners. Due to the study by Rosenstock et al. (2018), a revised explanatory model incorporating self-efficacy is proposed, which tries to explain how these factors may be related. Self-efficacy is offered as a separate independent variable along with perceived susceptibility, severity, benefits, and barriers. A vital component of the model is health motivation (incentives to behave). This model does not explicitly include locus of control since it is believed to be incorporated into other components. Due to this new formulation, health educators can suggest more effective behavioral interventions than they have had (Rosenstock et al., 2018).

Bremer and Brooks (2021) identified that when environmental demands do not match one's ability to meet them, one is likely to feel stressed. The causes and effects of

stress are both psychological and physiological. Adaptation requires people to learn how to cope with stress. It is possible to cope with stress in many ways. The existence of stress may be denied or avoided at one extreme. Alternatively, some people approach the sources of stress directly to overcome them. Social support is a common strategy for coping with stress, which can be used alone, or in conjunction with other efforts (Bremer & Brooks, 2021).

Observing other people's behaviors allows for a safer and more efficient way to learn behaviors than simply trying and failing. A critical factor in enhancing self-efficacy is social persuasion, according to Bandura. Wang and Willis (2016) defined social persuasion as the encouragement one receives from support systems. Social learning can also translate into social support. Through social constructs of social learning theory, we can understand how one's culture and social support network can directly impact one's behavior. Researchers may be able to explain why middle-aged women are most likely to suffer from obesity or overweight by understanding their subjective experiences. This study will examine middle-aged women who are obese or overweight and how social support may impact meaning and lived experiences. The social support network includes the diverse types of support that people receive from others, such as emotional and informational support. This study gave 14 middle-aged, obese, or overweight women, who are members of an online weight-loss community, the opportunity to share how they feel regarding social support networks having a role in their subjective experiences with excessive weight. Weight-loss communities online attract middle-aged women who seek the support of others in similar situations. For these women, other women's weight-loss

methods and adherence timelines are sources of guidance in choosing their weight-loss methods and adherence schedules.

Health Belief Model

A second model, in addition to SLT, chosen for this research study was the HBM. Four perceptions serve as the primary constructs of the HBM: perceived seriousness, perceived susceptibility, perceived benefits, and perceived barriers (Saghafi-Asl et al., 2021). The HBM is a conceptual framework that identifies perceptions of the extent to which people are willing to adopt behavior change for health improvement. The HBM examines an individual's health behaviors and is a theory to predict participation in preventative health behaviors (Gabriel et al., 2018).

As a result of the HBM, social psychologists developed a theory explaining why people are not able to prevent and detect disease (Champion & Skinner, 2008). HBM states that people will take action to avoid illness if they see themselves as:

- Susceptible to a condition (perceived susceptibility).
- Believe that their illness would have potentially serious consequences (perceived severity).
- Believe that a particular course of action reduces susceptibility or severity or leads to other positive outcomes (perceived benefits).
- Perceive few negative attributes related to the health action (perceived barriers) (Champion & Skinner, 2008).

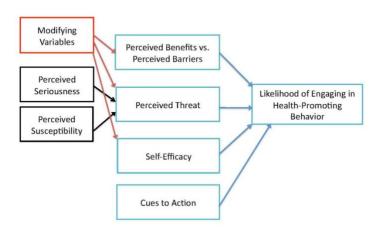
The first construct, susceptibility, relates to an individual's beliefs regarding the perceived risk of being overweight/obese. The second construct, severity, is the

individual's beliefs regarding the potential consequences of being overweight/obese. The third construct, perceived benefits, describes the individual's perceptions of the benefits of participating in an online weight-loss community. The fourth construct, perceived barriers, describes the perceived obstacles that may prevent the individual from participating in an online weight-loss community. The fifth construct is cueing to action, and this would be characterized as reminders for an individual to participate in an online weight-loss community. The final construct is self-efficacy, which describes an individual's beliefs about their ability to participate in an online weight-loss community. In later years, HBM scholars suggested incorporating self-efficacy into the model (Rosenstock et al.,1988). However, HBM studies rarely include self-efficacy (Jones et al., 2015). Hosseini et al. (2017) determined that addressing self-efficacy, perceived susceptibility, and severity should be a primary goal in middle-aged women's health promotion. The conceptual diagram for the HBM can be found in below:

Figure 2.

Health Belief Model (Boslaugh, 2019)





Individuals might learn how to cope with their lived experience of being overweight/obese from this theoretical framework. The basis of the HBM theory is that individuals value the health information about being overweight and obese and might initiate behavior changes. The relationship between health beliefs and practices addresses the practical level of the benefits that may consist of different elements. The approach of the HBM, along with research questions, described the lived experiences of a person suffering from overweight/obesity. Research questions were developed to identify how middle-aged women in an online weight-loss community perceive being overweight/obese, how their self-esteem is influenced, and their motivation to change.

Hidarnia et al. (2016) posited that to investigate the factors affecting the adoption of preventive behaviors among women, it is essential to use models that identify the factors affecting behavior. In HBM, people change their behavior when they realize the severity of the disease; otherwise, they may not adopt healthy behaviors. HBM models include perceived severity, perceived susceptibility, perceived benefits, perceived barriers, modifying variables, cues to action, and self-efficacy as structures (Hidarnia et al., 2016).

In the study by Hidarnia et al. (2016), perceived susceptibility was used to evaluate women's perceptions about the extent to which they are at risk of osteoporosis. The premise could also apply to the current research study on overweight/obesity in middle-aged women. The perceived severity of overweight/obesity should be considered as well. The sum of these two factors is the women's perceived threat of the disease. Perceived benefits and barriers refer to the individual's assessment of the benefits and potential obstacles to adopting obesity prevention behaviors, such as diet and exercise. Women's perceived ability to engage in preventive behaviors and their cues to action (the incentives they receive from friends, doctors, healthcare providers, media, and educational resources) are also important. Women's decisions to comply with obesity prevention behaviors are influenced by their fear of obesity complications and their sense of inner peace because of seeking preventive behaviors.

Literature Review Related to Key Concepts

Chapter 2 examined the historical background of obesity problems among middleaged women in the United States and worldwide. As part of the literature review, I evaluated the literature to understand how individuals live with overweight and obesity in online weight loss communities. This study aimed to determine how middle-aged women perceive peer and practitioner support and education within online weight loss communities.

This literature review examined books, scholarly articles, and other sources relevant to middle-aged women with overweight/obesity. Furthermore, it identified the relevant gap in this study: the experiences of these women in an online weight-loss community. This review summarized and evaluated such research.

Middle-Aged Women & Obesity

Middle-aged women are one of the highest percentages of Americans who are overweight or obese (Xu et al., 2018). A 20-year cohort study conducted by Xu et al. (2018) found that obese women with hypertension, inactivity, smoking or other chronic conditions had a higher risk of developing diabetes, heart disease, and stroke multimorbidity over the subsequent 3-year period than women without these characteristics. According to the research, women who have previously suffered from hypertension are more likely to develop multiple ailments. Research results suggest that hypertension plays a significant role in the progression of these ailments. Few studies have explored the interactions between other chronic conditions and diabetes, heart disease, and stroke multimorbidity (Xu et al., 2018). Because of this lack of research, more information is needed to understand these conditions in middle-aged women.

Most adults in the United States are overweight or obese, and middle-aged women are the highest (Chatelan & Carrard, 2021). Chatelan and Carrard (2021)

identified that Western Society has an overlap between excess weight and body dissatisfaction. Additionally, they found that a higher BMI is the main predictor of poor diet quality, and body dissatisfaction was highly correlated with a higher BMI.

Researchers question how to promote healthy diet behaviors and encourage the feeling of self-efficacy, which is needed to initiate behavior change (Chatelan & Carrard, 2021).

Women are at a higher risk of metabolic syndrome and cardiovascular disease (CVD) due to age, hormonal changes, and dietary habits (Abbaspoor et al., 2020). Weight gain typically starts before menopause and increases the risk of CVD. However, research shows that good physical activity leads to less body fat than when activity is low during the lifetime of these women (Abbaspoor et al., 2020). According to Abbaspoor et al. (2020), dietary and exercise programs have been shown to improve psychological parameters, which is crucial to the quality of life of middle-aged women. Their study indicated that weight loss might influence many aspects of life in overweight, middle-aged women (Abbaspoor et al., 2020). A relatively short-term weight loss program requires that specific anthropometric, biochemical, psychological, and physiological parameters be improved. Exercise combined with diet shows the most success, so health improvement programs should be implemented for this population (Abbaspoor et al., 2020). Middle-aged women need to adopt lifestyle changes to create lasting improvements in their overall health.

Comorbidities of Obesity in Middle-Aged Women

As women transition into menopause, they report weight gain and changes in body composition. Menopause negatively affects glucose, lipid metabolism, and bone

loss, leading to non-communicable diseases (Feller, 2021). According to a cohort study by Zhang et al. (2017), increased body weight increases the chances of developing chronic diseases (including Type 2 diabetes) and, thus, a lower chance of living a long and healthy life. Research by Luo et al. (2020) indicated that slower weight increases over time, delaying the onset of obesity, or reducing cumulative obesity exposure can significantly lower the risk of Type 2 diabetes (T2DM (Type 2 Diabetes Mellitus)) in middle-aged women.

Weight gain and obesity are associated with reduced insulin sensitivity (Luo et al., 2020). Luo et al. (2021) suggest that by reducing the cumulative exposure to obesity, delaying the onset of obesity, or slowing weight gain, type 2 diabetes may be significantly reduced. Regardless of initial BMI, long-term weight-change slope and quadratic terms were positively related to T2DM risk. Moreover, cumulative obesity exposure, measured as obese years, was positively associated with T2DM risk, and the younger the woman was at obesity onset, the greater the risk (Luo et al., 2021).

Cho et al. (2020) reported that the American College of Cardiology (ACC)/American Heart Association (AHA) guidelines for treating CVD in women have not changed since 2011. According to recent guidelines and relevant studies, recommendations are based on risk factors and treatments for women. Additionally, some aspects of hypertension treatment and prevention are specific to women. Being overweight, inactivity, high salt consumption, diabetes, and excessive alcohol consumption are all known causes of women's hypertension (Cho et al., 2020).

Cho et al. (2020) found that obesity had the most significant impact on women's hypertension. Women experience different symptoms of CVD than men. Studies have also shown that risk factors and therapies differ for men and women. Therefore, when treating women, special consideration should be given to pregnancy-related illnesses, PCOS, and treatment-related difficulties that are unique to women. Even though the American Heart Association guidelines address some gender differences, more research is needed relating specifically to women.

Women are at a greater risk of heart disease than men, further accentuating the gender differences in heart health (DuPont et al., 2019). Although aging, hypertension, and obesity are common causes of arterial stiffness, there are several differences between men and women regarding metabolic syndrome. In women, various autoimmune illnesses, PCOS, and endometriosis can increase arterial stiffness. Hypertension also promotes vascular thickening and fibrosis, resulting in the stiffening of the vessels (DuPont et al., 2019). High blood pressure is caused by arterial stiffness in which pulse pressure increases, and microvasculature is weakened, impairs dilatation, and contributes to hypertension. The order in which these phenomena occur is unclear. According to DuPont et al. (2019), aging women face greater cardiovascular risk due to arterial stiffness.

Consequences of Obesity in Middle-Aged Women

There are multiple consequences of obesity in middle-aged women. According to the World Health Organization (2021), the leading cause of death in 2012 was cardiovascular disease (primarily heart disease and stroke). Raised BMI is a significant

risk factor for diabetes and other non-communicable diseases such as certain types of cancer and musculoskeletal disorders, particularly osteoarthritis-a generative illness of the joints that is highly disabling (World Health Organization, 2021). The WHO (2021) states that these non-communicable diseases are more likely to occur as BMI increases.

Many medical consequences are associated with adult obesity. In terms of public health problems, obesity is one of the most concerning. There is also evidence that obesity increases the risk of individuals developing other primary lifestyle diseases, such as coronary heart disease, hypertension, stroke, T2DM, sleep apnea, and osteoarthritis. Such inequalities are treated by many standard treatments, such as special diets, balanced calorie intake, and increased physical activity (Chu et al., 2018).

An increase in weight increases systolic and diastolic blood pressure, raising the risk of cardiovascular disease and stroke. Reisin and Frohlich (2018) concluded that overweight patients who lost weight by eating a low-calorie diet and consuming less sodium experienced marked decreases in systolic and diastolic blood pressure levels. Cheng et al. (2018) discovered significant predictors for adult obesity, particularly around the age of 55 (both men and women), including maternal smoking during pregnancy, childhood neurological functions, educational qualifications, trait conscientiousness, and physical fitness (Cheng et al., 2018).

Weight gain and obesity are major lifestyle illnesses that contribute to numerous chronic diseases, including cancer, diabetes, metabolic syndrome, and cardiovascular disease. According to the World Health Organization, 30% of death in 2030 will be caused by lifestyle diseases and can be prevented through identifying and managing risk

factors and behavioral interventions. In addition, most researchers agree that obesity is an acquired disease influenced heavily by lifestyle factors (i.e., personal choices), such as low rates of physical activity and chronic eating (Safaei et al., 2021).

Various forms of obesity, which include abdominal obesity, have also been linked to increased risk of several chronic conditions and diseases, including asthma, cancer, diabetes, hypercholesterolemia, and cardiovascular disease (Safaei et al., 2021). It is believed that obesity affects almost every system of the body, including the cardiovascular (CV) system, endocrine system, central nervous system, and gastrointestinal (GI) system. Further, obesity is linked to several CV conditions, including hypertension, coronary heart disease (CHD), atrial fibrillation (AF), and total heart failure (Safaei et al., 2021). Middle-aged women often seek various treatments to help reduce or eliminate overweight and obesity.

Treatments for Overweight/Obesity

Middle-aged women with overweight/obesity often seek help through various methods such as physician assistance (surgeries or medication) and online help-seeking resources. In many cases, these methods include treatments that are quick in their results, such as crash diets and surgical procedures. Bariatric surgery is a weight loss-induced surgical procedure. According to Onyewu et al. (2018), hypertension was no longer found in 45% of patients who underwent bariatric surgery. These weight loss interventions, therefore, are often used for hypertensive patients (Chu et al., 2018). According to Bradford et al. (2017), bariatric surgery options are identified on the ObesityHelp.com website, but the most common is gastric bypass surgery. A more

common method (and practical for lifestyle purposes) for weight loss is adopting an exercise program and nutritional changes. Several components of weight management are reviewed by Mehta et al. (2021), including lifestyle interventions (dietary interventions, physical activity, and behavioral interventions), pharmacotherapy, endoscopic procedures, and surgical procedures. Their review shows few extensive studies on the safety and effectiveness of combination therapies, including pharmacotherapy and one or more procedures (Mehta et al., 2021).

The use of Intensive Lifestyle Interventions (ILIs) for weight management has evolved over the past 50 years from a promising new strategy to an accepted mainstream treatment for overweight/obesity and its associated medical complications (Williamson, 2017). Richard Stuart published the first paper describing behavioral treatment for overeating in 1967, presenting the weight loss results of eight obese patients treated for 12 months. Four years later, he described a "three-dimensional program" of behavioral treatment for obesity, including many of the elements of lifestyle interventions of today: (1) environmental interventions to promote healthy eating and reduce sedentary behavior, (2) structured exercise programs to increase physical activity, and (3) dietary programs to decrease calories (Williamson, 2017).

Albert Stunkard published one of the first modern texts on obesity in 1980. Various treatment options were discussed: diets, exercise, drugs, psychoanalysis, self-help, gastric bypass, and behavior modification. Behavioral modification "has aroused much initial enthusiasm," according to Stunkard (cited by Williamson, 2017). Stuart and Davis published the first treatment guide for intensive lifestyle modification for weight

loss in 1972 (cited in Williamson, 2017 from Stuart & Davis, 1972). The future of weight management was validated by more than 70 randomized controlled trials (RCTs) published over the following 25 years, and treatment length increased from eight weeks in the 1970s to 20 weeks (Williamson & Perren, 1996). In accordance with the Obesity Guidelines (Webb & Walden, 2017), overweight or obese individuals should receive a lifestyle intervention for at least 6 months, but Jensen (2013) states that the majority of experts concluded that at least two years of ILI are needed to prevent weight regain (cited by Williamson, 2017 from Jensen et al., 2013).

Behavioral treatment for obesity was initially described as individual therapy, but by the mid-1990s most ILIs relied on group therapy to deliver the intervention (cited by Williamson, 2017 from Stuart, 1967). An interventionist should deliver a comprehensive program that includes diet, physical activity, and behavior therapy (all three components). An interventionist is usually a dietitian, an exercise specialist, a psychologist, or a health counselor, or, less often, a layperson with training in delivering treatment, and frequent contact is essential for clinically meaningful weight loss (Webb & Wadden, 2017). When implementing a dietary intervention, McCafferty et al. (2020) recommend lowering caloric intake to produce a 500-kilocalorie deficit. Low calorie diets are an effective intervention, as trials have shown that they induce a 7%-10% weight loss within 6 months of initiation (cited by McCafferty et al., 2020 from Yarborough et al., 2018). The percentage of calories from carbohydrates, fats, and proteins in different diets varies, but no particular diet has been shown to be more effective as long as an energy intake deficit is present (Yarborough et al., 2018).

Online Communities and Social Support Networks for Weight Loss

In their study, Bradford et al. (2017) identified two of the common online sites for weight loss. The top weight loss website was identified as ObesityHelp.com for surgical support, while WeightWatchers.com was identified as the leading lifestyle-oriented website. The obesityhelp.com community, founded in 1998, has over 600,000 members and is a free, online, peer-support community for those considering, undergoing, or recovering from weight loss surgery. Founded in 1963 by Jean Nidetch, Weight Watchers is a fee-based program with face-to-face and online options and is the world's most extensive weight management program (Bradford et al., 2017). Users can access information or create content via blogs, chat rooms, or comments on these sites. Within these sites, members can create and share blogs and are encouraged to use text and images to share their progress.

Moreover, some members of ObesityHelp.com also join Weight Watchers to help them prepare for surgery and recover afterward. Therefore, these two approaches to weight loss are not only complementary but also highly interconnected. These two communities represent how consumers use social media to build community, be efficient, and achieve their goals (Bradford et al., 2017).

According to the theory of social support, Wang et al. (2021) investigated the interactional effect of social support types and sources on one's well-being and happiness in the digitalized healthcare environment. As Wang et al. found (2021), emotional support in a digital environment leads to higher levels of well-being and happiness than informational support, indicating that such significant differences are attributed to

individual differences in the effectiveness of social relationship coping. A higher level of happiness and well-being is also associated with emotional support from community members than from family members. Well-being and happiness are enhanced when emotional support is provided, which has important implications for healthcare community managers and close relatives (Wang et al., 2021).

