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Walden University

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Gladys Tataw-Ayuketah

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Walden University
2022

Abstract

Exploring Promotoras as Influencers of Physical Activity and Diet Acceptability Among Latinas

by

Gladys Tataw-Ayuketah

MPH, Walden University, 2010

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Public Health – Epidemiology

Walden University

February 2022

Abstract

Promotoras are frontline community health workers who help link Latino community members to health and social services. Latino women have high rates of attrition and lack of participation in weight loss programs due to various barriers, and the promotora model is vital to address these concerns. The approach incorporates strong family support and influence to address health and social issues through interdependent ties of promotoras and families who live and work within the community they serve. The purpose of this qualitative study was to explore how promotoras influenced the acceptability of and participation in physical activity and dietary modification programs among Latino women. To better understand these interactive and reinforcing behaviors between Latino women, promotoras, and their environments, this study explored the lived experiences of promotoras using the social-ecological model. Fifteen promotoras participated in audio-recorded semistructured interviews. Data analysis followed a six-step thematic analysis process for coding and theme identification. The eight identified and established themes were knowledge of physical activity, diet, and obesity; promotoras' roles/strategies as influencers; attitudes/beliefs/ and customs; social networks/social support; environmental influences; cultural values; schools/workplace as hubs of practice; and the perceptions of the government as a partner in reinforcing healthy lifestyles. The implications for social change include the potential use of the newly acquired knowledge to design culturally acceptable physical activity and diet programs that reduce barriers and attrition among Latino women and improve the sustainability of interventions in the communities.

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Dedicated heartily and proudly with love….

To God Almighty who kept me to this day, showered me with love, strengthened and motivated me, gave me patience, wisdom, time, and guidance to complete this work.

To my beautiful and poised daughters, Alexis Ayuketah and Abigail Ayuketah, for their love and support. You are the reason why I soar.

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Chapter 1: Introduction to the Study

The Centers for Disease Control and Prevention (CDC, 2018) identified obesity as a chronic disease related to multiple modifiable risk factors. While many factors contribute to the development of obesity and comorbidities, unhealthy diets and limited physical activity (PA) are significant contributors (Byrd et al., 2018) and the focus of this research. Racial disparities are apparent in obesity rates and associated comorbidities. Data from 1999 to 2008 showed that obesity prevalence was higher among Latino women at 45.1%, compared to 35.5% for all women (Agne et al., 2012). One decade later, data show that Latino women are 1.2 times disproportionately affected compared to all other women, indicating a prevalence of 50.6% (CDC, 2018). National Center for Health Statistics Data (NCHS) from 2017 to 2018 showed continuing disparities in obesity prevalence; with Hispanic women at 43.7%, non-Hispanic Black women at 56.9%, non-Hispanic White women at 39.8%, and non-Hispanic Asian women with the lowest prevalence at 17.2% (Hales et al., 2020).

Obesity is a major risk factor for the four top leading causes of death among Latino women: diabetes, hypertension, some cancers, and strokes (CDC, 2018; Emmanuel & Coppack, 2016; Hales et al., 2017). Furthermore, weight loss interventions focusing on PA and diet designed for the general population have been less successful among Latino women, indicating the need for investigation into culturally congruent interventions (Lindberg et al., 2013; Petersen et al., 2019; Seguin et al., 2019).

Because Latino women represent 25% of the total female population in the United States and 52% of the fastest growing and largest ethnic groups (U.S. Census Bureau,

2010), it is imperative to design culturally appropriate weight loss programs that will contribute to reduce obesity. Researchers have presented evidence suggesting that Latino women experience barriers to acceptability and participation in PA, diet, and weight loss programs, with negative obesity outcomes (Ragsdale et al., 2017; Seguin et al., 2019; Salihu et al., 2015). Notable barriers include individual preferences, cultural aspects, environmental factors, policy, acculturation, and multiculturism. The researchers of these studies measured acceptability through program attrition rates and overall attendance.

Investigators have expanded the understanding of critical cultural barriers and resulted in many culturally relevant PA and dietary interventions with generally positive yet unsustainable outcomes. In addition, persistent obesity disparities warrant the exploration of novel strategies, like the *promotoras* approach, shown to be effective in influencing participation in programs among Latino women. In the promotoras approach, frontline community health workers (promotoras) from the community help link the community to health and social services, including addressing issues of obesity (CDC, 2017; Cheun & Loomis, 2018; Keblusek et al., 2017). Application of this model creates relationships built on trust and social support through partnership and peer support. On the contrary, most culturally relevant programs simply translate materials into Spanish and hire bilingual facilitators to lead the intervention (Lindberg et al., 2013; Seguin et al., 2019).

By integrating the role of promotoras as influencers across the overlapping levels of human behavior within the socioecological model (SEM), I explored how they succeed in addition to what works well and challenges encountered as they operate within the

complex cultural and contextual structures (see McLeroy et al., 1988). Targeting the unique experiences of this group through their interactions with Latino women could suggest opportunities to improve obesity outcomes and reduce disparities (Paz & Massey, 2016; Tung & McDonough, 2015).

Through this study, I explored new ideas from the experiences of promotoras as influencers of Latino women's acceptability and participation in weight loss programs. The findings add to the growing body of knowledge surrounding the effectiveness of promotoras. Despite extensive literature on the effectiveness of the promotoras approach in addressing health and social issues, most researchers have focused on outcomes reported by participants and research institutions (Palmer-Wackerly et al., 2020). There is a need to explore and better understand the effectiveness of the promotoras approach concerning Latino women's participation in lifestyle modification programs from promotoras' own experiences (Palmer-Wackerly et al., 2020). The factors that facilitate and hinder influences on Latino women also merit examination. This study was needed to generate new knowledge from the interactions between Latino women, promotoras, and their environments at multiple levels of the SEM (McLeroy et al., 1988). The research filled the need to explore the perceived aspects of the phenomenon that promote acceptability or adherence to lifestyle modification programs. The findings could be useful to promote social change by developing innovative and effective strategies that ensure positive and sustainable weight loss outcomes among Latino women.

In this chapter, I summarize the literature on the barriers encountered by Latino women as they participate in weight loss programs, promotoras' multidimensional role

within the Latino community, the effectiveness of promotoras in influencing Latino women, and challenges encountered by promotoras as they influence Latino women. I discuss the notable research gap, purpose of the study, phenomenon of interest, research question, and conceptual framework that guided the study. The chapter also addresses the nature of the study and methodology, the limitations, the scope and delimitations, and the significance. Chapter 2 presents a further explanation of the conceptual framework grounding the study and the literature search strategy, followed by an in-depth review of the most relevant findings from the current body of literature.

Background

According to the CDC (2018) and the World Health Organization (WHO; 2018), obesity remains a top public health issue in the United States and the world. Obesity means having a body mass index (BMI) over 30, with BMI calculated by a person's weight in kilograms divided by the square of height in meters. In 2008, the overall cost of obesity in the United States was $147 billion, and health care spending for an obese person was $1,492, 42% higher than a healthy person (Petersen et al., 2019). The economic burden of physical inactivity is an estimated $53.8 billion worldwide; related deaths and productivity losses contributed to $13.7 billion and 13.4 million disability-adjusted life-years (Ding et al., 2016).

Efforts to reduce obesity and close racial/ethnic disparities have been less effective in minority groups like Latino women. These results are because interventions do not account for cultural influences on eating, PA, and the environmental and structural barriers to participation in lifestyle modification programs (CDC, 2018; Krueger &

Reither, 2015; Petersen et al., 2019). Although the Hispanic/Latino population is the fastest-growing minority group, most evidence-based interventions have occurred with dominant non-Hispanic populations. Thus, there is a need for ongoing culturally appropriate research on lifestyle modification interventions proportionate to the growing Latino population (Seguin et al., 2019).

There is evidence that PA and healthy diets are effective modalities to address obesity in the general population (Byrd et al., 2018; Seguin et al., 2019); however, Latino women are over 5% more likely than White women to not believe "at all" that lack of PA contributes to obesity due to cultural misconceptions about weight loss (Knerr et al., 2017). Additionally, about 69% of Latino women complete fewer than the 150 minutes of recommended moderate to vigorous weekly PA (Emadian & Thompson, 2017). This lack is related to time constraints to balance work and care for families, childcare, structural barriers such as limited grocery stores and access to fresh foods, limited individual resources, and lack of transportation (Salihu et al., 2015; Sánchez-Villegas et al., 2018; Seguin et al., 2019). Unhealthy diets are significant contributors to obesity in the general population, with much higher rates in Latino populations due to the consumption of high caloric foods and sugary drinks (Byrd et al., 2018; CDC, 2018; Seguin et al., 2019; Tunon-Pablos & Derby, 2016). Although Latino women are aware of the benefits of eating well, their adoption of unhealthy aspects of the American diet through acculturation and limited access to cultural ingredients from their countries of origin contributes to the loss of healthy dietary practices (Fuster & Uriyoan, 2017; Lindberg et al., 2012; Ragsdale et al., 2017). The shifts in social and physical environments can

contribute to changes in food preferences and family eating styles that have negatively impacted obesity outcomes among Latino women (Fuster & Uriyoan, 2017; Tunon-Pablos & Derby, 2016).

These cultural, behavioral, and structural barriers have adverse effects on Latino women's PA, energy intake, and reduced desire to lose weight. To address these barriers, several researchers have employed culturally appropriate strategies, specifically the promotoras approach, that provide relevant information and emotional support to Latinas with demonstrated success in improving acceptability to diet and PA programs, with generally positive obesity outcomes. This approach nonetheless has some challenges and limitations requiring further exploration (Cherrington et al., 2015; Koniak-Griffin et al., 2015). Promotoras are female community individuals without formal education trained to advocate and promote health in Hispanic/Latino communities (Allen et al., 2016; Katigbak et al., 2015; Keblusek et al., 2017). They have strong cultural and linguistic connections with the community, which informs an in-depth knowledge of the social networks, strengths, and needs.

To reduce barriers and close the gap in obesity disparities, Seguin et al. (2019) culturally adapted an effective evidence-based lifestyle intervention program focused on PA and nutrition modifications for over 12 weeks. The pilot study, "*Mujeres Fuertes y Corazones Saludables*," targeted rural Latina farmworkers who faced challenges to attendance and participation, such as geographic dispersion, sense of powerlessness, childcare, lack of transportation, and lack of organization. The authors systematically adapted the original version of a randomized controlled trial of Strong Women, Healthy

Hearts, an intervention designed to address PA and healthy eating among rural non-Hispanic White women (Folta et al., 2009). To meet the goals of Latino women, Seguin et al. culturally adapted the intervention by using translators to increase nutrition knowledge on fruits, vegetables, sugar-sweetened beverages, meats, and cheeses. Bilingual class leaders translated materials to reduce barriers associated with meal planning, shopping, receiving family support, replacing exercise with Latin dancing, and cooking unfamiliar foods with culturally relevant foods and recipes. The adapted program maintained the twice-weekly classes for over 12 weeks to improve participants' self-efficacy and social support. Seguin et al. also adapted culturally relevant team-building strategies, including greeting each other by name to establish group norms, group support, and connectedness, thereby enhancing participants' abilities to garner support from friends and family as a strategy to overcome the social and environmental barriers to a healthy lifestyle.

For the program's nutrition component, Seguin et al. (2019) adapted 'the Dietary Approaches to Stop Hypertension Eating Plan using the 2015–2020 Dietary Guidelines for Americans from the U.S. Departments of Agriculture and Health and Human Services. In addition, there was an emphasis on dietary patterns using HEART (heap on the vegetables and fruits, emphasize the right fats, accentuate the whole grains, revere low-and nonfat dairy foods, and target heart-healthy proteins). An important expectation of the adapted program was for class leaders to maintain close contact with Latino women and overcome cultural barriers, which may include sabotage by family/friends. The class leaders called participants to remind them of upcoming classes, checked up on

the participants who missed classes, and used motivational interviews to help participants overcome transportation barriers. The comparison of pre- and post-program data showed reduced weight, increased fruit and vegetable consumption, and decreased daily intake of sugar-added drinks. Seguin et al.'s findings reinforced the need to adapt evidence-based programs to include perceiving group settings as motivators. Further, the results showed that ongoing barriers to PA and dietary modifications included a lack of time to prepare meals and exercise, insufficient family support, and individual experiences, such as portion control challenges and weight fluctuations. Overall, weight changes of -1.5 kg for the adapted program were close to the original program's results of 2.1 kg loss. Seguin et al. found a retention rate in the adapted study of 26%, lower than previous programs for Latino women (Cousins et al., 1992; Sharma, 2008). There remains a need to explore unique strategies to recruit and retain Latino women in lifestyle modification programs with a focus on reducing barriers and attrition, such as limited individual resources, dispersed population, changing phone numbers, lack of trust, fear of deportation, and individual struggles with portion control (Seguin et al., 2019).

Building on the progress of previous studies to reduce barriers and improve participation in weight-loss interventions, D'Alonzo and You (2020) conducted a partially randomized controlled trial using the promotora model to evaluate a culturally tailored intervention program for increasing PA among low-income immigrant Latinas. D'Alonzo and You explained that attrition in lifestyle intervention activities is an issue, particularly among racial and ethnic minorities. As a means of overcoming this challenge among a low-income immigrant Latina population, the researchers used a 12-week PA

intervention facilitated by promotoras. The intervention was beneficial because it allowed women interested in the program to enroll in the same group as their friends; this was a more culturally appropriate strategy than previously adapted in Seguin et al. (2019). D'Alonzo and You determined that community engagement and involvement, through the use of promotoras, can promote the retention of not only Latina women but other populations at risk for attrition in PA interventions to improve obesity outcomes.

Research in the last decade supported the need to identify how community health workers (CHWs)/promotoras do or do not impact the communities they serve. Oliver et al. (2015) found that current knowledge about CHWs had come from others; therefore, it was necessary to hear directly from them. Considering the limited success of culturally adapted programs (Seguin et al., 2019), the potential of the promotora approach is a viable tool to address barriers to acceptability for and participation in PA and diet programs among Latino women (D'Alonzo & You, 2020). The present study focused on better understanding this approach through the experiences of promotoras.

Problem Statement

Latino women are 1.2 times more likely to be obese than other women (CDC, 2018). Obesity contributes to the four top leading causes of death among Latinas: diabetes, hypertension, some cancers, and strokes (CDC, 2018; Emmanuel & Coppack, 2016; Hales et al., 2017). Although research on the effectiveness of the promotoras approach provides advanced knowledge, persistent obesity disparities have warranted novel strategies exploring promotoras' voices to address barriers and improve acceptance of PA and diet programs (Koniak-Griffin et al., 2015; Palmer-Wackerly et al., 2020).

A review of the literature indicated extensive research devoted to the multiple roles and effectiveness of promotoras in supporting Latino women to overcome barriers to PA, diet, and other lifestyle modification programs. Most of this research, however, relied solely on the experiences, evaluations, and outcomes of health care organizations, research institutions, providers, and participants and not the promotoras or CHWs themselves (Palmer-Wackerly et al., 2020). Although a few studies showed the value of these women's testimonials and experiences during implementation (Koniak-Griffin et al., 2015; Palmer-Wackerly et al., 2020), there is limited published information on their valuable experiences as crucial partners in the Latino communities.

There are studies on successful strategies employed in improving participation in physical activities, adherence to diet programs, retention rates, minimizing dropouts, and facilitating behavior change (Koniak-Griffin et al., 2015; Seguin et al., 2019). Even so, there are mixed results and limitations regarding work-related challenges in navigating the Latinx (Hispanic) population (Palmer-Wackerly et al., 2020). These researchers answered most of the "what" and "why" questions of the phenomenon surrounding promotoras and Latino women interactions. However, no scholars have explored promotoras' experiences of how they influenced Latino women to accept PA and dietary modification programs. There appears to be a gap in the literature on how promotoras have successfully influenced Latino women or Hispanic/Latino populations over the years. An understanding of what it takes or how they concisely influence Latino women to accept PA and diet is lacking. Closely examining their multidimensional experiences within the multilevel constructs of the SEM provided an in-depth understanding of Latino

women's interactions with their environments and any contextual forces of influence over behavior change (Haughton et al., 2015). The findings indicate opportunities for culturally designed programs that are more acceptable and sustainable for Latino women.

Purpose of the Study

The purpose of this qualitative study was to explore how promotoras influence the acceptability of and participation in PA and dietary modifications among Latino women. The phenomenon of interest was the unique insight of the promotoras approach as influencers of Latino women in weight loss programs that focus on PA and diet. To develop effective obesity-related interventions and promote healthy lifestyles for this population, there is a need to understand behaviors related to acceptability and participation. The findings shed light on the valuable interactions among Latino women, promotoras, and their environments at multiple levels. Such insights indicate new strategies for clinical and public health providers to design culturally adapted, sustainable, and more acceptable programs.

Research Question

What are promotoras' understanding of PA, healthy diets, and obesity, and how do they influence physical activity and dietary interventions among Latino women within the multi-level interactions of the socioeconomic model?

Theoretical Framework for the Study

The SEM guided the development of the research question and provided a foundation for understanding how promotoras influence Latino women's participation in lifestyle modification programs at multiple levels of interactions (McLeroy et al., 1988;

Reifsnider et al., 2005). This conceptual framework has received use in epidemiological and obesity studies among Hispanic and Latino children to assess and address the multilevel factors that influence behaviors related to lack of healthy diets and PA (Kiraly et al., 2017). The framework supported the intent to understand the interactions of promotoras and Latino women with their environments as well as the contextual forces of influence at each level.

Exploring the experiences of promotoras allowed the identification of their interactive and reinforcing activities at the intrapersonal level based on their knowledge, beliefs, and skills (see McLeroy et al., 1988). Interactions at the interpersonal level showed changes in the participants' social environments, such as partnerships with churches and neighborhoods. At the institutional level, the study showed whether the promotoras had influence based on their perceptions and attitudes toward institutional leaders, cultures, and policies (see Haughton et al., 2015). Furthermore, the study presented the opportunity to understand promotoras' interactions at the community level and how they delivered services in the context of physical environments to reinforce or influence behavioral change. At the public policy level, this study focused on the role of promotoras in advocacy, in partnership with the government, and how they influence social norms and the acceptability of and participation in PA and dietary interventions among Latinas (see Golden & Earp, 2012; McLeroy et al., 1988).

SEM was an appropriate framework to focus on the multidimensional experiences of promotoras within the cultural and social context of Latinas and the interconnected systems of the relationships that comprise their environments (McLeroy et al., 1988).

Applying the SEM provided the ability to explore the interactions between Latinas, promotoras, and their environments at multiple levels. The SEM was an appropriate framework to identify what influenced Latinas' adherence to lifestyle modification programs. Chapter 2 presents a more thorough examination of the SEM conceptual framework used in the study.

Nature of the Study

In this study, a qualitative phenomenological design was appropriate to examine how promotoras influence the acceptability of PA and dietary interventions among Latinas. The qualitative approach was a more suitable method than quantitative research because the goal was to understand meaning instead of developing generalized hypotheses (see Creswell & Creswell, 2018; Maxwell, 2009). The promotoras' interview responses and verbal expressions to the prompts and probes provided valuable data of their journeys and relationships with Latinas. Quantitative researchers gather participants' opinions, attitudes, and behaviors to provide valuable insights and generate future hypotheses (Creswell & Creswell, 2018; Maxwell, 2009), which was not the purpose of this study.

In this study, audio-recorded phone interviews using a semistructured interview guide took place with the promotoras who met the inclusion criteria. Each participant received a $25 gift card for participation. NVivo was the software used to support the data analysis process to code the participant interviews into meaningful ideas.

The phenomenological approach provided the opportunity to characterize the phenomenon of promotoras as influencers. The phenomenological design enables

researchers to conduct detailed explorations of participants' personal lived experiences and perceptions via qualitative inquiry (Creswell & Creswell, 2018; Matua & Van Der Wal, 2015; Tuffour, 2017). Phenomenological researchers strive to explore, describe, interpret, and understand the participants' individual experiences (Neubauer et al., 2019; Tuffour, 2017). McLeroy et al. (1988) posited that exploring influential forces within SEM constructs could show interactive and reinforcing activities at multiple levels. This helped me to understand the multidimensional relationships of promotoras and Latinas. Instead of quantitative research via surveys, the phenomenological approach was appropriate to add new meaning to strategies for addressing barriers to PA and healthy diet and exploring how promotoras' voices add to the phenomenon.

Definition of Terms

Acceptability: Acceptability is a multifaceted construct that shows the extent to which the people delivering or receiving a health care intervention consider the intervention appropriate based on their anticipated or experienced cognitive and emotional responses to the intervention (Sekhon et al., 2017).

Acculturation: The cultural modification of an individual or group of people who adapt or borrow traits from another culture and merge cultures as a result of prolonged contact (Isasi et al., 2015).

Attitudinal familism: The endorsement of the family as a source of emotional support, obligation to family needs, and family as referent when making decisions (Sabogal et al., 1987).

Community health workers: CHWs work exclusively in community settings and connect members to health care services to promote health and prevent disease among groups with limited access to care (Rhodes et al., 2007).

Dietary patterns: The quantity, variety, or combination of different foods and beverages in a diet and the frequency with which an individual habitually consumes them (Sánchez-Villegas et al., 2018).

Latinas: A woman or girl born or living in South America, Central America, or Mexico or living in the United States with a family of origin from South America, Central America, or Mexico (Cherrington et al., 2015).

Latinx: An alternative, gender-neutral term for Latinos or Latinas to enable inclusiveness and avoid binary gender identification (Palmer-Wackerly et al., 2020).

Lay health advisers: Community workers who work exclusively in community settings and connect members to health care services to promote health and prevent disease among groups with limited access to care (Rhodes et al., 2007).

Multiculturalism: Multiculturalism consists of cultural pluralism or diversity within a society, organization, or educational institution (Lindberg et al., 2013).

Obesity: A weight higher than a normal or healthy weight for a given height, as indicated by a BMI of 30 and above (CDC, 2018).

Overweight: A weight higher than normal or healthy for a given height, as indicated by a BMI of 25 to 30 (CDC, 2018).

Physical activity: Any bodily movement produced by skeletal muscles that requires energy expenditure (WHO, 2018).

Promoteres: Male community workers who work exclusively in community settings and connect members to health care services to promote health and prevent disease among groups with limited access to care (Rhodes et al., 2007).

Promotoras: Female community workers who work exclusively in community settings and connect members to health care services to promote health and prevent disease among groups with limited access to care (Rhodes et al., 2007).

Assumptions

An assumption was that the promotoras would feel comfortable and willing to share their honest perceptions and strategies as influencers with a stranger. Another assumption was that the promotoras would value and want to participate in improving the obesity outcomes and overall health of Latinas.

Limitations

A potential limitation was researcher bias, a factor inherent in qualitative studies. Likewise, the purposive sampling method of recruiting promotoras in specific locations in Prince George's County, Frederick County, and Montgomery County in Maryland (MD) and Washington, DC, coupled with the small sample size, resulted in the limited generalizability of the findings. In addition, my inability to communicate fluently in Spanish could have been a barrier to the recruitment of participants with valuable insight into the phenomenon under study, and could influence inaccurate responses during the interview. In addition, there was the potential of misinterpreting the participants' verbal expressions or cultural mannerisms that could have provided meaning and information during the interviews.

Scope and Delimitations

The study had participants delimited to the inclusion criteria of English-speaking promotoras between 18 to 65 years of age who lived in Prince George's County, Frederick County, and Montgomery County in Maryland and Washington, DC. An additional delimitation was the criterion that the promotoras had to have lived in the United States for at least 5 years to ensure they had enough valuable experiences and expertise with the phenomenon of interest. Rich and thick descriptions of the procedures and findings were helpful to address potential transferability issues. The interview transcripts will remain secured in a safe and be destroyed 5 years after the study is completed.

Significance

Researchers have widely recognized the effectiveness of promotoras in facilitating the acceptability and participation of lifestyle modification and weight loss programs among Latinas from scholarly and practical perspectives (Ayala et al., 2017; Koniak-Griffin et al., 2015). Promotoras' perspectives of their effectiveness could provide a valuable understanding of the mechanisms and relevant behaviors influencing Latinas' participation in PA and diet interventions. Promotoras have unique views on how Latinas characterize their weights and body shapes, preferences, and beliefs of dietary patterns and PA practices. Thus, the views of promotoras could contribute to the design of culturally appropriate interventions acceptable to Latinas (Haughton et al., 2015). The findings of this study could lead to positive obesity outcomes, reduced health

disparities, decreased comorbidities, and lower overall health care costs (Arredondo et al., 2017; Secombe et al., 2017).

This study's implications for social change are that the newly acquired knowledge could contribute to innovative and effective strategies for reducing barriers and improving Latinas' acceptance and adoption of recommended strategies. Additional knowledge could be a means of strengthening promotoras' ability to raise Latinas' awareness of their susceptibility to obesity and the associated risks of comorbid conditions. The findings could also have a positive impact on Latinas' attendance, sustainability of interventions, and obesity outcomes.

The findings of this study showed the interactions of promotoras and Latinas with their environments and the contextual influences at multiple levels motivated and facilitated acceptability and participation in lifestyle modification programs. Translational epidemiologists could transfer the insights and knowledge from this research into practical applications to promote the acceptability of evidence-based PA and dietary modifications among Latinas (Neta et al., 2017).