It was found by Bradford et al. (2017) that individuals increasingly engage in virtual support communities (VSCs) where they interact with others one-on-one and conduct various aspects of their lives. When individuals make a public commitment to achieving such goals, they are more likely to be successful. In the context of their netnographic inquiry, Bradford et al. (2017) explains how public commitment manifests in VSC (virtual support communities) to support goal attainment. Specifically, these online communities encourage behaviors that facilitate compliance with public commitments, which in turn leads to more effective goal pursuit. The research by Bradford et al. (2017) also creates a typology of member roles within these VSCs that influence public commitment. Their findings contribute to theories of VSC and public commitment. Belegioli et al. (2020) found that a web-based behavior change program with computer- and human-delivered personalized feedback resulted in greater, albeit small, weight loss within 24 weeks (about 5 and a half months). A personalized program also showed greater improvements in dietary habits, but not in physical activity, than a non-personalized program. The online dietitian coach's personalized feedback increased user engagement with the program and significantly increased the likelihood of clinically meaningful weight loss (Belegioli et al., 2020).

McGuire et al. (2018) conducted an intervention study on perceived exercise benefits, perceived exercise barriers, and actual physical activity and exercise in midlife women. In this study, it was found that a multiple health behavior change intervention increased midlife women's perceptions of exercise benefits, overall physical activity, and exercise. Despite the cost-effectiveness and flexibility of Web-based programs and the ability to deliver them remotely, McGuire et al. (2018) found that participants' engagement and motivation can be enhanced by providing a range of options, such as face-to-face group delivery and electronic health coaching from registered nurses.

As Alterbarmakian & Alterman (2019) noted, early Internet prognosticators predicted that the Internet would enhance social skills. Using the Internet as a medium for sharing information and creating "socially constructed and shared" understandings, online learning will be "as much social as cognitive." (Alterbarmakian & Alterman, 2019). Technology-mediated learning collaborations are often awkward places to interact, despite the promises they hold. In other words, virtual collaboration does not always deliver on its promises as a basis for learning (Alterbarmakian & Alterman, 2019).

A virtual space limits communication and copresence is difficult, resulting in a reflective form of collaboration, according to Alterman & Harsch (2015). A sense of connectedness is essential for effective collaboration, and the awkwardness of virtual collaboration interferes with the group's ability to function as a unit. Small group learning is ideal when the members of the group work and learn together (Alterbarmakian & Alterman, 2019). In an online weight-loss community, there is a possibility that group

collaboration can lead to a greater sense of belonging and self-efficacy from the group participants (Alterbarmakian & Alterman, 2019).

Chang et al. (2016) found that their age influences women's perceptions of mobile health information seeking perceptions spite of statistically significant differences between age groups, respondents do not show strongly negative attitudes towards using mobile phones for health information. The study by Chang et al. (2016) reported that women generally view mobile health information seeking as beneficial from a medical and social standpoint. Additionally, they feel positive about utilizing mobile technology for health information, and they do not express much fear of using it. Mobile healthcare systems and mobile health interventions are likely to develop in the future due to their openness to seeking health information through mobile phones (Chang et al., 2016).

As Reading et al. (2019) point out, studies have shown that social support can promote weight loss, specifically when it is received online through forums on weight loss websites. Study participants were asked to describe their experiences using support forums on weight loss websites. Using web-administered survey responses from 340 members of two weight loss websites, Reading et al. (2019) conducted a content analysis. According to the findings, (1) weight loss is helped by receiving advice, strategies, and mantras; (2) weight loss is helped by participating in support forums; and (3) weight loss is helped by receiving social support and inspiration from someone similar. In this study, it was found that online support forums may benefit individuals who are trying to lose weight by providing them with nonjudgmental social support (Reading et al., 2019).

This study explored members' social experiences using online support forums from two weight loss websites and how these experiences benefit individuals who are trying to lose weight (Reading et al., 2019). According to participants, these forums provide a nonjudgmental environment in which members can communicate and receive advice, strategies, and encouragement from others experiencing similar challenges and successes. In the study, participants attributed their success to the ability to connect with people who shared similar interests and goals in a supportive environment; suggesting that individuals who share similar values are more inclined to trust and share personal information, which leads to weight loss (Reading et al., 2019). In contrast to the study by Reading et al. (2019), which included 340 adults between the ages of 18 and 84 years, my research was specifically aimed toward middle-aged females between 40 and 58 years. I believed that the reflections from these women could help in the creation of programs more specific to their age and gender. Additionally, the study questioned more specific health behaviors related to both nutrition and exercise, not just weight loss itself.

According to Gavarkovs et al. (2019), to maximize training effectiveness, researchers should analyze training needs and consider how online technologies can be used to achieve instructional best practices systematically. Gavarkovs et al. (2019) modified previous workshop content to be delivered via read-only or narrated PowerPoint presentations. Gavarkovs et al. (2019) described a protocol for developing online training for community-based health interventions, extending the literature on training in the public health field and training for intervention delivery. As one of the most commonly used instructional design models, Dick et al. (2022) identified the ADDIE instructional

design model as the basis for the protocol. ADDIE describes the process of analyzing, designing, developing, implementing, and evaluating instructional materials. Through it, tailor-made online training can be developed using a variety of technologies, or existing in-person training can be converted to an online medium (Gavarkovs et al., 2019).

According to Casalo et al. (2011), affective commitment motivates users to participate in online communities. Personal involvement is more likely in those who are emotionally attached to an entity (Gavarkovs et al., 2019). In addition to creating content through interactions with other customers, social networks allow customers to form strong emotional bonds (Gavarkovs et al., 2019).

Affective commitment to brands was positively associated with behaviors (e.g., interacting with or recommending brands). Also, higher levels of affective commitment in virtual communities may result in greater participation in activities that create value (Gavarkovs et al., 2019). Affective commitment is key to positive interactions with brands, according to Keiningham et al. (2018). An emotionally committed person is likely to interact with a brand account (Gavarkovs et al., 2019).

Xu et al. (2022) noted that social media such as Facebook and Instagram provide technology platforms for social support opportunities. Their study consisted of tourists that shared their photos on social media. When sharing, the members may get feedback such as likes and comments from their friends, providing online social support. Social support, which Cohen & Hoberman (1983) defined as "the various resources provided by one's interpersonal ties", is a crucial variable for individuals' quality of life and psychosocial well-being (Xu et al., 2022). People who receive social support via online

photo-sharing and communication may increase their well-being and be motivated to share more photos. Previous studies (Chawla & Sharma, 2019, Lin, et al., 2014) have explored the moderating effects of social support on the relationships between well-being and other constructs in employees' well-being context. Nevertheless, little was known about how online social support influences tourist online photo-sharing motivation and well-being (Xu et al., 2022). The study by Xu et al. (2022) included observing the moderating effects of online social support on the relationships between extrinsic communal motivation (i.e., social relationship) and intrinsic motivations, and between intrinsic communal motivation (i.e., altruism) and well-being (Xu et al., 2022).

Through social media, traditional offline social support extends to online social support with greater size and scope, according to Xu et al. (2022). According to Cohen & Hoberman (1983), social support refers to "the various resources provided by interpersonal ties", while online social support refers to "the social support received via any means of online communication" (Xu et al., 2022). House (1981) conceptualized social support in four dimensions: emotional support (empathy, caring, love, and trust), instrumental support (interpersonal resources for basic survival), informational support (interpersonal resources for obtaining information and resolving problems), and appraisal support (appreciation and respect from others) (Xu et al., 2022).

Recently, the relationship between social network sites (SNS) use, social support, and well-being has gained traction (Xu et al., 2022). A study by Lee & Cho (2019) found that social networking sites positively influence social support, which in turn reduces stress and boosts well-being. SNS use significantly influenced instrumental,

informational, and appraisal support, but not emotional support (Xu et al., 2022). It suggests further exploration of social support and how online weight-loss communities could influence these middle-aged women to seek such outlets, and what results those interactions could produce in reducing overweight/obesity and improving overall health.

Summary and Conclusion

Research on online weight-loss communities has been extensive, but little was known about middle-aged women's experiences. The literature review revealed that little research had been conducted on why women join these communities, or their lived experiences related to weight loss, exercise, and social support networks. Studies typically focus on either weight loss support or exercise support, but most indicate that nutrition modifications and exercise are often used together to achieve weight loss results.

To better understand the effects of online weight loss communities among middle-aged women, there needs to be a better discussion of this topic. Most medical providers do not provide clear instructions about eating healthier, losing weight, and exercising more. There is also little information about how online communities and social support specifically influence this population. Women should be aware of the long-term health consequences of being overweight/obese that may result from changing their lifestyle behaviors. Chapter 2 presented a literature review strategy, a conceptual framework, and the need to understand middle-aged women's lived experiences within online weight-loss communities.

The research strategy and rationale is presented in Chapter 3. In addition to the methodology, this chapter covered the researcher's role, including the protocol for selecting participants and collecting data. Additionally, a data analysis plan outlined how descriptive themes, concepts, and patterns were analyzed. To meet Walden University's Institutional Review Board (IRB) standards, the research's credibility, transferability, dependability, and confirmability were identified.

Chapter 3: Research Method

Introduction

This qualitative phenomenological inquiry aimed to explore the lived experiences of middle-aged women in an online weight-loss community. To understand how the group members (middle-aged women) perceive the support they receive, and to gain insight into their impressions of the effectiveness of this community on their goals, the purpose of this study was to understand how the members perceived the support they received in these communities. Assessing the situation of overweight/obese middle-aged women might promote relevant changes in the lifestyle approaches of these women. The research design, rationale, and methodologies, such as participant selection logic, instrumentation, recruitment, data collection procedures, and data analysis, are also explored in this chapter.

Research Design and Rationale

RQ1: How do middle-aged women perceive their experiences within an online weight-loss community?

Sub RQ1: How do middle-aged women describe their experiences in an online weight-loss community toward their nutrition/diet choices?

Sub RQ2: How do middle-aged women describe their experiences in an online weight-loss community toward their exercise choices?

Sub RQ3: How do middle-aged women describe their experiences with social support in an online weight-loss community?

The nature of this study was a qualitative descriptive study. Understanding how middle-aged women experience the support and the perceived benefits or drawbacks of an online weight-loss community could support the development and effectiveness of such communities. A qualitative study allows participants the opportunity to tell their experiences. The qualitative research design chosen for the research project was a qualitative narrative descriptive study. Narrative research focuses on the life of a single individual through the retelling of firsthand experiences or stories. Qualitative descriptive studies are the least theoretically structured (Lambert & Lambert, 2012). Studies of this type of design tend to draw from naturalistic inquiry, which allows researchers to study in a natural state within the context of the research arena (Lambert & Lambert, 2012). Using Zoom audio interviews, the researcher hoped to find the participants in a relaxed state, hopefully in the comfort of their own home or area of their choosing. This research study gathered information defining the subjective lived experiences of middle-aged women in an online weight-loss community using the qualitative phenomenological method of interviews.

In qualitative research, narratives help develop the personal accounts of individuals, primarily through interviews and transcripts. Data analysis of reports produces personal stories and themes. Using grounded theory, researchers can develop new theories that explain individual findings or collective experiences. This qualitative research study allowed participants to reflect and explore how they cope with excessive weight. Women should be able to express their feelings and emotions and the influence of an online weight-loss community on their lives. An individual's findings or

collaborative experiences can be explained using grounded theory research. Studying the interactions and behaviors of individuals within a natural setting is one of the methods researchers use.

I chose a phenomenological approach for this study because it focuses on understanding the lived experience and personal meaning of being a self-identified middle-aged overweight/obese woman. To capture the personal significance of a phenomenon, phenomenological researchers prefer to interview participants. Researchers investigate phenomena by developing research questions that focus on examining or exploring the phenomenon.

A philosophy-based qualitative method based on existential-phenomenological research (EPR), Churchill (2022) describes EPR as focusing on how a researcher makes sense of the subject matter and how they access it. Specifically, EPR examines how individuals are "thrown into" situations in life and how they find "avenues of choice" within those situations. By using empathy and intuition, researchers can access such phenomena. According to Churchill, EPR consists of the following central features: an evidence-based method that examines psychological lives, researchers who "bring themselves to the evidence," the use of first-person descriptions and reflections on those experiences, and researchers' cultivating empathy, curiosity, and wonder for human experience (Churchill, 2022). Researchers can achieve the same rigorous quality of natural scientific research by understanding each premise, including the research method, the research design, the research question, data collection, and analysis.

This study used a phenomenological approach to understand the lived experience of overweight and obese middle-aged women. A semi structured interview was used to obtain the lived experiences of overweight and obese middle-aged women within online weight-loss communities. I invited members of an online weight-loss community to share their experiences as obese or overweight middle-aged women and how social support networks have influenced their journey to achieve better health through the reduction of overweight/obesity.

Role of the Researcher

The role of the researcher is to discover by listening to the participants' feelings. Each interview will be performed online with careful observation and attention to the interviewee via Zoom using audio only to protect anonymity. The researcher is responsible for protecting the safety of the information and data received. There is a responsibility to uphold the validity and confidentiality of everyone interviewed. Examining for any reflexivity occurred before performing the research.

The concept of reflexivity has been around for more than a century. It has been articulated in scholarly writings and literature from various fields, with a predominant role in some (e.g., psychology, social work, nursing) and a lesser role in others (e.g., public health, medicine). It has been established as one of the ways qualitative researchers can ensure rigor and quality in their work; it is the gold standard for evaluating reliability (Dodgson, 2019). As Olmos-Vega et al. (2022) defined it, reflexivity is a set of continuous, collaborative, and multifaceted practices by which researchers self-consciously examine, appraise, and evaluate their subjectivity and

context. The purpose of reflexivity is to embrace and value the subjectivity of researchers (Olmos-Vega et al., 2022).

In qualitative research, ethical challenges include developing guidelines for interactions between the researcher and participants as they are involved in various stages of the study (Ravitch & Carl, 2021). To ensure anonymity, confidentiality, and informed consent for the researcher and participant, specific ethical guidelines, and protocols must be developed (Ravitch & Carl, 2021). I carefully planned every aspect of this study for data collection, integrity, and reliability. An interviewer will ask the interview questions in a manner that prevents unbiased responses and ensures truthful answers. In addition, I used instruments that would reduce the possibility of participant bias in this study (Safaei Pour et al., 2018). Following Walden University's IRB requirements (Slovin & Semenec, 2019), ethical considerations were considered and observed concerning human subjects. The American Psychological Association's Publication Manual guides how to correctly cite sources and attributions (American Psychological Association, 2020).

Methodology

Participant Selection

Purposive sampling was used for this study. This method ensures that the researcher secures an adequate sample of participants who meet the study criteria. The study sample consisted of 8 or more middle-aged women (40-58 years old) who are members of an online weight-loss community. The participants were from varying locations within the United States. Each participant will meet the following criteria: 1) between the ages of 40 and 58 years; 2) currently residing in the United States 3) self-

reported information on meeting the requirements for being classified as overweight, obese, or morbidly obese. In the screener survey, the BMI of each individual was confirmed to verify eligibility. An adult with a BMI between 25 and 29 is considered overweight; an adult with a BMI of 30 or higher is considered obese, and subcategories are as follows:

Class 1: BMI of 30 to < 35

Class 2: BMI of 35 to < 40

Class 3: BMI of 40 or higher. Class 3 obesity-categorized as "severe" obesity (CDC, 2020).

Participants' socioeconomic status, education level, marital status, employment status, and family background were not considered in selecting them for the study but could be asked to gather information about them. Participants were solicited by online recruitment flyers posted from my personal Facebook page as well as on LinkedIn and the Walden Participant Pool (See Appendix A-C). The researcher was specifically seeking women in online public weight loss groups. An informed consent agreement was emailed to each qualified participant (Appendix D).

The small sample size of this research study was supported by the need to gain an in-depth meaning of living with excessive weight from the voices of middle-aged women. Braun and Clarke (2019) identified theoretical sufficiency as an alternative to saturation to reflect the notion that data collection ends when the researcher reaches a sufficient or adequate understanding to build a theory. The sample size to achieve data saturation within thematic analysis (TA) ranges from six to sixteen interviews, depending

on the specific characteristics of the research and the level of data saturation required (Braun & Clarke, 2019). Hennick and Kaiser (2022) found that for relatively homogenous study populations, 9–17 interviews or 4–8 focus group discussions reached saturation. The researcher aimed for 12-20 participants as the stated target for recruitment.

Instrumentation

Beginning with recruitment, the first instrument that used was the Walden University IRB approved social media post created by the researcher, that was posted on my personal Facebook page, as well as on LinkedIn and in the Walden Participant Pool (Appendix A). The social media post is a description of the purpose of the study to use in addition to the flyer if needed. Interested participants were asked to complete a screener survey to verify eligibility for the study (Appendix B). During recruitment, none of the participants identified themselves as being members of the same online communities; however, all participants did not disclose the name of their group.

The aim was to conduct semi structured qualitative interviews with middle-aged women involved in online weight-loss communities about their lifestyle behaviors and their experiences. Once permission was granted, all interviews were scheduled and then recorded via Zoom audio. Interviews were conducted in a semi structured conversational style (Rubin & Rubin, 2016). Transcripts were prepared for each interview according to the guide. A dictation service was used for all Zoom interviews.

The interview questions were meant to understand the underlying subjective experiences of being an obese or overweight middle-aged woman. The researcher

recruited ethically, excluding bias and expectations, and validated the respondents (member checking) to ensure validity. This study's research and interview questions were developed from the literature's gap, defining the need to explore further the subjective experiences of obese or overweight middle-aged women (see Appendix D).

Bradshaw et al. (2017) opined that interviewing allows the researcher to explore issues with participants through encouraging depth and rigor, thereby facilitating the emergence of new concepts/issues and contributing to the "richness of data" required in qualitative descriptive designs. The interview was designed, to begin with, broad questions and become more specific as the discussion continued. For the researcher to develop further themes from the interview, probing questions were asked as needed.

Qualitative research suggests that the interviewer should ask brief questions about the story's dialogue to ensure trustworthiness. The necessary procedures ensured the study was not influenced by personal feelings, observations, and preconceived ideas. The interview questions were designed for use during the semi structured interview to produce answers to the research questions. The interviews were recorded via Zoom to aid with listening, reading, and capturing information for data analysis. Notes and memos were composed about the observations to develop classifications and connections. The questions were piloted with health professionals beforehand to confirm that the interview questions were sufficient to gather the needed information.

Pilot studies are often smaller-sized studies that assist in planning and modifying the main study, as defined by In (2017). Pilot studies enable researchers to become familiar with the procedures involved in the main study, which assists in selecting the

most appropriate research method for answering the research question (In, 2017). In (2017) stated that the pilot study is often ignored by researchers despite its benefits and importance. There are two types of pilot studies: external pilot studies that are independent of the main study and internal pilot studies that are integrated into the main study (In, 2017). This research included a pilot for validation of researcher developed instruments.

Researcher Developed Instruments

There was a significant gap in the literature regarding middle-aged women's experiences within online weight-loss communities at the time of the study. As a result, questions were developed to explore, in detail, their experiences related to fitness, nutrition, and social support. The interview guide, in its entirety, was presented to a panel of experts- women from within the health promotion field – for approval and the questions were vetted with these women who are familiar with overweight/obese populations in February 2023 to validate the questions and confirm they could be easily understood and that they would generate the data being sought after. Changes and revisions were made, as necessary, based on the participant responses and suggestions. A copy of the interview guide is in Appendix D.

Recruitment, Participation, and Data Collection

Online media posts and flyers describing the study and participant requirements were used to recruit participants. Recruitment took place within online weight-loss communities that are open to the public as well as the Walden group for research participation requests. A snowball sampling method was used to identify others who fit

the requirements outlined in the descriptive study. Potential participants had to self-identify as meeting the criteria for overweight or obese, as defined by the CDC (2021). They must also fall within the 40-58 years old age range and be current citizens of the United States. The researcher conducted a Zoom audio call for the interview portion of the study to allow for greater participant location. The researcher used the recording device on the Zoom program to record each session. The researcher met with the participants individually for up to an hour to allow for thorough understanding. The researcher utilized a general question approach and became more specific as the questions progress. The interview questions (Appendix D) were structured to answer the main research question as well as the sub-questions.

To be connected via Zoom audio, the participant was sent a link with a password specific to their interview location. This was to ensure privacy during the interview. The interviewees were told that the researcher was in a closed room, wearing headphones, and were also encouraged to be in a private location if possible to feel the most comfortable speaking with me. This occurred prior to the start of the interview recording. The interviewee was also as reminded of the informed consent and the amount of time allocated as specified in the informed consent. The interviewee was asked if they had additional questions. Once the interviewee was comfortable with the situation, the interview began. The interviewee was to direct the flow of the interview. The open-ended questions allowed the participant to speak freely about their personal experiences with overweight/obesity, as well as their experience in online weight-loss communities, both positive and negative. Upon completing the interview, the researcher thanked the

participant for completing the interview and asked a final time if they had any questions. The researcher then then informed the interviewee when they could expect to receive the results from the study (a summary review) and confirmed the best way to receive their \$10 Amazon gift card (either by email or physical mail).

Participants were asked if they knew anyone from within their specific weightloss community or a friend with experience in a different online weight loss group who
might be interested in participating. This was used as a method to get more participants
if necessary to reach saturation. Each participant received a debriefing (as previously
stated) and information on procedures to receiving the study results. As a result, this
served as the conclusion of the study. *Data saturation* is the degree to which new data
repeats what is expressed in the old data (Saunders et al., 2018). Data saturation in this
study was defined by the researcher's interpretation of what is said during the interviews.
As a result of the data analysis, it was determined if the interview process needed to
continue if there was not enough data to select themes.

Data Analysis Plan

Qualitative research involves three methods of data analysis: collecting the information, then preparing and organizing the text data (Saldaña & Omasta, 2022). The interview questions were guided by the research questions in this study. Each interview question should, by design, provide data that answers the research questions. The collected data was themed based on the identified conceptual frameworks and connected back to the originating research question. I identified themes in the data by

using open ended questions and then aligning the themes with the theoretical constructs that underpinned the research.

Based on the conceptual framework, collected data was themed and linked back to the original research question. To identify themes in the data, I used open-ended questions and aligned them with the theoretical constructs that underpinned the study. SLT and HBM theoretical constructs guided each interview question (Appendix D). In case any themes did not fit well within the SLT/HBM framework, they were not included in the themes; however, they could be included in the results. To code and analyze the data, I audio recorded interviews and transcribed them manually. In Creswell and Creswell (2017), codes are categorized into themes, resulting in a comprehensive description of the phenomena. A password-protected computer and a jump drive were used to identify and store all themes (Maher et al., 2018). As part of the development of the codebook, prior researcher-driven codes, and an inductive review of transcripts for salient concepts were used (Maher et al., 2018). I manually created codes to enhance trustworthiness, credibility, transferability, and dependability to improve codes after evaluating research findings.

The interview questions were designed for use during the semi structured interview to produce answers to the research questions. Recording the Zoom interviews helps allow a researcher to listen, read, and collect information for data analysis. Notes and memos acted as a basis for developing classifications and connections. Hermeneutic interpretation provided the content of the narrative. This practice guides a researcher in making a substantial list of the experiences the participants revealed. These

descriptions/comments were helpful in the development of themes. The thematic analyses of participants' life experiences preceded the priority list. Literature states, for example, that participants' responses enable the completion of the collective testimonies based on their experiences and coping mechanisms. Documentation shows that social support can include family and friends, including those made within an online community (Soós et al., 2022). The feedback generated helped collect participants' lived experiences and could prove to be helpful to individuals and communities. Themes revealed how individuals coped with the stress of their lived experiences. A table of codes recorded the participants' lived experiences by themes. The interviewer made notes and recognized the interviewee's conduct if the participant became elusive or resistant to further disclosure or that the participant seemed uncomfortable. If anger persisted in words and actions, this was determined to be a common theme.

Irritation might be expressed through tone or activity, such as loud or irritated responses, or failing to answer a specific question. The following illustrates a coding statement: A participant says, "I know that physical activity could help me with my problem, but I cannot fit this into my schedule." This statement shows a reason for not participating in physical activity. The clustering sheet might translate the lived experience of an embarrassed, elusive participant or if they said, "I feel and look too fat; I have tried to lose weight before."

Interpretative phenomenological analysis (IPA) was used to analyze the interview responses because it allowed for deep attention to the words shared by participants. The goal of this analytical approach was to provide a comprehensive understanding of the

uniqueness of each individual. Through IPA, individuals can examine in depth how they perceive events and experiences in their lives, as well as how they perceive their personal and social worlds. The researcher attempted to understand the participant's world through interpretative interaction. To interpret the data, the researcher developed codes using common themes from the transcriptions. The focus, however, was to analyze using the method of IPA (interpretative phenomenological analysis). After reading the transcripts, IPA was a process that helps the researcher develop themes anchored by direct quotes from participants (Kelly et al., 2022). In an IPA approach, three core concepts are included: the phenomenological component, which helps participants make sense of the experience as they develop their understanding; the analysis component, which seeks to reveal the participants' understanding of the experience; and the interpretative component, which will examine the culture from within the online community as a means of understanding the experience and gaining new insights. Participants' direct quotes are the primary source of all IPA findings (Kelly et al., 2022).

Issues of Trustworthiness

In qualitative research, researchers often disagree on which criteria are the best for evaluating trustworthiness. It is essential to establish trustworthiness in qualitative research for the outcomes to be rigorous and credible. The trustworthiness criteria were developed by Lincoln and Guba (2006) for evaluating qualitative research. According to Lincoln and Guba, quantitative and qualitative research cannot be judged using the same criteria, as their epistemological underpinnings differ; today, the criteria are widely recognized as credibility, transferability, dependability, and confirmability (Lemon &

Hayes, 2020). It is recommended that the researcher imposes 'activities' to strengthen the criteria and, therefore, the project's overall trustworthiness. To establish and maintain the highest level of trustworthiness, as a researcher, it was essential to continuously be aware of firsthand experiences, involvement, and subjectiveness.

Credibility is the confidence that a study's findings are factual. After interviews and transcripts were complete, credibility was maintained. The participants informed the researcher if the formation they were expressing was accurate if deemed necessary. This information provided credibility to the study by allowing participants to state their views and reevaluate their statements once questions were asked. The researcher always focused on encouraging further elaboration on participant responses.

The credibility of a study depends on whether the interpretation of its outcome accurately reflects the data gathered from participants (Korstjens et al., 2017).

Quantitative research's internal validity can be compared with qualitative research's creditability. The use of persistent observation and triangulation are commonly used to strengthen credibility. The study did not leverage these activities, but member checks, peer review, prolonged engagement, and reflexivity were utilized to boost credibility and trustworthiness (Merriam & Grenier, 2019; Ramsook, 2018).

My main strategy to strengthen credibility was peer review (Merriam & Grenier, 2019). Thus, the dissertation committee was a major source of feedback. Each member could review and provide feedback to assure alignment with dissertation-level expectations. A second strategy to strengthen credibility was prolonged engagement.

Data saturation occurs when no new insights are revealed from the data, and the data

remains consistent. The researcher's position, also known as reflexivity, remained a top priority for me during my research (Merriam & Grenier, 2019). The researcher's bias, experience, and perspectives were acknowledged and considered throughout the research process.

Transferability means the findings of the research can be used in other contexts, while dependability implies that the results bear repeatability. Schloemer and Schröder-Bäck (2018) noted that because the literature does not provide a well-established body of evidence on the concept and the criteria for transferability of health interventions, it is necessary to use a systematic review method that allows conceptual in-process and output to develop a basic model for the assessment of transferability. Therefore, a thematic synthesis can be performed, an inductive method that shares similarities with approaches from grounded theory and meta-ethnography. A further use of the IPA was to generate codes from the transcripts by means of reciprocal translation and constant comparison in order to derive descriptive and analytical (or higher order) themes (Schloemer & Schröder-Bäck, 2018).

Transferability can be compared with external validity in quantitative research, and it refers to the generalizability of the research results. When we provide 'thick descriptions,' the reader can judge whether our findings apply to other populations, settings, and situations, which we refer to as a transferability judgment, or as transferability in qualitative research (Korstjens & Moser, 2017). According to Lincoln and Guba (1985), it is up to the current researcher to determine transferability, not the past or future (Merriam & Grenier, 2019).

Providing rich, thick descriptions of the phenomenon is necessary to strengthen transferability, as stated by Merriam & Grenier (2019). To achieve this, open-ended questions were used, and participants were encouraged to provide as much detail as they would like in their responses. I also used probing questions to obtain more information and clarification. Participants' responses are not the only component of rich, thick descriptions. The procedures and context of the study are also important. In addition, I recruited participants using purposeful sampling. Purposeful sampling improves transferability by diversifying the group of participants (Merriam & Grenier, 2019).

The dependability of the study was ensured by using external audits. External audits were performed by having a separate researcher not involved in examining the process and product, in this case, by the Walden University URR. Walden defines the URR process as "the quality assurance mechanism for capstone research." It aims to facilitate quality student research through a supportive environment of committee members working together. Conducting a single quality control at the end of the research study is common at other universities. Still, this approach can lead to delays or confusion when substantive revisions are required. Comparatively, the URR quality assurance approach distributes feedback across earlier stages so that reviewers can identify potential modifications to a student's research.

It is questionable whether human behavior is reliable in social science research. The concept of dependability or consistency in qualitative research was introduced by Lincoln & Guba (1985) (Merriam & Grenier, 2019). Qualitative research focuses on the consistency of the data's process and interpretation, that is, the stability of the data,

instead of replicating the study. An audit will strengthen dependability by providing a vivid description of data collection and analysis, and decision-making. A journal served as a mechanism for collecting reflections, capturing ideas, and explaining problemsolving situations.

Confirmability refers to how a study's findings reflect respondents' views and experiences rather than the researchers' biases, motivations, or personal interests.

According to researchers, authenticity is about accurately depicting the diverse realities present in the data collected from participants (Kyngäs et al., 2019). After the researcher completed the interviews and transcribes the interviews, credibility will be maintained by allowing participants to receive the information, if desired, as a form of member checking. The member checking process establishes credibility in trustworthiness. A research study's credibility is established by proving that the findings are accurate and honest; in laymen's terms, it means showing that the findings are true (Lincoln & Guba, 1985). Research participants are typically provided with either a brief summary or the entire findings of a study as part of member checking. Lincoln and Guba (1985) were seminal authors on qualitative research trustworthiness, and this is their classical definition. The participants could inform the researcher if any of the themes look inconsistent with the information they were trying to portray.

The confirmability of the research will be maintained by utilizing reflexivity.

Dodgson (2019) states that reflexivity is not a new concept, saying that it has been established as one of the ways qualitative researchers should ensure rigor and quality in their work. Mitchell et al. (2018) identified reflexive practice as some of qualitative

research's most challenging and vital work. Researchers should focus more on self-knowledge and sensitivity; better understand the role of the self in knowledge creation; self-monitor the impact of bias, beliefs, and individual experiences on their research; and maintain the balance between the individual and the universal (Dodgson, 2019).

Confirmability assimilates neutrality or objectivity in the study findings. By strengthening confirmability, the researcher establishes that the outcomes are grounded in the data and not his/her bias, motivations, or interests (Amankwaa, 2016). I used reflexivity to maximize confirmability by keeping a reflexive journal. This technique allowed me to intentionally document my personal experience with online weight loss communities, physical activity, and nutrition as it pertained to my study. Lincoln & Guba (1985) stated that a reflexive journal is "valuable and essential" to examining one's, "preconceptions, beliefs, values, assumptions, and position" throughout the entirety of the research process (Amankwaa, 2016).

Ethical Procedures

The ethical practices of research should be at the forefront of every research design. Conducting research with human participants requires this component, and it may even be the most important. Safeguards have been established by Walden University's IRB and U.S. federal regulations to uphold the utmost ethical standards. Likewise, the researcher bears the greatest burden to ensure ethical practices, that is, the validity and reliability of the study depend on the ethics of the researcher (Merriam et al., 2016).

The participants in this qualitative study had the right to receive the results from this study upon request, as well as access to their individual transcripts. All participants were offered to have the findings of the study summarized and sent to them when the research was complete. It was essential to limit any possibility that the participants can be coerced or have unclear boundaries during the research. Protecting human subjects from physical or psychological harm was a top priority. Participants were selected from an online weight loss community group. Participants were informed about the importance of the research and their role in understanding the study better.

Participants were identified by participant numbers or given an alias name in the study. The list of the aliases was stored in a secure, safe location only accessible by the researcher. All records stored will remain there for five years when they are discarded. Participants were informed that they could choose not to participate in the study. Any uncomfortable questions can be refused, and the participants could withdraw from the study at any time. Without exception, all participants were to electronically sign and agree to the informed consent form. When conducting research with human participants, informed consent forms serve a similar protective purpose as IRBs (Institutional Review Boards). Walden University's Center for Research Quality provides informed consent templates for participants 18 years and older, under 18 years of age, and their parents; I customized the template specifically for participants 18 years and older (Walden University, 2020). The form included information on the study's background, procedures, voluntary nature, risks and benefits, and privacy, as well as contact information for Walden University's Institutional Review Board.

Data security safeguards were established to strengthen research ethics. While my chair and I were the only ones with access to these files, I implemented password

protection and encryption where necessary. After study completion, the data will be maintained for five years; after that, I will delete all files from my computer.

Summary

This phenomenological study used a systematic method of analysis for data gathering. When an investigation and a planned approach are employed, quality control, reliability, and validity are achieved. The phenomenological methodology was deemed as suitable for this study, as Van Manen (as cited in Creswell & Creswell, 2017) defined hermeneutical phenomenology as the text of life (hermeneutics) that focuses on life experiences. The semi structured interview process consisted of online audio interviews and data analysis. Through this process, firsthand information was collected to identify and develop categories/themes from the narrative to form common ideas about the obesity experience.

Data collection and analysis provided answers to the research questions. These study findings can contribute to social change that helps with participants' life-altering issues related to overweight/obesity. The findings from this study provided valuable evidence about how obesity affects the daily lives of individuals. The findings of the research are discussed in chapter 4 by discussing the themes found in the interviews conducted with the study participants.

Chapter 4: Results

Introduction

The purpose of this qualitative research study was to gain an understanding of the experiences of middle-aged women in an online weight-loss community. Volunteers in this study participated in one-on-one, semi structured interviews via Zoom (audio). All interviews upheld the utmost confidentiality, and interviews were recorded per participant approval. Each member received an alias name to be used in all transcription material as well as the study results. The interviews addressed the following research and sub-research questions:

RQ1: How do middle-aged women perceive their experiences within an online weight-loss community?

Sub RQ1: How do middle-aged women describe their experiences in an online weight-loss community toward their nutrition?

Sub RQ2: How do middle-aged women describe their experiences in an online weight-loss community toward their exercise?

Sub RQ3: How do middle-aged women describe their experiences with social support in an online weight-loss community?

By understanding how middle-aged women perceive online weight loss communities, researchers and healthcare practitioners may be able to create more effective community experiences for middle-aged women trying to improve their health and wellness. The chapter outlines my research questions, operationalizes study

conditions, codes, and analyses, and presents data in tables and figures in a succinct and useful way. An overview of the research setting, participant demographics, data collection, and data analysis are presented in this chapter. The trustworthiness and results of my work will also be provided in this chapter.

Setting

Participants were recruited through both Walden University's participant pool and social media outlets; these aligned with the approved IRB proposal granted by Walden University's IRB. Interested volunteers completed a survey (SurveyMonkey) to identify that they met the qualification criteria. The qualification criteria consisted of being a female between the ages of 40-58 years old, a resident of the United States, having a BMI of over 25 (verified through a BMI calculator), and or having been a member of an online weight-loss community. The community focus on weight loss needed to be through fitness and nutrition methods, not through medical intervention (bariatric surgery, etc.) If members qualified through the survey, I sent an email with the next steps. Once the participant agreed to participate, and confirmed consent via email, a Zoom meeting day and time was selected with a subsequent detailed invitation sent. The data focused on the participants' experiences within the online community, including recommendations from other members related to fitness and nutrition as well as social support.

Participant Demographics

In this study, all participants were middle-aged women (self-identified as 40-58 years old) from the United States. The exact age of the applicants was not

requested. Participants were all members of an online weight-loss community, and the length of time they participated in the community is specified in Table 1. The interview process consisted of 15 interviews, and of those, one interview was disregarded because of a language barrier. Demographics are identified in Table 1.

Table 1Demographics

Alias Name	Age	Residency	Length of time in the online community
Angie (P1)	40-58	United States	7 years
Brenda (P2)	40-58	United States	10+ years
Carol (P3)	40-58	United States	10 months
Debra (P4)	40-58	United States	4 years
Elaine (P5)	40-58	United States	5 years
Felicia (P6)	40-58	United States	11 months
Glenda (P7)	40-58	United States	2 years
Heidi (P8)	40-58	United States	2 years
Janice (P9)	40-58	United States	1 year +
Kelly (P10)	40-58	United States	10 months
Mary (P12)	40-58	United States	14 months
Nancy (P13)	40-58	United States	5 years
Pauline (P14)	40-58	United States	1 month
Rhonda (P15)	40-58	United States	1 year +

Data Collection

Data collection began on April 17, 2023 and concluded on May 11, 2023. Participants were recruited from Walden University's participant pool, as well as through professional and public social media outlets (LinkedIn and Facebook). The recruitment process consisted of interested participants completing the screener survey with further questions directed to me via email at holly.fields@waldenu.edu. I replied with the

informed consent attached to the email asking interested participants to read and ask any questions, before responding with "I consent" in the body of the email. They were also directed in the email with the next steps process of scheduling an audio Zoom interview. Once this was received, a day and time were selected, and Zoom call-in details were sent. The interview durations were between 25 and 40 minutes, with an average of 32 minutes in length. I began each interview by expressing appreciation for participating in my research interview. I asked if they had questions before we began and confirmed their consent to begin recording on both Zoom (audio) and Fathom transcription devices.

To establish rapport, I began by asking each participant background questions related to what motivated them to join their respective community and how long they had been in that group. I also asked about any health concerns that they might currently have. A semi structured open-ended interview question allowed each participant to answer the question narratively. During the discussion, I encouraged the participants to share as much information as they felt comfortable sharing. To ensure comprehension, I rephrased questions and summarized them while leveraging probing questions to ensure rich responses. After completing my interview questions, I asked participants if there was anything else they wanted to share before stopping the recording. Details on the interview script and interview guide can be found in Appendix E. Upon conclusion of each interview, I sent the incentive (\$10 Amazon gift card) to the participant's email, transcribed the interview via Fathom, and changed participant identification therein. A transcription was sent to each participant for verification of correct content. The participants were directed to send any changes to me via email. I received feedback from

four participants, three confirming everything appeared accurate, and one giving me an updated version of the transcript that clarified some unclear points.