Summary

According to the CDC (2018), obesity is a chronic disease related to top modifiable risk factors, such as unhealthy diet and limited PA. Disparities exist in obesity rates and associated comorbidities. Persistent obesity burdens and disparities require the exploration of innovative strategies, such as the promotoras approach, based on the experiences of promotoras who closely interact with and influence Latinas by meeting them where they are.

This qualitative research study was a means to fill the gap in the literature on how promotoras influence Latinas' acceptance of and participation in lifestyle modification and weight loss programs focused on healthy diets, PA, and relevant reinforcing behaviors. The findings addressed this moderately understood phenomenon. In addition, this study had the potential to contribute to improved obesity outcomes among Latinas.

Chapter 1 included background information on obesity, disparities, the benefits of healthy diets and PA, barriers to participation, and the role of promotoras in influencing Latinas' participation in lifestyle modification programs. The chapter also presented the problem statement, study's purpose, and the gap in the literature on how promotoras influence Latinas. In addition, the chapter addressed the theoretical basis, methodology, and nature of the study. Chapter 2 includes the literature review. Chapter 3 presents the details of the study's methodology and design. Chapters 4 and 5 will present the results and a discussion of the findings.

Chapter 2: Literature Review

Introduction

The purpose of this qualitative study was to explore how promotoras influence the acceptability of and participation in PA and dietary modifications among Latino women. Obesity requires PA and dietary modifications. Obesity remains a significant public health burden in the United States and worldwide, and it correlates with multiple modifiable risk factors, including unhealthy diets and physical inactivity. In addition, racial disparities exist in obesity-associated comorbidities, with Latinas disproportionately affected. This literature review shows the benefits of using PA and healthy diets to reduce obesity. The review also addresses researchers' efforts to address barriers and improve obesity outcomes. The promotoras approach is generally effective for improving Latinas' participation in public health interventions focused on PA and diet.

Chapter 2 presents the literature search strategies and the study's relevant concepts. The review focuses on promotoras, including their strategies for addressing obesity among Latinas. This chapter includes the barriers to PA, diet, and weight loss among Latinas, promotoras' roles in addressing these problems, and who promotoras are and their relationship to the Latinx population. The SEM was the conceptual framework used to ground the study. Chapter 2 presents the literature on SEM and its applicability to promotoras' roles and relationships with Latinas and their impact at different levels of interactions.

Literature Search Strategy

The databases used for this dissertation included EBSCOHost, PubMed Central, CINAHL, Medline, Scopus Embase, Science Direct, and Health Sciences. A search for literature also commenced on government websites, such as the CDC and National Institutes of Health, and academic websites, such as Walden University. The National Institutes of Health Library and Maryland Department of Health were additional sources. In addition, searches commenced on search engines such as Google and Google Scholar. There were Boolean operators (e.g., AND/OR/NOT) applied to string words together. This literature search was restricted to works published between 2000 to 2019 in English, with the exception of seminal materials on the SEM and qualitative data analysis. The keywords searched included *obesity, physical activity, healthy diets, Hispanic/Latino women, Latinas, promotores/*promotoras*, barriers and facilitators to weight loss, lifestyle modification, weight loss programs, Hispanic culture, community health workers, qualitative methods, obesity disparities,* and *socioecological model.*

Theoretical Foundation

The development of the research question was based on the SEM, the framework used to explore how promotoras influence Latinas' lifestyle modification by understanding the multiple interconnected factors related to behavioral change (McLeroy et al., 1988). SEM was also the theoretical foundation of the data collection and analysis processes. The CDC presented the SEM as a key framework for prevention and the complex interplay of factors of influence. At the same time, Reifsnider et al. (2005) depicted the SEM as an epidemiological framework for examining disease and the

interactions with an effect on health disparities in complex environments. SEM was an appropriate model for this study, as obesity is a chronic disease related to multiple factors.

The five levels of the SEM (see Figure 1) include the factors that contribute to obesity and influence the behaviors of Latinas. The SEM was a relevant framework for exploring the influences of promotoras on Latino women and incorporating their voices could contribute to culturally relevant interventions programs acceptable to the members of this difficult-to-reach population (Kiraly et al., 2017).

Figure 1

Social-Ecological Model

Note. From "Using the Socio-Ecological Model to Frame Agricultural Safety and Health Interventions," by B. Lee, C. Bendixsen, A. K. Liebman, & S. S. Gallagher, 2017. *Journal of Agromedicine, 22*(4), 298–303 (https://doi.org/10.1080/1059924X.2017.1356780). Copyright 2017 by Taylor & Francis.

The five levels of the SEM are intrapersonal (individual), interpersonal, institutional, community, and public policy (Golden & Earp, 2012; McLeroy et al., 1988; Soderlund, 2016). The factors considered at the intrapersonal level include education, training, and improvement of skills within a target population. Researchers have used the SEM to understand various modifications at the interpersonal level and the social support systems and social networks within the community impacting behavior change. Thus, the SEM was appropriate to understand the complex factors of how promotoras influence the individual behavior change of Latinas participating in lifestyle medication programs within the context of the complex environments.

In previous promotoras-led PA and dietary interventions among Latinas, Haughton et al. (2015) used the SEM to examine the influence of promotoras on individual women within the context of the complex environments in which they live. Haughton et al. chose the SEM because social, cultural, economic, and environmental factors influence individual behaviors. In addition, the PA intervention program addressed four levels of the SEM (McLeroy et al., 1988; Sallis et al., 2002; Stokols, 1996).

In a randomized trial of churchgoing Latinas in San Diego (N = 436), 27 CHWs/promotoras led a moderate-to-vigorous PA intervention between 2010 and 2015. The strategies used to overcome multilevel barriers included three different exercise classes, motivational interviewing every 3–4 months, telephone calls to contribute to PA efforts, and appraisal and emotional support for participation. Additionally, the CHWs negotiated for space for the intervention, advertised the program in church bulletins, and

set up schedules. At the environmental level, the CHWs engaged the participants in neighborhood walk audits to identify areas for improvement and advocate for environments that contribute to PA. Findings showed a 68% participation rate and the challenges encountered by CHWs, including data collection and timely reporting of hours, paperwork completion, time management, and effective modeling of PA intervention postures.

Another application of SEM occurred with a quasi-experimental trial of Healthy Kids and Families, a lifestyle intervention developed from social cognitive theory and social-ecological principles (Borg et al., 2019). Healthy Kids and Families targeted the social and home environments of children by engaging parents. The intervention included exploring parental weight-related knowledge, beliefs, and skills to provide support for healthy lifestyles. The participants included 247 English- or Spanish-speaking parent–child pairs from racially and ethnically diverse low-income communities in Worcester, Massachusetts. The findings had implications for this study because they showed the significance of using social-ecological principles to design CHW-led interventions for reducing multilevel barriers and improving lifestyles to address obesity.

The application of the SEM enabled an examination of the interactions between Latinas, promotoras, and their environments at multiple levels of human behavior. The study added to the knowledge about the influences on the acceptability and participation of lifestyle modification programs among Latinas. The SEM focuses on patient engagement through accumulation, amplification, facilitation, cascade, and convergence strategies via the delivery of individualized interventions (McCormack et al., 2017).

Literature Review

This section presents the literature relevant to the study. This literature review commences with broad categories and then focuses on specific themes identified in the literature. The subsections include detailed information relevant to the overarching topics and categories. The review contains the following sections: (a) obesity and Latino women and the contributing factors to obesity and previous intervention programs, (b) promotoras, (c) barriers to addressing obesity among Latino women, (d) outcomes of promotoras as influencers of participation and engagement in PA and dietary modification programs to address barriers and obesity disparities among Latino women, and (e) the barriers and facilitators encountered by promotoras. The review concludes with a summary of the key findings from the literature.

Obesity and Latino Women

Obesity is a public health threat that disproportionately impacts Latinos in the United States (Falbe et al., 2017). As evidenced from 2015–2017 data, non-Hispanic Black adults had the highest prevalence of obesity (38.4%), followed by Hispanic adults (32.6%) and non-Hispanic White adults (28.6%; Petersen et al., 2019). From 2017–2019, non-Hispanic Black adults had the highest prevalence of self-reported obesity (39.8%), followed by Hispanic adults (33.8%) and non-Hispanic White adults (29.9%).

This section presents the issue of obesity among Latinas to provide the context for the importance of addressing the barriers that hamper weight loss. The 2013–2016 data from the Office of Minority Health (2017) indicated that 78.8% of Hispanic women 20 years of age and older were overweight compared to 64% of non-Hispanic White women

of the same age range. Also, 48.9% of Hispanic women were obese compared to 37.9% of non-Hispanic White women. Data from 2017–2018 showed the lowest prevalence of obesity among non-Hispanic Asian women (17.2%) compared with non-Hispanic White women (39.8%) and Hispanic women (43.7%). Non-Hispanic Black women had the highest prevalence of obesity at 56.9% (Hales et al., 2020).

Contributing Factors to Obesity

Several behavioral and genetic factors contribute to obesity within the Latino population (Petersen et al., 2019), including PA, inactivity, dietary patterns, medication use, exposure, food and PA environment, education and skills, food marketing and promotion, preferences, diseases, and drugs, such as antidepressant and steroids. Genes contribute to obesity, as they influence hunger and food intake (Locke et al., 2015). No single gene is the direct reason for obesity; however, the interaction of several genes with the environment contributes to multifactorial obesity. In addition, there is a strong correlation between genetics and the prevalence of obesity and comorbidities in Hispanic children. This subsection addresses some of these factors based on relevant literature. The subsection also focuses on the contributions of diet and PA to weight loss, as indicated in this study.

Home Environment. Culture and home environment are significant contributors to an individual's probability of obesity. Ochoa and Berge (2017) found that parental influences, screen time, PA or sedentary behavior, socioeconomic status and food security, and sleep duration were significant home environmental factors contributing to obesity. However, these factors also apply to child obesity. Hence, Ochoa and Berge

suggested decreasing controlling parent feeding practices and increasing parent modeling of healthy behaviors to alleviate the chance of obesity among children. Home environment is also a contributing factor to obesity for Latinas.

Like Ochoa and Berge (2017), Benjamin-Neelon et al. (2018) claimed that family or childcare home environment is a significant determinant of an individual's health and diet quality. A person with a childhood environment filled with nutritious snacks and meals tends to have a good-quality diet throughout life. Therefore, Benjamin-Neelon et al. asserted that the foods and beverages served at home might be determinants of the diet a person acquires as a child and in the future.

Food Insecurity. Nutrition is a strong indicator of weight status among Latinas (Odoms-Young et al., 2014). Latinas, in their home countries, generally cook using fresh fruits and vegetables; however, they may lack knowledge of similar ingredients in the United States. Additionally, Latinas may have low food efficacy and confidence in preparing healthy foods (Lindberg et al., 2012; White et al., 2010). Food insecurity is another significant contributor to obesity among Latinas and a barrier to healthy eating (López-Cepero et al., 2020; Ro & Osborn, 2018).

Food insecurity is a term for limited access to nutritionally adequate and safe foods (Ro & Osborn, 2018). Food insecurity correlates with poor eating habits, such as emotional eating, preferences for sugary drinks, and high-calorie foods that contribute to the risk of being overweight or obese (López-Cepero et al., 2020; Ro & Osborn, 2018). In the population of Latinos, approximately 19% experience food insecurity (López-Cepero

et al., 2020). Moreover, Latinas have high food insecurity rates that range from 20% to 30%, placing the population at high risk of obesity.

Depressive Symptoms and Anxiety. Researchers have explored the relationship between depression and obesity. Witherspoon et al. (2013) looked at the impact of obesity at different stages (e.g., measured through age) on the psychological distress felt in late adolescence with longitudinal data on Black and White girls. Witherspoon et al. tested if parent or friend labeling is a mediator of this relationship.

Lindsay et al. (2017) found a relationship between depressive symptoms and obesity. More specifically, Lindsay et al. explored these factors in Latina mothers with low incomes, as they are at elevated risk of depression and obesity. About 33% of the Latina mothers in their study were obese and had identified high risks for depression. Therefore, Lindsay et al. recommended screening and culturally relevant interventions for depressive symptoms and obesity among Latinas with low incomes.

Inactivity and Lifestyle. A challenge linked to the issue of obesity among Latinas is the lack of the recommended PA (Arredondo et al., 2017). Low PA correlates with high rates of cardiovascular disease and other chronic diseases among Latinas, including diabetes, cancer, and obesity. Arredondo et al. (2017) analyzed the impact of a faith-based intervention for PA among Latinas with promotoras in 16 churches in San Diego County, California. An important finding was that a faith-based, community-based intervention was an effective means of decreasing the participants' BMIs. The researchers also focused on Latinas in the community, barriers such as time constraints to balance work and PA, limitations of the intervention, and their use of the ecological

framework to address the promotion of PA among Latinas. Additionally, according to Hales et al. (2020), 49.5% of Hispanics compared to 38.9% non-Hispanic Whites do not meet the recommended PA recommendations. Hence, this study focused on exploring culturally acceptable strategies for addressing the lack of PA, which is one of the major contributing factors to obesity among Latinas.

Comorbidities Among Latino Women. Obesity is a risk factor for the four top leading causes of death among Hispanic and Latina women: diabetes, hypertension, some forms of cancer, and stroke. Disparities exist, as 40% of all Americans are likely to develop diabetes over a lifetime compared to 50% of Latinos. The age-adjusted prevalence of diabetes for adult Latinas is 12.4% compared to 7.5% for non-Hispanic White women. In addition, Latinas are 1.7 times more likely to receive diagnoses, 2.6 times to undergo hospitalization, and 1.4 times more likely to die from diabetes than non-Hispanic Whites (CDC, 2019). Hispanic women are 29.8% times more likely to receive hypertension diagnoses compared to 27% of non-Hispanic Whites. Hispanic women are 2.2 times more likely to receive diagnoses of stomach cancer, 40% more likely to receive diagnoses of cervical cancer, and 20% more likely to die from cervical cancer than non-Hispanic Whites. Although Latinas have a similar prevalence of stroke, they are more likely to suffer from strokes due to higher obesity, hypertension, and less PA (CDC, 2019). The Latina population has factors associated with obesity; however, there are also opportunities for targeted prevention and intervention programs.

Culturally Relevant Interventions to Address Obesity Among Latino Women

Non-Promotoras Approach. This section presents some culturally adapted interventions for behavior change related to the research focus on PA and the dietary factors that contribute to obesity among Latinas. In a randomized control trial, Cousins et al. (1992) recruited and randomized 168 Latinas experiencing obesity into three groups. The participants in Group 1 received printed PA, diet, and weight loss material. Group 2 received the same material and attended 24 weeks of classes, followed by a 6-month maintenance class. The participants in Group 3 received a family approach to printed material and had to attend 24 weeks of classes facilitated by a bilingual registered dietician.

Cousins et al. (1992) found that the participants in the family group had the highest weight loss, attrition of over 60%, and the same weight as the baseline at the 6-month follow-up. The findings suggest the value of social support and family-based approaches to obesity, culturally adapting food items, and bilingual instructors. The findings also indicate the need for better approaches for improved adherence to interventions and to reduce attrition.

Similarly, Avila and Howell (1994) designed a randomized control trial that included eight weekly sessions of PA and diet modification weight loss strategies for 44 Mexican-American women experiencing obesity. The intervention occurred at a community medical clinic setting for ease of recruitment and as a safe space for exercise classes. A bicultural Spanish-speaking physician led the weekly sessions. The participants also adopted a “buddy” support system and received social support from their

spouses. The presession, postsession, and 3-month postsession findings showed significant reductions in BMI and increased PA levels compared to the control group. This study suggests the importance of culturally appropriate and tailored interventions. The trial showed 50% attrition, suggesting the need to explore strategies for sustainable attendance in this community. A decade later, Sharma (2008) had similar findings and challenges in an intervention for PA among young Latinas.

Another pilot study, *Nuestras Comidas* (Ravindran, 2014)*,* was an 8-week intervention program for healthy eating and cooking for 46 Hispanic women. The strategies included providing education on nutritional practices with a group approach to foster social support and cooking skills to address barriers to obtaining knowledge about preparing healthy meals. In addition, the participants received food items similar to those used in the classes for home practice. Similar to prior culturally appropriate programs, a bilingual RD facilitated the sessions. Ravindran (2014) administered a presurvey and postsurvey to measure participation and the five multilevel barriers of knowledge, food efficacy, food outcomes, barriers, and social support.

The *Nuestras Comidas* program had a positive outcome on the participants' perceptions of healthy eating of fruits and vegetables (Ravindran, 2014). However, the lack of knowledge on the daily recommendations, attrition of 35%, and a lack of confidence in preparing healthy meals indicated the need for future exploration. In addition, the findings showed that innovative, culturally targeted interventions that address multilevel barriers and provide enhanced social support had increased acceptability of and participation in healthy diet intervention programs by Latinas.

Building on Avila and Howell (1992), Cousins et al. (1994), Ravindran (2014), and Sharma (2008), Seguin et al. (2019) conducted a pilot study, *Mujeres Fuertes y Corazones Saludables*, focused on rural Latina farmworkers who faced challenges to attendance and participation, such as geographic dispersion, a sense of powerlessness, transportation, and a lack of organization. The authors adapted the original version of a randomized controlled trial of Strong Women, Healthy Hearts, an intervention for addressing the PA and healthy eating of rural non-Hispanic White women (Folta et al., 2009). The participants of the adapted program attended twice-weekly classes over 12 weeks to improve ’their self-efficacy and social support. Bilingual leaders used culturally relevant team-building strategies, such as greeting each other by name, to establish group norms, group support, and connectedness. The team-building strategies were also a way to enhance the participants’ abilities to garner support from friends and family and overcome the social and environmental barriers to healthy lifestyles. The study had a 26% attrition rate. The findings indicated the need to adapt evidence-based programs that include group settings and incorporate cultural norms to adapt acceptable and sustainable programs.

Culturally adapted interventions have been successful strategies for improving health outcomes. However, a need exists to explore unique strategies for recruiting and retaining Latinas in lifestyle modification programs. Such strategies must be means of reducing barriers and attrition, increasing weight loss, and sustaining the benefits of the program. This study presented the promotoras approach as a viable culturally relevant strategy for improving the acceptability and participation of diet and PA programs among

Latinas. The promotoras approach can provide the family, partnerships, and social support needed to address obesity among Latinas.

Lindberg et al. (2013) expressed the need to adapt culturally relevant weight loss strategies while considering Latino culture. Ayala et al. (2017) showed that the addition of promotoras in a previously unsuccessful healthy lifestyle intervention positively resulted in increased attendance and participation. Therefore, it is necessary to further explore and scale up such interventions. The following sections provide evidence of the promotoras approach as a strategy for addressing Latinas' health, the barriers they face, the challenges of the approach, and the need for further exploration.

Promotoras Approach. Persistent obesity and notable disparities have led researchers to explore new culturally appropriate strategies, such as the promotoras approach, to address barriers and improve acceptability and obesity outcomes among Latinas. Positive behavioral changes contribute to adherence and positive outcomes; however, such changes have lacked sustainability or have not impacted the intended population due to barriers (Leung et al., 2017; Seguin et al., 2019; Stoutenberg et al., 2014). As CHWs, promotoras are frontline public health workers who link the community to health and social services (Cheun & Loomis, 2018; Koniak-Griffin et al., 2015).

As a link between the community and services, promotoras receive specialized training to provide health education to the community (Cheun & Loomis, 2018). Promotoras improve the links between health care services and the community. Thus, the

use of promotoras in community health programs correlates with improved health outcomes in the community (Ayala et al., 2017).

Promotoras play an essential role in connecting the community to health care services (Wilkinson-Lee et al., 2018). As related to the issue of obesity among Latinos, promotoras also have a role in addressing the structural and cultural barriers related to health disparities. Specifically, promotoras improve health education and interventions for individuals in underserved communities.

Several researchers have suggested interviewing promotoras to understand the influence of any barriers and facilitators on Latinas (Leung et al., 2017; Stephens et al., 2014; Stoutenberg et al., 2014). The promotoras approach has had more success as an intervention for improving the health outcomes of Latinas because it provides them with relevant information and emotional support (Albarran et al., 2014; Koniak-Griffin et al., 2015; Larsen et al., 2013). Many culturally relevant weight-loss interventions with short-lived success and higher attrition rates among Latinas tended to lack the support that is available with the promotoras approach.

Who Are Promotoras? Promotoras are female community individuals without formal education who influence health care outcomes and knowledge among Latinas (Cheun & Loomis, 2018; Koniak-Griffin et al., 2015). Promotoras possess similar characteristics and challenges as the individuals in their community, such as language, culture, poverty, immigration, and racism. In addition, promotoras focus on addressing health disparities in their communities (Katigbak et al., 2015; Keblusek et al., 2017).

Promotoras navigate multidimensional relationships within their groups while simultaneously influencing others as CHWs (Palmer-Wackerly, 2020). Promotoras have received recognition worldwide as CHWs or lay health advisers. Many promotoras get recruited to facilitate or lead interventions in different populations, including the Latinx community, rural communities, and communities in low- and middle-income countries (Mlotshwa et al., 2015; Oliver et al., 2015).

Promotoras are valuable CHWs; as such, WHO officials have encouraged their integration into public health. CHWs act as additional or primary human resources and address the critical shortages of health resources in many countries, especially in underserved areas, to provide diverse services. The services of promotoras include the identification and tracking of disease outbreaks, preventative care, and support interventions. Promotoras focus on improving acceptability and participation and overall health outcomes in their communities (Kousar et al., 2016; Oliver et al., 2015; WHO, 2018). The 2010 Patient Protection and Affordable Care Act (ACA; 2010) suggested that the U.S. federal government provide resources for the training and development of CHWs as a strategy to promote positive health outcomes in underserved areas and support the members of racial and ethnic minorities in overcoming cultural and linguistic barriers (Carter-Pokras et al., 2011; Shah et al., 2014; WestRasmus et al., 2012).

Furthermore, Latinas' view promotoras as comadres (kinswomen), buena profesoras (good teachers), cultural mediators, and role models. Their understanding of these cultural values makes them uniquely positioned to succeed (Arredondo et al., 2016). Promotoras engage and facilitate connections between themselves, their patients,

and community health care providers via communication, feedback, encouragement, and emotional support (Arredondo et al., 2016; Deitrick et al., 2010). As trusted community members with multidimensional roles and identities similar to their target participants, promotoras enhance the cultural appropriateness of programs by reinforcing strategies (e.g., partnerships) and encouraging each other through group walking. They serve as comadres or best friends, gran amigas or special friends, facilitating acceptability among participants by using interpersonal relationships to incorporate social time and snacks (botanas; Keller & Cantue, 2008), compañerismo (companionship), and supported recruitment/retention with low attrition rates (Deitrick et al., 2010; Koniak-Griffin et al., 2015; Seguin et al., 2019).

The Health Services Resource Administration indicated that there were approximately 121,000 CHWs/promotoras in the United States in 2007, with a potential 7% annual growth (Rush, 2012). In Hispanic and Latino communities, CHW and promotora are words used interchangeably. However, the spelling often varies by gender: promotor and promoteres for men and promotoras for women. Promotoras tend to be women between 20 and 65 years of age. Vollmer Dahlke et al. (2014) recruited 89.9% female and 10.1% male CHWs to examine the barriers to PA for cancer survivors. Latinas comprised 68% of the sample, non-Hispanic Blacks/African Americans comprised 13%, and non-Hispanic Whites made up 14.6%. In a qualitative systematic review of 172 studies on lay health advisor-led interventions among Hispanic/Latinos, Rhodes et al. (2007) found that some studies included both male and female promotors as

an approach to building bridges with vulnerable communities and reducing health disparities.

Role of Promotoras. CHWs/promotoras are change agents. Some researchers have argued that CHWs are a crucial resource to bridge the gap between clinical practice and public health (Ayala et al., 2017; Koniak-Griffin et al., 2015; Landers & Stover, 2011; Palmer-Wackerly, 2020; Staten et al., 2012). CHW roles include health education; the delivery of medical services, such as immunization and the identification and tracking of disease outbreaks; health screenings for diabetes, cancer, cardiovascular disease, and asthma; maternal and child health care; caring roles; field data collection; organizational support; state resourcing; and community relations (Carter-Pokras et al., 2011; Landers & Stover, 2011; Rhodes et al., 2007; Vollmer Dahlke et al., 2014). As community health volunteers or workers, promotoras effectively incorporate evidence-based strategies into health promotion and health education. Promotoras can leverage their cultural and linguistic abilities in diverse communities (Kouser et al., 2015; Seguin et al., 2019) and have high effectiveness when individuals in the community see them as peers who lead lifestyle modification programs for immigrant women in newly emerging Latino communities in the United States (Cherrington et al., 2015; Palmer-Wackerly et al., 2020).

Research has shown that promotoras address barriers, reach Latinas with interventions, and facilitate behavior change to impact weight loss. A randomized control trial entitled “Mujeres Sanas y Precavidas” (“Healthy Women Prepared for Life”; Koniak-Griffin et al., 2015) included the adaptation of “Su Corazon, Su Vida” (National

Institutes of Health, 2000), a 9-week curriculum for lifestyle modification interventions among Latinas. The authors targeted immigrant Latinas living in Southern California with cardiovascular risk factors to evaluate the effects of the lifestyle behavior intervention. Promotoras led the more than 6-month intervention, which had strategies for increasing retention rates, such as a case management approach for rapport, telephone reminders, cash incentives, flexible scheduling, bus tokens, and group education.