Having collected relevant data from fourteen participants, a decision was made to stop the solicitation of additional participants. Saturation is one of the most important concepts in qualitative research. The saturation of data occurs when no new findings are discovered in data analysis, indicating that data collection may be sure that further data collection would produce comparable results and confirm emerging themes and conclusions (Faulkner & Trotter, 2017). It was evident from reviewing the transcripts that saturation for this study had been reached.

Data Analysis

The highest level of rigor was pursued throughout the execution of this project. My purposeful sampling protocol and study purpose are described in greater detail in Chapter 3 to align with my research design. All recorded interviews were transcribed in Fathom, edited, organized for consistency, and returned to participants to ensure accuracy. Fathom offers a comprehensive solution for Zoom meetings by serving as an AI meeting assistant that facilitates recording. Once the transcripts were verified by the participants, I uploaded the documents into Dedoose for coding, theming, and analysis. Dedoose allows you to organize research data in a variety of formats, including qualitative information such as text, audio, images, and video, as well as quantitative information such as test scores, ratings, or demographics.

The next step included the building of groups of meanings into codes and then themes. I searched for significant statements, which supported the themes and brought

awareness of how the participants experienced the phenomenon. I applied an inductive approach to all fourteen scripts and produced 12 "parent" codes with 43 total "child" codes. A parent code is a main code, and a child code is a subcode found under the parent code. An example in this research study of a parent code was "definition of healthy" (parent code) and the subcodes (child codes) were as follows: energetic, good health markers, good mental health, and self-sufficient with age. A second example of a parent code in this study was health concerns with the child codes identified as feeling tired, hard to move, high blood pressure, and stress.

Software for qualitative data analysis (QDA) provides researchers with tools for analyzing raw data by "systematizing, organizing, and analyzing" text data. QDA evaluates text data to generate outcomes by recognizing relevant words or phrases, both determined by the software or determined by the researcher, and calculated based on frequency (Adu, 2019). I used Dedoose's QDA software because it was user-friendly, intuitive, and secure, based on my limited experience with QDA software. With Dedoose, themes are color-coded, and categorized into categories (parents) and subcategories (children), themes are generated, and guides and manuals are provided (Dedoose, 2023a).

Transcripts were uploaded and coded immediately following the interviews to reduce recall bias and improve data management. In this study, direct transcripts were examined to identify code and category matchings that corresponded to the HBM and SLT conceptual frameworks. A reflexive first cycle coding strategy was intended, while a refined second cycle coding strategy focused on barriers and facilitators health educators

experience when recommending physical activity and nutrition to middle-aged women with obesity and overweight.

John Dudovskiy (2021) states that inductive reasoning begins with detailed observations of the world, then moves toward abstract generalizations and ideas. Inductive research typically begins with a topic and develops empirical generalizations and preliminary relationships as the researcher carries out his research (Neuman, 2003). According to Neuman (2003), during the initial stages of a research study, none of the hypotheses are apparent, and the researcher does not know what type of findings will be found until the study has been completed. In addition to using a reflexive approach, I used inductive reasoning as both a first step in producing codes and as a second step in formulating common themes based on these codes.

Evidence of Trustworthiness

Credibility

According to Moran (2021), credibility is the first aspect, or criterion, to establish trustworthiness since it is the most important aspect. Researchers must demonstrate credibility by linking their research study's findings to reality in order to establish the truth of their findings (Moran, 2021). Throughout the interview and transcript process, credibility was maintained. If necessary, participants informed the researcher if the information they were expressing was accurate. Once participants were asked questions, they were able to clarify their views and reevaluate them. A probing question would be used if more details were desired from participants' responses to the interview questions. Reflexivity, also known as the researcher's position, was one of my top priorities during

my research (Merriam & Grenier, 2019). During the process of research, the researcher's bias, experience, and perspectives were acknowledged and considered. In Shufutinsky's (2020) view, the researcher's use of self is critical to qualitative research's validity and credibility. This is because the researcher is generally the primary instrument for collecting, analyzing, interpreting, and reporting data.

Following the collection and transcription of data, members were given the opportunity to check their data. They could analyze the summary and transcription and offer any comments or corrections to the data after reviewing the summary and transcription. If participants provided corrections, changes were made before themes were developed to ensure accuracy. As a result of these steps, the credibility of the study could be confirmed. During the interviews, I became aware that I was not learning any additional insights and had likely reached saturation. After a discussion with my committee chair, it was decided that 14 interviews were sufficient to ensure that I had exercised prolonged engagement to strengthen my credibility in consultation with my committee chair. At the end of each interview and subsequent follow-up, I completed my reflective journal. I intentionally paused to evaluate possible bias during each entry and considered what went well in the interview, where improvements could be made, and where process improvements could be made.

Transferability

In addition to purposeful sampling, open-ended and probing questions were used to validate transferability. The two strategies reinforced the diversity of participants and their responses. Using Walden University's participant pool and social media outlets to

recruit participants yielded a diverse group. During the recruitment process, I was upfront about the incentive I was offering, a \$10.00 Amazon gift card. As a result of journaling, dependability, confirmability, critical thinking, personal experience, and bias were strengthened. In real-time, reflective journaling was conducted after each interview, which allowed me to make sure conclusions were based on participant feedback and not my own.

Since the literature does not provide a well-established body of evidence on the concept and the criteria for the transferability of health interventions, Schoemer and Schröder-Bäck (2018) recommend a systematic review method that allows conceptual input and output to develop a basic model for evaluating transferability. It is therefore possible to conduct a thematic synthesis, a method that is similar to grounded theory and meta-ethnography. As an additional application of interpretive phenomenological analysis (IPA), descriptions and analytical (or higher order) themes were derived by reciprocal translation and constant comparison of transcripts (Schloemer & Schröder-Bäck, 2018).

Transferability in quantitative research refers to the generalizability of the results and can be compared with external validity within qualitative research and determines whether a study's findings can be applied to other contexts, situations, periods, and populations (Moran, 2021). Our thick descriptions enable the reader to determine whether our findings can be applied to other populations, settings, and situations, which we refer to as a transferability judgment (Korstjens & Moser, 2017). Lincoln & Guba

(1985) assert that transferability is determined by the current researcher, not the past or future (Merriam & Grenier, 2019).

Gilbert Ryle (1949) stated that rich, thick descriptions are necessary to strengthen transferability (Merriam & Grenier, 2019). As part of this process, open-ended questions were used, and participants were encouraged to provide as much detail as they wanted. To obtain more information and clarification, I also asked probing questions. Rich, thick descriptions are not solely based on participants' responses. A study's procedures and context are also important. Additionally, I recruited participants by using purposeful sampling. The purposeful sampling of participants improves transferability by diversifying the group of participants (Merriam & Grenier, 2019).

Dependability

External audits ensured the study's dependability. Discussions with my research committee were performed as part of the external audit process. By fostering a supportive environment of committee members working together, the external audit process facilitated quality student research. Most universities conduct quality control at the end of the research study. It can, however, result in delays or confusion when substantive revisions are required. Receiving feedback across earlier stages was necessary so that reviewers could identify potential modifications.

The reliability of human behavior in social science research is questionable. It was Lincoln & Guba (1985) who introduced the concept of dependability in qualitative research (Merriam & Grenier, 2019). Qualitative research emphasizes consistency in the process and interpretation of data, rather than replicating the study. By providing a

detailed description of data collection and analysis, as well as decision-making, an audit will strengthen dependability. As a way of capturing ideas, capturing reflections, and explaining problem-solving scenarios, journals were used.

Confirmability

For a concept to be confirmable, it has to be credible, transferable, and reliable (Thomas & Magilvy, 2011). Thomas & Magilvy (2011) state that a study's confirmability is measured by how well its findings reflect respondents' views and experiences rather than the biases, motivations, or personal interests of the researchers. Researchers define authenticity as accurately depicting participants' diverse realities within the data collected from them (Kyngäs et al., 2019). Upon completion of the interviews and transcription of the interviews, the researcher allowed participants to receive the transcripts to ensure credibility. By checking members, trustworthiness was established. By proving that the findings of a study are accurate and honest, its credibility was established (Lincoln & Guba, 1985). Member checking typically involves providing participants with a summary or the entire study's findings. Among the seminal authors on qualitative research trustworthiness are Lincoln and Guba (1985). It is up to the participants to inform the researcher if any of the themes appear to be inconsistent with the information they were trying to convey. This was identified through the email process of reviewing the transcripts. The participant did not specifically know the themes, but the verification of the information found within the transcripts would confirm accuracy.

Reflexivity maintained the validity of the research. Among the ways qualitative researchers can ensure rigor and quality in their work is through reflexivity, which

Dodgson (2019) calls a not-so-new concept. The most challenging and essential work in qualitative research is reflexive practice, according to Mitchell et al. (2018). Increasing self-knowledge and sensitivity, a better understanding of the role the self plays in knowledge creation, self-monitoring of bias, beliefs, and experiences in their research, and maintaining a balance between the individual and the universal are important for researchers (Dodgson, 2019).

Confirmability implies neutrality or objectivity in study findings (Thomas & Magilvy, 2011). A researcher must be self-critical and consider how preconceptions affect their research. Taking notes about personal feelings, biases, and insights immediately after an interview is one way to achieve confirmability. Another is to follow rather than lead the direction of interviews by asking for clarifications when needed (Thomas & Magilvy, 2011). As a result of strengthening confirmability, the researcher ensured the outcomes were based on the data and not on their own biases, motivations, or interests (Amankwaa, 2016). Maintaining a reflexive journal maximized confirmability using reflexivity. As part of my study, I used this technique to document my experiences with online weight loss communities, physical activity, and nutrition. A reflexive journal, according to Lincoln & Guba (1985), is "valuable and essential" for examining one's beliefs, assumptions, biases, and preconceptions throughout the entire research process (Amankwaa, 2016).

Results

I developed codes for each transcript based on my research questions and identified 10 emerging themes. These themes are related to health concerns and

information received from within the online community, including that from both other participants of the community and admin/coaches within the community. The information received from within the online community as specific to exercise and nutritional guidance or recommendations, as well as social support from within the community. The following is a comprehensive analysis of the main research question and each sub-research question.

RQ1

How do middle-aged women perceive their experiences within an online weight-loss community?

Middle-aged women were asked about their experiences in an unspecified online weight-loss community. Research has shown that by being involved in a community for weight-loss efforts, the participants tend to be more successful (Bradford et al., 2017). This made me wonder exactly how middle-aged women perceive this support though, and specifically, what their experiences are related to exercise, nutrition, and social support. Of the 14 participants, all 14 stated that they joined their online community to lose weight. All 14 participants were also seeking support, and 6 of the participants indicated that they were seeking further knowledge related to their weight-loss goals. To answer the main research question, I asked a series of open-ended questions from the interview guide. The core themes that emerged during the data analysis were: (a) the need to lose weight (b) seeking support and (c) seeking education. The main RQ corresponded with the following interview questions with probing questions used as needed:

- Individual Question: What made you join this community?
- Individual Question: How long have you been a member of this community?
- Individual Question: As you identified yourself as overweight/obese, can you share any health concerns with me?

Emergent Theme: Seeking Social Support

Participants were asked their reason for joining the online weight-loss community. Participants described their thoughts on seeking not only the support of other individuals but also that they were seeking information and education from both other members of the community, as well as from members of the administrators of the group. Collectively, participants stated that they joined, as stated by 'Angie', for having access to new research, new information, new recipes, anything to kind of keep my education up", and 'Carol' stated, "I needed to find something that was going to get the weight off, to get a support base to kind of help me, plus the whole idea of having a community was to have that sense of accountability and to keep me on task and to keep me on plan and to really kind of give it and to trust in the plan and see how it works because I just I never give it fully, you know, for any length of time. 'Debra' commented, "get ideas, to get motivation, ideas of things that were healthier to eat that maybe I was overlooking and that type of thing", whereas 'Elaine' stated "So I think there was a lot to be said for the education that I got from just going through that whole experience, both with the coaches and with the ladies that I met through it". 'Heidi' commented:

That really caused a lot of stress and I put on like 40 pounds that I couldn't seem to get rid of it. In 2017 I joined the community, and the purpose was because I needed the accountability. So, I knew what to do.

'Kelly' stated:

Because I was feeling body shamed along whenever I visit my friends. And I needed something to, to like, kind of motivation that will maybe motivate me to work hard. And maybe have a routine. So that's when I decided to join the community.

'Nancy' reflected, ". I joined that community because I, found it's important to associate with people who had a similar interest of engaging in weight loss programs, in weight loss studies." All 14 participants indicated that they were seeking some type of accountability and/or social support.

Emergent Theme: Need to Lose Weight

From these interviews, a common theme emerged about the women's need to lose weight. One of the main reasons the women came to this community was because of this desire to lose weight. The women were seeking some type of program or plan to help them in losing unwanted pounds. 'Glenda' stated:

Yes, so I need to actually watch my weight because I was in a car accident years ago and broke my pelvis and so I can really feel the difference on my body when I have too much weight on my body.

'Mary' identified her reason for joining by stating:

Yeah, the main reason is because I wanted to work on my weight. Yeah, I wanted to work on my weight. I wanted to, you know, I wanted people. I wanted motivation to see what I could do to, you know, cut some fat and just cut down my weight so I could stay fit and just like I said, avoid all the serious health issues.

Pauline' commented, "So it was a while ago when I started the make journey to reduce my obesity and I found this online platform." 'Carol' stated, "I needed to find something that was going to get the weight off." All 14 participants made a reference to weight loss as one of the reasons that they found their respective online community.

Emergent Theme: Multiple Health Concerns

Of the 14 participants, 5 indicated that they were concerned about their levels of stress, 5 indicated they found it hard to move while being overweight, 3 felt miserable/tired, and 4 indicated high blood pressure was a health concern. Of the 14 participants, 5 of them had received an actual diagnosis related to overweight and 9 of them had not received a medical diagnosis. Some of the health concerns as stated by these women were as follows: 'Janice' commented:

Okay, with my weight. Oh, yeah, that had to be difficult in breathing. Yeah, and then sometimes I feel tired so easily, I can't walk long distances and you know I just kind of feel so weak and tired doing some kind of stuff at home.

'Elaine' also reflected about her inability to move as easily as she once did by stating, "The physical side of it, so like the physical flexibility, mobility, not being able to move as well as I did when I was in my younger years. 'Carol' stated:

And it's hard because my body does not want to move for like a good two hours in the morning. And, and it's, it's, I mean, it hurts to bend and flex my ankles to go down the stairs. It's like then by the mid afternoon and evening, yeah, I'm probably a little bit more limber. I won't call it limber, but at least more functional.

Relating to health diagnosis from a medical practitioner, the women commented as follows: 'Rhonda' stated, "My cholesterol is going up. And my A1C is going up. And I think that's 100% the fact that I'm starting to put on weight." 'Heidi' commented, "So that would be the hypertension, the NASH, and the sleep apnea." 'Elaine' replied, "The high blood pressure." 'Carol' expressed, "Undifferentiated connective tissue disease, which is a fancy word of saying, hey, you're either going to get RA or you're going to get lupus." 'Brenda' said, "Well, the diabetes and high blood pressure. And high cholesterol." Even though a low percentage of the women indicated an actual medical diagnosis, over half of the participants indicated a concern with their overall health.

SubRQ1

How do middle-aged women describe their experiences in an online weight-loss community toward their nutrition/diet choices?

- Individual Question: Can you describe what you have experienced as a community member?
- Individual Question: What were your experiences regarding nutrition from within the community?

Emerging Theme: Nutrition Guidance Provided

Related to nutrition, all 14 of the participants received some type of guidance related to their dietary intake. Some women had more structured recommendations (from coaches) and others received more "loose" guidelines, which were typically from other members of the community. 'Pauline' stated:

I can say most of them. They encourage me to take small meals. Regularly at intervals. That I can say it was from a community member. And also. Low fat products." Also, she continued by saying, "So, we were given, we were given these guidelines. And diet too. And also, we were also defined. to adopt us to help us to never we need to feel like the diet that you're using is not correct or is not going well with our body and also physical activity this was the most recommended one in our group and we're usually advised to attend dreams near our places to help us and we always record how you're going through your journey to the dish or the city and the lifestyle too we were told to change our lifestyle if it's taking alcohol we would told not to take a toll or if someone cannot manage not to should take it in small amount reduce fatty foods and cut down sugar salt.

'Nancy' commented:

The advice that to fasten weight loss, I should incorporate a slim tea like I should be taking a slim tea, sometimes you know, lifting, maybe coffee, then I should depend more on vegetables and then reduce my consumption of simple carbohydrates.

'Angie' stated, "Sure. Yeah, in the group, it also came with meal plans and information about how daily servings of, you know, everything, fruits, vegetables, carbs, proteins, things like that."

'Elaine' added:

Nutrition is a tough one because with any type of program you have to have, you should have a certified nutritionist sort of blessing all the nutritional information. I think between the two fitness and nutrition, nutrition was one of the weaker areas of the program because a lot of nutrition information that was provided was taken from what's typically shared out on the internet or was just one person's own personal journey and they kind of shared what they did. I Didn't feel like the nutrition was specialized enough.

Emerging Theme: Unrealistic Nutrition Ideas

As 'Elaine' indicated, nutrition was not specialized enough for her in her respective community. Approximately 6 out of the 14 participants reflected on a somewhat negative aspect of their community related to nutrition advice or guidance. These women stated that they received information that was either unbeneficial or questionable. Some reflections are as follows: 'Felicia' commented:

It's very centered around macros and tracking. And I have found through the last months

thatthe tracking itself is very unhealthy for me mentally because all I'm doing 24 seven is thinking about macros." 'Carol' reported:

I mean to do, you know, to do some quick easy meal replacement type of situation because it's easy in a life situation to do that. If you're, you know, busy or what have you to, for doing meal planning, it was easy for me to get on board with that as as a mother, a new mother and not have a lot of time. But it's not sustainable in a sense because we have to make good food. food choices outside of just having a shake every time. And we have to be able to live in the world where we go out to eat or we do things. And those choices have to be met with a food that we put in their mouth at all times. We can't just pop a pill or take a powder or have that shake every day. It's just not sustainable.

'Debra' noted a comment received from another community member:

You need to go on a 48-hour of fast and only drink water and occasionally water down juice. Well, that's not exactly conducive to most people's lifestyles and I'm sure it probably does have an effect. However, that's not very helpful. I think sometimes the extremes when you're not making the progress that you want to, that people will push you to can be a little bit unhealthy for your, not only for your health in general.

Emerging Theme: Helpful nutrition tips and guidance

Although 6 of the 14 participants noted some type of negative perception of the nutrition advice received within their communities, 6 of the 14 noted positive experiences. These women believed that they were receiving beneficial information that would help them toward achieving their goals. These women responded with the following: 'Nancy' received positive feedback, commenting:

Yeah, about what I eat, I reduced my intake of carbohydrates and my intake of foods from the other side. So I had to take a look at how much carbohydrates, and free sugar, I consumed. So I reduced that a lot.

'Pauline' stated:

They encourage me to take small meals. Regularly at intervals. That I can say it was from a community member. So, we were given, we were given these guidelines. And diet too. And also, we were also defined. to adopt us to help us to never we need to feel like the diet that you're using is not correct or is not going well with our body and also physical activity this was the most recommended one in our group and we're usually advised to attend dreams near our places to help us and we always record how you're going through your journey and the lifestyle too we were told to change our lifestyle if it's taking alcohol we would told not to take at all or if someone cannot manage not to should take it in small amount reduce fatty foods and cut down sugar salt.

'Glenda' noted:

I think. Learning about nutrition. Um. And in that group, I learned a lot about, or not a lot, but I think it was my first like introduction to how processed foods can be not so great for you. So, um, you know, that was when I was kind of taught to try to shop on the outer parameters of the grocery store was from that group. So, that was really good advice.

'Kelly' stated:

From the community members, they still help. Also, regarding nutrition, it's really had a positive effect on me because I learned that there are certain meals that I should avoid, there are certain meals that I should take once in a while. That really helped me to understand the nutrition path regarding the weight addition and weight loss.

'Angie' commented, "Sure. Yeah, in the group, it also came with meal plans and information about how daily servings of, you know, everything, fruits, vegetables, carbs, proteins, things like that." The general consensus was that nutrition advice was helpful in achieving weight loss goals, however, the recommendations were not always tailored to the individual.

SubRQ2

How do middle-aged women describe their experiences in an online weight-loss community toward their exercise choices?

- Individual Question: What were your experiences regarding exercise/activity from within the community?
- Individual Question: Did you receive any fitness recommendations from within the community?

The participants were asked multiple questions related to what the experienced within their weight-loss communities related to exercise with probing questions used as necessary. They were questioned on the same basis as with nutrition as to whether they received guidance from other community members or members of admin of the

respective groups, as well as if they believed the information that they received was helpful for them. 6 of the 14 participants stated that they received information from admin/coaches within the community, and 10 of the 14 stated they received information from other community members.

Emergent Theme: Helpful Exercise Tips and Recommendations

Nine of the 14 participants noted a positive experience within the community related to information they received related to exercise. This could have taken the form of an actual exercise plan received from coaches/admin, or just general exercise recommendations and tips from other members of the community. 'Nancy' reflected:

Yeah, I was encouraged to go on morning walks. Morning walking. Could say it would call it a morning walk. You know you can jump in the morning. Every day. And we also talked about about workouts. Like yeah there are whole workouts you could do without going to the gym. Because that's all. you know, do belly pushups, you know, yeah, I'm not busy with exercise.

'Kelly' stated:

Like regarding exercise, it has been made easy because of teamwork. And you know, we have levels of exercise as you reduce weight. So there are those exercises that you could do whenever I was there, time I was overweight, they are exercises that I could learn to do. And as for now, I can do them. So that has been my motivation because they are taking you step by step to new levels of exercises until you perfect.

'Felicia' commented:

So that's the part where I feel like I mostly benefited and really appreciate the community, is that I have never lifted weights and I like going to the top of the top of the top of someone that's in the subject if I'm learning it. And I feel like the person, my first coach that I had that's no longer with there, them was a bodybuilder. I'm not interested in bodybuilding, but they were literally a professional competing bodybuilder and understand how to communicate so effectively that I started lifting weights and I've never felt so body positive in my life. And it became my whole mindset was not necessarily about getting skinny, it was about becoming strong. And that's a huge thing at my age after so much social impact of the world, of skinny, skinny, skinny, and growing up in the 70s and looking at 17 magazine or whatever, like that was a big shift for me.

Emergent Theme: Exercise Recommendations not Personable

Seven of the 14 participants reflected on some type of negative aspect in their experience with exercise within their respective communities. These women felt that the exercise recommendations were either not sustainable, or achievable for them specifically. Some of the responses were as follows: 'Carol' reflected:

Well, that was difficult too because of again, it was like having to grieve a little bit of where I was physically because of my newfound illness and then having to kind of learn my limits of physical energy and like for me to just go ahead and jump on the treadmill. It's laughable but I would be done. We're like, okay, I can't do anything else. Without function, it's literally like I have just enough energy to go and do this for the day and I have enough energy to do this, this, this, and this.

But if I was trying to find that as I'm also trying to find the right medication combination, as I'm trying to find the right supplements that will help me to get more energy. All of that was happening at the time that I'm trying to do this. And everything was new, and I didn't have all the answers yet about me. And so, it was hard for me to say, oh yeah, I'll go ahead and I'll do my body for life, interval training of weight and I'll do a leg day today. That is not what I could be doing at the age of 48 or something that I was doing this. So, it's a lot of learning.

'Debra' stated:

No. I felt like, and you find this a lot, but because most people are focused on the way that their life works, that there wasn't a whole lot of input around how it could be adapted to someone else's lifestyle.

'Rhonda' noted:

Yes. So, whenever there's a weight gain, they are immediately just they're like, you know, you need to get your cardio up. And I'm always like, it's food and weight training. Food and weight training. Food and weight training.

SubRQ3

How do middle-aged women describe their experiences with social support in an online weight-loss community?

• Individual Question: Can you describe what suggestions, recommendations, or guidance have you received from other members of the community?

- Individual Question Did anyone in the online community give you medical advice?
- Individual Question: Do the members within the community discuss weight goals? How do you feel about these discussions?

Twelve of the 14 participants in the research study had at least one positive experience from within their respective communities. 4 of the 14 participants noted some type of negative experience related to social support within the community. There was one outlying comment which differed from any others. This was received from 'Angie', who stated that she wished there was more age-appropriate information from within her community.

Emergent Theme: Encouragement and Accountability

One of the most noted reasons for joining the online communities was social support and accountability. Eleven of the 14 participants specifically noted that they were seeking social support when they joined their community. The complexity of social interactions varied from each individual. 'Rhonda' commented:

They truly were a truly bonded group of women. And we truly care about one another. And there's a lot to be said for that safe space. It is a safe space. I can say exactly how I feel. And clearly, they can too. So, without, you know, persecution, so that's incredibly valuable.

'Pauline' stated:

When I got in the community, I realized there were also many people like me or even or people that are even more issues than the ones I got. So, they will help me a lot with the how to manage my eating habits, to change my lifestyle, and how to interact really with my body so that I can accept the change that it has taken place and also accept that I can also make it comfortable and also reduce it without any pressure.

'Angie' added:

Some of the things that resonate with me are when people share kind of their daily routine. That's helpful. How they handle when they have to go out to eat or social situations. Strategies they have that have helped them stay on track with where they want to be but not feel deprived. So, it's those kind of strategies and suggestions that are helpful to me.

'Glenda' stated:

Accountability not only from the instructor, but kind of, you know, if you start out doing it and people are seeing what you're doing and you're not there for a few days, you don't track or something like that, you know somebody's going to say something. So, I think accountability of it was what made it a success for me.

Emergent Theme: Weight Loss Goal Discussions

As part of the interviews, each participant was asked if their community members discussed weight loss goals specific to their personal goals. Two of the 14 indicated there was no specific weight discussion, but 12 of the 14 indicated specific weight discussions from within the community. Below is a list of responses from a select group of participants: 'Rhonda' stated there was NO discussion, noting:

No. We, in fact, if I ever bring up an absolute number, they get really defensive on the number. And it's all about like, you know, are your pants fitting? And, you know, do you feel good in what you're wearing kind of thing? How does your body feel? You feel good. So, it's not a number based group. It's like, how do you feel?

'Brenda' also stated there were no specific discussions of weight but commented:

The only mention of weight is wonderfully psychological about if there was this one question that was posed and I will never forget it for the rest of my life. And they said the other day they said if you looked exactly like you did today, but the number on the scale happened to be that magic number that you always want, would you be happy?

From the participants who answered YES, the following is a sample of responses: 'Janice' stated:

Well, I feel encouraged and I feel inspired, you know, when people talk about their goals and what they are willing to achieve. You know, a couple of months or yes, I also feel the need to. Be serious and also consistent in my weight loss journey

'Heidi' commented:

Um, it didn't really bother me. I never really went back and forth, but a lot of times the new members, they would kind of post their initial kind of, you know, like who they are, what their expectations were or what their goals were. And a lot of the times it would be like where they want to get with the weight. And then

people would comment, you know, in the comment section, but that was really it. And, you know, I kind of, I liked when I would see, you know, where somebody was starting and what their goals were and I really liked when I could see them actually working towards it and making it towards that goal. Unfortunately, not many people in the community actually stuck with it and actually met those goals. It was really only a handful of people unfortunately.

Summary

In this basic qualitative study, I interviewed 14 middle-aged women who were members of an online weight loss community. Women were asked to describe nutrition, exercise, and social support experiences within the community. As a result of the research, codes and themes emerged which were guided by the principles of the health belief model and the social learning theory. The 14 participants expressed outcomes that confirmed the assumption that physical activity and nutrition play a major role in weight management and weight loss. Overall, participants shared similar insights and experiences. This study provides health educators with detailed, in-depth insights into current practices and opportunities for creating programs and online communities to help middle-aged women suffering from obesity/overweight.

Chapter 5: Discussion, Conclusions, and Recommendations

Introduction

The purpose of this basic qualitative study was to better understand how the HBM and SLT influenced the exercise and nutritional choices of middle-aged women within an online weight-loss community. Women between the ages of 40 and 58 years who were overweight/obese, as indicated by their BMI charts, were included in this study. My study collected data from 14 women who volunteered to participate using semi structured, open-ended interview questions. My goal in conducting research was to determine the most effective programs for reducing body weight and improving the health markers of this group of women by gaining greater insight into their experiences. The key findings identified both the opportunities and drawbacks of online communities, which can be used to improve online platforms for future participants and to guide health professionals in developing new models.

Interpretation of Findings

As a result of this research study, the healthcare community may be able to identify what type of online communities are most appropriate to help middle-aged women reduce overweight/obesity. This study highlights the experiences and barriers, attitudes, norms, and perceived behavioral control of the women who participated. For middle-aged women suffering from overweight/obesity, there is a significant gap in the literature relating to their experiences in online communities. Thus, this research will contribute to the understanding of nutrition, physical activity, and social support in online communities as strategies for weight loss.

The following questions were used to understand middle-aged women's experiences in an online weight loss community:

RQ1: How do middle-aged women perceive their experiences within an online weight-loss community?

Sub RQ1: How do middle-aged women describe their experiences in an online weight-loss community toward their nutrition?

Sub RQ2: How do middle-aged women describe their experiences in an online weight-loss community toward their exercise?

Sub RQ3: How do middle-aged women describe their experiences with social support in an online weight-loss community?

Together, these research questions propagated the following ten emergent themes: Seeking social support, need to lose weight, multiple health concerns, nutrition guidance received, unrealistic nutrition ideas, helpful nutrition tips and guidance, helpful exercise tips and recommendations, exercise recommendations not personable, encouragement and accountability, and weight loss goal discussions.

Theme 1: Seeking Social Support

There was full consensus among all participants that social support is beneficial for helping a person stay on track in their journey to lose weight. This research study was based on the SLT and HBM constructs. Adhikari, et. Al (2019) validated social support in their research, stating that self-efficacy and social support are important constructs of social cognitive theory when it comes to obesity or overweight prevention or maintaining a normal body weight.

According to Sendra et al. (2019), social media can provide social support regularly, but institutions must create safe environments that allow physicians to participate in the communities of the sites. For many years now, patients have been using social media without the support of their physicians, so finding ways to reduce the communication gap between them is crucial. A social support theory application could be one solution, according to this review (Sendra et al., 2019).

Hedarnia et al. (2016) found that a behavior modification or prevention program is successful if it is flexible and tailored to the individual's features and characteristics. In their study, self-regulation and social support structures were tested to compensate for the deficiencies of HBM. A person's social support can be defined as the help he or she receives from other people. Additionally, it refers to the belief that one is respected and loved by others, that one is a valuable individual, and that one belongs to a social network of relationships and obligations (Hedarnia et al., 2016). The participants in my research study agreed that they felt a sense of belonging in their respective communities, aside from one participant who had conflicting information as her opinion changed throughout her course of time spent in her respective community.

Theme 2: Need to Lose Weight

According to the findings of the study, participants participated in their communities to lose weight. All 14 participants felt a strong connection between losing weight and seeking further knowledge to help them achieve that goal. Each community provided a somewhat different framework in their programs, some including input from coaches/admin and some not. Also, each community had different levels of support in the

weight loss goals of the participants, including specified nutritional programs/goals and/or specified workout plans or exercise recommendations.

Beleigoli et al. (2020) found in their study that the usage of weight loss websites was positively associated with levels of exercise, internalization, being female, eating disorder symptomatology, and being overweight or obese. The usage of weight loss websites was also connected to age and online social support, although very weakly. Weight loss concerns are widespread among young women (Belegioli et al, 2020). In their study, Beleigoli et al. (2020) found that within 24 weeks, web-based behavior change programs with personalized feedback from both computers and humans led to increased weight loss, though of a smaller magnitude. Personalized programs also improved multiple dietary habits, but not physical activity. Users engaged in the program more when they were provided with personal feedback from the online dietitian coach and their weight loss was significantly improved (Beleigoli et al., 2020).

As Martin-Vicario, & Gómez-Puertas (2022) demonstrated, recent literature shows that social support in online health communities contributes to weight loss both directly and indirectly. The authors found that previous research suggests most overweight treatments focus too much on weight loss rather than helping patients internalize healthy lifestyle behaviors. Reifegerste et al. (2017) argue that effective obesity treatment shouldn't focus exclusively on weight loss, but ought to help patients learn and practice healthy habits as well. A combination of social support and weight loss techniques combined in online health communities (OHCs) has been shown to be beneficial for obesity treatment (Yan, 2018), as this approach improves health outcomes

and helps members cope emotionally with their condition (Hwang et al., 2010; Nosek et al., 2019). In order to cope emotionally, one must believe in one's ability to control one's emotions and external factors (Bandura, 1997). Individuals who received social support at the beginning of participating in an OHC felt able to control their weight more effectively, according to Li et al. (2014). Social support for weight loss is not proven to be an independent factor, however.

Theme 3: Multiple Health Concerns

Several of the participants not only came to the community to lose weight but also to control an underlying health condition. Diabetes and high blood pressure were among these conditions. According to Chelmow et al. (2022), the prevalence of obesity (body mass index [BMI] >30.0 kg/m2) among women aged 40 to 59 years was 43.3% in the United States from 2017 to 2018. It was found that 11.5% of people in this age group had severe obesity (BMI >40.0 kg/m2). Women in midlife gain approximately 1.5 pounds a year, increasing their risk of becoming obese as their BMI increases. As well as increasing the risk of hypertension, dyslipidemia, diabetes type 2, coronary artery disease, stroke, and all-cause mortality, obesity is causally associated with 13 different types of cancer, including those of the endometrium, the ovary, and the breast (Chelmow et al., 2022). As Luo et al. (2021) found, slowing down weight changes, delaying obesity onset, or reducing obesity cumulative exposure can substantially lower the risk of developing type 2 diabetes.

As a result of their study of middle-aged women, Xu et al. (2018) concluded that health promotion, interventions for modifying lifestyle factors (obesity, high blood

pressure, physical inactivity, and smoking), and treatment of other chronic conditions could potentially be beneficial for preventing diabetes, heart disease, and stroke multimorbidity. It is especially important to promote, intervene, and treat health promotion among women who have suffered strokes, considering their likelihood of developing other conditions in the future (Xu et al., 2018). The concerns stated by the participants in my study confirm their worries about current conditions becoming increasingly worse or leading to related diseases.

Theme 4: Nutrition Guidance Received

The importance of receiving nutritional guidance in online weight-loss communities cannot be understated. As noted in this research study, many participants acknowledged very little education related to healthy food choices when they joined the community. Creating nutritional interventions that are centered around the individual requires a patient-centered, mindfully strategic approach, according to Feller (2021). In order to promote realistic and sustainable eating patterns, we must promote whole, minimally processed foods that honor an individual's foodways. In addition to reducing the risk of developing and managing noncommunicable diseases and cardiovascular diseases, comprehensive nutrition prescriptions may also be used to modify the experience of troublesome symptoms commonly associated with menopausal transition (Feller, 2021).

The women who participated in this research study, as a whole, noted some type of nutritional guidance from within their communities. All 14 participants received guidance either from other community members or coaches related to either development

of a nutritional plan or just tips on eating healthier and guidelines to follow. Nutritional habits can be modified and have a significant impact on longevity and quality of life, among the various aspects of health promotion and lifestyle adaptation to the postmenopausal period (Silva et al., 2021).

Theme 5: Unrealistic Nutrition Ideas

Approximately six of the 14 participants reflected on a somewhat negative aspect of their community regarding nutrition advice. According to these women, the information they received was either unbeneficial or questionable. One participant commented that there was too much focus around specific "meal replacements" that the community supported. She felt that food supplements were not the best method of improving nutritional intake and not sustainable as a means for achieving weight loss. Nutrition recommendations should be evidence-based, based on the study's findings. Among participants, there was a strong belief between program design and follow-through when information was received from a coach/admin. Participants' likelihood of following through significantly decreased when they received information from community members, as some felt that the recommendations could be harmful or counterproductive to their weight loss goals.

Most responses emphasized the importance of meeting women where they are and developing a nutrition and physical activity strategy. It is imperative to meet people where they are-literally, going to familiar places where the population is to build trust and rapport. If women receive nutrition recommendations that are using the foods that are inherently available in their homes and culture, they are much more likely to be able to

stick to such a nutrition plan. As Goldberg (2022) pointed out, the premise of the argument is sound, since "meeting people where they are" is crucial to public health. The notion of "meeting communities where they are" can be effective both from the point of view of intervention design as well as from the perspective of implementation science (Goldberg, 2022). According to Martino et al. (2015), lifestyle medicine specialists can help patients enhance their quality of life, as well as their health and well-being during those years by counseling them on how to strengthen their social connections, prescribing connections, and asking about the quality and quantity of their social interactions. It would also apply to health educators who are developing best practices within the context of online communities.

Theme 6: Helpful Nutrition Tips and Guidance

There were six of 14 participants who indicated helpful ideas were received within the community related to nutrition. Increasing weight and associated comorbidities are risks for middle-aged women. The deliberate restriction of food intake (dieting) results in short-term weight loss but is not effective on a long-term basis (Boucher et al., 2016). The importance of nutrition to weight loss cannot be overstated, as eating is something that we all must take into account on a daily basis.

In a study conducted by Seguin & Folta (2017), it was found that self-efficacy and social support for healthy eating habits (but not physical activity) were related to maintaining BMI or losing additional weight. According to this research study, an even number of women reported positive and negative aspects regarding nutrition in their online community. Three of the participants specifically commented on support within

the community toward the effort to reduce caloric intake. One participant stated that her specific community focused on calorie goals versus macros-based goals.

Seven of the 14 participants received information from coaches or nutritionists in their community. Twelve of the 14 received information from other community members that they considered to be positive for helping them in their effort to lose weight. One participant noted that joining her respective community included guidelines for recommended nutrition, including fruits, vegetables, etc. U.S. adults' fruit and vegetable intake remained low in 2019, with only one in ten meeting either recommendation; differences were found by state, age, gender, race/ethnicity, and household income (Lee et al., 2022). Moreover, Lee et al. (2022) write that U.S. residents consume far less fruit and vegetables than their government recommends. Some chronic conditions, which are among the leading causes of mortality in the United States, can be prevented by eating enough fruits and vegetables. Because fruits and vegetables are high in nutrient density and low in calories per serving, as well as fibrous, they can help in weight loss by having high volume compared to processed foods that tend to be high in palatability and low in nutrients.