The program also included the use of promotoras to improve participation and retention rates and reduce barriers (Koniak-Griffin et al., 2015). The results aligned with prior findings (Reinschmidt et al., 2006) on the effectiveness of promotoras/CHWs in minimizing dropouts and addressing barriers through motivation, encouragement, and strategies such as bus tokens, flexible scheduling, childcare, telephone calls for follow-ups and class reminders, and home visits. The results showed improvement in the knowledge, dietary habits, PA, weight, and waist circumference of the participants in the intervention compared to those in the control group (Koniak-Griffin et al., 2015). These findings suggest that the Latinas considered lifestyle behavior intervention led solely by promotoras acceptable. The promotoras-led intervention resulted in increased class attendance, participation, and retention rates of 86.5% and 87% at the 6- and 9-month follow-ups, respectively. The study further indicated the success of using promotoras to influence Latinas in a nonclinical (i.e., community) setting compared to a clinical setting, where prior promotoras studies occurred. In addition, the researchers presented the evidence needed to draw conclusions about promotoras' effectiveness in influencing

Latinas to engage in culturally acceptable lifestyle behavior interventions to address obesity.

Similarly, Islam et al. (2014) reported the positive effects of CHWs in interventions. CHWs' cultural congruence with their communities contributed to their strong interconnectedness to community resources and ability to influence cultural and religious norms and values. Vega-López et al., (2015) also used culturally adapted strategies and found similar positive weight loss outcomes. These studies show the effectiveness of promotoras in facilitating positive behavioral change and impacting obesity outcomes for Latinas.

Promotoras foster companionship (*compañerismo*) and social support to improve health outcomes (Palmer-Wackerly et al., 2020; Staten et al., 2012). Through emotional and social support, promotoras encourage changes in lifestyle behaviors and provide informational support to Latinas using tools. In addition, promotoras use their knowledge of the community to facilitate Latinas' acceptance and adherence to programs for preventing and reducing obesity (Dietrick et al., 2010; Vega-López et al., 2015). The desirable personal qualities of promotoras include patience, trustworthiness, friendliness, determination, resilience, and caring nature. Dietrick et al. (2010) found that during interventions, promotoras prepared food or brought samples of food to women when acceptable and motivated the women to participate in group exercises. Scholars have reinforced these strategies to address the barriers of tiredness and the lack of energy and time to prepare meals or exercise (D'Alonzo et al., 2017; D'Alonzo & You, 2020;

Koniak-Griffin et al., 2015), and to increase the retention and participation of Latinas in weight loss programs focused on PA and healthy diets to address obesity.

CHWs/lay health advisers who report their experiences promote adherence, increase the integrity of program implementation, and provide detailed observations and program content to motivate participants and enhance their understanding of how to successfully facilitate behavior changes (Albarran et al., 2014; Balcazar et al., 2014; Koniak-Griffin et al., 2015; Palmer-Wackerly et al., 2020; Sanchez et al., 2014). The information known about promotoras influencing Latinas comes from the perspectives of those they serve or work closely with; such information does not include the voices of the promotoras themselves (Laderman et al., 2015; Lanesskog et al., 2015). Therefore, including the perspectives of CHWs in the design of public health programs could have positive outcomes for various communities (Arvey & Fernandez, 2012; Ayala et al., 2017; Balcalzar et al., 2014; Javanparast et al., 2011; Koniak-Griffin et al., 2015; Oliver et al., 2015; Palmer-Wackerly et al., 2020; Rhodes et al., 2007; Seguin et al., 2019).

The studies presented in this section showed the role of promotoras as teachers who utilize a hands-on approach to improve health outcomes and address obesity. Promotoras inspire participants through motivation, encouragement, and enthusiasm; model healthy behavior; and feel accountable for Latinas' adoption of healthy diets and increased PA. The findings have also shown how promotoras build trust by remaining accessible and providing their cellular phone numbers for participant usage to minimize the barriers reported by Seguin et al. (2019), such as participants changing telephone numbers, limited family support, and fear of deportation. Additionally, these studies

indicated the need for future exploration of novel strategies for addressing persistent barriers to attendance and participation in weight loss programs to address obesity disparities.

Promotoras' Challenges and Barriers as Influencers. Promotoras encounter work-related and training challenges on their journeys as valuable public health partners (Haughton et al., 2015; Palmer-Wackerly et al., 2020). In addition, despite promotoras' documented successes as influencers, few randomized studies with rigorous designs have shown their effectiveness (Balcazar et al., 2014; Koniak-Griffin et al., 2015).

Inconsistencies in Duration, Type of Training, and Education. CHW certification is not a requirement in 41 states (Association of State and Territorial Health Officials, 2017). CHW training ranges from basic medical terminology to several (3–5) hours of in-depth disease prevention education. Some participants deemed the training adequate, while others requested more knowledge of health care policy and specialized training in cultural competence to deal with diverse communities within the Latinx population (Palmer-Wackerly et al., 2020).

Lack of Clearly Defined Roles and Processes for Communication. Orpinas et al. (2020) found that promotoras faced eight challenges in fulfilling their role as CHWs:

- Balancing work with family commitments.
- Managing a perceived imbalance of power with men.
- Dealing with the emotional impact of hearing participants' problems.
- Managing the barriers of limited English language skills.

- Dealing with discouragement due to the perception of ethnocentric beliefs and the discrimination of some providers.
- Feeling disheartened by the cultural beliefs of some participants.
- Handling the lack of transportation for themselves and for participants.
- Managing the burden of data collection for research for the program.

In addition to the challenges expressed by the promotoras in the study by Orpinas et al. (2020), Haughton et al. (2015) found that application of the SEM was a means of improving Latinas' engagement and participation in lifestyle modification programs. However, the CHWs encountered several challenges leading them to withdraw from the 2-year commitment to lead the study. In addition, the CHWs struggled with collecting data, reporting hours on time, completing paperwork, managing their time, and effectively modeling PA intervention postures as designed.

Work-Related Challenges. Similar to Orpinas et al. (2020), Palmer-Wackerly et al. (2020) found that CHWs routinely encountered facilitators and barriers as influencers of Latinx communities as they navigated their multidimensional role as community members and health care professionals. The authors shared that CHWs often encounter structural barriers, such as difficulty obtaining health insurance and understanding the benefits, limited access to health care, barriers to needed resources, and a lack of stable salaries and standardized training. Palmer-Wackerly et al. built on the challenges reported by Haughton et al. (2015, finding that work-related challenges included bothersome paperwork and the stress of establishing relationships with transient individuals who change telephone numbers frequently.

Despite the plethora of research on the roles and effectiveness of promotoras, there is little known of promotoras' perspectives of the mechanisms they use to influence acceptability. Landers and Stover (2011) indicated the need for more research to find how CHWs do or do not impact their communities. Likewise, Whittemore et al. (2014) suggested the need to understand the role of CHWs in delivering health programs to quantify their impact and define their characteristics for success. Oliver et al. (2015) argued that the information known about CHWs is "spoken about" or "spoken of" by others; therefore, a need exists to hear directly from promotoras.

Palmer-Wackerly et al. (2020) indicated that promotoras increase the value of weight loss and lifestyle intervention programs. Thus, a need exists to include their voices through interviews to understand and improve their effectiveness. The authors opined that although research has shown the effectiveness of CHWs or promotoras, the extant research has focused on the evaluations of health care organizations and research institutions rather than the CHWs themselves. Therefore, Palmer-Wackerly et al. sought to overcome barriers by employing multiple levels of the ecological model to explore the voices of promotoras/CHWs' as a viable strategy to sustain their effectiveness as partners in reducing health disparities among Latinx populations.

Promotoras empower the members of their communities because they understand the community's needs and effectively meet them. Thus, promotoras play a pivotal role in navigating complex contextual structures within the multilevel approach of the SEM by developing connections between the community, lifestyle modification programs, and health services. The existing research has focused on the effectiveness of promotoras

from the perspectives of research institutions, participants, and organizations (Palmer-Wackerly et al., 2020). However, Palmer-Wackerly et al. (2020) emphasized the need to solicit the voices of promotoras to address the barriers they face in accomplishing their goals as effective influencers of Latinx communities. These studies showed the value of adding the powerful voices of promotoras to the literature to reduce obesity among Latinas, as previous scholars have focused on short-term outcomes based on the reports of those who interacted with CHWs and promotoras.

However, notable gaps remain in the promotoras approach, such as inconsistent training, a lack of core competencies or scope of practice, conflicting outcomes, the challenges of incorporating promotoras in some public health programs, and a lack of understanding of how promotoras influence Latinas. Therefore, it is necessary to explore promotoras' views of their expertise. Such research could contribute to the design of novel constructs for characterizing barriers to and facilitators of weight loss and positive obesity outcomes among Latinas (Palmer-Wackerly et al., 2020). Culturally adapted behavior change interventions for addressing obesity among Latinas have had limited success, sustainability, and adherence and high attrition (Avila & Howell, 1994; Lindberg et al., 2013; Seguin et al., 2019). Many interventions have failed because they lacked the familial and emotional support present in the promotoras approach and the unique, multidimensional roles of promotoras in public health programs.

Barriers to Addressing Obesity Among Latino Women

Latinas have reported barriers to acceptability, recruitment, and participation in PA, diet, and weight loss programs, resulting in negative obesity outcomes (Ragsdale et

al., 2017; Seguin et al., 2019; Salihu et al., 2015). This section presents the literature on the barriers to addressing obesity among Latinas to show the role of promotoras in overcoming these barriers. The persistent obesity prevalence among Latinas and the limitations of other culturally adapted interventions have indicated the need for innovative strategies and methodologies for addressing and overcoming identified barriers, promoting PA and dietary adherence, and improving outcomes for this at-risk group (Joseph et al., 2017; Segar et al., 2017).

Researchers have explored the barriers to addressing obesity among Latinas and examined PA preferences and decreased sedentary time to improve health care outcomes among this population (Salinas & Parra-Medina, 2019). The Enlance study consisted of a randomized clinical trial for increasing the PA of Mexican American women with low incomes in South Texas. Salinas and Parra-Medina (2019) posited the importance of understanding the PA preferences of individuals to overcome barriers in interventions for increasing PA and reducing sedentary time. Identifying PA preferences could be a means of informing PA programs specific to Latinas to reduce barriers and improve participation and obesity outcomes. Similar to Salinas and Parra-Medina, Soto et al. (2018) researched the PA of pregnant Latinas and found the need to improve the demand and acceptability of PA interventions. According to Soto et al., there is a need to overcome the identified barriers to improve the effectiveness and feasibility of PA interventions for Latinas.

The barriers to Latinas’ ability to maintain healthy diets include the costs of fruits and vegetables and the impact of environments and social networks. The barriers to

Latinas' PA include self-efficacy, a lack of time, challenges with finding reliable transportation, weather, costs, multiculturalism, and acculturation (Agne et al., 2012; Fuster & Uriyoan, 2017; Koniak-Griffin et al., 2015; Lindberg et al., 2013; Seguin et al., 2019; White et al., 2010). In addition, unhealthy behaviors and health disparities among Latinos could result from issues such as a lack of access to healthy food, transportation, and childcare (Brown et al., 2018; Joachim-Célestin et al., 2020; McCurley et al., 2017). The cultural, multicultural, acculturation, and environmental subsections that follow present these barriers in detail.

Culture as a Barrier

Promotoras play an important role in overcoming cultural barriers by bridging communications and providing culturally appropriate public health interventions (Falbe et al., 2017; Fernández et al., 2020). Culture may be a barrier to weight loss interventions focused on diets to prevent and address obesity. Successful lifestyle interventions in the general population have not had much success in Latino populations, perhaps because efforts to culturally adapt evidence-based studies have consisted of translating materials into Spanish and hiring bilingual facilitators (Lindberg et al., 2013; Seguin et al., 2019). Effectively adapting studies to address Latinas' goals requires addressing the barriers related to attitudinal familism and making Hispanic cultural views on food measurement and portion control the central components of weight loss programs (Lindberg et al., 2013).

Dietary patterns relate to cultural patterns, as diet is a social thread for families and communities. Individuals often use food as a rite of passage and for celebrations

(Sánchez-Villegas, 2018). Therefore, weight loss programs must address barriers based on knowledge of healthy versus unhealthy foods; selection of ingredients; the preparation of meals, including the timing and context of meals; portion sizes; food storage; fear of waste; and notions of "meals" versus "snacks" (Lindberg et al., 2013). Yee et al. (2006) incorporated the SEM in the *De Por Vida* (For Life) program delivered over 6 weeks to address cultural influences on obesity. The interplay of the intrapersonal, interpersonal, institutional, community, and policy targeted the contributing barriers to adherence, such as individual knowledge, family unit, community influences, and policies, to provide Latinas with the best access to healthy foods and sustainable PA. Their findings suggested that multiple factors beyond an individual's control have an influence on obesity and lifestyle decision-making. Therefore, improving obesity outcomes requires addressing these interconnected influences.

Some scholars have noted Latinas' eagerness to lose weight with multiple dieting attempts (Agne et al., 2012; Carter-Pokras et al., 2009; Diaz et al., 2007; Mitchell et al., 2015; Ragsdale et al., 2017; Sharma, 2008). However, other researchers have shown that Latinas often feel conflicted about the desirability of weight loss based on the Hispanic culture, in which individuals may view thinness as a symptom of illness, frailty, or low sexual attractiveness (Cachelin et al., 2002; Lindberg et al., 2013; Lindberg & Stevens, 2011; Tung & McDonough, 2015). Altered perceptions of obesity may result from sociocultural factors of body image that indicate desirable body shape and weight. Such perceptions may present cultural barriers that influence dietary behaviors over the years (Lindberg et al., 2013; Seguin et al., 2019).

Contrary to views of body image and the issue of thinness, other scholars have found that Latinas do express a desire to lose weight if supported by their providers with nutritional advice, referrals, and encouragement (Agne et al., 2012; Ragsdale et al., 2017; Seguin et al., 2019). Some individuals aware of the severity of obesity attempted to lose weight; however, they did not succeed due to barriers such as the cost of a healthy diet and the use of food as a coping mechanism. Lindberg et al. (2013) expressed the need to adapt culturally relevant weight loss strategies while considering the Latino culture.

Diet interventions for the general population (Folta et al., 2009) tend to focus on portion control and not using food as a coping mechanism. Ragsdale et al. (2017) found that 95% of participants with a desire to lose weight felt disappointed that their doctors never discussed options or prioritized weight loss with them. Despite a ’desire to lose weight, the barriers to Latinas’ participation (e.g., traditional foods, cultural preservation, and family incorporation) and a lack of culturally appropriate programs and support have a negative impact on this population’s acceptance and participation in weight loss programs (Agne et al., 2012; Ragsdale et al., 2017).

Barriers to and misconceptions about PA and dietary practices related to obesity may make Latinas less inclined to appreciate the seriousness of obesity, consider the associated comorbidities, and want to lose weight (Ceballos et al., 2017; Vollmer Dahlke et al., 2014; Hayashi et al., 2010; Im et al., 2010; Knerr et al., 2017; Lindberg et al., 2013; Lindberg & Stevens, 2011; Sharma, 2008; Tung & McDonough, 2015). The barriers to addressing obesity among Latinas include weather, culture, sickness, and a lack of transportation (Agne et al., 2012; Ragsdale et al., 2017).

Latinas have exhibited limited engagement in leisure-time PA. D'Alonzo et al. (2017) found that 47.8% of Latinas never engaged in leisure-time PA, although they knew of the associated risks of developing cardiovascular and other chronic diseases. 'Similarly, other researchers have found that Latinas associated participation in weight loss programs as a waste of the valuable time needed to care for family responsibilities and domestic tasks in a phenomenon known as *attitudinal familism* (Im et al., 2010; Larsen et al., 2013). In addition, Latinas tend to place the needs of their families above their own. Thus, Latinas are less likely to engage in leisure-time PA (Ayala et al., 2017; Gershow et al., 2014). These authors have stressed that Latinos/Hispanics should not be considered homogenous when designing culturally appropriate programs.

Multiculturism as a Barrier

Multiculturalism is a cultural pluralism or diversity within a society, an organization, or an educational institution (Lindberg et al., 2013). Hispanics and Latinos are the fastest-growing minorities, representing 18% of the U.S. population (U.S. Census Bureau, 2017). The members of the heterogenous Latino group come from multiple countries of origin, posing multicultural challenges because diverse cultural norms and individual experiences influence Latinos' health behaviors, such as PA and diet (Arredondo et al., 2016). Some researchers identified the need to consider multicultural strategies to improve acceptability in lifestyle programs (Lindberg et al., 2013). To add to the value of multicultural research, Middleton et al. (2017) examined the acceptability of yoga among minorities. Their findings confirmed that incorporating multicultural teams, in addition to translators, bilingual materials, and classes, facilitated trust and

acceptability among predominantly Hispanic and Black/African American groups. Middleton et al. concluded that for an intervention to be adoptable, it must be acceptable. Therefore, multiculturism must be a consideration in efforts to improve acceptability and participation in PA and diet programs among Latinas.

Acculturation as a Barrier

Acculturation is the cultural modification of an individual, group, or people by adapting to or borrowing traits from another culture and merging cultures due to prolonged contact (Isasi et al., 2015). Positive acculturation to U.S. norms based on years of residence and English proficiency could negatively impact the obesity rates of Hispanics and minority communities. Acculturation could cause Hispanics and Latinos to adopt more sedentary, Westernized lifestyles. Dietary habits related to access to unhealthy fast foods, coupled with the higher marketing of unhealthy products (Hruby & Hu, 2015), may contribute to obesity.

Similarly, acculturation or the length of time in the United States could influence diet, leisure time, PA, and sedentary behavior among Hispanics and Latinos (Benitez et al., 2016; Chaplain et al., 2020). Acculturation could adversely affect weight loss among Latinas, especially immigrants, who might gradually stop adhering to healthy diets due to easy access to unhealthy foods with high sugar and fat levels, such as meats and desserts (Lindberg et al., 2013). Hispanics and Latinos may consider this acculturative process as effectively assimilating with and modernizing to “American foods” without considering the consequences. Thus, effective and culturally relevant weight loss interventions must address acculturation as a barrier.

Building on a review by Benitez et al. (2016) with mixed results and inconclusive evidence, Joseph et al. (2018) evaluated the relationship between acculturation and assimilation with PA outcomes in a 12-month study of postpartum Latinas. The findings aligned with previous conclusions that the members of the least-acculturated group (i.e., Latinas with less time in the United States) engaged in more moderate-to-vigorous PA than those in the most-acculturated group (i.e., Latinas with more time in the United States). These results showed the need for an in-depth understanding of the sociocultural factors influencing Latinas' participation in PA and healthy diet when designing interventions to address obesity among this population.

Environment as a Barrier

The social determinants of health that contribute to obesity disparities may correlate to the neighborhood environment (Hurly & Hu, 2015). The barriers of a lack of park space, access to healthy food, and walkability can contribute to a lack of PA and healthy diet and worsening obesity disparities. Seguin et al. (2019) observed the adaptation of a study of non-Hispanic White women to include bicultural, strong community partnerships and culturally relevant strategies. However, the researchers found notable barriers to attendance and retention, such as weather and road conditions (e.g., snow and ice), illness (e.g., cold and flu during the winter months when women did not engage in farm work), and a lack of transportation. The authors confirmed that the retention rate for the adapted study was 26%, a rate similar to previous programs for Latinas (Keller & Cantue, 2008; Staten et al., 2012).

In relation to this study, there was a need to explore unique strategies for recruiting and retaining Latinas in lifestyle modification programs by addressing attrition and barriers, such as limited individual resources, dispersed populations, changing telephone numbers, a lack of trust, a fear of deportation, and individual struggles with portion control (Seguin et al., 2019). Agne et al. (2012) and Ragsdale et al. (2017) found that barriers such as weather, sickness, and a lack of transportation had a negative impact on participants' PA, energy intake, and desire to lose weight. These barriers have resulted in a persistent obesity prevalence among Latinas.

Additionally, the strategies used by promotoras to facilitate their effectiveness include individual teaching and coaching. Promotoras use strategies to reinforce their knowledge of overcoming barriers to lifestyle modification programs at the intrapersonal level. In addition, interactions between case managers and promotoras provide social support at the interpersonal level. Promotoras use the strategies of bus tokens, flexible scheduling, and childcare to address interpersonal, intrapersonal, and environmental barriers (Koniak-Griffin et al., 2015). Promotoras may also use culturally appropriate videos, role play, telephone calls for follow-up and class reminders, and home visits to promote diet and PA behavior changes and address cultural, acculturation, multiculturalism, and transportation barriers.

Promotoras and Physical Activity Outcomes Among Latino Women

PA includes weekly participation in aerobic and muscle-strengthening activities for improved health (CDC, 2019; Office of Disease Prevention and Health Promotion, 2020). PA is "any body movement that works your muscles and requires more energy

than resting" (U.S. Department of Health & Human Services, 2014, para. 1). According to CDC (2019) guidelines, healthy women should exercise at least 2 hours and 30 minutes per week and engage in moderate-intensity aerobic activity, such as brisk walking. Data from 2013 to 2018 showed that 49.5% of Latinas did not meet the federal PA guidelines, compared to 38.9% of non-Hispanic White women (CDC, 2019; D'Alonzo et al., 2017). Diabetes outcomes disproportionately impact Latinas, particularly those with low incomes. In addition, Latinas have higher mortality rates than other demographic groups (Joachim-Celestin et al., 2020).

In the general adult population, PA is a way to reduce the risk of early death, coronary heart disease, stroke, high blood pressure, type 2 diabetes, breast, and colon cancer, falls, and depression (Hales et al., 2020). Welch et al. (2009) found that time pressure was a barrier to PA for 73% of adult women. Seguin et al. (2019) added that 53% of non-Hispanic U.S. adults meet PA guidelines compared to 43% of Hispanics. The factors that negatively impact PA among adults include advancing age, low income, lack of time, rural residency, perception of effort needed to exercise, overweight or obese status, and perception of poor health.

Several promotora-led studies have addressed PA barriers among Latinas. For example, D'Alonzo et al. (2017) designed a 12-week promotora-facilitated PA intervention to improve reach to Latinas. D'Alonzo et al. found that acceptability correlated with increased PA and less body fat among the participants. In another study, promotoras facilitated an intervention with immigrant farmworkers that consisted of 10 weekly sessions of PA and healthy eating patterns (Mitchell et al., 2015). The results

showed improvements in waist circumference, weight loss, and increased fruit and vegetable intake and PA.

Cherrington et al. (2015) recruited 22 Latina immigrants for an 8-week program grounded in self-determination theory to promote weight loss. Promotoras delivered the intervention, called *Esencial Para Vivir* (Essential for Life), to an emerging Latino community in Alabama. The results showed increased PA participation and dietary patterns postintervention and at 6 months. Staten et al. (2012) conducted a randomized controlled trial of *Mujeres Sanas y Precavidas* (Healthy Women Prepared for Life) that contained adapted *Su Corazon, Su Vida* strategies with an additional focus on improved participation and retention rates with immigrant Latinas in Southern California with cardiovascular risk factors. The goal of the study was to evaluate the effects of a lifestyle behavior intervention led by promotoras for over 6 months.

In a partially randomized patient preference study, promotoras led a PA intervention program over 12 weeks to reduce attrition rates (D'Alonzo et al., 2017). The study included one randomized group. The participants in the other group could attend the program with their friends and receive childcare. In addition, the promotoras adopted a cultural conflict skill set to conduct reminder telephone contacts or house visits for the participants who missed two consecutive classes. The strategy of this study consisted of leveraging promotoras' understanding of their communities. The promotoras reduced the program's attrition to 16.4%.

According to D'Alonzo et al. (2017), almost half (47.8%) of Latina adults report never engaging in any leisure-time PA. In support of the evidence presented in this

review, "the importance of exploring this issue" is that a lack of PA is an independent risk factor for cardiovascular disease and other chronic diseases. Also supporting the need for this study, D'Alonzo et al., similar to Koniak-Griffin et al. (2015), suggested developing novel, culturally relevant strategies that could impact the sustainability of lifestyle behavior interventions for Latinas.

D'Alonzo & You., (2020) developed a promotora-facilitated 12-week PA intervention. They hypothesized that the participants who completed the intervention would have higher daily PA levels, improved aerobic fitness, greater muscle strength, enhanced flexibility, and lower BMIs and body fat percentages. A total of 76 Latinas participated in the intervention, which included a twice-weekly, low-impact aerobics Latin dance PA taught by the promotoras. The study results included significant improvements in aerobic fitness, muscle strength, flexibility, and daily PA levels. Sixty percent of the participants attended at least 60% of the PA sessions.

Based on their findings, D'Alonzo & You., (2020) concluded that promotoras can improve the delivery of PA interventions among immigrant Latinas. Scholars have extended the research by D'Alonzo & You within the low-income immigrant Latina community. Researchers have found evidence of the short-term positive effects of promotoras on attrition and attendance in PA and diet programs, as well as positive obesity outcomes.