Theme 7: Helpful Exercise Tips and Recommendations

Nine of the 14 participants in the study felt that they received helpful exercise suggestions or tips from their community. Except for one participant, all others said their community provided exercise recommendations as part of its weight loss guidance. A single participant came from a strictly nutritional support group known as Weight Watchers, which she said did not provide exercise guidelines or recommendations.

In a variety of populations, Buckley (2014) found that interventions derived from SCT have been effective in increasing adherence and initiation to exercise. Based on SCT, exercise self-efficacy beliefs include believing that one can complete physical activities, schedule regular exercise sessions, and overcome concerns about exercise (Buckley, 2014). Evidence indicates that self-efficacy beliefs are dynamic (Bandura et al., 1997), and the relationship between self-efficacy and physical activity behavior is reciprocal (McAuley et al., 2011). Additionally, self-efficacy beliefs influence individuals' efforts when engaging in activities (Bandura et al., 1997). In overweight and obese women, SCT provides a promising intervention framework for increasing exercise self-efficacy and exercise energy expenditure.

Results from Holahan et al.'s (2020) study suggest that everyday leisure-time physical activity promotes a wide spectrum of positive affective experiences among middle-aged and older women. Regular physical activity has psychological benefits for women and may serve as a foundation for strengthening leisure-time physical activity interventions for women in midlife and later in life (Holahan et al., 2020). According to one participant, exercising could be flexible enough for her to be able to stick with it. She stated that she didn't need to do heavy weight lifting according to members and admin, she could simply do smaller things like jogging that were more achievable for her. Another participant indicated that she was encouraged to go on daily walk. She found it helpful to know that her activity was achievable on a daily basis.

Participants were asked which type of exercise was most important in their community, and several modalities were mentioned. The most frequently noted modality

was strength and resistance training for middle-aged women. Resistance training and strength training are interchangeable terms, and participants also refer to their exercise as lifting weights. The research of Petridou et al. (2019) emphasized that it is effective to increase daily energy expenditure to tip the energy balance in order to lose weight, and the larger the negative energy balance, the greater the weight loss. It is possible to increase one's energy expenditure by exercising under supervised supervision or unsupervised supervision, doing chores around the house, caring for oneself, commuting, and enjoying leisure activities.

Theme 8: Exercise Recommendations not Personable

Seven of the 14 participants indicated some type of dissatisfaction with the exercise recommendations they received from within their online community. One participant indicated that she would actually be "put off" if she received recommendations from anyone in the community, as the focus within this group was on nutrition, and not on exercise In addition, a second participant said that she had so many medical problems that she felt as if members of her community were not in a position to give appropriate recommendations, since medical experts should be consulted.

The effectiveness of an exercise program depends on the ability of each individual to participate. As mentioned previously, one participant liked the community recommendation of "walking" as an activity because it could be sustained. According to Nawrocka et al.'s (2019) study of middle-aged women, adherence to Global Recommendations on Physical Activity for Health disseminated by WHO is associated with better-perceived work ability among adults (30–49 years) and middle-aged women

(50–64 years). In middle-aged women, adherence to recommendations of physical activity is also associated with pain intensity and frequency (Nawrocka et al., 2019). As a result, the perception of what can be achieved in such a program is crucial to its success.

In addition, Lum & Simpson (2021) note that one-third of women's lives are spent postmenopausal, and interventions that encourage healthy aging around menopause are essential. The authors argue that clinicians can use menopausal changes as cues to promote female health and well-being (Lum & Simpson, 2021). Moreover, clinicians should promote the health benefits of exercise and inform women of the importance of meeting physical activity guidelines for optimal health. It is important to encourage women to increase their physical activity levels by planning and setting goals and gaining support by exercising with friends or family as a way to better control menopausal symptoms (Lum & Simpson, 2021). As part of this study, many participants used community involvement to make new friends and connect with others.

Theme 9: Encouragement and Accountability

As a continuation of the theme of seeking social support, the current theme emphasizes the fact that middle-aged women are seeking both accountability and encouragement when they join their respective online communities. When a participant is trying to lose weight, encouragement can help keep them motivated. A necessity for keeping people moving forward was accountability, according to all 14 participants.

According to Johannsen and colleagues (2021), online communities promote patient empowerment both in terms of the process of empowerment as well as the outcome of empowerment. As well as complementing traditional health care, it was seen as an

encouragement to health care professionals to have a more positive approach to patients' use (Johannsen et al., 2021).

In their qualitative study of women with obesity regarding their perspectives on social support for weight control, Reiger et al. (2018) found that their proposal is consistent with previous findings. A major complaint about ineffective strategies was critical and/or intrusive behavior (reported by 73% of the participants), such as unsolicited advice and dietary pressure. Additionally, Reiger et al. (2018) point out that Thoits' study (2011) concluded that support can only be helpful to the extent that it is perceived as supportive and that acts of support can negatively impact the recipient if they cause recipients to feel indebted, unfairly rewarded, too dependent, overcontrolled, or incompetent in the eyes of support providers (Thoits, 2011). In the current study, middle-aged women consistently stated that support and accountability were important to their weight loss goals, and community members or coaches could provide such support.

Theme 10: Weight Loss Goal Discussions

Twelve of the 14 participants in this research study indicated that their online community members discussed weight loss goals, indicating that specific pounds were discussed amongst the members and/or coaches/admin. One participant noted that she felt the discussions to be very impactful. Another stated that she was inspired by such discussions in that it allowed her to see that other members were achieving their goals in the program, which she found motivating. As mentioned previously, 'Glenda' found the discussions somewhat neutral, as she didn't really have a specific scale weight goal, but it was more important for her clothes to fit better.

Researchers have found conflicting results when it comes to social influence. Some may find the influence beneficial, but others may find it triggers unhealthy behaviors and body image issues. A study by Thompson et al. (2023) showed that individuals judge themselves by comparing themselves to others, as Festinger identified in 1954. Social comparison can take many forms, but one type that is particularly relevant to social media may be body comparison: the tendency to compare one's body shape, weight, or appearance with others' (Fitzsimmons-Craft et al., 2012). Even though social media platforms can promote group identities and strengthen social ties, they also increase opportunities for body-related comparisons (Thompson et al., 2023; Fox & Warber, 2015).

Summary of Key Findings

The HBM and SLT provided a conceptual framework for a study, providing a rationale for the development of the research questions. These frameworks helped develop research questions and identify how online weight-loss community programs impact middle-aged women suffering from overweight/obesity. In this study, a main research question and three sub-research questions were addressed. The participants in this study all shared their personal experiences related to exercise, nutrition, and social support within an online weight-loss community, none of which were explicitly named. Establishing emergent themes gave structure to the data and allowed conceptual analysis.

Physical activity was unanimously endorsed, along with nutrition as a key factor in weight loss. In addition, social support was described as an overall positive strategy for achieving weight loss behavior changes. It is important not to overlook some drawbacks

related to exercise and nutritional programming from within communities; it is imperative to seek appropriate professional guidance.

The knowledge, confidence, and personal experiences of these participants are very important in online weight loss communities. There was a consistent level of exercise and nutritional development among this group, laying the foundation for the transfer of knowledge. The SLT was in action, utilizing the influence of the other group members to learn from them. Moreover, the HBM plays an important role as it determines whether or not the members believe the program is of importance to their health through weight loss. Their belief that the program has barriers (not having appropriate recommendations) and that it has perceived benefits is also important.

Limitations of the Study

As stated in Chapter 1, there were two main limitations to this qualitative study. It may have been possible for participants' language to not accurately reflect their experiences. Due to this limitation, all interviews were conducted anonymously through Zoom, using only audio. Conducting anonymous interviews were arranged to make it easier for the participants to share their stories and experiences." The relative anonymity of online interactions and the lack of shared social networks online" may promote self-presentation and authenticity compared to face-to-face meetings (Janghorban et al., 2014). In addition, being of a similar age could possibly allow the participants to feel a stronger connection to the researcher, making them more willing to share their experiences. The participants in the study did seem to be very open with their answers and I did not sense any reservations with any sharing of information while conducting the

interviews. Due to self-reporting, participants' answers are limited to what they are telling the truth about.

Secondly, the participants' recollections of their experiences were assumed as not always accurate. Participants were asked to take some time and reflect on their experiences before verbalizing, giving them time to think about all aspects of their experiences before sharing them. It was the researcher's intention to create an atmosphere of open, sharing dialogue with plenty of time allowed to answer questions, using probing questions if necessary. Even with probing questions, some answers were lacking in detail, but the participants were considered to be truthful in their sharing of individual experiences. It was valuable to gain a deeper understanding of excessive weight among middle-aged obese or overweight women from a qualitative study.

Interchanging the terms, physical activity and exercise could have impacted the parameters of reference. They both have scientific definitions, establishing a delineation, which may have been perceived by participants differently. For me, it was crucial to minimize assumptions and bias throughout the interview process. It was very important for me to pay close attention to my demeanor and how I spoke during each interview.

Recommendations

This basic qualitative study sought to understand the experiences of middle-aged women in an online weight-loss community, guided by the HBM and SLT constructs.

Through semi structured interviews, I actively listened to the experiences of these women. This helped me gain a greater understanding and insight into their experiences.

Study themes helped answer my main and sub-research questions and strengthened

Diversity (Walden University, 2021), is one in which ideas, strategies, and actions are developed and applied to enhance the worth, dignity, and development of individuals, communities, organizations, institutions, cultures, and societies. Research in this area has been conducted with physicians, nurses, and other allied health professionals, but not with health educators; the results are a foundation for future research.

This study provides insight into what social support means to middle-aged women who belong to online weight loss communities. Moreover, it discusses the importance of physical activity and nutrition in reducing overweight and obesity for middle-aged women and how health educators can use this information in developing future programs. Current and future health educators need to align with online community administrators about the benefits of physical activity for middle-aged women who suffer from overweight/obesity. These women all recalled the importance of physical activity and nutrition as part of an overall lifestyle strategy, as well as how others within their community provided support to them. Although some acknowledged drawbacks, they continued to try to improve diet and exercise routines. Going forward, it is important for health educators to take the information provided by the results of this study and use them to create programs that are more fact based, and including some type of standardization. It is important to middle-aged women to have social support, but it is evident that a one size fits all approach is the most effective way to produce results when it comes to weight loss goals.

Implications

Obesity continues to be a growing concern across the globe, not just among this group of middle-aged women. It was the aim of this dissertation study to understand the experiences of middle-aged women in these online spaces related to physical activity and nutrition as well as social support. The HBM and SLT provided a theoretical foundation for explaining why some people engage in a particular behavior and others do not, as well as how other people influence people to change behavior. There is little qualitative research specific to this age group presently, and the data from this dissertation project will establish a body of knowledge in this area. This research identified the importance of the SLT, and health educators can use this information and look at adding these concepts to future programs.

The data highlighted the experiences of middle-aged women, while emphasizing social support and accountability as well as community guidance. It is critical to conduct additional research to ensure the best treatment, and outcomes, for middle-aged women suffering from overweight or obesity as health educators become more valued members of a multidisciplinary team. The research should be continued with other health educators and within different online communities. Health educators could use this information to develop programs aimed at reducing obesity through physical activity, nutrition, and social support. Further qualitative research will expand upon the experiences of middle-aged women suffering from overweight/obesity. As a practical application in the field, this type of research will assist health educators in developing programs and interventions that will positively impact health.

Through the findings of this research, social change may be achieved by providing insight into middle-aged women's experiences in online weight loss communities, as well as how health educators can assist middle-aged women who are overweight or obese with nutrition and physical activity recommendations. Using these results, treatment protocols, programs, initiatives, and resources could be enhanced or created to improve outcomes for patients. In order to relieve overweight and obesity, physical activity is a cost-effective and readily available strategy that can be used alone, or in conjunction with other strategies related to nutrition and social support.

An understanding of middle-aged women's experiences with online weight-loss communities, the facilitators/admin, and barriers can identify opportunities for improvement. In spite of the need for additional research, these results highlight the potential of the health education profession when it comes to creating such communities and making physical activity and nutrition recommendations to middle-aged women suffering from overweight or obesity. Obesity has infinite, extensive, and life-altering implications for individuals, families, and societies. Transformation of lives of overweight/obese people is a positive social change action that improves the human condition and social well-being.

Conclusion

This study addressed a gap in the literature pertaining to the experiences of middle-aged women in an online weight-loss community who are dealing with overweight/obesity, guided by the constructs of the HBM and SLT. It was overwhelmingly acknowledged by participants that physical activity and nutrition

contribute to weight loss. While some drawbacks were identified, they did not significantly influence the effectiveness of the fieldwork.

Participants demonstrated alignment with current research on the value of physical activity knowledge and nutritional needs for this demographic. Identifying health and wellness professionals to participate on the community team was recognized as an asset by the participants. To establish consistency in the community, participants recognized that a dietician or nutrition expert could assume the role of community expert. This population valued the benefits of social support and it consistently contributed to a positive mindset. Although the value proposition was consistent, approximately half of the participants took different approaches to practical application.

To fully assess the potential contributions health educators could make to these communities independently or as part of an online team, additional research is needed. If the same, or similar, research guide and question set was explored with a different population, it may be possible to determine the experiences of other groups that do not identify with the same issues as middle-aged women. The purpose of this study was to understand the experiences of middle-aged women involved in online weight loss communities for reducing overweight and obesity and improving their health. The findings of this research should be shared with professionals and industry organizations to improve patient outcomes, provide improved programs, and transform lives.

References

- Abbaspoor, Z., Miryan, M., Haghighi-Zadeh, M., Rashidi, H., Sharifipoor, F., & Amani, R. (2020). The prevalence of determinants of obesity, metabolic syndrome and overweight in middle-aged urban women living in a megacity. *Family Medicine* & *Primary Care Review*, 22(1), 7–12. https://doi.org/10.5114/fmpcr.2020.92499
- Adhikari, C., Puri, A., Thapa, D., Thapa, R., Magar, S., & GC, S. (2019). Application of social cognitive theory in Obesity Prevention: A Rapid Review. *Journal of Health and Allied Sciences*, 7(1), 53–62. https://doi.org/10.37107/jhas.23
- Adu, P. (2019). A step-by-step guide to qualitative data coding. Routledge.
- Almenara, C. A., Machackova, H., & Smahel, D. (2019). Sociodemographic, attitudinal, and behavioral correlates of using nutrition, weight loss, and fitness websites: An online survey. *Journal of Medical Internet Research*, 21(4). https://doi.org/10.2196/10189
- Altebarmakian, M., & Alterman, R. (2019). Cohesion in online environments.

 International Journal of Computer-Supported Collaborative Learning, 14(4),
 443–465. https://doi.org/10.1007/s11412-019-09309-y
- Alterman, R., & Harsch, K. (2015). Collaborative and individual learning mixing the two. *Proceedings of the 7th International Conference on Computer Supported Education*. https://doi.org/10.5220/0005476504110417

- American Psychological Association. (2020). Publication manual of the American Psychological Association 2020: the official guide to APA style (7th ed.). American Psychological Association.
- Andrade, C. (2020). The inconvenient truth about convenience and purposive samples. *Indian Journal of Psychological Medicine*, 43(1), 86–88.

 https://doi.org/10.1177/0253717620977000
- Asi, Y. M.; Williams, C. (2020). Equality Through Innovation: Promoting women in the workplace in low- and middle-income countries with Health Information Technology. *Journal of Social Issues*, 76(3), 721–743.
 https://doi.org/10.1111/josi.12394
- Bandura, A. (1977). Social Learning theory. Prentice-Hall.
- Bandura, A. (2005). The evolution of social cognitive theory. In Great minds in management (pp. 9–35). Oxford: Oxford Univ. Press.
- Bandura, A., Freeman, W. H., & Lightsey, R. (1999). Self-efficacy: The exercise of control.
- Barnett-Page, E., & Thomas, J. (2009). Methods for the synthesis of qualitative research: a critical review. BMC medical research methodology, 9, 59. https://doi.org/10.1186/1471-2288-9-59
- Beadini, A., Beadini, S., Bexheti, S., & Beadini, N. (2019). Menopause, hormonal changes and osteoporosis among women in region of the western Macedonia.

 International Journal of Biology, 11(4), 9–15. https://doi.org/10.5539/ijb.v11n4p9

- Beleigoli, A., Andrade, A. Q., Diniz, M. D., & Ribeiro, A. L. (2020). Personalized web-based weight loss behavior change program with and without dietitian online coaching for adults with overweight and obesity: Randomized Controlled Trial.

 Journal of Medical Internet Research, 22(11). https://doi.org/10.2196/17494
- Birks, M., Mills, J.: Grounded Theory: A Practical Guide, 2nd ed. Sage, London (2015)
- Bradford, T. W., Grier, S. A., & Henderson, G. R. (2017). Weight loss through virtual support communities: A role for identity-based motivation in public commitment.

 Journal of Interactive Marketing, 40(1), 9–23.

 https://doi.org/10.1016/j.intmar.2017.06.002
- Bradshaw, C., Atkinson, S., & Doody, O. (2017). Employing a qualitative description approach in health care research. Global Qualitative Nursing Research, 4, 233339361774228. https://doi.org/10.1177/2333393617742282
- Braun, V., Clarke, V., Boulton, E., Davey, L., & McEvoy, C. (2020). The online survey as a qualitative research tool. International Journal of Social Research

 Methodology, 24(6), 641–654. https://doi.org/10.1080/13645579.2020.1805550
- Bremer, B. A., & Brooks, L. J. (2021). Social support as a coping strategy. *Salem Press Encyclopedia of Health*.
- Bryman, A.: How many qualitative interviews is enough? In: Baker, S.E., Edwards, R. (eds.) How Many Qualitative Interviews is Enough? Expert Voices and Early Career Reflections on Sampling and Cases in Qualitative Research, pp. 18–20. ESRC National Centre for Research Methods, University of Southampton, Southampton (2012)

Buckley, J. (2014). Exercise self-efficacy intervention in overweight and obese women. *Journal of Health Psychology*.

https://doi.org/10.1177/1359105314545096

Buckley, J. (2014). Exercise self-efficacy intervention in overweight and obese women. *Journal of Health Psychology*.

https://doi.org/10.1177/1359105314545096

- Carraça, E. V., Leong, S. L., & Horwath, C. C. (2019). Weight-focused physical activity is associated with poorer eating motivation quality and lower intuitive eating in women. Journal of the Academy of Nutrition and Dietetics, 119(5), 750–759. https://doi.org/10.1016/j.jand.2018.09.011
- Carrard, I., Kruseman, M., & Marques-Vidal, P. (2018). Desire to lose weight, dietary intake and psychological correlates among middle-aged and older women. The Colaus Study. Preventive Medicine, 113, 41–50.

 https://doi.org/10.1016/j.ypmed.2018.05.011
- Casaló, L. V., Flavián, C., & Ibáñez-Sánchez, S. (2021). Be creative, my friend! engaging users on Instagram by promoting positive emotions. *Journal of Business**Research*, 130, 416–425. https://doi.org/10.1016/j.jbusres.2020.02.014
- Centers for Disease Control and Prevention. (2021, June 29). *Adult Obesity Facts*.

 Centers for Disease Control and Prevention. Retrieved December 13, 2021, from https://www.cdc.gov/obesity/data/adult.html

- Champion, V. L., & Skinner, C. S. (2008). The health belief model. In K. Glanz, B. K. Rimer, & K. Viswanath (Eds.), Health behavior and health education: Theory, research, and practice (pp. 45–65). Jossey-Bass.
- Chang, L., Chiuan Yen, C., Xue, L., Choo Tai, B., Chuan Chan, H., Been-Lirn Duh, H., & Choolani, M. (2016). Factors associated with mobile health information seeking among Singaporean women. *Journal of Women & Aging*, 29(1), 75–86. https://doi.org/10.1080/08952841.2015.1065144
- Chatelan, A. & Carrard, I. (2021). Diet quality in middle-aged and older women with and without body weight dissatisfaction: Results from a population-based national nutrition survey in Switzerland. Journal of Nutritional Science, 10.

 https://doi.org/10.1017/jns.2021.32
- Chawla, S., & Sharma, R. R. (2019). Enhancing women's well-being: The role of Psychological Capital and perceived gender equity, with social support as a moderator and commitment as a mediator. Frontiers in Psychology, 10. https://doi.org/10.3389/fpsyg.2019.01377
- Chelmow, D., Nelson, H. D., Pappas, M., Atchison, C., Cantor, A. G., Witkopp, C., & Hoffstedder, S. (2022). Preventing obesity in midlife women: A systematic review for the Women's Preventive Services initiative. Annals of Internal Medicine, 175(9), 1275–1284. https://doi.org/10.7326/m22-0160
- Chu, D.-T., Minh Nguyet, N. T., Dinh, T. C., Thai Lien, N. V., Nguyen, K.-H., Nhu

 Ngoc, V. T., Tao, Y., Son, L. H., Le, D.-H., Nga, V. B., Jurgoński, A., Tran, Q.
 H., Van Tu, P., & Pham, V.-H. (2018). An update on physical health and

- economic consequences of overweight and obesity. *Diabetes & Metabolic Syndrome: Clinical Research & Reviews*, *12*(6), 1095–1100. https://doi.org/10.1016/j.dsx.2018.05.004
- Chuang, S. (2021). The applications of constructivist learning theory and social learning theory on adult continuous development. Performance Improvement, 60(3), 6–14. https://doi.org/10.1002/pfi.21963
- Churchill, S. D. (2022). Essentials of existential phenomenological research. https://doi.org/10.1037/0000257-000
- Cohen, S., & Hoberman, H. M. (1983). Positive events and social supports as buffers of life change stress. Journal of Applied Social Psychology, 13(2), 99–125. https://doi.org/10.1111/j.1559-1816.1983.tb02325.x
- Coupé, C., & Ollagnier-Beldame, M. (2019). Epoché, Verbal Descriptions and Corpus Size in the Conduct and Analysis of Explicitation Interviews. Constructivist Foundations, 14(2), 158–160.
- Creswell, J.W. & Creswell, J.D. (2017). Research design: Qualitative, quantitative, and mixed methods approaches. Sage Publications, Inc.Dedoose. (2023a, July). https://www.dedoose.com/resources/webinars
- Dey, I.: Grounding Grounded Theory: Guidelines for Qualitative Inquiry. Academic Press, San Diego (1999)
- Dick, W., Carey, L., & Carey, J. O. (2022). The systematic design of instruction. Pearson.
- Dodgson, J. E. (2019). Reflexivity in Qualitative Research. *Journal of Human Lactation*, *35*(2), 220–222. https://doi.org/10.1177/0890334419830990

- Dolberg, P., & Ayalon, L. (2018). Subjective meanings and identification with middle age. The International Journal of Aging & Human Development, 87(1), 52–76. https://doi.org/10.1177/0091415017721932
- DuPont, J. J., Kenney, R. M., Patel, A. R., & Jaffe, I. Z. (2019). Sex differences in mechanisms of arterial stiffness. British Journal of Pharmacology, 176(21), 4208– 4225. https://doi.org/10.1111/bph.14624
- Faulkner, S.L. and Trotter, S.P. (2017). Data Saturation. In The International

 Encyclopedia of Communication Research Methods (eds J. Matthes, C.S. Davis
 and R.F. Potter
- Feig, E. H., Levy, D. E., McCurley, J. L., Rimm, E. B., Anderson, E. M., Gelsomin, E. D., & Thorndike, A. N. (2019). Association of work-related and leisure-time physical activity with workplace food purchases, dietary quality, and health of hospital employees. BMC Public Health, 19(1). https://doi.org/10.1186/s12889-019-7944-1
- Feller, M. (2021). Nutrition and weight management in midlife. Each Woman's

 Menopause: An Evidence Based Resource, 283–305. https://doi.org/10.1007/978-3-030-85484-3 12
- Ferretti, F., & Mariani, M. (2017). Simple vs. complex carbohydrate dietary patterns and the global overweight and obesity pandemic. International Journal of Environmental Research and Public Health, 14(10), 1174.

 https://doi.org/10.3390/ijerph14101174

- Fitzsimmons-Craft, E. E., Bardone-Cone, A. M., & Harney, M. B. (2012). Development and validation of the body, eating, and exercise comparison orientation measure (BEECOM) among college women. *Body Image*, *9*(4), 476–487. https://doi.org/10.1016/j.bodyim.2012.07.007
- Fox, J., & Warber, K. M. (2014). Queer Identity Management and political self-expression on social networking sites: A co-cultural approach to the spiral of silence. *Journal of Communication*, 65(1), 79–100.

 https://doi.org/10.1111/jcom.12137
- Fröhlich, H., Frey, N., Frankenstein, L., & Täger, T. (2022). The obesity paradox in heart failure: Is it still valid in light of new therapies? Cardiology, 147(5-6), 529–538. https://doi.org/10.1159/000527332
- Gabriel, E. H., Hoch, M. C., & Cramer, R. J. (2019). Health belief model scale and theory of planned behavior scale to assess attitudes and perceptions of injury prevention program participation: An exploratory factor analysis. Journal of Science and Medicine in Sport, 22(5), 544–549. https://doi.org/10.1016/j.jsams.2018.11.004
- Galvin, G. (2020, February 27). America Has Gotten Much Fatter in the Past Two

 Decades. Retrieved December 9, 2020, from

 https://www.usnews.com/news/healthiest-communities/articles/2020-02-27/us-obesity-rate-passes-40-percent
- Gao, Z., Chen, Z., Sun, A., & Deng, X. (2019). Gender differences in cardiovascular disease. *Medicine in Novel Technology and Devices*, 4, 100025.
 https://doi.org/10.1016/j.medntd.2019.100025

- Gavarkovs, A. G., Blunt, W., & Petrella, R. J. (2019). A protocol for designing online training to support the implementation of community-based interventions.

 *Evaluation and Program Planning, 72, 77–87.

 https://doi.org/10.1016/j.evalprogplan.2018.10.013
- Given, L.M.: 100 Questions (and Answers) About Qualitative Research. Sage, Thousand
 Oaks (2016)
- Glanz, K., Rimer, B., & Viswanath, K. (2015). Health behavior: Theory, research, and Practice (5th ed.). John Wiley &Sons.
- Glaser, B.G., Strauss, A.L.: The Discovery of Grounded Theory: Strategies for Qualitative Research. Aldine, Chicago (1967)
- Goodman, E. L., Baker, J. H., Peat, C. M., Yilmaz, Z., Bulik, C. M., & Watson, H. J. (2018). Weight suppression and weight elevation are associated with eating disorder symptomatology in women age 50 and older: Results of the gender and Body Image Study. *International Journal of Eating Disorders*, 51(8), 835–841. https://doi.org/10.1002/eat.22869
- Goodman, E. L., Baker, J. H., Peat, C. M., Yilmaz, Z., Bulik, C. M., & Watson, H. J. (2018). Weight suppression and weight elevation are associated with eating disorder symptomatology in women age 50 and older: Results of the gender and Body Image Study. International Journal of Eating Disorders, 51(8), 835–841. https://doi.org/10.1002/eat.2286

- Hennink, M., & Kaiser, B. N. (2022). Sample sizes for saturation in qualitative research:

 A systematic review of empirical tests. *Social Science & Medicine*, 292, 114523.

 https://doi.org/10.1016/j.socscimed.2021.114523
- Hidarnia, A., Jeihooni, A. K., Kaveh, M. H., Hajizadeh, E., & Askari, A. (2016).
 Application of the health belief model and social cognitive theory for osteoporosis preventive nutritional behaviors in a sample of Iranian women. *Iranian Journal of Nursing and Midwifery Research*, 21(2), 131. https://doi.org/10.4103/1735-9066.178231
- Hosseini, H., Moradi, R., Kazemi, A., & Shahshahani, M. S. (2017). Determinants of physical activity in middle-aged woman in Isfahan using the health belief model.
 Journal of education and health promotion, 6, 26.
 https://doi.org/10.4103/jehp.jehp_68_15
- House, J. S., Umberson, D., & Landis, K. R. (1988). Structures and processes of social support. Annual Review of Sociology, 14(1), 293–318.
 https://doi.org/10.1146/annurev.so.14.080188.001453
- Hwang, K. O., Etchegaray, J. M., Sciamanna, C. N., Bernstam, E. V., & Thomas, E. J. (2014). Structural social support predicts functional social support in an online weight loss programme. *Health Expectations*, 17(3), 345-352.
 https://doi.org/10.1111/j.1369-7625.2011.00759.x
- In, J. (2017). Introduction of a pilot study. *Korean journal of anesthesiology*, 70(6), 601–605. https://doi.org/10.4097/kjae.2017.70.6.601
- Janghorban, R., Roudsari, R. L., & Taghipour, A. (2014). Skype interviewing: The New

- Generation of online synchronous interview in Qualitative Research. International Journal of Qualitative Studies on Health and Well-Being, 9(1), 24152. https://doi.org/10.3402/qhw.v9.24152
- Jalali-Farahani, S., Amiri, P., Karimi, M., Vahedi-Notash, G., Amirshekari, G., &Azizi, F. (2018). Perceived social support and health-related quality of life (hrqol) in tehranian adults: Tehran lipid and glucose study. Health and Quality of Life Outcomes, 16(1). https://doi.org/10.1186/s12955-018-0914-y
- Jensen MD, Ryan DH, Donato KA, et al. Guidelines (2013) for the management of overweight and obesity in adults. Obesity (Silver Spring) 2014;22: S1-S410.
- Johansson, V., Islind, A. S., Lindroth, T., Angenete, E., & Gellerstedt, M. (2021). Online communities as a driver for patient empowerment: Systematic review. Journal of Medical Internet Research, 23(2). https://doi.org/10.2196/19910
- Jones, C. L., Jensen, J. D., Scherr, C. L., Brown, N. R., Christy, K., & Weaver, J. (2014).

 The health belief model as an explanatory framework in communication research:

 Exploring Parallel, serial, and moderated mediation. Health Communication,

 30(6), 566–576. https://doi.org/10.1080/10410236.2013.873363
- Keiningham, T. L., Rust, R. T., Lariviere, B., Aksoy, L., & Williams, L. (2018). A roadmap for driving customer word-of-mouth. Journal of Service Management, 29(1), 2–38. https://doi.org/10.1108/josm-03-2017-0077
- Kelly, T., Thompson, J. D., Surjan, Y., Rinks, M., & Warren-Forward, H. (2022). Lived experiences of first-year radiation therapy students communicating with patients and radiation therapists a qualitative review using interpretative

- phenomenological analysis. *Radiography*, 28(1), 168–173. https://doi.org/10.1016/j.radi.2021.10.002
- Klemm, K., Brehm, W., Schmidt, S., De Clerck, I.L., Bös, K. (2020). Fit and Healthy in Middle Adulthood– Do Fitness Levels Make a Difference. Central European Journal of Sport Sciences and Medicine, 2 (30), 33–46.

 DOI:10.18276/cej.2020.2-04.
- Korstjens, I., & Moser, A. (2017). Series: Practical guidance to qualitative research. part

 4: Trustworthiness and publishing. *European Journal of General Practice*, 24(1),

 120–124. https://doi.org/10.1080/13814788.2017.1375092
- Kyngäs, H., Kääriäinen, M., &Elo, S. (2019). The trustworthiness of content analysis.

 The Application of Content Analysis in Nursing Science Research, 41–48.

 https://doi.org/10.1007/978-3-030-30199-6 5
- Laakkonen, E. K., Kulmala, J., Aukee, P., Hakonen, H., Kujala, U. M., Lowe, D. A., Kovanen, V., Tammelin, T.& Sipilä, S. (2017). Female reproductive factors are associated with objectively measured physical activity in middle-aged women.

 PLOS ONE, 12(2). https://doi.org/10.1371/journal.pone.0172054
- Lambert, V. A., & Lambert, C. E. (2013). Qualitative Descriptive Research: An Acceptable Design. *Pacific Rim International Journal of Nursing**Research, 16(4), 255–256. Retrieved from https://he02.tci-thaijo.org/index.php/PRIJNR/article/view/5805
- Lee, H. E., & Cho, J. (2018). Social media use and well-being in people with physical disabilities: Influence of SNS and online community uses on social support,

- depression, and psychological disposition. Health Communication, 34(9), 1043–1052. https://doi.org/10.1080/10410236.2018.1455138
- Lee, S.H., Moore, L.V., Park, S., Harris, D.M., Blanck, H.M.. Adults Meeting Fruit and Vegetable Intake Recommendations United States, 2019. MMWR Morb Mortal Wkly Rep 2022;71:1–9.
 - DOI: http://dx.doi.org/10.15585/mmwr.mm7101a1external icon
- Lemon, L., & Hayes, J. (2020). Enhancing trustworthiness of qualitative findings: Using Leximancer for qualitative data analysis triangulation. *The Qualitative Report*. https://doi.org/10.46743/2160-3715/2020.4222
- Lin, Y.-S., Huang, W.-S., Yang, C.-T., & Chiang, M.-J. (2014). Work–leisure conflict and its associations with well-being: The roles of social support, leisure participation and Job Burnout. Tourism Management, 45, 244–252. https://doi.org/10.1016/j.tourman.2014.04.004
- Lincoln, Y. S., & Guba, E. G. (2006). *Naturalistic inquiry*. Sage Publications.
- Li, V., McDonald, D. W., Eikey, E. V., Sweeney, J., Escajeda, J., Dubey, G., Riley, K., Poole, E. S., & Hekler, E. B. (2014). Losing it online. *Proceedings of the 18th International Conference on Supporting Group Work*.

 https://doi.org/10.1145/2660398.2660416
- Ling, C., & Rönn, T. (2019). Epigenetics in human obesity and type 2 diabetes. Cell Metabolism, 29(5), 1028–1044. https://doi.org/10.1016/j.cmet.2019.03.009
- Lum, K. J., & Simpson, E. E. A. (2021). The impact of physical activity on psychological well-being in women aged 45-55 years during the Covid pandemic: A mixed-

- methods investigation. *Maturitas*, *153*, 19–25. https://doi.org/10.1016/j.maturitas.2021.07.012
- Luo, J., Hodge, A., Hendryx, M., & Byles, J. E. (2021). BMI trajectory and subsequent risk of type 2 diabetes among middle-aged women. Nutrition, Metabolism and Cardiovascular Diseases, 31(4), 1063–1070.

 https://doi.org/10.1016/j.numecd.2020.12.019
- Maher, C., Hadfield, M., Hutchings, M., & de Eyto, A. (2018). Ensuring rigor in qualitative data analysis. *International Journal of Qualitative Methods*, 17(1), 160940691878636. https://doi.org/10.1177/1609406918786362
- Martin-Vicario, L., & Gómez-Puertas, L. (2022). The role of social support in obesity online health communities: A literature review. *Review of Communication Research*, 10. Retrieved from https://www.rcommunicationr.org/index.php/rcr/article/view/131
- Martino, J., Pegg, J., & Frates, E. P. (2015). The Connection Prescription: Using the Power of Social Interactions and the Deep Desire for Connectedness to Empower Health and Wellness. *American journal of lifestyle medicine*, 11(6), 466–475. https://doi.org/10.1177/1559827615608788
- Massie DC, Amaro A, & Kaplan M. Patient well-being and the clinical and economic burdens associated with obesity in the United States. Am J Manag Care.

 2022;28(15 Suppl): S279-S287. doi:10.37765/ajmc.2022.89291

- McCafferty, B.J., Hill, J.O., & Gunn, A. J. (2020). Obesity: Scope, lifestyle interventions, and medical management. Techniques in Vascular and Interventional Radiology, 23(1), 100653. https://doi.org/10.1016/j.tvir.2020.100653
- McAuley, E., Mailey, E. L., Mullen, S. P., Szabo, A. N., Wójcicki, T. R., White, S. M., ... & Kramer, A. F. (2011). Growth trajectories of exercise self-efficacy in older adults: influence of measures and initial status. *Health Psychology*, *30*(1), 75.
- McGuire, A. M., Seib, C., Porter-Steele, J., & Anderson, D.J. (2018). The association between web-based or face-to-face lifestyle interventions on the perceived benefits and barriers to exercise in midlife women: Three-arm equivalency study (preprint). *Journal of Medical Internet Research*.

 https://doi.org/10.2196/preprints.10963
- Mehta, M., Istfan, N. W., & Apovian, C. M. (2021). Obesity: Overview of weight management. *Endocrine Practice*, 27(6), 626–635.

 https://doi.org/10.1016/j.eprac.2021.04.001
- Merriam, S. B., & Grenier, R. S. (2019). *Qualitative research in practice: Examples for discussion and analysis* (Second). John Wiley & Sons Inc.
- Mitchell, J., Boettcher-Sheard, N., Duque, C., & Lashewicz, B. (2018). Who do we think we are? Disrupting notions of quality in qualitative research. Qualitative Health Research, 28(4), 673–680. doi:10.1177/104973231774889
- Monteleone, P., Mascagni, G., Giannini, A., Genazzani, A. R., & Simoncini, T. (2018).

 Symptoms of menopause global prevalence, physiology and implications.

- Nature Reviews Endocrinology, 14(4), 199–215. https://doi.org/10.1038/nrendo.2017.180
- Moran, M. (2021, June 23). What is credibility in qualitative research and how do we establish it?. Statistics Solutions. https://www.statisticssolutions.com/what-is-credibility-in-qualitative-research-and-how-do-we-establish-it/
- Nakayoshi, Y., Takase, M., Niitani, M., Imai, T., Okada, M., Yamamoto, K., & Takei, Y. (2021). Exploring factors that motivate nursing students to engage in skills practice in a laboratory setting: A descriptive qualitative design. International Journal of Nursing Sciences, 8(1), 79–86.

 https://doi.org/10.1016/j.ijnss.2020.12.008
- Nawrocka A, Niestrój-Jaworska M, Mynarski A, & Polechoński J. (2019). Association

 Between Objectively Measured Physical Activity And Musculoskeletal Disorders,

 And Perceived Work Ability Among Adult, Middle-Aged And Older

 Women. Clinical Interventions in Aging, ume 14, 1975–1983.
- Neubauer, B. E., Witkop, C. T., & Varpio, L. (2019). How phenomenology can help us learn from the experiences of others. Perspectives on Medical Education, 8(2), 90–97. https://doi.org/10.1007/s40037-019-0509-2
- Neuman, W.L. (2003) "Social Research Methods: Qualitative and Quantitative Approaches" Allyn and Bacon.
- Nguyen, H. D. (2022). Interactions between nutrient intake and comorbidities for quality of life in premenopausal and postmenopausal women. *Menopause*, 29(11), 1285–1295. https://doi.org/10.1097/gme.0000000000000004

Nosek, M. A., Robinson-Whelen, S., Ledoux, T. A., Hughes, R. B., O'Connor, D. P., Lee, R. E., Goe, R., Silveira, S. L., Markley, R., & Nosek, T. M. (2018). A pilot test of the Gowoman Weight Management Intervention for women with mobility impairments in the online virtual world of second life®. *Disability and Rehabilitation*, *41*(22), 2718–2729.