Similarly, a randomized control trial using the *Enlace* (To Link) intervention had a unique approach to addressing PA deficits among Mexican-American women without chronic conditions in rural South Texas, Hildalgo, and Cameron counties along the U.S.–

Mexico border over 16 weeks (Salinas & Parra-Medina, 2019). The promotora-led PA intervention included the use of realistic activities, such as walking groups, dance and Zumba classes, and yoga, as a complement to weekly PA education sessions focused on the benefits of PA. The participants in the control group received community health and safety education without reinforcement. The results showed that 43.5% of participants in the intervention group led by the promotoras increased their walking time by 30 minutes, compared to 27% in the control group. In addition, the intervention group participants increased their time completing aerobics by 32.8%, compared to 17% of the control group. The reasons for noncompliance and completion, similar to prior studies, included the participants obtaining employment, pregnancy, relocation outside of the center catchment area, limited time, noncompliance with accelerometry collection, and illness.

As shown in these studies, promotoras can increase the PA of Latinas. Dietary outcomes are another challenge to improving the health outcomes of Latinas. The following section presents the role of promotoras in improving the dietary outcomes of Latinas.

Promotoras and Dietary Outcomes Among Latino Women

Dietary patterns and culture closely relate for the Latina population. However, obesity also closely relates to dietary behavior. Reducing obesity and associated health conditions and chronic diseases, such as heart disease, high blood pressure, and diabetes, requires proper nutrition from a healthy diet and the maintenance of a healthy weight (Byrd et al., 2018; CDC, 2018). An unhealthy diet is a major contributor to obesity. Notable dietary patterns among Latinos include portion size, ingredient type, food

preparation, and misconceptions or confusion over what is a meal or a snack and what is a healthy versus unhealthy meal.

Latinas know the health benefits of healthy diets. However, many Latinas continue to assimilate and adopt the American diet, which contributes to the loss of known cultural protective factors from their countries of origin (Pichon et al., 2007; Ragsdale et al., 2017). Likewise, Latinas have gradually adopted unhealthy high-fat and low-fiber diets that contribute to obesity disparities (Fuster & Uriyoan, 2017; Lindberg et al., 2013). Generally, Latinos have been known to eat more fruits and vegetables and consume higher amounts of saturated fat than the members of other minorities (Fuster & Uriyoan, 2017).

Some of the barriers to Latinas' ability to maintain healthy diets include the cost of fruits and vegetables, the impact of social networks, multiculturalism, acculturation, lack of energy due to work, and lack of knowledge on how to prepare healthy meals (Agne et al., 2012; Koniak-Griffin et al., 2015; Lindberg et al., 2013; Seguin et al., 2019; White et al., 2010). Welch et al. (2009) found that time pressure is a barrier to 41% of adult women among the general population, who are significantly less likely to meet fruit and vegetable recommendations. Koniak-Griffin et al. (2015) suggested overcoming barriers and setting major goals for lifestyle changes by focusing on healthy food choices, portion control, the management of emotional eating, and culturally appropriate hunger scales and food diaries. The overall retention rates of 86.5% at a 6-month follow-up and 87% at a 9-month follow-up showed acceptability of the program and that Latinas felt comfortable working with promotoras.

Baquero et al. (2009) conducted an experimental design study, *Secretos de la Buena Vide*, delivered to 238 Latinas along the U.S–Mexico border in California over 14 weeks. With the ecological model, the researchers examined the effects of tailored nutrition intervention. Baquero et al. used newsletters alone and in combination with the promotoras approach. The findings showed promotoras' effectiveness in the interpersonal level of interaction with Latinas, as they facilitated behavior changes through home visits and newsletters. The promotoras enhanced the adoption of the low-fat diet at the 15-month follow-up more than the newsletters or targeted materials alone.

In another study, promotoras facilitated an intervention with immigrant farmworkers that included 10 weekly sessions of PA and healthy eating patterns (Mitchell et al., 2015). The participants showed improvements in waist circumference, weight loss, fruit and vegetable intake, and PA. The findings showed the positive effects of healthy eating and dietary habits on the participants' waist circumferences and weights.

Promotoras are part of the community; therefore, they know of the health beliefs and barriers in their communities. Promotoras play a pivotal role by interacting with Latinas at the multiple levels of the SEM to enhance Latinas' acceptance of lifestyle modification programs (Haughton et al., 2015). Promotora-led lifestyle modification programs focused on peer support and consideration of Latinas' needs tend to have the most success.

The importance of culturally appropriate interventions in changing dietary practices among Latinas was an evident finding by Brown et al. (2018). Brown et al.

conducted focus groups with Mexican Americans in an impoverished rural community in Texas to understand the barriers to adopting healthier lifestyles. The researchers noted that cultural factors and structural barriers influence lifestyle behavior and diabetes prevention interventions within the community. In addition, the findings showed that cultural influences and barriers to implementing healthy lifestyles required regular assessment for strategies to address them. One such strategy is the use of community interventions, such as the promotoras approach.

The peer support and partnership (*comadres, gran amigas)* strategy has had success in other studies as well. The autonomous motivation of the promotoras approach indicates that the participants who choose to lose weight are most likely to succeed with support. Similar findings occurred in the *Paso Adelente* lifestyle modification program facilitated by promotoras/CHWs. The promotoras delivered the program to 305 (at baseline) Mexican Americans along the U.S.–Mexico border to focus on chronic disease prevention (Staten et al., 2012). The curriculum focused on PA and nutrition with multiple levels of the SEM; strategies for intrapersonal, interpersonal, and community empowerment; social support; and community partnerships. A 3-month follow-up (n = 221) showed the positive outcomes of the promotora-led interventions.

The findings from these past studies have implications for exploring how promotoras improve Latinas' engagement and participation in PA, dietary programs, and weight loss programs. Culturally relevant interventions have had limitations in addressing obesity outcomes among Latinas. Thus, there is a need to explore potential approaches for reducing barriers to participation and attrition.

Summary

What is known about the phenomenon of interest is that Latinas in the United States suffer from high rates of obesity and increased risk of chronic diseases at rates disproportionate to their non-Latino White counterparts. Latinas report barriers to participating in lifestyle modification programs focused on PA and diet. The promotoras approach and promotora-led lifestyle behavior intervention programs have been successful in reducing attrition, improving acceptability and participation, and addressing short-term obesity disparities among Latinas. Several studies have focused on reinforcing strategies and barriers yet with mixed results. At the time of this study, no researchers had explored the experiences and voices of promotoras and how they actualize their roles as influencers, and achieve success.

The goal of this study was to fill the existing literature gap with promotoras' voices. This study showed how promotoras influence Latinas' acceptance of lifestyle modification programs focused on PA and diet. The findings of the study could contribute to future PA and dietary modification programs acceptable to Latinas. One way to examine the role of promotoras and how they influence Latinas to engage in PA and dietary modification programs is via qualitative interviews, which was the goal of this qualitative phenomenological study. Chapter 3 presents the research design and methodology used to guide this study.

Chapter 3: Research Method

Introduction

The purpose of this qualitative study was to explore how promotoras influence the acceptability of and participation in PA and dietary modifications among Latino women. Developing effective obesity-related interventions to promote healthy lifestyles for Latinas requires understanding the behaviors related to acceptability and participation. The findings of this study could contribute to the design of culturally appropriate PA, diet, and weight loss programs acceptable to Latinas. This chapter provides details on the research methodology, my role as a researcher, the phenomenon of interest, the instrument used to collect data and measure behaviors during the interviews, and issues of trustworthiness and ethical considerations.

Research Question

The study had one guiding research question:

What are promotoras' understanding of physical activity, healthy diets, and obesity, and how do they influence physical activity and dietary interventions among Latino women within the multilevel interactions of the social-economic model?'

Research Design and Rationale

A qualitative phenomenological approach was the method used to examine how promotoras influence the acceptability of and engagement in PA and dietary interventions among Latinas. The qualitative approach was more suitable than the quantitative method, as the goal of the study was to understand meaning and not to develop and test generalized hypotheses (Creswell & Creswell, 2018; Maxwell, 2009). The quantitative

method would have been inappropriate, as this study consisted of collecting detailed, subjective information, not numerical, objective, quantitative data (Creswell, 2013).

The discipline of phenomenology focuses on the participants' understanding of lived experiences in relation to a specific phenomenon and the hidden meanings of these experiences (Neubauer et al., 2019; Tuffour, 2017). Phenomenology enables researchers to explore a phenomenon from the perspective of those who have experienced the phenomenon. Thus, phenomenological research is the study of lived experiences (Creswell, 2013; Mouskakas, 1994). The rationale for this research tradition is that it enables a detailed examination of participants' personal lived experiences via qualitative inquiry (Creswell & Creswell, 2018; Matua & Van Der Wal, 2015; Tuffour, 2017).

Descriptive phenomenology was the method used in this study to explore the meaning of the phenomenon based on the participants' subjective experiences. The descriptive phenomenological approach required suspending personal attitudes, beliefs, and suppositions to focus on the promotoras' lived experiences. Thus, this study required constantly assessing personal biases and preconceptions that could have influenced the participants' descriptions of their experiences.

This study consisted of attributing meaning to the role of the promotoras based on the experiences of the participating promotoras. The participants' descriptions of their experiences provided the data used to identify themes in data analysis. The study's data provided new meaning to the strategies shared to address barriers. In addition, the data showed the unique behaviors for how, what, and why promotoras influence Latinas' participation in weight loss programs.

Role as a Researcher

My role as a researcher in this study was as an observer–participant during data collection (Creswell & Creswell, 2018). The collection of data occurred by conducting semistructured interviews with participants per an established protocol. I avoided casual conversations that could have influenced how the participants expressed their' lived experiences. I approached each question or topic neutrally, without bias, partiality, or assumptions. I documented any biases or feelings in a journal for inclusion in later analysis.

Husserl's transcendental phenomenological approach through the process of bracketing (*epoche*) was the means used to set aside previous biases, understanding, or knowledge of the promotoras phenomenon. Setting aside biases commenced to enable the true meaning to emerge from the interviews (Neubauer et al., 2019; Tuffour, 2017). As the researcher, I was an active participant who created the instrument and collected data of the participants' lived experiences of the phenomenon under study.

Although the plan was to conduct face-to-face interviews, audio-recorded phone interviews were necessary due to the impact of COVID-19. Nonetheless, the phone interviews provided ample opportunity to obtain the participants' unique experiences and viewpoints and enabled the free exchange of ideas through open-ended questions. The interviews allowed me to establish trust and honesty and encourage the participants to share their lived experiences of interacting with and influencing Latinas to participate in lifestyle modification programs.

I remained nonjudgmental during the interviews to avoid pressuring or influencing participants. In addition, I used my listening, pursing, and verbal confirmation to communicate empathy, sensitivity, and total respect. If any participant had decided to stop answering questions, I would not have pressed for further response. I maintained a commitment to privacy by not sharing the participants' experiences with others. I ensured that no misconceptions or stereotypes harmed my relationship with or the community's trust in the participants. In addition, documentation occurred of potential or actual biases throughout the data collection, analysis, and reporting.

I did not have supervisory or instructor relationships with the participants. As the researcher, I remained aware that, based on the Latino culture, the participants likely perceived my position as one of power. Therefore, I worked to gain the participants' trust and comfort to facilitate better interview outcomes. I managed the power differential by emphasizing the voluntary nature of participation. In addition, I told the participants that they were critical contributors to the fight against obesity among Latinas.

I do not speak Spanish. Therefore, all the interviews occurred in English. However, the use of the English language could have been a potential threat or barrier to the participants. Nonetheless, I brought over 10 years of experience interacting with this community and as an associate investigator in a previous study assessing the feasibility and acceptability of yoga among minorities (Middleton et al., 2017).

Moreover, as a nurse for over 20 years, I have experience caring for Latinos. I used my experience as a nurse to foster confidence and freely engage and interact with the participants for the project. In addition, I am a program/clinical manager for obesity

and metabolic research at the National Institutes of Health. I oversee the implementation of clinical trials and studies on the causes and contributing factors to obesity. I set aside these biases during the interviews.

Methodology

The target population was Latinas who had been promotoras for at least 5 years at the time of the interview. As the fastest growing and largest ethnic minority group, projections have indicated that 128 million Latinos will reside in the U.S. by 2050. Latinas represent 25% of the total female population and 52% of the Latino population (Paz & Massey, 2016). In Maryland, Latinos comprise 10.4% of the population; of these, 51.5% are females. In Prince George's County, there are 19.1% Latinos; in Montgomery County, there are 19.9% Latinos; and in Frederick County, there are 16.7% Latinos. Recruitment and selection of the participants occurred from this geographic population of promotoras.

Sampling Strategy/Participant Selection

Purposive sampling commenced to recruit participants from a targeted group with characteristics that aligned with the study's purpose (Hannaway et al., 2019). This sampling strategy was appropriate to identify and select promotoras from the multicultural representation of the general Latino population who could best provide unique experiences and insight into the research questions and phenomenon of interest (see Creswell & Poth, 2018; Palinkas, 2015). The eligibility criteria indicated that purposive sampling was an appropriate recruitment method, as the participants had to

meet the inclusion criteria to provide information relevant to the study's research question.

The participants had to meet the following inclusion criteria: (a) be over 18 years of age, (b) self-identify as Latina, (c) have lived in the United States for over 5 years, (d) speak English, (e) have worked as a promotora influencing Latinas in PA and dietary programs for at least 5 years, and (f) reside within the community served in Washington, DC, or Montgomery, Prince George's, and Frederick Counties in Maryland. The recruitment strategy did not focus on immigration status. In addition, the participants did not have to indicate or document their immigration status.

Recruitment occurred through direct and indirect methods. I posted flyers with relevant information about the study to inform potential participants about the research. I identified strategic sites frequented by Latinas, such as grocery stores, laundromats, and churches. In addition, I asked managerial permission to post recruitment flyers in these areas (Koniak-Griffin et al., 2015; Palmer-Wakely et al., 2020; Seguin et al., 2019).

Determination of the sample size occurred after achieving saturation. Data saturation in qualitative studies occurs when the themes within the data saturate, and the researcher no longer has to collect information (Creswell, 2013). Fifteen participants were a sufficient sample size for saturation. I determined whether data saturation occurred after analyzing the initial data set. Data saturation indicated that there was no need to recruit additional participants. However, if saturation had not occurred, recruitment of additional participants would have continued until data saturation reached.

Instrumentation

The data source in this study was semistructured interviews. I designed the open-ended interview questions to answer the research question. (Appendix D contains the interview guide). Testing of the interview questions occurred through a pilot study with two promotoras who met the criteria for inclusion. Because the promotoras did not recommend changes, the final analysis included their data as collected. I ensured the pilot study participants understood the questions to ascertain the participants' engagement and estimate the flow and time of the interviews.

Procedures for Recruitment, Participation, and Data Collection

The study received Institutional Review Board (IRB) approval and the participants' informed consent before the interviews commenced (Creswell, 2013; Creswell & Poth, 2018). All the interviews lasted approximately 45 minutes. I audio-recorded the interviews. Each participant received a $25 gift card as a token of gratitude for their time.

Transcription of the audio recordings occurred for data analysis. The participants knew that they could withdraw from the study at any time for any reason and that there would be no follow-up. However, if I needed to contact a participant after the interview for clarifications and to share results, I would communicate via telephone or email based on the participant's preference.

Data Analysis Plan

NVivo was the software used to support the coding of the transcribed interviews, analyze the data, and identify relevant themes. I sorted these themes to determine which

ones related to the research question. The process enabled the systematic identification of codes and themes during analysis. I used thematic analysis to code the interviews into meaningful units with phrases and paragraphs related to the promotoras' experiences.

I used NVivo to group the related expressions into codes and to form the basis for the themes. I categorized and grouped related codes into trees within NVivo, which showed the relationship of the codes or groups of coded data. The highest-level code was the main theme that had a direct relationship to the research question. In addition, using NVivo, I labeled and defined themes that emerged from the coded data. Additionally, I manually identified themes by giving meanings to related words or groups of ideas (Sardana, 2016). Chapter 4 presents the discussion of the themes related to the research question and the existing literature.

Trustworthiness

The trustworthiness of a study requires credibility, transferability, dependability, confirmability, and inter- and intracoder reliability. Credibility includes the assumption that the participants provided truthful responses from which the researcher developed meaning. The collection of rich and detailed data via semistructured interviews was the means to ensure the transferability of the findings in this study. Another aspect of trustworthiness in qualitative studies is dependability. I ensured dependability by recruiting participants that had relevant experiences as promotoras to adequately answer the interview questions.

Confirmability within qualitative studies is comparable to reliability in quantitative studies (Given, 2008). Semistructured interviews were the means used to

collect the data and ensure confirmability. I based the findings on my analysis of the transcripts generated from the collected data. I used NVivo to ensure objectivity to support the data analysis as well as inter- and intra-coder reliability. I identified, documented, and recorded the codes and themes in my notes and exported the outputs from the NVivo software.

Ethical Procedures

I obtained Walden University Institutional Review Board approval before collecting the data [Approval number 04-28-21-0136709, expiring 04-27-2022]. Subsequently, participant recruitment occurred through the established and approved recruitment plan. I ensured participant privacy, conducting the interviews at the participants' preferred locations, such as their workplaces, public libraries, or coffee shops (Palmer-Wackerly et al., 2020).

I obtained permission to post flyers at the recruitment sites. All participants were aware of the purpose of the study and the requirements of participation (Creswell & Poth, 2018). The participants learned of the voluntary nature of participation, including that they could leave the study at any time, for any reason. Each participant gave informed consent via email or SMS text messaging by replying "yes" to the consent before participating. The participants also knew that I would audio-record the interviews for transcription and data analysis. Only the participants who agreed to the audio-recording of the interviews took part.

I addressed other potential ethical issues, such as the fear of getting reported to immigration (Seguin et al., 2019) and the protection of human subjects via the Walden

IRB approval process before data collection. In addition, I maintained the participants' anonymity and confidentiality by replacing their names with pseudonyms during transcription.

I protected the participants' information by storing all collected electronic data in a password-protected file on my computer. Only I had access to these records. I stored all hard copies of the data in a locked filing cabinet in my home to which only I had access. I stored the informed consent forms separately from any data collected for this study. In addition, I will retain all the data collected in this study for 5 years, after which time I will delete the electronic files and shred all hard copies.

Summary

This chapter contained an overview of the methods and research design used in this study. The chapter presented my role as the researcher, along with issues of trustworthiness and ethical concerns. The qualitative descriptive phenomenological approach-was the most suitable method for exploring how promotoras influence Latinas to participate in weight loss programs and interventions focused on PA and dietary modifications. Data collection occurred via semistructured interviews with open-ended questions, with NVivo software subsequently used to support data analysis. The themes that emerged linked to the research question. Chapter 4 presents the findings of the study.

Chapter 4: Results

The purpose of this qualitative study was to examine how promotoras influence the acceptability of and participation in PA and dietary modifications among Latino women. Using the SEM, I examined the interacting and reinforcing influences on the relationship between promotoras and Latino women. I furthermore explored the barriers, motivators, and facilitating influences over these relationships and the coping mechanisms employed by promotoras in their daily multidimensional roles as promotoras and community members.

Chapter 4 opens with a discussion of the pilot study and participants. There is a review of the data collection and analysis processes and evidence of trustworthiness, followed by a comprehensive report of the study results. There were data gathered from 15 promotoras (two pilot interviews and 13 study interviews).

I used a semistructured interview guide (see Appendix D) to complete audio-recorded phone interviews with the participants. I transcribed the audio recordings using TranscribeMe! software, and then listened to the recordings while reading the transcripts to ensure clarity and completeness. Chapter 4 presents the results from data cleanup to ensure no identifiers were present. A six-step thematic analysis process based on Creswell and Poth (2018) followed, which was an iterative data analysis process beginning with assembling individual transcripts into segments. I familiarized and refamiliarized myself with the data, noting distinctiveness and commonalities.

NVivo QRS was the software used to support the thematic analysis process. I uploaded segments of the data (separate participant transcripts) as individual files into

NVivo and reorganized the data into files under “New Project” for ease of analysis. Applying deductive and inductive coding was the means to capture all ideas, phrases, or meaningful words related to the topic and research question (Saldaña, 2016). I coded each transcript, moving inductively from one idea or sentence to another to explore what emerged as well as deductively coding to previously identified themes in literature and from the analysis completed during data collection. Initial coding of the 15 transcripts resulted in 405 codes. Next, I categorized the codes under 20 major categories and subcategories by grouping (sorting based on relationships or descriptions of the same concepts), merged and deleted repetitive codes, and collapsed and expanded codes with multiple meanings. The final phase of data analysis entailed manually generating themes by grouping and regrouping the categories based on relatability and recurrence across the 15 participants. This process resulted in eight primary themes and several subthemes that reflected the lived experiences participants revealed during the interviews. The findings indicated how promotoras have been able to influence Latino women over the years.

Research Question

One research question guided this study:

What are promotoras’ understandings of physical activity, healthy diets, and obesity, and how do they influence physical activity and dietary interventions among Latino women within the multilevel interactions of the social-ecological model?

Pilot Study

I recruited and interviewed two promotoras for the pilot study. The pilot was necessary to ensure the interview guide (see Appendix D) was culturally acceptable, clear

and well understood, of a suitable length, and appropriate to elicit meaningful responses that revealed promotoras as influencers of Latino women's acceptability and participation in PA and diet programs. Before approving the study, the Walden University IRB recommended changing the data collection method from face-to-face to video conference or telephone interviews due to the COVID-19 global pandemic.

To solicit pilot study participants, I distributed flyers at the Mega Mart Latino supermarket and the CASA Multicultural Center, both in Langley Park, Montgomery County, Maryland. These locations are heavily frequented by the Latino community and had remained open during the pandemic. I also posted flyers by the Foodway Supermarket in New Carrolton, Prince Georges County. Finally, I placed flyers near the Spanish Catholic Center and Catholic Charities in Washington, DC, and Frederick Counties, where promotoras gathered to serve their communities. Within the first week of recruitment, it was clear that the pandemic negatively impacted recruitment because most locations I had planned to target, including community grocery stores, health care clinics, laundromats, and churches, were still closed.

Based on my knowledge of this population and recommendations from Catholic Charities volunteers, I next distributed flyers through public networks, including Vision y Compromiso, a national network of promotoras, CHWs, Chula Vista Community Collaborative's Promotora Program, the Community Health Workers professional association of Washington, DC, and the Maryland Department of Health. Of the five promotoras who called within the first week, two met the eligibility criteria as determined

by the prescreening tool (see Appendix A); these women became the pilot study participants.

Participant 1, Sonia (pseudonym), was a 22-year-old woman who self-identified as Latina, had lived in the United States for over 15 years, and had worked as a promotora for more than 7 years. Originally from Guatemala, Sonia lived in Washington, DC, at the time of the interview. Participant 2, Miriam (pseudonym), was a 26-year-old El Salvadoran native who had been in the United States for over 10 years and been a promotora for 10 years. At the time of the interview, she lived in Montgomery County. P1 and P2 engaged in telephone interviews at designated dates and times. Both reported that their selected locations were private and safe for the hour-long interview.

At the conclusion of the interviews for the pilot study, Sonia and Miriam provided positive feedback regarding the instrument. They indicated that the interview guide (see Appendix D) was culturally congruent, clear and well understood, and appropriate in length as they did not have much time to talk. Their responses better explained the promotora model and role and how they have been able to influence Latino women's acceptability and participation in PA and diet programs. The interview guide provided ample opportunity for promotoras to share their lived experiences freely.

The interviews with Sonia and Miriam lasted just under 17 minutes and just over 38 minutes, respectively. Both participants recommended using the interview guide for the larger study without alterations. Their recommendation was relevant to the study, in compliance with IRB approval, and as stated in the proposal. Because the pilot participants had not recommended any changes, their data became part of the final

analysis. The pilot study led to the next phase and added relevant information to the study. I used pseudonyms throughout this study to humanize my participants.

Setting

I recruited and interviewed 15 promotoras who met the eligibility criteria. The setting was the location selected by the participant for the audio-recorded phone interview. During prescreening, I reinforced the need for privacy during the interviews, allowing the participants to select the location and confirming the time and date. I did not ask participants to reveal their setting and proceeded once they confirmed their privacy and comfort.

Demographics

As a cluster and cohort, all 15 participants self-identified as Latino women who had been promotoras for at least 5 years and lived in the United States for at least 5 years. Table 1 presents the participants' age ranges, countries of origin, and years of practice as promotoras. The years of practice ranged from 6 to 20, with an average of 13. I used purposive sampling to recruit participants from different countries of origin in keeping with the multiculturism of the Latino community (Lindberg et al., 2013; see Figure 1). The individuals' uniqueness added to the value and strength of the study. Most participants had worked all over the United States because of job instability or as part of a research implementation team in different parts of the country; five of the participants worked in studies reviewed in Chapter 2. The age range was from 18 to 65 years, with a mean of 37 (see Figure 2). The interviews ranged from 16 minutes and 40 seconds to 59

minutes and 52 seconds, with a mean length of 36 minutes and 45 seconds. This average was well within the allotted 45 minutes.

Table 1

Participant Demographics

Participant	Gender	Age group	Place of origin	Years of practice
Sonia	Female	24–34	Guatemala	7
Miriam	Female	24–34	El Salvador	10
Alexandria	Female	18–24	Antigua	7
Lucia	Female	54 and over	El Paso, Texas	20
Catalina	Female	34–54	Mexico	12
Elena	Female	24–34	Puerto Rico	6
Guadalupe	Female	24–34	El Salvador	7
Angelica	Female	54 and over	Puerto Rico	20
Luciana	Female	24–34	Guatemala	20
Julieta	Female	18–24	El Salvador	10
Angel	Female	34–54	Mexico	10
Isabelle	Female	54 and over	Mexico	15
Valeria	Female	24–34	Honduras	14
Gabriela	Female	54 and over	El Paso, Texas	20
Camila	Female	18–24	Honduras	10

Note. Names are pseudonyms.

Figure 2

Participants' Country of Origin

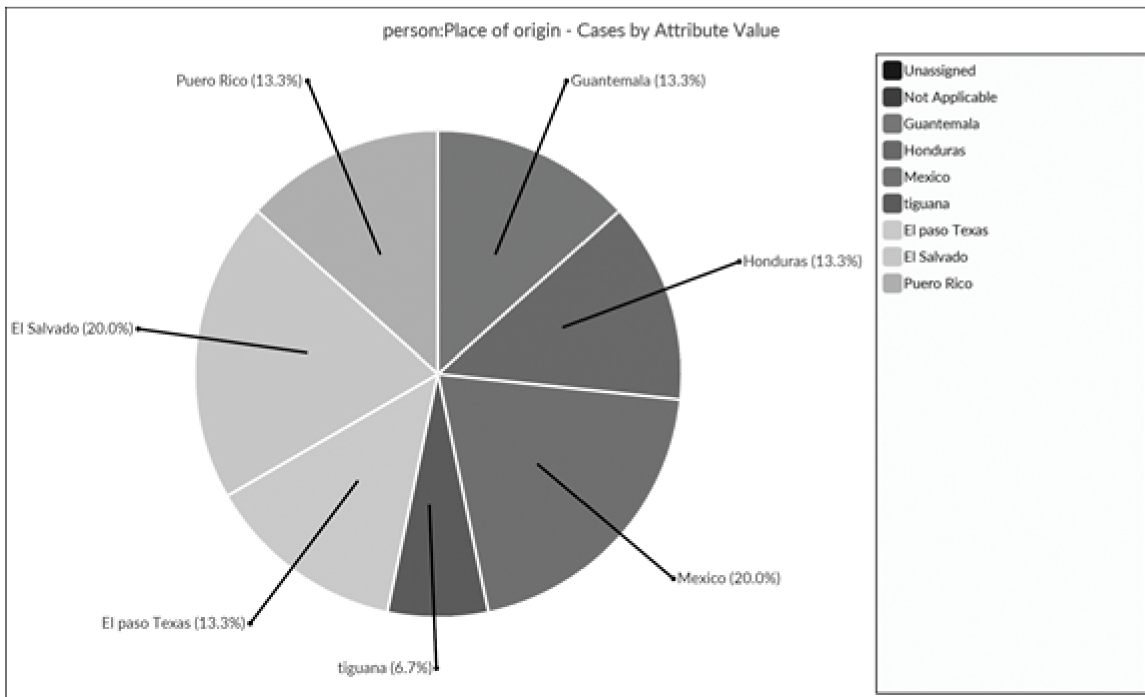
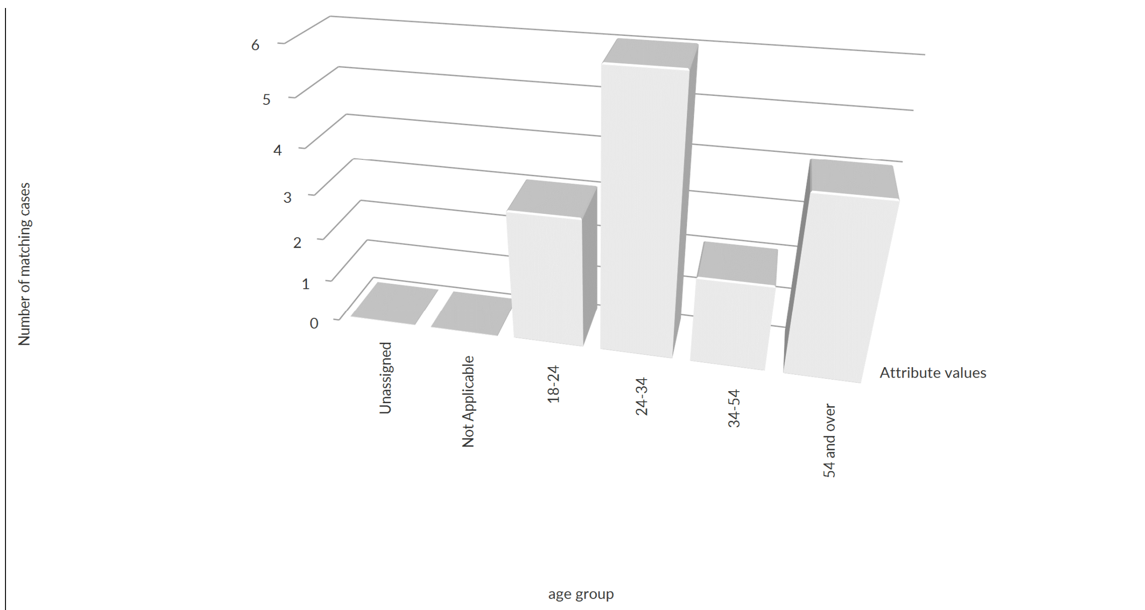


Figure 3

Participants' Age Distribution



Data Collection

Using purposive sampling, I recruited participants through an indirect approach due to COVID-19 restrictions. This indirect approach primarily involved snowball sampling by word of mouth, using platforms and public networks to distribute promotional material without face-to-face meetings and announcements or organizational partnerships. Similar to the pilot study, after Walden University IRB approval, I distributed flyers at the Mega Mart Latino Supermarket and CASA Multicultural Center in Langley Park, Maryland, locations heavily frequented by the Latino community and open during the pandemic. I also posted flyers by the Foodway Supermarket in New Carrolton and the Spanish Catholic Center and Catholic Charities in Washington, DC, Montgomery County, and Frederick County. Many of the originally intended locations—churches, health care facilities, community grocery stores, and retail shops—were closed due to COVID lockdowns.

This indirect recruitment method yielded 50 inquiries from promotoras across the United States. Individuals contacted me using my personal phone number and Walden University email address to express their interest in participating. They were highly attracted to having their voices heard and included in this study. The women notified others about the study and shared the flyer with colleagues, neighbors, and families. As a result, the majority of respondents had learned of the study via word of mouth (snowball sampling).

I prescreened all 50 interested participants using the prescreening approved tool (see Appendix E), eliminating 25 promotoras who did not meet the established inclusion

and exclusion criteria due to language barriers and location. To enable a diverse group of participants, I invited all 25 qualified individuals to participate in the study. During prescreening, I notified the women that all those screened might not receive an interview invitation as I had to evaluate transcripts on an ongoing basis to determine saturation. I next reviewed availability, scheduling the two participants for the pilot study and 15 who were immediately available for the larger study. The last eight who met the eligibility criteria were not yet available for interviews, although they had expressed interest in participation; however, I could contact them at a later date, if needed. Each participant received a pseudonym (see Table 1) for confidentiality and to humanize them, with the first two being the pilot study participants and the next 13 being participants for the larger study.

For the larger study, I achieved saturation after 15 participants; therefore, I did not need to contact the remaining eight interested respondents. Two women had to postpone their interviews due to family commitments; however, there was no further need to contact them to reschedule. Although I achieved saturation after 10 participants, because the study was an exploration of the lived experiences of a minority group based on their individual voices, oversampling was a recommended procedure to account for potential attrition and nonresponse (Koskan et al., 2013). The goal was that selected themes would be notable paradigms representing the promotoras' collective contributions to the empowerment and influence of the Latino community.

As described in Chapter 3, the study's inclusion and exclusion criteria were that participants (a) were over 18 years of age, (b) self-identified as Latina, (c) had lived in

the United States for more than 5 years, (e) spoke English, (f) had worked as a promotora influencing Latino women in PA and dietary programs for at least 5 years, and (g) resided in the communities they served in Washington DC, Montgomery, Prince George's, and Frederick Counties.

On the day of each interview, I contacted the participant to confirm, emailing or texting the informed consent for review. At the beginning of each interview, I reviewed the consent to include the purpose of the study, my experiences with the Latino community, the voluntary nature of participation, that all data would remain confidential, and that I would be audio recording the interviews. After asking any questions they had, the participants sent me an email with the word "consent," indicating their acceptability of the interview terms. At times, the consent process created delays and even rescheduling if the participant had issues sending the electronic consent. I audio recorded each interview using iPad Voice Memos, which I then transcribed verbatim using the TranscribeMe! software. I performed an ongoing analysis to determine saturation.

I began each interview with an introduction before reviewing the consent form; I ended the interviews by thanking the women for their participation. All interviews were in English, which was a criterion for eligibility, and followed the interview guide (see Appendix D) for each participant to ensure reliability. I asked for clarification using probes, and inserted prompts when necessary to allow participants to add to or expand on their responses. The probes, prompts and follow-up questions elicited more detailed and comprehensive responses. This process allowed participants to discuss their individually lived experiences freely and comfortably with me because they trusted that I was

gathering information to improve the lives of Latinos. All 15 participants answered the questions over the telephone without any issues. At the end of the interview, I offered participants a gift of $25 using Venmo, Cashapp, Zelle, or a mailed gift card as a token for their participation. Although the plan outlined in Chapter 3 was to provide a $25 gift card at the end of each face-to-face interview, it was necessary to change the process due to the pandemic and distribute the gifts electronically or by mail according to each participant's preference.

Data Analysis

Thematic Analysis

Data collection was by audio-recorded telephone interviews with 15 promotoras (two pilots and 13 for the larger study) using a semistructured interview guide. I transcribed the audio recordings verbatim using TranscribeMe! software and offered to share the transcripts with each participant for member checking to ensure the words reflected their voices; however, all participants declined this review. Data analysis for this study was ongoing during data collection to ensure saturation. I followed a six-step iterative data analysis process by Creswell (2013) and Creswell and Poth (2018), which entailed the following steps: (a) organizing and preparing the data by assembling them into segments; (b) reading through and cleaning the data to remove all identifying information; (c) coding the data using NVivo software; (d) developing categories from the codes and thematic analysis; (e) representing the findings using tables and figures; and (f) interpreting the findings by comparing themes with the literature and identifying lessons learned. I familiarized and refamiliarized myself with the data, reviewing each

transcript and comparing it to the audio to ensure clarity and completeness. NVivo QRS was the software used to support the thematic analysis process. I next uploaded segments of the data (participant transcripts) as individual files and reorganized the data in files under “New Project” for ease of analysis. Saldaña’s (2016) model informed the coding process.

Coding

The next step was to create case classifications of participant information and conduct data exploration using the query command in NVivo. I used an open coding method, inductively moving from one line of the transcript to another, assigning codes or labels to any ideas, phrases, or words while coding relevant ideas to deductively preselected themes. To assess for saturation during data collection, I reviewed the transcripts for emerging themes, which became part of the parent codes in the first cycle. I incorporated the constant comparative method as I returned to the transcripts, research question, and model to identify relevant codes associated with the promotoras phenomenon (bracketed). This process resulted in 405 initial codes.

Categorizing

I sorted the codes into 20 major categories and multiple subcategories by collapsing similar codes that referenced specific concepts. I expanded codes with different meanings, condensing or reducing codes according to the research question while continually comparing the codes to the literature on the promotoras phenomenon. I grouped codes or data chunks based on relationships—for example, I placed cost, childcare, and transportation under the parent category of barriers to participation in PA

and healthy diets. I merged related categories describing the same idea, deleted duplicates through NVivo searches, and ranked categories hierarchically if they characterized the same behavior or represented the same central idea of the research question. Throughout this process, I regularly reviewed the transcripts and field notes for additional emerging ideas and patterns.

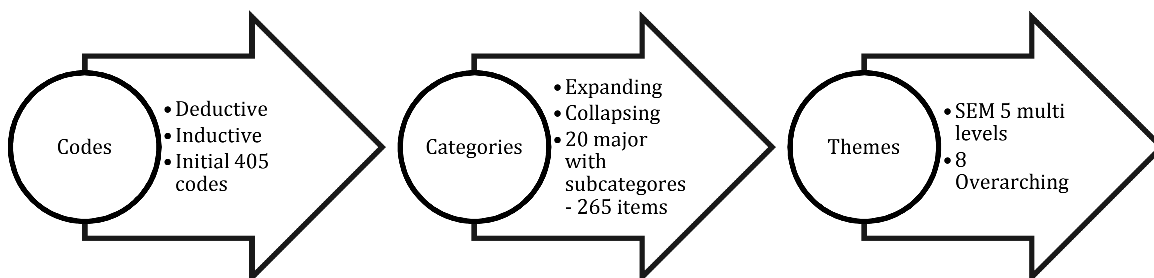
Themes

Merging the categories based on their central ideas led to the creation of eight overarching themes and subthemes that addressed the research question and indicated recurring barriers and motivating and facilitating strategies. I looked at the reoccurrence of codes across the 15 participants, the frequency of ideas using NVivo's query function, and how many times I assigned the code to each section or passage of the data, generating themes based on the underlying meaning from a group of codes. Finally, I manually reviewed the categories and identified those descriptive themes consistently shared and representative of promotoras' lived experiences, how they influenced Latino women, and their relevance to the research question and public health issue addressed. Figure 4 presents the thematic data analysis process, showing how I moved segments of data into codes that later merged into broad categories and, finally, into overarching themes that addressed the research question. I also engaged in reduction, disregarding information not directly related or needed (winnowing) during the analysis. Reduction is common in qualitative research due to the large amounts of dense and rich data collected and not used (Creswell, 2013; Creswell & Poth, 2018). Throughout this process, I took scheduled breaks from data analysis and then reviewed the uploaded transcripts upon

return for additional insights. This practice kept the data fresh and ensured the accurate representation of promotoras' lived experiences through the identified themes.

Figure 4

Thematic Data Analysis Process Moving from Specific Codes to Overarching Themes



Evidence of Trustworthiness

Trustworthiness in qualitative research refers to the truth value of the data collection and analysis. Trustworthiness pertains to the rigor, degree of confidence, accurate interpretation, and methods used to describe processes different from quantitative parameters. The four criteria of trustworthiness are credibility, dependability, confirmability, and transferability (Lincoln & Guba, 1985). The main data source for this study was semistructured interviews. To accurately report participants' ideas, I audio recorded all interviews and transcribed the recordings verbatim. Transcripts were available for member checking to ensure confidence in the text and accuracy in interpreting the lived experiences. I removed all identifying information from the transcripts before analysis. Audio recordings, consents, and transcripts remained securely stored in my home to maintain confidentiality and meet trustworthiness standards. All documents are available for review if needed.

Credibility

Credibility refers to the accuracy of the researcher's representation of participants' ideas. I ensured credibility by audio recording interviews and using prompts to obtain clarification. Participants had ample time to support their responses with authentic examples that reflected their lived experiences (Given, 2008; Korstjens & Moser, 2018). Although the interview structure ensured consistency in questions, prompts and probes were appropriate to elicit thoughts and ideas relevant to individual experiences. At the end of each interview, I asked participants to share anything else related to the topic beyond the scope of the interview questions. This request reinforced trust and allowed participants to ask additional questions or requests for clarification. They could share complete and thoughtful insights that informed the phenomenon.

Transferability

Transferability refers to the external validity of the findings and mainly concerns applicability (Given, 2008; Korstjens & Moser, 2018). As the researcher, my responsibility was to maintain a thick description of my participants and processes. I provided individual and cluster descriptions of the participants, all of whom were Latino women who had been practicing as promotoras for more than 5 years, had lived in the United States for at least 5 years, and worked throughout the United States in lifestyle modification programs focused on PA and diet programs. Individual descriptions included their countries of origin, number of years living in the United States, and number of years practicing as a promotora. Additionally, I shared the research process in detail, from direct recruitment and purposive sampling to data analysis and findings, all

of which facilitated transferability. I further provided the inclusion and exclusion criteria and a description of the interview process that opened with an introduction and ended with my appreciation.

Dependability

Dependability focuses on the aspects of consistency and repeatability (Given, 2008; Korstjens & Moser, 2018). Achieving dependability entailed using similar methods for each participant during recruitment, interviewing, and transcription. I followed the six-step research path for data analysis by Creswell and Poth (2018). Descriptive coding occurred using NVivo, which included generating central ideas later categorized into groups based on relationships. Finally, overarching themes emerged from the categorized codes based on the repetitiveness of ideas or phrases, frequency of words across transcripts, and subthemes that captured the participants' lived experiences. I documented in detail the analytical process and all field notes/memos (thoughts I collected during interviews), audio recordings, transcripts, and coding nodes. NVivo outputs are secured at my home and available for review if needed.

Confirmability

Confirmability depends on the neutrality of the analysis, with data analysis informed by participant interviews and not the researcher (Korstjens & Moser, 2018). The themes in this study emerged from the deductive and inductive analysis processes performed within NVivo and manually. The interpretation of the themes that described the lived experiences of promotoras followed from the codes selected to label the raw transcript data. An audit trail was useful for recording the research path. I achieved

confirmability by describing the process for researchers to follow to confirm my findings. I documented the methods of data collection, analysis, and reporting. Also, I took responsibility for managing the raw data and reflexive notes, documenting my reflections on each interview. Though challenging based on my past experiences with this population, I bracketed my biases during data analysis to ensure no preconceived assumptions influenced my interpretations.

Results

Following is a summary of the themes identified through a basic format by Saldaña (2016)—theme–meaning–evidence or quotes—to add the individual voices of promotoras' lived experiences as guided by the interview questions (IQs).

Theme 1: Knowledge/Awareness Facilitated Acceptability and Participation in Physical Activity and Healthy Eating

IQ1: How long have you been a promotora?

The participants recognized that having knowledge and being aware of obesity, PA, healthy diet, and disease burdens empowered promotoras and Latinas to change and correct misconceptions. Additionally, knowledge on the mechanisms to influence Latino women boosted confidence among promotoras to effect change. The length of practice enhanced knowledge and confidence to influence Latino women in adopting healthy lifestyles. Promotoras' practice ranged between 6 to 20 years (see Table 1). All participants reported acquiring extensive knowledge that enhanced their effectiveness in influencing Latino women. Gabriela explained,

> The intervention is from the agency, and once we are trained on cultural competency, role modeling, and how to influence the people, we feel good and confident to do our job. Oh, yes. Promotoras need knowledge, and the many years we work, we gain that knowledge.

Ten participants responded that gaining knowledge on the different promotoras' roles empowered and gave them needed confidence. All 15 indicated that they acquired teaching and time management strategies during training for program implementation. Five promotoras acquired knowledge on how to influence others, and three of the women added that acquiring valuable experiences on challenges of multiculturism prepared them for practice as promotoras.

IQ3: What weight loss program have you worked for?

Subtheme: Program of Practice. Participants felt that knowledge from specific weight loss programs optimized effectiveness and efficiency as influencers. Promotoras worked all over the United States in various weight loss-related programs and capacities. Angel related,

> I worked for over 15 years and know what obesity does to my people. Different kind of diseases. I think one is for depression because of obesity or other things, diabetes and heart diseases. As I worked, I learned these things and [it] makes me able to educate my people. So, I worked all over America, and I know what I am saying, and the people listen.

Six of the women worked in obesity and weight loss programs, three worked in diet programs for diabetes management, seven primarily led PA interventions, and all 15

facilitated healthy lifestyle classes and had extensive knowledge in the subject matter hence ability to influence Latino women. Eight participants reported the impact of knowledge from various programs on their overall success in influencing Latino women to participate in PA and diet programs.

IQ12: Describe your understanding of obesity (as a Latino woman and promotora).

Subtheme. Obesity Knowledge. The participants felt that knowledge of obesity was essential to the success of healthy lifestyles. Obesity-related knowledge was vital to promotoras as Latino women to live healthy lifestyles and serve as community leaders to influence acceptability and participation in healthy lifestyle programs. All 15 women agreed that knowledge and understanding of obesity, the contributing factors, the impact of PA and healthy diets, and disease burdens empowered them to influence the individuals who make up the complex Latinx community to adopt healthy lifestyles. Angelica summarized,

> Ma'am, you know our people are complicated and the culture, too, very complex. The tradition and customs make them eat only on the big plate, especially in the buffet. You know, I mean, so this is something I say there is more than that. What they really need is to be aware that the food is causing disease. What an insult when there is misinformation in the community, and they get upset when we try to correct them. They need accurate knowledge about [these] big plates of food and the risk of diabetes, obesity, and many diseases killing our people. It will empower them to change the bad beliefs and behavior.

Six of the women defined obesity as “being too fat, too big,” two said it was “having excess fat,” four responded “when your body shows how much food you eat,” one described it as a “high body mass index (BMI),” and two simply indicated that obesity was “too much churros” (a corn meal). The 15 participants were aware that understanding obesity and comorbidities was essential to their success as promotoras influencing Latino women to lead healthy lifestyles. Five articulated that awareness of risks and disease burdens addressed and somewhat countered the beliefs, customs, and misinformation that contributed to recruitment, retention, and high attrition issues among Latino women.

Alexandria described obesity as “having excess fat” and “when you are too big or fat”; Isabelle said that obesity represented a “higher BMI.” Luciana summarized,

> I think obesity, and diabetes, or any other disease that prevents you from participating, even to listen to the education, is a problem. And that’s the problem that we are having. Like, how do you reach that community when they really have it? The only way is to educate them to counter the lies, and this helped us to recruit and retain during the programs. A lot want to come and learn when we know what to say. Knowledge is power.

IQ13: What do you consider to be physical activity?

Subtheme: Knowledge of PA. Promotoras believe that knowledge of the different types of physical activities facilitates acceptability and participation. The aim of this question was to assess promotoras’ knowledge about different physical activities or exercises, identify any barriers keeping Latino women from achieving the required PA,

and establish the impact of this knowledge to influence participation among Latino women. For promotoras to influence and reinforce acceptability and participation in PA behaviors, they must understand the various types of activities that qualify as PA. Analyzing personal and collective narratives showed that promotoras were aware and able to facilitate acceptability and participation among Latino women by educating them on types of PA. Fourteen participants expressed adequate knowledge of PA recommendations and specific activities that qualified as PA, whereas one had limited knowledge of specific activities. This awareness was necessary for them to practice as PA teachers and coaches among Latino women. Five participants associated housework as PA, four expressed that walking was PA, five indicated that dance and any form of movement were PA, and one insisted that PA was only going to the gym. Further discussions revealed that this participant had limited knowledge of PA and struggled with weight loss herself. She expressed that a lack of time and money to pay for the gym made it difficult to lose weight. Alexandria related, “I learned [the importance of] not sitting or having said sedentary behavior, whether at home or outside, at work or somewhere, any movement, even for leisure or housework and yard work and physical activity.”

Guadalupe stated,

> Education and knowledge about discipline and what is workout, exercise, how to use housework, gardening, walking to the store, what is active and being active, if it is 15 or 20 minutes of summer walking. [We] need to give the people knowledge.

Similarly, knowledge of leisure PA and specific activities emerged as a facilitating factor for participation. Isabelle described PA as “any movement that keeps you from being sedentary.”

IQ14: What do you consider to be a healthy diet?

Subtheme: Knowledge of Healthy Diets. Most participants recognized that knowledge of healthy diets reinforced acceptability and participation in healthy behaviors. Having knowledge of nutritious and fresh foods being full of vitamins and minerals and proper food preservation and storage helped to manage costs, awareness of healthy portion sizes facilitated participation, and a desire to cook reinforced healthy behaviors and lifestyles. Promotoras needed a better understanding of what constitutes a healthy diet to effectively influence acceptability and participation by others. They gained knowledge on healthy diets, became community experts, and earned the trust of Latino women.

Alexandria described healthy as “fresh fruits, vegetables, balanced diet similar to MyPlate, lots of water, minimal pupusa and churros.” Elena defined a healthy diet as “healthy foods, like fruits, vegetables, lean meat, low-fat and fat-free milk, beans, meat, fish together at one meal. A lot of water and juice.”

Five participants associated healthy diets with vegetables, beef, meat, and fish. One mentioned “portion size,” four said it was “whatever you put on your plate, like vegetable or grains. Five participants felt that healthy diet referred to “food without preservation and chemicals.” Elena responded, “Lots of food, like fruits and vegetables, lean meat, milk, beans, fish, fresh foods and nothing preserved with chemicals and to

drink water instead of juice" P2 indicated, "We teach them about weight loss, healthy lifestyle, and knowledge of food and stress management about life to reduce obesity, blood pressure and diabetes" She added, "We teach on weight management because some starve themselves; they need a healthy diet balance."

Subtheme: Knowledge Adequacy. The women understood that acquired knowledge had to be adequate to effect behavior change**.** All participants responded that knowledge was impactful only if it was adequate to address the gap. Luciana described the critical need for knowledge, saying, "The people need education and knowledge on how to prepare healthy meals because I have seen through the food distribution, which has fresh fruit and vegetables, and they have cilantro and [are] not sure what to do if no education." All participants possessed extensive knowledge of the cost of obesity and disease burdens, which empowered them to influence Latino women. Also, three women remarked on the importance of knowledge to achieve the intended purpose; otherwise, promotoras have not completed their jobs.