- Obri, A., Serra, D., Herrero, L., & Mera, P. (2020). The role of epigenetics in the development of obesity. Biochemical Pharmacology, 177, 113973. https://doi.org/10.1016/j.bcp.2020.113973
- OECD (2022), "Overweight or obese population" (indicator), https://doi.org/10.1787/86583552-en (accessed on 25 August 2022).
- Olmos-Vega, F. M., Stalmeijer, R. E., Varpio, L., & Kahlke, R. (2022). A practical guide to reflexivity in Qualitative Research: Amee guide no. 149. Medical Teacher, 1–11. https://doi.org/10.1080/0142159x.2022.2057287
- Olshansky, E.F.: Generating theory using grounded theory methodology. In: de Chesnay, M. (ed.) Nursing Research Using Grounded Theory: Qualitative Designs and Methods in Nursing, pp. 19–28. Springer, New York (2015)
- Petridou, A., Siopi, A., & Mougios, V. (2018, October 29). *Exercise in the management of obesity*. Metabolism. Retrieved January 14, 2023, from https://www.metabolismjournal.com/article/S0026-0495(18)30227-0/fulltext

- Ramsook, L. (2018). A methodological approach to hermeneutic phenomenology. *International Journal of Humanities and Social Sciences*, 10(1), 14-24.
- Ravitch, S.M., & Carl, N.M. (2021). Qualitative research: Bridging the conceptual, theoretical, and Methodological (2nd ed.). Sage.
- Reading, J. M., Buhr, K. J., & Stuckey, H. L. (2019). Social experiences of adults using online support forums to lose weight: A qualitative content analysis. Health Education & Behavior, 46(2_suppl).

 https://doi.org/10.1177/1090198119859403
- Reifegerste, D., Wasgien, K., & Hagen, L. M. (2017). Online social support for obese adults: Exploring the role of forum activity. *International Journal of Medical Informatics*, 101, 1-8. https://doi.org/10.1016/j.ijmedinf.2017.02.003
- Rieger, E., Sellbom, M., Murray, K., & Caterson, I. (2018). Measuring social support for healthy eating and physical activity in obesity. *British Journal of Health Psychology*, 23(4), 1021–1039. https://doi.org/10.1111/bjhp.12336
- Robinson, E., Haynes, A., Sutin, A.& Daly, M. (2020). Self-perception of overweight and obesity: A review of mental and physical health outcomes. Obesity Science & Practice, 6(5), 552–561. https://doi.org/10.1002/osp4.424
- Rohde, K., Keller, M., la Cour Poulsen, L., Blüher, M., Kovacs, P., & Böttcher, Y. (2019). Genetics and epigenetics in obesity. Metabolism, 92, 37–50. https://doi.org/10.1016/j.metabol.2018.10.007

- Rosenstock, I. M., Strecher, V. J., & Becker, M. H. (1988). Social learning theory and the health belief model. *Health Education Quarterly*, 15(2), 175–183. https://doi.org/10.1177/109019818801500203
- Rubin, H. J., & Rubin, I. S. (2016). *Qualitative interviewing: The Art of Hearing Data*.

 Sage.
- Safaei Pour, M., & Rahimi Chamkhani, A. (2018). Critical analysis of sampling designs in human geography research by focusing on selection bias in probability samples. *Geographical Researches Quarterly Journal*, 32(4), 47–68. https://doi.org/10.29252/geores.32.4.47
- Saghafi-Asl, M., Aliasgharzadeh, S., & Asghari-Jafarabadi, M. (2021). Correction:

 Factors influencing weight management behavior among college students: An application of the health belief model. *PLOS ONE*, *16*(5).

 https://doi.org/10.1371/journal.pone.0252258
- Saldaña, J., & Omasta, M. (2022). Qualitative research: Analyzing life. SAGE.
- Saunders, B., Sim, J., Kingstone, T., Baker, S., Waterfield, J., Bartlam, B., Burroughs, H., & Jinks, C. (2017). Saturation in qualitative research: Exploring its conceptualization and Operationalization. *Quality & Quantity*, *52*(4), 1893–1907. https://doi.org/10.1007/s11135-017-0574-8
- Seguin, R. A., & Folta, S. C. (2017). Long-Term Body Weight Maintenance among StrongWomen-Healthy Hearts Program Participants. *Journal of Environmental and Public Health*, 2017. https://doi.org/10.1155/2017/4372048

- Sendra, A., Farré, J., &Vaagan, R. W. (2020). Seeking, sharing and co-creating: A systematic review of the relation between social support theory, social media use and chronic diseases. Social Theory & Samp; Health, 18(4), 317–339. https://doi.org/10.1057/s41285-019-00106-z
- Shufutinsky, A. (2020). Employing Use of Self for Transparency, Rigor, Trustworthiness, and Credibility in Qualitative Organizational Research Methods. *Organization Development Review*, 52(1), 50–58.
- Skinner, C. S., Tiro, J., & Champion, V. L. (2015). The Health Belief Model. In K. Glanz, B. K. Rimer, & K. "V." Viswanath (Eds.), Health behavior: Theory, research, and practice (pp. 75–94). Jossey-Bass/Wiley
- Slovin, L. J., & Semenec, P. (2019). Thinking/writing within and outside the IRB box.

 *Reconceptualizing Educational Research Methodology, 10(1), 14–27.

 https://doi.org/10.7577/rerm.3241
- Smith, J. A., & Fieldsend, M. (2021). Interpretative phenomenological analysis. In P. M. Camic (Ed.), Qualitative research in psychology: Expanding perspectives in methodology and design (pp. 147–166). American Psychological Association. https://doi.org/10.1037/0000252-008
- Song, X., Jin, J., Liu, Y.-H., & Yan, X. (2019). Lose your weight with online buddies:

 Behavioral contagion in an online weight-loss community. *Information*Technology & People, 33(1), 22–36. https://doi.org/10.1108/itp-11-2018-0525
- Soós, M. J., Coulson, N. S., & Davies, E. B. (2022). Exploring Social Support in an Online Support Community for Tourette Syndrome and Tic Disorders: Analysis

- of Postings. Journal of medical Internet research, 24(10), e34403. https://doi.org/10.2196/34403
- Stacey, D., Jull, J., Beach, S., Dumas, A., Strychar, I., Adamo, K., Brochu, M., & Prud'homme, D. (2015). Middle-aged women's decisions about body weight management: needs assessment and testing of a knowledge translation tool.

 Menopause (New York, N.Y.), 22(4), 414–422.

 https://doi.org/10.1097/GME.0000000000000326
- Stuart R.B. Behavioral control of overeating. *Behav Res Ther* 1967; 5:357-365.

 Stuart R.B., Davis B.D. *Slim Chance in a Fat World*. Champaign, IL: Research Press; 1972.
- Stunkard A.J. Obesity. Philadelphia: W.B. Saunders; 1980.
- Sulat, J.S., Prabandari, Y.S., Sanusi, R., Hapsari, E. D., & Santoso, B. (2018). The validity of health belief model variables in predicting behavioral change. Health Education, 118(6), 499–512. https://doi.org/10.1108/he-05-2018-0027
- Thoits, P. A. (2011). Mechanisms Linking Social Ties and Support to Physical and Mental Health. Journal of Health and Social Behavior, 52(2), 145–161. https://doi.org/10.1177/0022146510395592
- Thomas, E. & Magilvy, J. K. (2011), Qualitative Rigor or Research Validity in

 Qualitative Research. Journal for Specialists in Pediatric Nursing, 16: 151–155.

 [WWW document]. http://onlinelibrary.wiley.com/doi/10.1111/j.1744-6155.2011.00283.x

- Thompson, K. A., Miller, A. J., Walsh, E. C., & Bardone-Cone, A. M. (2023). Social Media and disordered eating among middle-aged women: Not just an adolescent concern. *Eating Behaviors*, *50*, 101748.

 https://doi.org/10.1016/j.eatbeh.2023.101748
- Urich, A. (n.d.). The health belief model. Methods for Stress Management. Retrieved January 26, 2023, from https://psu.pb.unizin.org/kines082/chapter/the-health-belief-model/
- Urquhart, C.: Grounded Theory for Qualitative Research: A Practical Guide. Sage,
 Thousand Oaks (2013)
- Wang, W., Shukla, P., & Shi, G. (2021). Digitalized social support in the healthcare environment: Effects of the types and sources of social support on psychological well-being. *Technological Forecasting and Social Change*, 164, 120503. https://doi.org/10.1016/j.techfore.2020.120503
- Wang, Y., & Willis, E. (2018). Supporting self-efficacy through interactive discussion in online communities of Weight Loss. *Journal of Health Psychology*, 23(10), 1309– 1320. https://doi.org/10.1177/1359105316653264
- Webb, V. L., & Wadden, T. A. (2017). Intensive lifestyle intervention for obesity:

 Principles, practices, and results. Gastroenterology, 152(7), 1752–1764.

 https://doi.org/10.1053/j.gastro.2017.01.045
- Weller, S. C., Vickers, B., Bernard, H. R., Blackburn, A. M., Borgatti, S., Gravlee, C. C., & Johnson, J. C. (2018). Open-ended interview questions and saturation. *PLOS ONE*, 13(6). https://doi.org/10.1371/journal.pone.0198606

- Williamson, D.A. (2017). Fifty Years of behavioral/lifestyle interventions for overweight and obesity: Where have we been and where are we going? Obesity, 25(11), 1867–1875. https://doi.org/10.1002/oby.21914
- Williamson D.A., & Perrin L.A. Behavioral therapy for obesity. Endocrinol Metab Clin North Am 1996; 25:943-954.
- World Health Organization. (2022). *Obesity and overweight*. World Health Organization.

 Retrieved April 7, 2022, from https://www.who.int/news-room/fact-sheets/detail/obesity-and-overweight
- Wu, Y.K., & Berry, D.C. (2017). Impact of weight stigma on physiological and psychological health outcomes for overweight and obese adults: A systematic review. *Journal of Advanced Nursing*, 74(5), 1030–1042.
 https://doi.org/10.1111/jan.13511
- Wu, F., & Sheng, Y. (2019). Social Support Network, social support, self-efficacy, health-promoting behavior and healthy aging among older adults: A pathway analysis. Archives of Gerontology and Geriatrics, 85, 103934.
 https://doi.org/10.1016/j.archger.2019.103934
- Xu, X., Mishra, GD, Dobson AJ, & Jones, M. (2018) Progression of diabetes, heart disease, and stroke multimorbidity in middle-aged women: A 20-year cohort study. PLoS Med 15(3): e1002516. https://doi.org/10.1371/journal.pmed.1002516
- Yan, L. L. (2017). Good intentions, bad outcomes: The effects of mismatches between social support and health outcomes in an online weight loss community.

- Production and Operations Management, 27(1), 9–27. https://doi.org/10.1111/poms.12793
- Yang, H.-M., Choo, J., & Kim, H.-J. (2018). Health-promoting behavior and quality of life among community-dwelling, middle-aged women: A comparative study between overweight and normal-weight groups. *Korean Journal of Health Promotion*, 18(4), 159–168. https://doi.org/10.15384/kjhp.2018.18.4.159.
- Zhang, J., Xu, L., Li, J., Sun, L., Qin, W., Ding, G., Wang, Q., Zhu, J., Yu, Z., Xie, S., & Zhou, C. (2019). Gender differences in the association between body mass index and health-related quality of life among adults: a cross-sectional study in Shandong, China. *BMC Public Health*, 19(1). https://doi.org/10.1186/s12889-019-7351-7

Appendix A: Social Media Post

My name is Holly Fields, a Ph. D. student and health & wellness professional for over 30 years. I am writing my doctoral dissertation on middle-aged women's experiences in an online weight-loss community. The admin of this group has allowed me to announce my study on this site, or it is a public site.

To Participate: Participants are asked to take part in a 30-minute interview done via Zoom. Participants need to meet the following criteria: Be a female who is a resident of the United States, between the ages of 40-58 years old, and have a BMI of 25 or higher (a calculator to determine BMI is included in the survey), as well as being a participant in an online weight-loss community (nutrition and exercise focus). A survey link is provided here: Survey Link

This link includes questions regarding eligibility, information about your participation, and a survey to screen your eligibility for this study. No personal or identifying information is required. If you are interested in participating, please click on the link above to complete all questions and confirm eligibility.

You will complete an informed consent form that I will send by email, and I can also answer any questions you may have. Please allow 5-10 minutes for the survey above. Your responses will remain confidential throughout the research study. Your participation in this study is entirely voluntary. Should you have any remaining questions or concerns, I am available via email at holly.fields@waldenu.edu. Thank you in advance-

Respectfully, Holly

IRB approval #04-12-23-0825386

expiration 04/11/2024

Appendix B: Screening Survey

Volunteers are Needed for a Research Study of Middle-Aged Women (40-58) in an online weight-loss community focusing on exercise and nutrition. To confidentially volunteer, please complete the Pre-screening survey-the link in Appendix A has the following questions:

Appendix A has the following questions:
Identification (age) *1. Are you a female between the ages of 40-58 years old?
C Yes C No
Overweight/Obesity identification * 2. I currently know my BMI (Body Mass Index
C Yes C No 2.1. I identify myself as overweight/obese
$^{\text{C}}$ $_{Yes}$ $^{\text{C}}$ $_{No}$ *3. will determine my BMI using this online tool and enter the number below:
https://www.nhlbi.nih.gov/health/educational/lose_wt/BMI/bmicalc.htm
Knowledge of Study 4. How did you find out about this Research study?
Flyer
Social Media Referred by a friend

Contact Information

5. So that I may reach out to you, please provide your first name with your email address or phone number. Thank you for participating in this screening survey. I will reach out to you within 48 hours-Holly Fields
6. I am a resident of the United States
C Yes
C No
7. I am currently (or have previously been) a participant in an online weight-loss community (nutrition/exercise focus, NOT medical interventions).
Yes
No

Appendix E: Interview Script

Interview Script					
Interview Code Name:					
Location: Zoom Audio Only					
Date:					
Time:					
RQ: How do middle-age	d women perceive th	eir experiences within	an online v	weight-	
loss community?					
Thank you for contacting me about participating in the research study. It is my pleasure to have you as a participant in this study. In order to protect your privacy, I will use an alias first name. This information will be used for communication, transcription, and discussion. (Your alias name will be Researcher will identify for participant awareness). This name may be changed during the coding process if I feel it could jeopardize your identity. Feel free to share your story with me openly, as the "alias" is chosen randomly to protect your identity, information, and medical history. We will use the information you provide in this research, but your identity will not be revealed. Your openness and willingness to share your experiences as part of an online weight-loss community is greatly appreciated.					
Again, thank you for tak for qual	d in that? Before we have go through the interpret free to a med consent form that any questions or constanted started from this email lity assurance purpose	begin, do you have any erview today or in the sk!!! at you signed. After recerns we should address d?	y questions future, plea ading over as before ge te to record ou?	? If you ase feel it again, etting this call	
conversation and ensure	e accuracy. In order to rmation will be used	o protect your privacy for communication, tr Researcher will iden	, I will use anscription	an alias , and	
Health-Related Questions-Keywords or concepts: overweight, obesity, health Notes Memos				Memos	
RQ1: How do	Questions	Probes			

perceive their experiences within an online weight-loss community?			
Q1	Tell me a little about yourself. I'd like to know more about you.	Tell me more about your experiences. What made you join this community?	
Q2	As you identified yourself as overweight/obese, please share your current health concerns with me.	What challenges do you face?	
Sub RQ1: How do middle-aged women describe their experiences in an online weight-loss community toward their nutrition/diet choices? Sub RQ2: How do middle-aged women describe their experiences in an online	How long would you say you have been in this community? What were your thoughts, feelings, and concern? Can you share what you have experienced as a community member? What were your experiences regarding nutrition from within the community? What were your experiences regarding exercise/activity	What do you feel is most beneficial for being a part of this group?	

weight-loss community toward their exercise choices?	from within the community? Did you receive any fitness recommendations from within the community?		
I am interested in learning you feel the community Key concepts: Life, experience exercise, sleep, stress, st	influences these beha erience, lifestyle beha	viors.	
Q4	How do your lifestyle behaviors affect your weight and health? Lifestyle behaviors include diet, exercise, sleep, stress, and weight.	What, if anything, has been most challenging about lifestyle behaviors? What barriers, if any, do you face?	
Q5 Sub RQ3: How do middle-aged women describe their experiences with social support in an online weight-loss community?	From the community, what suggestions, recommendations, or guidance have you received?	Tell me more about the suggestions, recommendations, or guidance.	
Q6	In terms of your overall health, what role does your lifestyle behavior play?	In terms of lifestyle behaviors, how do you feel you are being supported? What	

	Have you ever been diagnosed with a medical condition related to overweight? Did anyone in the online community give you medical advice?	would you like to know more about? What is your go-to place for lifestyle questions?		
Q7	Do the members within the community discuss weight goals? How do you feel about these discussions?	Would you mind telling me your height and weight right now? Could you please tell me more about your weight? Is there a weight you consider ideal for you? Can you tell me how you came up with this number?		
Now let's move on to more knowledge base questions. Answers are not right or wrong. Trying to build a common knowledge foundation is all I'm trying to do. Keywords or concepts: Knowledge, understanding				
Q8	Tell me what "healthy" means to you in your own words. What does the term "health behavior" mean in your own words?	If you could describe yourself or where you would like to be, what would you say? Can you tell me what's holding you back?		

	What about "Changes in lifestyle behavior."?		
Q9	In your opinion, how should a healthy meal plan be created? How have you developed nutrition ideas within the community? Can you explain more about these?	Have you ever been assisted in developing a healthy eating plan? I would like to know more about your eating habits.	
Wrap-up	Before we wrap up the interview, is there anything you would like to highlight or explore about your experiences within the online community?	Is there anything we haven't discussed that you would like to discuss related to your overweight and daily life experiences? If you think of anything you want to share after this meeting, please feel free to reach out to me.	
Conclusion	Your openness and sharing your experiences regarding the online weight loss community are greatly appreciated.		

	1	
If you indicated		
that you would		
like a follow-up		
email, I will		
contact you as		
soon as possible.		
Please confirm		
your email		
address if you		
indicated so.		
Again, thank you		
for taking part in		
this interview.		
Would you like to		
receive your \$10		
Amazon gift card		
by email or		
physical mail?		
Please confirm		
either address		
please.		