Subtheme: Lack of Knowledge. On the other hand, individuals' lack of knowledge about different foods led to the consumption of "processed foods full of harmful chemicals" (Miriam). This emerged as a barrier to community participation and created challenges for promotoras to influence the women. Seven participants reported that Latino women's lack of knowledge of how to read labels led to purchasing processed foods that contributed to obesity. Eight indicated that their clients had limited knowledge of healthy traditional, equivalent foods. Additionally, four participants discussed other cultural barriers related to lack of knowledge, such as understanding it was culturally

inappropriate to tell someone to lose weight; therefore, they had to approach these discussions cautiously. Through education, promotoras raised awareness, motivated people, and influenced behavioral change among Latino women.

Lack of knowledge also led to shaming community members trying to lose weight. Miriam related, “We have to educate and raise awareness because the Latino community have [*sic*] obesity disparities, and it is not good to hear.” Similarly, lack of knowledge contributed to men not supporting women in their weight loss efforts. Isabelle indicated that “not having knowledge leads to domestic violence, men not letting women attend classes to learn exercise, dance, and the role that machoism plays in holding back our community from becoming healthy.”

Subtheme: Valuable Knowledge Facilitates Action. Promotoras argued that knowledge was only useful if it filled the intended gap. Knowledge regarding healthy lifestyles only had value if it accomplished the need to facilitate action and reinforce behavior change. According to Luciana,

> We can show them a salad bowl with the mixing—you know, for example, a can of corn and with a little salt, mixing, a piece of cheese. It might seem easy, but with no education of what to do, Latino women don’t know what to do, and it will have no value.

Five participants (33%) emphasized the value of knowledge on Latino women’s overall confidence and self-esteem. They insisted that people need broad knowledge to empower them to act without waiting on community leaders and researchers. The same five women added that knowledge needed to be valuable to have an impact on the community, such as

on obesity comorbidities and available programs. They said the use of culturally relevant pictures of foods, ingredients and portion sizes is more valuable. Four participants explained that knowledge through education brings awareness of available resources, programs in the community, and needed infrastructure. All of the promotoras stressed the importance of knowledge on behavior change toward PA and healthy diets; therefore, they used creativity to educate and improve knowledge among Latino women. Isabelle reported,

> I am gardening with the women, and I lead groups. I also [talked to] a woman…about the advantages of physical activity and a healthy diet, what works and don't [*sic*] work. I get them not because you want them to leave their children and housework to attend all these classes but because knowledge is valuable to them. It made sense for her to learn and know what to do to exercise without spending money in the gym. The knowledge we give them [has] got to be of value to them.

Theme 2: Promotoras' Roles as Influencers of Acceptability and Participation

IQ3: What weight loss program have you worked for? Name of the program. What was your role?

Promotoras' lived experiences through their roles built trust to influence Latino Women. According to the interviews, I noted that promotoras working or volunteering in different roles greatly influenced Latino women's acceptability and participation in PA and healthy diet programs. The various roles provided opportunities to earn Latino

women's trust, enhancing resilience and self-efficacy to influence behavior change and the sustainability of participation in programs. Gabriela stated,

> I lead the discussions about healthy nutrition, and I plan and lead groups, through group walking, dancing like Zumba in the community, encourage and help them complete medical forms or food vouchers, SNAP, WIC, and I volunteer to follow them to medical appointments when they have diabetes or cancer

All 15 participants shared their lived experiences as they navigated the complex structures of the community. They described their roles as varied and many, encompassing physical, financial, emotional, teacher, amiga (friend), coach, and advocate. Sonia explained, "Our job is to reduce almost all of these disparities that people are talking about." Julieta said, "I was there with the community, and I was training them to have a healthy life. Like in class. I may teach healthy living and safety skills." Angel explained, "I was there to give information to the people in school, to eat healthy foods." Isabella added, "I made flyers by hand to inform [them] of the problem. I helped to convince the women to stop by the resource tables that we display. I lead food and dietary discussions and help with the questions." Catalina reported,

> I participated in the program with Barack Obama and Michelle Obama on healthy diet and nutrition, that program, the MyPlate program. I worked with the team of different doctors and with different institutions as well as school districts to develop the healthy meals for the children and school.

Advocacy. Most participants felt that leading various programs enhanced their confidence as they became experts in the subject matter and issues facing the Latinx

community. Promotoras experienced similar challenges as the community and understood the urgency. Isabelle stated, “As educated partners with public health officials, promotoras advocate for more grocery stores because some [people] have money to buy healthy foods, but our communities are food deserts.” She continued, “I advocated for pedestrian walkways for exercising in the community and safe parks for group dancing activities.” Four participants explained similar advocacy responsibilities as they worked closely with legislators in writing meaningful proposals, setting their states’ legislative agenda to address challenges, such as frequent shootings, health insurance for Latinx without legal status, and overall crime in their communities. Angelica remarked,

> My role is in [the] legislature setting and making sure people have their legislative rights. We select three proposals and decide on which one we want to go for, and in the end, I ask for their support. Yes. OK. And, obviously, for the Latino community—and this is not just for the COVID—people can all have health insurance. All people. So, I advocate that even the ones that don’t have legal status, they all need to have health insurance. They can’t have food in their tables and no health insurance.

Through advocacy, promotoras felt a sense of responsibility to act to address barriers to participation in PA and diet. They were empowered to demand that interventions designed for the Latino communities should have specific strategies to reduce barriers and improve participation. Promotoras called for a tool kit of strategies that investigators could use individually or in combination to influence the acceptability of PA and diet. Angel indicated,

> There should be a tool kit of strategies that work for our communities to be included with the programs for weight loss. We know that this works because we know our people and have used these to make them participate when no one else could. This kind of tool kit is like the kit of ideas we use to train for diabetes. It will help anyone coming to our community to implement programs to address obesity disparities. I know this because I work for the program for diabetes, and we use the tool kit.

Emotional Support Roles. All participants were aware that emotional support was important. The promotoras provided critical emotional support to families, especially during COVID. They explained that community members were confused and struggled with mistrust of information from multiple outlets. Thirteen participants (87%) shared the need to switch roles and quickly learn mitigating strategies for COVID because the communities did not trust anyone. Four participants shared an ongoing need to educate Latino women on lifestyle management strategies, including stress management. They indicated that classes for lifestyle modification provided ample opportunities to listen to issues happening at home with children, spouses, or families. Promotoras, therefore, encouraged discussions of the issue, providing emotional support and guidance on where to access information. All 15 participants reported that the promotoras' role in providing emotional support builds confidence and motivates Latino women to accept and participate in PA and diet programs. Luciano explained, "During COVID, everything changed. My role was to recruit and refer the people for testing. [There was] a lot of

emotional pain. We had to support, yeah, recruiting, educating, and supporting as a neighbor through COVID." Angelica reported,

> My role is with supporting homeless seniors. Sometimes we do bingo for seniors, and I help them, and I have them sometimes in some kind of workshops for healthy nutrition projects. With COVID, some got sick, some [struggled with] diet and needed support to get food, testing, and even during vaccine, I was there to help because I share a bond with them.

Teachers/Coaching. The women shared that Latino women sometimes needed coaching to access relevant information to help their families; once the women learn the process and become engaged, promotoras can more easily influence those who feel empowered to act because of the availability of choice. Thirteen (87%) participants were teachers and leaders of classes on obesity and diabetes burdens. Isabelle said, "I work as a promotora to educate my people and help reduce all the obesity and other disparities that people are talking about." She added,

> I follow them to medical appointment[s] when they have diabetes or cancer. You know from the research the system does not put enough time to help, so people don't comply with treatment and have bad outcomes and more expensive and disparities.

Camila explained, "We teach them about healthy lifestyle with food and knowledge of stress management about life to reduce blood pressure and diabetes" with a focus on "education on goal setting."

All participants recognized that their roles in teaching, coaching, and supporting the communities helped build trust and became a critical tool for recruitment and retention. I observed that teaching and coaching were important roles and facilitators of influence. Miriam indicated, “We teach on weight management because some starve themselves; they need a balance. We have to educate and raise awareness because the Latino community have [sic] obesity disparities, and it is not good to hear.”

Friendliness/Commitment to the Community. All 15 promotoras indicated that they felt a sense of duty and responsibility to their communities. The participants echoed that their role was not a job or career but an individual calling to partake in a shared community. Lucia said,

> We speak the same language. We know our community. We know how to approach them respectfully but persistent[ly]. We know their needs, their strengths, and their weaknesses and try to get what they need to help them succeed.

All the participants shared their commitment and dedication to empowering their people. They became the encouragers in the face of uncertainty. All 15 verbalized specific experiences as they supported one another with childcare to enable neighbors to attend lifestyle modification classes. They even spent their own money to sustain programs long after researchers completed their implementation and left the community. All participants shared that, as friends committed to the community, they used culturally appropriate language and strategies to influence Latino women. Sonia stated, “I take their

opinions as well as many issues seriously and child-rearing issues, as well. We also discuss…their work issues, and all this makes it easier for them to trust me."

All 15 shared they called each other by name to be friendly, and this strategy encouraged Latino women to listen. Two responded that they showed compassion and persistence by not giving up, even when women resisted or did not open the door; as a result, the women gained confidence and trusted promotoras' guidance. One participant shared that she used candor to encourage action, build *confianza* (confidence), and motivate behavior change. Valeria said,

> I am very open and blunt with my people. I tell them to stop eating the fatty foods and to get up and move. I tell them no one cares about their grocery stores not having this or that, and they need to use what they have. I tell them that we have to help ourselves with what we have. I walk all the time, and I get the women to join me. They learn to trust me because I am committed. They have confianza, and it works.

Similarly, Elena explained, "We do what we can to reach the community by distributing flyers in churches, laundromats, grocery stores. [We] talk to people, call them, and go to their houses if needed."

Sustainability of Programs. Promotoras embraced the responsibility to sustain programs and social change benefits long after researchers and public health providers leave their communities. Two participants (Miriam and Valeria) shared their interests in promoting individual promotoras' growth to influence social mobility instead of program

sustainability to simply maintain their role within the program; even so, there was a general sense of the need to sustain programs. Miriam stated,

> It is true that the programs need to be sustained for the community to benefit from the healthy eating and being physically active. We, as promotoras, also need to grow in our profession. We need training and education to grow and make more money to feed our families. It could be hard to work many jobs and still have time to help the community, so I think individual growth will be good, too.

Nonetheless, all 15 participants called for extending the benefits gained from PA and healthy diet programs through ongoing program support. The women advocated for funding the promotora approach for outreach and program continuation within the community. They engaged in fundraising efforts, such as washing cars, selling cookies, and soliciting private donations. Isabelle acknowledged, “It is rewarding to know that we can raise funds to keep the program benefits going, but it’s not easy. We need help.” Five participants suggested it would be beneficial to train promotoras specifically for obesity-related health program delivery to disseminate ongoing information through social networks. Three others suggested training could be through alliances with other promotoras across the nation to build capacity and raise funds to support the programs. All participants understood the value of training promotoras actively involved in outreach and support to the community leaders and members. Angelica suggested, “I believe a train-the-trainer program would help sustain promotoras who address community health needs, and we have used it in many other programs.” Such a program would build

confidence and improve outcomes by empowering promotoras to reach the most resistant and vulnerable individuals.

The participants were clear of the enormity of the responsibility to sustain program benefits and called for action from other providers to support this effort. Elena stressed,

> We need help to sustain good programs that have helped our communities eat healthy and be physically active. If not, they will just fall back to the old ways. They [researchers and public health leaders] should not just come here and get the research and leave. They need to keep the program in the communities [the] and money to get it going. That is how we solve the obesity problem.

Promotoras***' Encountered Challenges as They Performed Their Roles***

IQ6: Tell me about your training as a promotora (formal, informal, length, certified).

Subtheme: Inconsistency/Inadequate Training. Most of the participants viewed standardized and adequate training as winning strategies to reinforce knowledge and abilities to motivate action toward healthy lifestyles. Although training was an important strategy to educate and empower promotoras to succeed in their roles, all 15 participants voiced the need for consistent and "equitable training with the need for certification and standardization." Isabelle stated, "Promotoras will benefit from better training and paid jobs everywhere and good pay so we can have the time to work in decreasing barriers that affect our Latino communities." Nine women recommended having levels of promotoras depending on education and certification to make them even more "important and [to receive] better pay" (Valeria). Training ranged from 48 hours during programs to 4 years

of undergraduate training as a health educator. Twelve participants indicated they received weekly professional development throughout program implementation to reinforce roles and content. Five reported that they received training in topics like motivational interviewing, conflict management, technology, dealing with difficult people, time management, privacy, and information security, in addition to specific project content. Sonia recalled,

> We were recruited and trained. Sometimes it could be a couple of weeks to a couple days, and then you're kind of doing the job, and sometimes you get paid for that job. I received education for 3 months and training for 36 hours.

IQ4: Tell me about your experiences as a promotora. What helps or makes it difficult: environment, culture, acculturation, multiculturism?

Subtheme: Paperwork Burden. Challenges, such as paperwork burdens while leading programs, emerged as difficulties during participant discussions. Three explained how the paperwork took a lot of time that could be useful for the community. None of the participants appreciated completing significant amounts of paperwork. They added that it becomes stressful to balance the responsibilities of the role with so much paperwork, especially because it is sometimes very tough to motivate Latino women to participate.

Subtheme: Transportation/Communication Challenges. Eight promotoras mentioned other issues and challenges, including the lack of reliable transportation to visit people or travel to training sites; technology issues, especially during the pandemic; the cultural fear of approaching adults or men to encourage participation; and the stress of working to maintain their families while supporting the community. Catalina identified

barriers to promotoras' roles as "employee stress, mental health problems, [and] technology is a burden to us." She added, "We see a lot of crazy, very sad [people]. There is depression. The families are suffering, so we never know what to find when the door opens for us, but we keep going to help." Three participants reported challenges and barriers to their multidimensional roles that sometimes made it difficult to influence Latino women. However, all 15 participants agreed it was a joy and a duty to continue supporting and influencing healthy lifestyles among their community. Guadalupe stated, "I know I have to do it because if I don't, no one will do it. I don't take no for an answer. Even when they resist, I keep going patiently until they say yes."

Subtheme: Balancing Work/Family. Additional challenges discussed by the 15 participants included the lack of defined roles, such as balancing work with family commitments; a perceived imbalance of power with men; and the emotional impacts of hearing participants' problems, especially mental health and COVID-19 deaths. Two women voiced discouragement with the perceptions of ethnocentric beliefs and discrimination from some providers, and all reported challenges influencing women who were frustrated by not losing weight. I understood that these challenges made it difficult for the promotoras to do their jobs.

Promotoras***' Resilience/Coping Mechanisms***

IQ8: Tell me how you balance being a promotora and community member with similar experiences. What about the impact of being a member of the community?

Subtheme: Recognition. Most of the participants agreed that their recognition as experts and leaders in the community reinforced their confidence and self-efficacy to

influence Latino women. Eight participants shared the importance of the government recognizing them as a critical resource to public health because they received respect in their communities. This recognition added respect, resilience, self-efficacy, and confidence as the women in their communities trusted and took them seriously. Camila stated, “We feel good about ourselves and our work. We do much better for our people when they recognize us. So good.” They used support and motivation, such as fundraising, to sustain programs. Angel related,

> We know that we need help to keep the program going or to feed the homeless and hungry, so we ask for spaces like the parking lot in school, then we ask for permits from the city, and we rent or sell the spaces and make extra money.

Angel voiced the challenge of influencing Latino women from different cultures who sometimes resist because they do not know the promotora. As a result, the promotoras have to explain their roles, which could be discouraging. Angel felt that “government recognition would make it easier to go everywhere they are needed without fear because there is credibility and support for the role.” One reason for persistent obesity disparity is the difficulty of reaching communities such as Latinx. Acknowledging the promotoras’ role could improve outreach to this community, increasing awareness of obesity and education on PA and healthy diets.

Other coping mechanisms utilized by the promotoras to address challenges included networking for support and self-care, as stressed by five participants. Four stated incorporating yoga and meditation, seven mentioned taking time off when needed, and all responded that using schedules to manage their time helped them to cope and fulfill their

multidimensional roles. I observed that these tools helped keep the women rested, resilient, and healthy enough to manage the stress of the job. All 15 participants were familiar with the issues of the community and therefore prepared to be role models. At times, some gave way to food temptation. Catalina explained,

> Promotoras are human and from the same culture and facing similar customs and traditions of celebrations and eating a lot. So, when we have community fairs, they eat lots of donuts [and] chips, and some are so fat, they cannot even help the people to do their exercise. We have to be role models, but sometimes it is hard, even if we try.

Additionally, three promotoras said they relied on supporting and motivating initiatives like fundraising to support and sustain programs. Camila reported,

> Our job is to make extra money to keep the program going. We know people who need help to care for children, clean their houses and drop the children to school. We come together and do those jobs to help ourselves. I love it.

During the interviews, I observed that this self-reliance strategy helped promotoras cope with the challenges of sustaining programs and to further build trust, facilitating their reach to influence Latino women. Also, I understood that there was a sense of struggles that further humanized the promotoras and that support from multiple networks strengthened them as individuals and as a group.

Theme 3: Perceived Attitudes/Beliefs and Customs Regarding Physical Activity and Healthy Diet on Participation

IQ4: Tell me about your experiences as a promotora. What helps or makes it difficult: environment, culture, acculturation, multiculturalism?

Most of the women knew that Latino women's attitudes, beliefs, and customs toward obesity, PA, and healthy diets created barriers as well as facilitated the acceptability of lifestyle modification programs. Promotoras' unique insight as Latino women living in the same community and facing similar issues provided a bridge to reach, educate, and change perceptions. Understanding the traditions and cultural customs that reinforced and enabled unhealthy behaviors and reduced lack of participation in weight loss programs provided a path to influence acceptability. Similarly, the women were aware of the community's belief that healthy eating and PA are essential to health, thus indicating the need to improve acceptability. Angel stated, "Latinas know that eating healthy and being active is important to our health. Our traditions show us, and past generations know it."

Subtheme: Culture as a Barrier and Facilitator to Physical Activity and Healthy Eating. All of the promotoras recognized that understanding the Latino culture was significant for influencing acceptability among Latino women. As immigrants and daughters of immigrants, promotoras recognized that Latino women held fast to the various traditions, norms, and beliefs that defined their communities. Participants voiced the need to replicate their culture of togetherness and sharing during events, celebrating the alive and dead with food in their new communities. The sense of belonging

strengthened the communities, and promotoras used this desire to maintain the Latino culture in the new country to influence participation. They engaged in the custom of storytelling to gain trust.

All participants reported that culture played a tremendous role in their overall effectiveness and challenges as influencers, requiring a solid understanding of the cultural norms that shape behavior to successfully influence Latino women. Catalina said, "Health programs don't work because if someone from the agency come [sic] to talk to the people about healthy lifestyles, they will not listen."

Participants discussed traditional cultural beliefs regarding gender roles. Three participants believed that women's perceived roles as wives and mothers discouraged participation in PA and diet programs. Catalina explained, "Latinas accepted this responsibility, which meant caring for others, not really valuing their own health, and that doing anything for themselves, like exercise and eating healthy, is considered being selfish." Two participants (Gabriela and Miriam) validated the idea of gender roles, saying that women should not walk in public with exercise outfits because it is embarrassing to their husbands and families.

Subtheme: Cultural Misconceptions as Barriers to Participation. Some participants believed that cultural misconceptions created barriers to participation in healthy lifestyles, leading to high attrition levels**.** A mix of attitudes, traditions, beliefs, customs, and characteristics guide social networks and Latinx communities. All participants indicated that mixed feelings and misconceptions among the Latino community toward weight loss created a barrier to participation in healthy lifestyles. Four

women explained that others perceive Latinas who participate in PA and diet programs to be lazy women who "do not have anything to do." One-third (five) of participants identified misconceptions as the cause for communities shaming and name-calling people trying to lose weight. Catalina shared, "When people lose weight, [others] do encourage [them] and then later say, 'Oh, you are thin.'" She described these individuals as "people not educated, even rich people, because the culture celebrates fat people as good." Additionally, four women voiced that the members of the community had conflicting views about diet; some thought healthy diets were helpful if not abused, whereas others saw healthy diets as a waste of money. Five participants reported that instead of viewing thinness as beautiful, Latino women often celebrated obesity as healthy. These attitudes presented barriers to healthy lifestyles. Luciana expressed,

> I am skinny. It doesn't seem good. Thin skin is not positive for our culture. Everybody is making comments, but everybody wants to be skinny. Like the skinny kid, once the people see them, the first thing is to give them food because skinny [is] not positive.

Four other women shared that men or spouses viewed PA as a waste of time, which was an additional cultural barrier. Isabelle identified barriers related to the culture of machoism as a contributing factor to obesity and unhealthy lifestyles in the community. She added that women were helpless in some instances when they did not receive support or could not express how they felt. The men would not have conversations because they do not believe in the value of exercise. Isabelle said, "Women are not encouraged to be active. As a promotora, I learned a lot about compassion,

patience, respect, domestic violence, and the role that machoism plays in holding back our community from becoming healthy." She shared that some of the husbands would even restrict their wives from leaving the house without them for safety, or at times due to the males' jealousy and insecurity. Angel added, "There is a feeling of loneliness sometimes when we cannot go anywhere without our husband or someone taking us because of the need for security and transportation."

IQ5: Tell me about any beliefs or customs that guide your practice as a promotora (cultural, spiritual, environment)?

Subtheme: Culturally Appropriate Language/Strategies to Motivate. Participants felt that awareness of cultural beliefs on how to approach and talk to others helped promotoras successfully influence Latino women. Two participants (13%) said it was important for researchers to frame healthy lifestyle programs around healthy nutrition instead of diets because the culture considered diets negative. One participant indicated women could comfortably say they were practicing healthy, nutritious lifestyles but not on a diet. Lucia explained,

> [I] don't like to use the word "diet." I've never been on a diet. And I think, similar to the community, your diet automatically changes. I mean, instead, it should be the nutritional status, It's like it changes, and they're willing to change their eating habits or nutrition. This will be more appropriate for the Latino culture.

Four participants indicated that the Latino culture does not encourage discussions about weight and weight loss; therefore, researchers should use appropriate language when implementing weight loss programs. They expressed that Latinos from Brazil

encouraged weight loss and valued PA if it did not take time away from caring for children and completing household chores. Likewise, seven women added that it was culturally acceptable to incorporate routine physical activities, such as housework, gardening, fun-filled dancing within the community, and walking to the store, as motivating strategies for engaging in healthy lifestyles. Five promotoras indicated that spirituality was a strong sense of support for one another; it built trust and self-esteem and empowered them to persistently educate and influence Latino women to participate. They explained that the fear of disobedience of selected community leaders helped with recruitment and participation. Three promotoras also stated that it was culturally acceptable to incorporate traditional foods for healthy diet programs to enable accessibility after program completion. From my observation, additional cultural norms and strengths that guided promotoras' practice included taking care of each other and children to reduce the burden and facilitate participation in group walks, exercise, or classes. Mariana said, "I want to help them by having someone to take care of their children so they're not only focusing on their house chores. Either get an education in diabetes, nutrition, or any other health issues." Angelica added that she sought "to help them by taking care of [their] kids to give them time for exercise."

Participants further revealed that awareness of cultural beliefs on how to approach and talk to others helped promotoras successfully influence Latino women. Guadalupe admitted that "knowing how to talk to people helped my job" as well as "calling each other by name, you know, *personalismo* [to be friendly] and not a leader." She stated that cultural norms familiar to Latinos are critical tools for success when influencing behavior

change. Guadalupe indicated that even researchers who spoke Spanish were often unable to recruit or retain Latino women; they needed to know how to communicate with respect, which sometimes involved being a friend and not a leader.

Subtheme: Acculturation. Most participants understood that acculturation was relevant to healthy eating and PA in their new country. Six participants (40%) said acculturation—the length of time in the United States—was a barrier to their roles as influencers. All participants acknowledged that coming to the United States was a dramatic change because there were so many more fast foods than in the women's countries of origin. Additionally, some women identified how migration and acculturation had impacted their overall leisure-time PA. The built environments in many of their communities were barriers to regular walking. Twelve of the women reported participating in PA activity programs as promotoras; however, leisure-time PA was limited to housework or the worksite. Angel remarked, "In most of our home countries, we had to walk every day to the market, to church, and to visit family. While in the U.S., we rely on transportation to go to anywhere." Four other women reported that in their home countries, they went shopping daily to the local markets and an opportunity to walk. Promotoras understood these barriers and were able to navigate efforts to influence healthy PA behaviors. All the women felt that fast food prevalence made it difficult to follow a healthy diet, as most immigrants wanted to assimilate and adapt to American foods, soon forgetting the traditional foods. Miriam shared,

> The food in the actual country is a lot better than America just because in the actual country, [more] traditional foods are available than in America. They use

> the natural ingredients, and when in America, we can just take on our processed food and try to do the same foods to taste good, though actually, it is bad for you. Food from back at home is made from natural ingredients.

She added, “Though the food industry is helping the families, they need to understand that there are chemicals in the food right now to get it processed and is unhealthy for you.”

Although one participant acknowledged the impact of acculturation, she was not in total agreement with the influence of acculturation on Latino women and promotoras’ efforts to practice healthy lifestyles. Alexandria explained that although there was less pressure and opportunity to access processed foods in the women’s home countries, the media and fast food had begun to change the culture of healthy nutrition. She admitted that although most people were already practicing unhealthy habits at home, these behaviors appeared to accelerate in relation to the length of stay in the United States. However, Alexandria added that there was less opportunity for PA back home due to a lack of safe pedestrian walkways and cultural misconceptions. The participant continued,

> The culture of people back in the home country about exercise is not positive. We don’t have that culture of exercise and of nutritious food, so the women resist to participate in healthy lifestyle programs when they come to America.

Overall, the 15 participants agreed that the higher the level of acculturation among Latinos, the more likely the adoption of unhealthy diet and PA practices, which posed a challenge to their role.

Subtheme: Income and Socioeconomic Status. Most participants felt income and SES were valuable for eating healthy and participating in PA**.** I observed that SES played a part in recruitment and retention because it contributed to issues of cost, time, transportation, and childcare. Gabriela noted,

> I have less money, so I buy lots of junk food to feed my kids than going to buy fruits or vegetables. And also, you know, besides, there is lack of time to take care of the kids and lack of time to go and exercise.

All participants indicated that a lack of adequate income created a community where people had to work very hard with no time to participate in healthy lifestyle programs. Villeges et al., (2018) found financial constraints contributed to unhealthy food consumption. Camila said, "There is no time for the people to exercise. They need to work for a day on the farm [with] no time to exercise." Seven of the women expressed feelings of exhaustion from having to work multiple jobs and take care of the home, which left little time to exercise and care for themselves.

Five participants shared that women often could not afford healthy foods, gyms, or reliable transportation to classes or grocery stores outside of their communities. Luciana recounted,

> The sad thing is that we have to go to the next county to get fresh foods and don't know why [it] is that we have rotten and bad vegetables and fruits, and we have to take, like, two buses to get there, so we buy what is available to feed our kids.

Three of the promotoras indicated that women with higher SES, more education, and better jobs could more easily afford childcare, healthy foods, and reliable transportation,

making it easier to incorporate healthy lifestyles. Julieta discussed the disparities between the communities and the negative impact on healthy lifestyles, regardless of income or SES. Although income and higher SES helped with staying healthy, when she lived in a community with more fast food, she did not cook and had fewer opportunities for PA. However, when she moved to her current location, ease of access to grocery stores and fresh food enabled her to start cooking and eating healthy. She often walked on the safe beaches, practicing yoga for stress management. Even though her household income level and SES were the same in both locations, the poorer neighborhood was a food desert and unsafe. Julieta stressed that although income and SES were horizontal barriers, both contributed less than environmental and neighborhood barriers to healthy lifestyles.

Julieta reported,

> There's no McDonald's on this side. They're not working only on this side that we live now; we always worked but no good fresh foods. So, yes, it was, like, very easy to find fast food. I didn't cook because you could have one hamburger in a very good way. So though we had same job and money, we could not find, like, all fresh things in the grocery store. Now that we moved to the other side with rich people, there are good grocery stores. Now we make good use of our money to buy fruits and vegetables that last longer and not go bad. Why is that? It is not money but no good fresh food in the stores that made me and my family sick and obese when we lived on the poverty side. Not good.

Theme 4: Social Networks/Social Support Built Capacity, Fostered Community Partnerships, Motivated Behavior Change, and Facilitated Participation

IQ10: Describe the role of social support during weight loss for Latino women family, church, community partnerships, other influences).

All the participants reported that social networks afforded promotoras the needed capacity to perform their day-to-day activities as influencers; in comparison, social support through social interactions and relationships with each other motivated and facilitated Latinas to participate in PA and diet programs. All 15 participants said that social networks provided the backbone for their multidimensional roles as promotoras and community members. They partnered with churches, families, and community members for the critical support needed to enable Latino women to participate in PA, diet programs, and healthy lifestyles. The women considered churches to be safe, with community access and convenient hours. Isabelle recalled, "Health care providers help bring empowerment, positive outcomes, awareness of disparities, social issues, and collective partnership to work together toward sustainable communities." Miriam added,

> Participating in community organizations provide[s] family support and help[s] communities adopt healthy lifestyles. …[Additionally], social support for families in the community, churches, Catholic charities, and other organizations, like the federal government—this plays a great role in recruiting and retention in the programs.

Five promotoras remarked that they brought programs to churches and the community "to meet the women where they are." Two women shared that they scheduled

programs on the weekends and reached out to motivate women to participate. Catalina reflected, "Maybe having these programs, like family activities on the weekends, motivated them to come." Guadalupe added, "We reach out to them to, you know, to reach out to motivate them in your community by making everything convenient and comfortable for them to attend. This helped with recruitment and retention for the program." Analysis of the personal experiences and collective narratives of promotoras showed that using social networks to bring programs to the women at the right time and place was a strategy that positively impacted acceptability and participation among Latino women. From my understanding, this decentralization of programs was a participant-centric paradigm shift to bring a positive experience because it removed the barriers identified as childcare, transportation and cost, and improved compliance. The community resource centers were the sites for several programs because of their locations within the community, eliminating barriers such as fear, transportation, childcare, and time. The centers were a place for social interaction and support, with shared information and help for Latino women in completing WIC and other program forms. Two women said the space was large enough for walking and recreation and was open during hours when women were available. Ten women explained that they relied on social support from family members, friends, and churches. Miriam identified the importance of "the social aspect of the program, such as building green groups, reaching out to communities, to other churches, and other organizations that can help them and help us stay physically, mentally, and socially healthy." I observed that social support provided a guide for

reinforcing togetherness and building sustainable communities and resilience among the unique group of CHWs.

Subtheme: Incentives to Motivate. Promotoras found that incentives motivated Latino women to engage in healthy behaviors regarding weight. Incentives could be tangible or intangible and made Latino women feel valued. Two women shared that as partners in improving the health of the Latino communities, health care providers introduced incentives for participation, such as "health dollars for weight loss" (Gabriela). Based on the literature review, incentives are tools to recruit and motivate individuals to accept and participate in activities (Palmer-Wackerly et al., 2020). Valeria proudly stated, "They give me rewards for my health. In the last year, I won $285"; similarly, Camila reported winning "$185 for my exams, and this year again, I got health dollars." Through the interviews, I understood that financial incentives were motivating factors for the women to engage in healthy behaviors leading to weight loss.

All 15 participants strongly encouraged the use of financial incentives to motivate Latino women to participate in programs. During the recruitment phase, I made a similar observation as several women who contacted me asked for a financial incentive to motivate them to participate. Gabriela stated, "Yes, [we] talk about benefits and incentives for recruitment and be respectful. Our community love[s] incentives, and they will not let you down."

Two women emphasized the need for utilizing incentives wisely to ensure the women receiving the money actually participated. One participant shared an experience of leading a group that brought prescriptions for walking. She explained that when the

program started, promotoras would sign the walk logs or cards before completing the prescribed activity. She later realized that women were not completing the prescribed number of minutes. Promotoras used the cards to motivate and encourage PA while instilling a sense of responsibility; they became creative and only signed walk logs and cards after the women completed the walks, which motivated and reinforced the healthy behavior. Gabriela reported,

> Providers prescribed walk just like medicine. They will give them a little card, and they get the amount of time walked. The tip is to sign the card at the end of the walk and not the beginning because they might not finish the walk.

Luciana stated, “I have some tips for incentives that we have to be very wise with incentives. Only give when they deserve and actually do the work, don’t just give because it doesn’t help them.” From the discussions, it was clear that partnership with community providers created several avenues to influence healthy lifestyles among Latino women.

Transportation and childcare emerged as barriers to participation, according to all 15 promotoras. Thirteen participants (87%) indicated that families provided babysitting and transportation to support Latino women in their efforts to engage in healthy lifestyles. Two participants said they sometimes offered childcare so the women could attend useful classes, especially when they could not bring their children. Similarly, to encourage men and spouses to allow women to participate in weight loss, three participants reported making it a family decision by inviting the men to participate and providing transportation. Promotoras informed the men that the classes were free, which was

motivating compared to the cost of gym memberships. All participants were persistent in influencing resistant spouses. Two said they refused to accept rejection. They added that understanding the culture made it easier to be persistent while respectful, as both traits were important to influence Latino women. Participants formed partnerships with other promotoras to provide needed support, and the long-lasting relationships played significant roles in influencing Latino women. Guadalupe explained, “Families are working families. The woman is the one that carries the family during the day with all the activities for the house, so I will do anything for family support.” She added, “Friendships from the multiple social networks provided support due to trust.” From my observations, social support and social networks were valuable infrastructures for promotoras to perform their varied roles based on friendships, familiarity, and long-lasting relationships.

Although four participants shared that some family members discouraged participation in lifestyle modification programs, all expressed the value of family relationships for support, comfort, and help when needed. Catalina explained, “Partnerships with families and neighbors is helpful to care for children and to support one another. We need it.” Alexandria added,

> Social support is important in our communities. I believe it encourages them to attend and participate in programs, [providing] support during difficult and challenging times, like COVID, child care, and transportation. It helps understanding and sharing, trust for one another in my community. It used to be

> difficult to recruit women, so the social networks helped [provide] support and partnership with families and churches…to strengthen our communities

Subtheme: Promotora Model as a Tool for Social Support and Influence. All of the participants were aware that the promotora model provided the foundation that guided their practice. The tenets of the model (trust, similar culture, same language, and layperson; see Figure 5) comprised the roles and core values of the promotora approach and provided the strongest evidence for why they were more likely to succeed as influencers of Latino women. It also shows that promotoras means "to promote," which underscored their influence in the Latino community. Angel said the model shows how they were successful "because we share same interests and goals and connect more with people who come from the same background and have suffered [the] same way." I felt that this statement summarized the essence of the promotora model and the interrelationships of promotoras and Latino communities. Integration strengthens community partnerships, which are key drivers to success.

Six participants (40%) voiced the need to incorporate the promotora model as the guiding principle and cultural bridge between the complex health care system and the Latinx community. The participants indicated the model's influence on Latino women's acceptability and participation in healthy lifestyles. Gabriela explained,

> I grew up here right in so many places. Sharing the same interest and issues helps to connect different people together, and they listen when I talk to them because we kind of speak the same language, not simply Spanish, but [the] same type of problems.

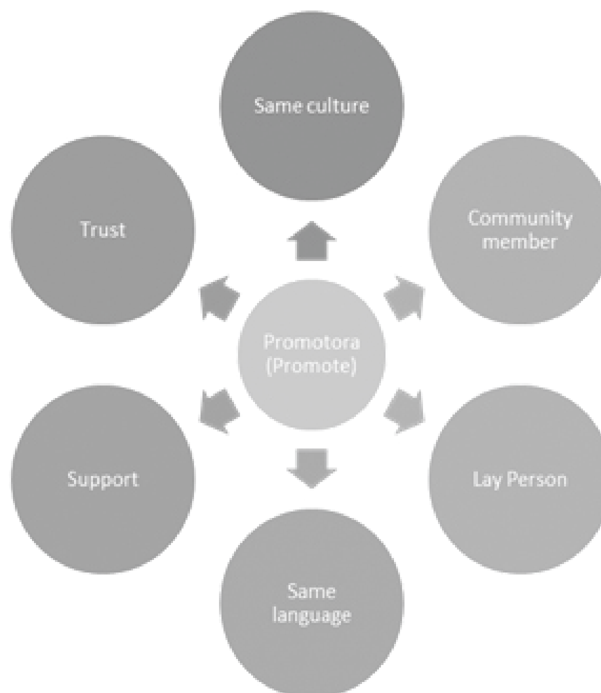
Six other women (40%) recounted how the model humanized the promotora as a community member and leader who was "one of their own" (Angel). All participants shared that the model determined promotoras' roles, reflective of community trends and easily adapted to individual situations. Eight participants added that researchers could benefit from incorporating the model because it empowers leaders to be culturally competent, fostering engagement and collaboration among the research teams and the communities. The 15 promotoras related shared experiences with pride, stressing that the model identified them as respectful community partners and put them in "the middle of it all" (Camila).

Through the interviews, I observed that commonality emerged as a factor that tied together the constructs of the promotora model and was a crucial component of interpersonal relationships because it showed the interdependent links between promotoras and the communities they serve. Miriam recounted, "We share common interests and goals, similar backgrounds. They have a lot to connect on. You know, we have similar issues. So, you know, they're kind of like families." Angel discussed how well the interactive promotora model facilitated their role as influencers of Latino women. She recalled a specific instance:

> Learning the same thing, you have the same problem with math and in the same culture. They're giving information over here about diabetes, and you say, "Let's go because I have people who also have diabetes." You think they go because you tell them about that, and it is because they get you.

Figure 5

Promotora Model: A Public Health Community Engagement Model



Note. Adapted from the Volunteer Training Network. King County Equity and Social Justice Initiative (2010). Developed for outreach into Hispanic communities.

The promotora model reinforced the multidimensional roles of promotoras and enhanced social support. There has been use of this model in previous promotoras-led interventions (Albarran et al., 2014; Koniak-Griffin et al., 2015; Larsen et al., 2013) and health disparity research, making it an appropriate background for this study. The promotora model aligned with this study's findings showing how promotoras, through their lived experiences as both community members and leaders, have been successful in influencing Latino women. The model (see Figure 5), adapted from the King County Equity and Social Justice Initiative (2010) and modified to reflect my data, shows that as

laypeople, promotoras leveraged the tenets of same language and same culture to provide support and build trust with positive outcomes in influencing acceptability and participation. My findings would strengthen the model as a viable tool for future health disparity research.

Theme 5: Environmental Influences on Adopting Physical Activity and Healthy Eating

IQ9: Describe any policies that help or hurt your success as a promotora ***leading a weight loss program: environment, food, marketing. What helped? Were there any barriers?***

Most participants were aware that the physical environment and social infrastructure were both assets and significant barriers to participation in PA and healthy diets. As important fixtures in the community both made up the environmental factors that reinforced promotoras' successes and challenges in influencing Latino women. A lack of infrastructure and easy access to fast foods created a sense of helplessness among promotoras as leaders. All 15 participants said the safety concerns in their communities were related to fear of gangs and perceived racism; therefore, the distance of and hours of operation of gym facilities and parks made it challenging for Latinas to engage in PA. Angelica stated,

> Our communities are just not safe because there are gang members and racist people, and it does not help when the parks, the gyms, even the community centers are far away or open only when we are working and caring for our families. Can you believe there is poor lighting on the streets, no pedestrian

> walkways, and sometimes I feel unwelcome when I go to the gym in another neighborhood.

Lucia lamented that having more fast food restaurants than grocery stores in their community drove unhealthy dietary behaviors and obesity. She said, “There are a lot of fast-food restaurants. So yeah, I was thinking back on the policies that put more fast food than grocery stores in my community and make our jobs difficult.” Alexandria expressed similar sentiments, identifying a need for

> More healthy grocery stores in our community to help them sustain the healthy foods because, in our communities, there are few grocery stores compared to fast foods. …When we go to the store with children, if you walk into the store, we go straight to the chips or cookies.

Six other participants added that their environments were not conducive for community walks because they were unsafe. Catalina explained, “We did everything in groups for support and safety.” Five shared that the grocery stores were not close, and a lack of transportation discouraged healthy lifestyles. Elena added that the “grocery stores are far away, and we need to make time to shop. Time is precious to us. Time and transportation make it hard, so we go to fast food to feed our kids”; similarly, Guadalupe said that fast food was “quick and easy for me.”

Subtheme: Inequity in Physical Infrastructure. Most of the women voiced strong feelings regarding inequity in physical infrastructure. These included the grocery stores, parks, pedestrian walkways, and community and resource centers that facilitate participation in PA and healthy diet. Two participants expressed frustration with inequity

in the environments where they lived and worked. Catalina explained, “Rich people on the other side of the community have more grocery stores [and] lots of organic foods. She continued, “We are being set up for failure in our environments, and they say you have to make up healthy choices for yourself.”

In implementing healthy nutrition programs, promotoras are responsible for educating Latino women on label reading, shopping, and food storage. Five participants expressed difficulty fulfilling this role due to limited grocery stores in the neighborhood. Camila remarked, “Teaching women to read labels and to shop is not easy. You cannot just walk to the store nearby to do it, and all the stores in our neighborhood are smaller and cannot accommodate all the women.” Catalina summarized the environmental barriers:

> You can tell something is wrong. [There are] no parks for safe walk[ing] at this digital age. Business people take advantage with many fast food [restaurants] close by my house. [They] manipulate [us] with poor foods. Processed foods [are] not organic [but] say “organic” because my people don’t read. They only consume raw drugs. [There is a] lot of homelessness. It is poverty, and we cannot be healthy like this.

Luciana went further, discussing the deceitful business practices in their community.

> Because the product is organic or fat-free or low-fat, they got enough and don’t do their research. Sometimes they buy meat, and it says sugar-free. They are going to buy it, even though they know that meat doesn’t have sugar in the farm.

She did not appreciate that businesses take advantage of Latinx who fail to read labels and instead trust a product's claims.

Regarding social infrastructure, participants identified communication networks as essential for reaching communities where public health officers and researchers have struggled. For example, six participants admitted to harassing the women to attend classes, a necessity due to "people moving and changing phone numbers often" (Camila). Four participants said their communities were more transient than reported due to immigration, work, and family ties; therefore, it was necessary to understand these barriers and minimize factors leading to unhealthy behaviors. All 15 participants indicated that promotoras had to continuously track down people for follow-up and education. Alternatively, resource centers and clinics played significant facilitating roles, making it easier to share information and follow up on health challenges. Catalina explained, "Fabulous resource centers and clinics offer programs that motivate people to live healthy lifestyles." She added that, similarly, clergy, community leaders, and charity organizations, such as Catholic Charities, were part of the critical social infrastructure and spheres of influence on the interactions between promotoras and Latino women.

Subtheme: Neighborhood. According to the promotoras, the neighborhood provided the infrastructure that reinforced and facilitated healthy lifestyles. As part of the social infrastructure the neighborhood contributed the social capital that reinforced collective efficacy and influenced healthy lifestyles**.** The communal activities and relationships built resilience and facilitated acceptability and participation. All 15 participants verbalized the interactive and reinforcing influences of their neighborhoods

as a people despite the environmental barriers they encountered. Lucia said, “Though [there is] no safe space to walk and play, our neighborhoods are hubs of practice and education.” I noticed recurrent stories involving using neighborhood parks for group walks and dance and neighbors’ homes for classes when needed. Four participants discussed using the neighborhood markets to share information through flyers and word of mouth. Luciana explained, “We place information on a resource table in front of the market and approach people to show them how to shop when they go inside. Maybe it can help.” Neighbors care for one another. Isabelle indicated, “It is an expectation to be caring and respectful because we know their problem with family and childcare and cost of food.” Catalina added, “You share conversations ‘Hey, how are you doing?’—to encourage and support.” The feelings that work and caring for multigenerational and extended families took precedence over health created additional barriers to Latinas’ access, therefore neighbors were important support. Elena and Angelica provided space at their homes for dance and education to raise awareness of current issues. For example, all of the women stated that when COVID hit the communities, promotoras became the frontline educators. Catalina explained,

> Like when COVID started, we [brought] people to talk about how to be safe, wear masks, and share where to take the vaccine. We do [the] same for healthy foods. [We] show [them] how to cook, read labels, [and] store the food because we know that food is expensive.

My understanding was that promotoras used neighborhood familiarity and word of mouth to influence acceptability and participation in healthy lifestyles at the backdrop

of environmental barriers. Isabelle encouraged neighbors to share and help each other, saying, for example, “Ask your neighbor for salt or oil if you need it.” She acknowledged that most people in the neighborhood were poor, but some had a bit more to share than others, which was important because “we live in a food desert, and no one should go hungry if others can help.” I could deduce from the interviews that neighborhoods provide a sense of togetherness as neighbors serve as each other’s keepers.

Theme 6: Cultural Values/Norms Enhanced Trust and Cultural Acceptability

IQ11: Tell me how you have been able to influence Latino women to participate in physical activity and diet weight loss programs. What helped? Any barriers? What about the impact of being a member of the community? Have you always succeeded? If not, why not?

Participants recognized that incorporating cultural values in practice reinforced trust and contributed to promotoras’ success in influencing the acceptability of PA and diet programs. Latino cultural values characterize the community. Promotoras are uniquely situated to promote and incorporate these values in prevention and implementation programs, understanding and modeling the values in ways that no other public health provider could. All 15 participants echoed that the expression of cultural values reinforced trust, thus improving confidence and self-efficacy in time management, balancing family responsibilities, and taking care of themselves.

The complexity of the Latino community was a comment repeatedly mentioned by all 15 participants. It was clear that their unique abilities to display appropriate cultural norms, in addition to their excellent competence in accessing cultural values,

played a part in their roles as influencers of Latino women. Catalina remarked, “The Latino community is complex, and this group of people is more susceptible sometimes to problems, and it takes a special person to talk to them.” All 15 promotoras used cultural values, such as *familismo* (friendship), *respeto* (respect), and *personalismo* (personalism), to recruit and retain Latino women. Three participants shared they reinforced friendship by placing the family at the center, providing community support, and calling each other by name. These actions made the leaders personable, which was a motivating factor for Latino women to engage in healthy behaviors. Two participants emphasized respect during community interactions, remaining aware of how to approach people. Providing special consideration for the elders, leaders like promotoras, pastors, and doctors were valuable.

Meanwhile, all 15 participants agreed that flexibility and support emerged as facilitating factors. Additional considerations helped with community participation according to seven participants, such as “classes and group walking scheduled around the time when women can come, they can bring their children in their own time for biking and biking as a family affair to help with the time problem” (Julieta). She continued, “Sometimes the class is going to be at a bar with my schedule and some women.”

Sonia and Isabelle emphasized the value of familismo, which reinforced loyalty to the family, cooperation among communities, and interdependence amid crises, such as COVID-19. Overall, the 15 participants echoed togetherness as a value to model healthy behavior and education. Angel stated, “I’m just trying to encourage them to follow good

habits, so I follow good habits. I tell them to go together, and we go together to classes to walk because we have [the] same problems."

From the interviews, I gathered that togetherness was a positive value, as the women gathered for education. Isabelle emphasized having a group of promotoras together around "grocery stores, approaching women to educate [them] on healthy habits." She continued, "I believe togetherness and sharing helps [*sic*] me to do my job in recruiting and getting the people to trust me, though I think that the custom of elderly being feared and not approached is a barrier to me sometimes."

The interview transcripts also showed an emphasis on the value of trust and confianza. Eight participants shared that Latinos listen and participate in PA and diet programs led by promotoras because they have more confianza in the promotoras than public health workers. All 15 participants communicated the importance of incorporating cultural values to influence and reinforce healthy lifestyles. They expressed the need to be friendly and relatable, have a positive attitude during implementation, and even use culturally relevant cartoons and pictures for education to reinforce behavior. Promotoras added that their knowledge of cultural values, sensitivity to spiritual beliefs, and community dynamics, such as sharing information on healthy diets, PA, obesity, and diabetes burden to counter negative customs and beliefs, emerged as successful strategies for researchers when working with the Latinx community.

Gabriela was nostalgic about the historical context and traditions of the Latino community having strength and confidence in leading healthy lifestyles; however, she lamented that community members did not draw upon these traditions as they should. She

further expressed that public health leaders and researchers ought to incorporate culturally relevant traditional healthy meals as options to improve healthy diets. Gabriela said, “History tells us about the strength of our people, and we can use it to our advantage to make people feel comfortable and confident.” She added,

> It was a very ancient church habit, and we used to eat a lot of organic foods, so we should go back to the basics, I feel. [I] tell the women that we are a strong race. We used to have very good nutrition and healthy habits because our ancestors had very good habits. That’s the way I try to follow [a] healthy lifestyle and teach other women to do [the] same. We are a strong race.

Theme 7: Schools/Workplace as Hubs of Influence

IQ11: Tell me how you have been able to influence Latino women to participate in physical activity and diet weight loss programs.

Promotoras believed that schools and workplaces offered opportunities for a flexible, individualized, and tailored approach to reach Latino women and influence acceptability and participation in PA and diet programs. It was clear from the interviews that these locations played crucial roles in promotoras’ success, serving as hubs for communication, recruitment, and practice. They understood that Latinas work multiple jobs to care for their families, with the sole responsibility of taking their children to school. Therefore, promotoras planned to bring the program to the women, improve reach, and facilitate participation. Because children spend a lot of time in school, the participants used that opportunity to reach parents through emails and flyers. Ten participants indicated that the Healthy School Resource Officer helped reinforce healthy

behaviors in the students expecting that, culturally, the children would transmit these behaviors to the parents. All participants talked about their creative recruitment strategy as they waited for parents to drop off their kids and then respectfully approached for program or community walk group recruitment. At times, they invited parents to dance classes at the time of drop-off, resolving the issues of transportation and time.

Understanding that cost, time, childcare, and transportation were barriers to participation in PA and diet programs, the 15 promotoras found ways to perform their roles remotely without disrupting family time. Julieta started a dance group after drop-off, which became very successful, growing from 10 to 80 women and lasting over 10 years. She explained, “Reaching Latino women where they are helps me to be successful. …They didn’t like to attend the program because of no time, so we make it comfortable with the schedule, the kids, and the whole family.” Lucia added,

> Time is limited and a barrier to healthy eating because these parents work all the time to care for their family. You don’t want them to leave their children and housework to attend these classes. I even ask them to bring their children to gardening and walking sessions.

To reinforce healthy behaviors learned from previous programs, eight promotoras shared they would routinely incorporate group walks, dance, and classes at work as opportunities to educate women on the burdens of obesity and diabetes and the benefits of healthy diets using traditional foods.

Data analysis of the interviews showed there was a challenge to locate sites for remote activities where the women lived, worked, and played; therefore, participants

found it helpful when the school provided space, completed the paperwork, and facilitated insurance payments. Six participants (40%) expressed that this gesture from the school supported their role while minimizing the cost of continuing the programs and the burden of paperwork. Julieta appreciated when schools "do all the paperwork. It makes it easier for you to do your job because the paperwork is a burden. I get very stressed because of the paperwork."

Eight participants reported using the workplace for information sharing, education, and practice opportunities. Valeria said, "We share common interests and goals, so [it is] easy to form groups at work for support…[where] women talk openly about mental health and the problems of abuse." My observation from the interviews was that workplaces became hubs of friendship where women learned and shared comfortably. According to Valeria, women in these spaces "learn to listen, to be patient, to work in teams, how to communicate well, manage stress, mental health, and manage conflict in the homes and communities." Elena added, "You know, women like *simpatia* [small talk] about their life and their home. They love it."

Theme 8: Perceptions of the Government as a Partner in Reinforcing Healthy Lifestyles

IQ9: Describe any policies that help or hurt your success as a promotora ***leading a weight loss program (environment, food, marketing.***

Pronotoras expressed mixed perceptions of the relationships and roles of government**.** Their opinions were divided because they needed these officials, yet they expected more support of their efforts to influence Latino women. Being advocates for

the community reinforced promotoras' influence on Latino women. Promotoras did not hesitate to seek help from the government as a valuable ally to influence healthy lifestyles. In guiding Latino women to access financial support from the government, including food stamps, SNAP, and WIC, participants described developing commonality and common interests. All 15 participants held strong feelings about the government's role in their communities. The opinions were mixed: Five identified government actions as facilitators to reinforcing healthy lifestyles; in contrast, five felt government actions were barriers to their jobs as promotoras. Catalina expressed concern with communities lacking knowledge of applying for food programs, such as food stamps and vouchers, asking, "Why does the government make it so complicated to get help?" She added, "It makes it harder for promotoras to do their job. I volunteer to help the women and children to complete the paperwork because they need it." Four women identified poverty as a barrier that made it difficult to be healthy. Three participants perceived that the government bore some responsibility for low-SES citizens' health because families need to work very hard to keep up and avoid expensive foods due to limited funds.

Subtheme: Financial Support. Promotoras were aware that financial support was a bridge to sustainable healthy lifestyles and lobbied for funds on behalf of Latino women. Nine participants (60%) identified a need for financial support for schools to provide more healthy food choices "School lunches [are] not healthy; the government need[s] to do something" (Elena)—and for families to afford healthy foods and childcare. Two other participants said their communities were food deserts, which should concern the U.S. government and society due to the long-term effects on obesity, overall cost, and

health disparities. Five promotoras indicated that food policies encouraged healthy options. Catalina remarked,

> The WIC program is just being able to buy healthy foods to help me actually do my job as a promotora. In our community, I help them to apply for the program and how to manage the money to buy healthy foods.

Julieta said, "The government's decision to send that $300 helped my work with the community. Yes, the government relief helps." Gabriela added, "Even SNAP helps with hunger."

On the other hand, two participants strongly felt that the government provided unhealthy foods from these programs, including distribution through food banks and school lunch programs. Valeria said, "The issue is the food comes prepackaged with unhealthy foods from the food distribution center and no way to make it healthy." Elena added,

> WIC, SNAP helps with hunger and not with healthy foods. The government program for immigrants—We saw the women use WIC to buy unhealthy foods, less fruits and vegetables. They buy what can fill their families and last longer to make up for the time when there is no money for food, and they don't waste it for expensive foods, like fruits, vegetables, meat, and fish.

Subtheme: Mistrust Related to Immigration. The majority of participants (87%) cited mistrust and suspicion of the government as barriers to program recruitment and participation. Angel related, "The culture makes them more suspicious of the government, and maybe fear of immigration, and they don't talk, and I keep going and

being persistent until they believe me." The same participant discussed how societal fear and mistrust of other people (which she acknowledged was common in most communities) and sales practices create barriers to recruitment. She explained, "There is fear of other people, so they don't trust us when we first approach them, and then they trust us when they know we are coming from the same community and not selling anything or telemarketing." Luciana stated, "The government is sometimes not very helpful. There is fear about immigration, especially when people are afraid they may be deported. They don't trust to participate in the classes. It is a big problem in our community."

Seven participants said that as a partner in reinforcing healthy lifestyles in communities, the government was not doing enough to combat unhealthy environments. Catalina stated,

> It is kind of hard to stay healthy in our communities sometimes because we are kind of bombarded by fast food restaurants and the media marketing us fast, unhealthy foods, and the government could really step it up to help us.

Although 12 participants voiced different levels of dissatisfaction with the role of the government, Alexandria shared that the government's recognition of promotoras as integral parts of community health and health care had increased respect, productivity, funding, and outcomes. She acknowledged, "Government and local leaders are beginning to acknowledge promotoras' work in the community, and it has been very helpful to talk to people with confidence and good self-esteem, and they become respectful of our work." Additionally, she called on the government to help fund promotora training

because of perceived inequity and inconsistency, saying, “Now that the government knows we are important, promotoras need more money for sure and to fund formal training for all of us.” I could deduce from the interviews that the mixed feelings toward the government created a sense of uncertainty and fear among the Latino community, as members became less engaged in lifestyle modification programs and more challenging for promotoras to influence participation.

Research Question

What are promotoras’ understandings of physical activity, healthy diets, and obesity, and how do they influence physical activity and dietary interventions among Latino women within the multilevel interactions of the social-ecological model?

This is a two-part research question. The first part relates to the knowledge, attitudes, beliefs, and customs guided by the intrapersonal level of the SEM conceptual framework. The second part focuses on “how” they influence Latino women. Interview questions elicited responses on promotoras’ lived experiences to include barriers, motivating and facilitating strategies, and coping mechanisms and other influences that contributed to their success in influencing Latino women. Following is a summary of the themes and responses to answer both parts of the research question.

I employed the phenomenological approach to explore promotoras’ lived experiences, using the SEM as a guide to understanding the enabling and reinforcing factors on the relationships with Latino women. To answer the first part of the research question, all 15 participants expressed adequate understanding and knowledge of PA, healthy diets, and obesity in addition to obesity burdens. Although their definitions varied

slightly—for example, Lucia identified obesity as “being fat,” while Isabelle described it as “having a higher body mass index [BMI] of over 25”—all participants reported that PA involved some movement and not living a sedentary lifestyle as well as healthy diets involving fruits, vegetable, vitamins, water, no soda, no chemicals, and no *churrors* (cornmeal). Participants stressed the value and adequacy of knowledge of the factors contributing to obesity, available programs, specific diets or PA, and the burden of diseases such as diabetes because it reinforced their confidence and empowered them to educate and influence Latino women. On an intrapersonal level, knowledge and awareness had strong motivating and facilitating influences over the relationships.

For the second part of the research question of how they influenced Latino women, all participants pointed to the promotora model as the central principle on how they lived and influenced members of this population. They explained that the root word of promotora is “to promote,” and they were all committed to supporting their community. Each participant lived and practiced daily according to the tenets of the promotora model: similar culture, same language, community member, liaison, trust, and layperson. The promotoras explained that these tenets humanized them; fostered a sense of togetherness, compassion, down-to-earth nature, and duty; and were strong facilitators in influencing Latino women to attend and participate in PA programs and healthy diet classes.

Additionally, the model defined their roles while fostering a sense of responsibility and flexibility to meet the community’s needs. Their multidimensional roles included amiga (friend), advocate, teacher, coach, emotional supporter, encourager,

leader, translator, community member facing similar challenges, role model, fundraiser, and many others. Through these various roles, promotoras had the credibility and familiarity required to influence Latino women in behavioral change.

Promotoras leveraged social networks and social support as strategies of influence. Aware of the cultural, environmental, and system and societal barriers, they partnered with families, churches, community organizations, schools, workplaces, and neighborhoods to build capacity and further their efforts. These locations became hubs of communication and practice. For example, they used schools to distribute flyers, send emails, make face-to-face invitations during drop-off and pickup hours, and hold classes and PA practice, such as dance. They creatively met the Latino women where they were to facilitate participation and create participant-centric positive experiences. Bringing the programs to the churches, neighborhoods, schools, and workplaces eliminated time, program cost, transportation, and childcare barriers. Promotoras explained that Latino women viewed them as a trusted voice because they cared and were compassionate. Furthermore, they stressed the value of involving the family in decision-making, as they understood the traditions of men and elders. This knowledge and engagement translated into acceptability, reduced attrition, and program participation.

At the community level, promotoras demonstrated that incorporating Latino cultural values influenced Latino women. Promotoras suggested that researchers include five values to successfully influence Latino women: simpatia, respeto, familismo, personalismo, and confianza. Simpatia (small talk) was important, especially during classes and group activities. Promotoras' awareness of community struggles provided an

opportunity for women to share struggles with domestic violence, children, and mental health. Participants added that Latinx do not trust health care professionals and that machoism kept them from accessing help. These classes offered ample opportunities and fostered trust within communities. Respeto is an ancient custom that promotoras used by respecting seniors and men as the heads of household. Participants felt it was easy to influence others when they did so with respect, calling men "*señor*" and women "*señorita.*" They knew how and when to talk to people. Familismo and personalismo added the value of friendship; along with confianza, the values reinforced trust, confidence, and familiarity, which was an important strategy.

Promotoras embodied a sense of pride and responsibility to educate and care for the communities. They all expressed love for and enjoyment in the role, as well as significant challenges to their multidimensional roles as community members and leaders. Challenges included inconsistency in education and training and a lack of defined roles and responsibilities, such as (a) balancing work with family commitments; (b) handling a perceived imbalance of power with men; (c) dealing with the emotional impact of hearing participants' problems, especially regarding mental health and COVID-19 deaths; (d) struggling with ethnocentric beliefs and discrimination from some providers; (e) dealing with the women's discouragement when not losing weight; (f) feeling disheartened by some women's cultural beliefs; (g) handling the lack of transportation for themselves and participants; (h) responding to paperwork burdens; and (i) managing the burden of data collection for program research. The women echoed that successfully influencing the community required awareness of these challenges and

limitations; therefore, they networked for support and self-care, practiced yoga and meditation, took time off when needed, and used schedules to manage their time. They truly loved what they did, and most asked rhetorically, “If we don’t do it, who will?”

Another finding was that the participants had mixed views of the federal government’s role. Although financial support, food banks, and programs such as SNAP and WIC were helpful to prevent food insecurity, there was a sense that the food was not healthy, which made promotoras’ jobs as influencers more difficult. Overcoming these barriers and building trust was challenging. As part of the community, promotoras had to build rapport and trust for community members to share their immigration status. They vowed to protect these women; for example, one participant advocated for health care coverage for individuals without legal status, a gesture that instilled trust.

The promotoras in this study discussed how they influenced Latino women’s acceptability and participation in weight loss programs focused on PA and diet. Despite the challenges encountered in their multidimensional roles, they remained self-aware, accessing strategies to help them cope because they were committed to supporting the community and willing to put others’ needs first. A few participants said they were not always successful, but they were persistent and did not accept rejection, which helped them move the community to action. Additionally, they discussed reinforcing factors at the intrapersonal, interpersonal, community, and societal, and policy levels of the SEM that aligned with the themes that emerged from data analysis.

A logical argument and the essence of promotoras’ experiences was to create change and action toward healthy lifestyles among Latino women regardless of

challenges. Through the phenomenological analysis (as indicated by Moustakas, 1994), I bracketed my beliefs, experiences, biases, and presumptions; reduced the data by deleting repetitive experiences, allowed for the free flow of information; and grouped participants' core experiences into themes. Finally, I combined what promotoras experienced (textual) with how they experienced it (structural) to arrive at the essence of their experiences influencing Latino women.

Summary

This study's findings showed that obesity disparities among Latino women are due to a combination of factors, including policy and systems, culture, environment, and behavior. The findings suggested that the promotora model is a viable tool to influence Latino women's acceptability and participation in PA and diet programs. The model showed how promotoras' roles as liaisons, advocates, teachers, friends, and fundraisers facilitated the influence of Latino women. The study indicated the reinforcing and enabling factors that influenced the relationship between promotoras and Latino women, creating networks and infrastructures for success. The factors included their knowledge of obesity, PA, and diet, which played a significant role in their ability to influence acceptability and participation. For example, they were aware of how multiple levels of influences reinforced unhealthy lifestyles, such as individual barriers from misconceptions of obesity, cultural barriers about thinness, machoism, and embracing obesity as healthy.

This chapter presented the data collection and analysis processes used to enable the emergence of themes from participants' responses. Phenomenological qualitative data

analysis involved suspending preconceptions, biases, experiences, and emerging thoughts. I also shared how I coded the transcripts using NVivo QRS. Furthermore, I presented data from the pilot study and details of the participants as individuals and as a group of Latino women who are promotoras, noting their demographic information.

Also in Chapter 4 was evidence of trustworthiness and application. The findings suggested that through the promotora approach (promotora model), promotoras influence Latino women to participate in lifestyle modification programs. Despite challenges, promotoras were able to navigate the complex systems; even when they were unsuccessful, they never quit because they loved the job and felt a sense of urgency and responsibility for their communities.

In Chapter 4, I highlighted the lived experiences of 15 participants who were promotoras aged 18 to 65 years, lived in the Prince Georges County, Montgomery County, Frederick County, and Washington, DC, areas, and had worked across the United States for at least 5 years. The semistructured interviews were appropriate to capture the interactions with Latino women, thus revealing the true essence and meaning of the relationships. A summary of the themes that answered the research question on promotoras' knowledge and how they influenced acceptability and participation in PA and healthy diets through their lived experiences follows.

- Theme 1: Knowledge/Awareness Facilitated Acceptability and Participation of Obesity, Physical Activity, and Healthy Eating. Participants expressed adequate understanding and knowledge of PA, healthy diets, and obesity in addition to obesity burdens, which enhanced their confidence. Many felt that a

lack of knowledge reinforced beliefs, misconceptions, and attitudes toward obesity and thinness.

- Theme 2: Promotoras' Roles/Strategies as Influencers of Acceptability and Participation. Participants understood that their lived experiences through their roles built trust and reach to influence Latino women.
- Theme 3: Perceived Attitudes/Beliefs and Customs Regarding Physical Activity and Healthy Diet Facilitated and Constrained Participation. Most of the women knew that Latino women's perceived attitudes, beliefs, and customs toward obesity, PA, and healthy diets created barriers as well as facilitated the acceptability of lifestyle modification programs.
- Theme 4: Social Networks/Social Support Fostered Community Partnerships, Motivated Behavior Change, and Facilitated Participation. Participants knew that social networks afforded promotoras the capacity to influence, while social support motivated and facilitated Latinas to participate in PA and diet programs.
- Theme 5: Environmental Influences on Adopting Physical Activity and Healthy Eating. Most of the participants identified physical environment and social infrastructure as both assets and barriers to participation in PA and healthy diets.
- Theme 6: Cultural Values/Norms Enhanced Trust and Cultural Acceptability. Participants recognized that incorporating cultural values in practice

reinforced trust and contributed to promotoras' success in influencing the acceptability of PA and diet programs.

- Theme 7: Schools/Workplace as Hubs of Influence. Promotoras believed that schools and workplaces offered opportunities for a flexible, individualized, and tailored approach to reach Latino women and influence acceptability and participation in PA and diet programs.
- Theme 8: Perceptions of the Government as a Partner in Reinforcing Healthy Lifestyles. Promotoras expressed mixed perceptions on the relationships with and role of government in addressing obesogenic environments.

Chapter 5 presents a deeper description of the data collection and analysis processes. There are discussions of the findings, interpretation of results, limitations of the study, recommendations, implications for social change, and conclusions from the study's findings.

Chapter 5: Discussion, Conclusions, and Recommendations

The purpose of this qualitative study was to examine how promotoras influence the acceptability of and participation in PA and dietary modifications among Latino women. This was a qualitative phenomenological study using semistructured telephone interviews to better understand participants' lived experiences and interactions with Latino women. I explored the influential forces within SEM constructs and revealed the interactive and reinforcing effects on the relationships between promotoras and Latino women. The findings have helped me to better characterize the promotora phenomenon as a viable approach to improve acceptability and participation in PA and diet programs.

Latino women represent 25% of the female population in the United States and 52% of the fastest growing and largest ethnic groups (U.S. Census Bureau, 2010). Accordingly, it is imperative to design culturally appropriate weight loss programs that will contribute to positive obesity outcomes. Persistent obesity disparities warranted exploring novel strategies, such as the promotoras approach, proven to be highly effective in influencing program participation among Latino women. Past researchers have answered the "what" and "why" questions to promotoras' success and shown limitations and challenges to this approach. The present study added promotoras' voices to better understand how they navigate the cultural and contextual structures with the potential to improve obesity outcomes and reduce disparities. Chapter 5 presents the data collection and analysis processes, including the findings, interpretation of results, limitations of the study, recommendations, and implications for social change.

Interpretation of the Findings

Notable findings highlighted the behaviors surrounding food traditions and customs in relation to the influences of culture, acculturation, multiculturism, and systems. Most Latino traditions incorporate the sharing of food during events, with healthy foods, fruits, and vegetables freely available in the countries of origin. Promotoras emphasized the importance of cultural sensitivities, such as calling each other by name, respecting elders, and remaining cognizant of program lengths, in successfully influencing program acceptability. Other findings included the environment being a barrier due to the lack of adequate grocery stores and pedestrian walkways. Additionally, identifying barriers, such as food costs, transportation, and childcare, that prevent participation empowered promotoras to develop strategies to motivate, support and facilitate action. Also, the study's findings showed that the fear of deportation due to immigration status negatively impacted Latino women's participation in programs.

Another finding of the study was that communities and neighborhoods were useful practice hubs as promotoras disseminated information through schools, churches, grocery stores, and workplaces and within the community. Findings indicated that social networks and social support were critical to the role and success of promotoras influencing Latino women related to partnerships, family, capacity-building, and resilience among Latino communities. An additional finding was that incorporating cultural values into their day-to-day practice was an effective strategy promotoras used to influence Latino women.

Fifteen participants with various characteristics took part in this study (see Table 1). Collectively, they were all female promotoras with mean age and mean years of practice. Participants currently resided in Maryland, Washington, DC, or Frederick Counties but had lived and worked all over the United States in several research and community programs focusing on PA and healthy diet for weight loss and overall healthy lifestyles. An iterative data analysis process guided by Creswell (2013) and Saldaña (2016) led to the emergence of eight themes and multiple subthemes reflecting promotoras' lived experiences, with supporting evidence on how they interacted and influenced Latino women.

Discussion and Analysis of the Findings

Weight loss interventions focusing on PA and diet and designed for the general population have been less effective in Latino communities, indicating the need to identify more culturally congruent interventions (Lindberg et al., 2013; Petersen et al., 2019; Seguin et al., 2019). Whereas researchers have expanded the understanding of barriers and culturally relevant interventions (e.g., D'Alonzo & You, 2020), persistent obesity disparities indicate the value of novel strategies, such as the promotora model, to bridge the gap (Palmer-Wackerly et al., 2020). Oliver et al. (2015) found that health care providers and researchers often reference CHWs (i.e., promotoras); therefore, it was relevant to academic research to include these workers' voices and lived experiences. This study was unique in that it was an exploration of the lived experiences of promotoras in their own voices. The findings add to the growing body of evidence and

knowledge supporting the effectiveness of integrating promotoras through the promotora model as viable influencers of acceptability among Latino women.

Schools/Workplace as Hubs of Influence

Key findings from the present study suggested that promotoras provide an individualized approach tailored to participants' needs and preferences. They used various means of recruitment, including face-to-face interactions during school drop-offs and pickups, presence at grocery stores, home visits, appearances in neighborhoods and at community events, and emails sent from schools. These findings confirmed and reinforced similar strategies in previous studies that facilitated recruitment and retention (Dietrick et al., 2010; Vega-López et al., 2015). New knowledge in this study included the use of creative strategies during drop-off and pick-up of school-aged kids to reduce childcare, transportation, and cost barriers. The promotoras held programs at different sites, including churches, neighborhoods, community centers, schools, grocery stores, clinics, and other accessible locations. This was similar to findings from D'Alonzo et al. (2017), whereby decentralization of program activities increased retention and participation in weight loss programs focusing on PA and diet to address obesity. Participants surmised that eliminating or reducing barriers to participation would encourage Latino women to engage in activities, with reduced attrition and positive outcomes. All participants (promotoras) confirmed that influencing Latino women to accept and participate in programs required flexibility in program implementation and a strong sense of service to their people beyond all obstacles.

Knowledge/Awareness of Obesity, Physical Activity, and Healthy Diet

Previous studies have shown strong associations between knowledge and self-efficacy (Sanchez et al., 2021). Findings from this study confirmed that having knowledge and awareness of obesity, PA, healthy diet, and disease burdens empower Latinx to change, correcting misconceptions and boosting confidence among promotoras to influence Latino women. All participants reported acquiring extensive knowledge through their practice that enhanced their effectiveness in influencing Latino women. They were all knowledgeable about obesity disparities, risk factors, and the importance of maintaining healthy diets and PA as modalities to foster weight loss.

Study participants shared that having knowledge on obesity and healthy lifestyles did not readily translate into influencing Latino women because of the lack of confidence. Promotoras' experience ranged from 6 to 20 years, which helped build their skills. In addition, they had gained knowledge as teachers, in time management through their years of practice. Some of the participants added that although they were Latino women, the training and years of practice taught them how to make obesity, PA, and diet education material culturally competent for greater acceptability. Similarly, Koskan et al. (2013) and Matos et al. (2009) suggested the need to train promotoras on channeling cultural competence because they represent trust, community empowerment, social support, and a bridge to the Latino community. The women in this study shared that lack of knowledge contributed to barriers to acceptability, such as shaming, discouraging thinness, and celebrating obesity. Parra-Medina & Hilfinger (2011) found that poor knowledge of the

types of PA led to a lack of participation in PA programs and higher attrition rates. Promotoras reported the same experiences regarding lack in knowledge and participation.

Participants said the training they received before leading interventions provided necessary skills to deliver obesity, PA, and diet interventions in the communities. Knowledge about team-building enhanced their confidence in forming and leading groups and the necessary structures that improved capacities to influence behavior change. Similarly, knowledge of PA and healthy diets increased promotoras' self-efficacy to confront and advocate for healthy environments within the complex social networks where Latino women live.

Researchers have found that increasing knowledge and awareness regarding obesity-related risk factors improves the adoption of healthy lifestyles (Cheun & Loomis, 2018; Koniak-Griffin et al., 2015; Sanchez et al., 2021). All participants in this study shared new information regarding the relevance of knowledge adequacy and the value of knowledge to be meaningful. The women indicated that providing Latino women with knowledge about healthy diets without showing them how to prepare healthy meals was inadequate and contributed to the lack of acceptability. Therefore, they stressed the importance of knowledge to accomplish what is necessary, such as weight loss and positive obesity outcomes. For example, promotoras provided samples of healthy meals using traditional ingredients, sharing charts about portion sizes and healthy height and weight for Latino women. These tips and practical knowledge translated into trusting relationships as Latino women fostered healthier lifestyles without shaming or fearing the loss of traditional foods.

Promotoras' ***Roles and Challenges***

Promotoras are female community members without formal education who have been particularly effective in improving health care knowledge and outcomes among Latinas (Cheun & Loomis, 2018; Koniak-Griffin et al., 2015). They often possess similar characteristics and challenges as the community they serve, such as language, culture, poverty, immigration, and racism, and are focused on addressing health disparities in their communities (Katigbak et al., 2015; Keblusek et al., 2017). Findings from this study supported research showing that promotoras are crucial links between health care and public health and Latino communities. All participants shared their unique and varied roles, providing physical, financial, and emotional support while serving as teachers, amigas, coaches, and advocates. Some backed pedestrian walkways to improve community exercise and safety, some identified the need for more grocery stores to improve access to healthy foods, and others contributed to legislation targeting crime in the community. The promotoras in this study were Latino women who considered themselves as a *comadre* (kinswoman), *buena profesora* (good teacher), cultural mediator, and role model, identities in line with their cultural traditions (Arredondo et al., 2016). They engaged in and facilitated connections and social networks between themselves, their patients, and community health care providers. Participants also confirmed that promotoras are *comadres* (best friends) or *gran amigas* (special friends), and these roles facilitated acceptability among Latino women.

Drawing from a wide range of skills, knowledge, and cultural competence, promotoras facilitate access to services for individuals and improve the cultural

appropriateness of service delivery (Deitrick et al., 2010). Flores et al. (2021) stressed the importance of examining promotoras' voices to fill the gap in the literature. The authors focused on the impact of promotoras' roles on Latino women who are promotoras, finding that most expressed their love for the job, that they were God-given to the Latino community, and they could not visualize themselves working other jobs. The present study added to and expanded upon the growing knowledge of the promotora phenomenon by exploring the role, the impact, and the success in influencing Latino women's acceptability and participation in lifestyle modification programs. Palmer-Wackerly et al. (2020) identified the need to add promotoras' voices to the literature because extant research on their successes and challenges had been from the people with whom promotoras interacted, including researchers, health care leaders, and program participants.

According to Palmer-Wackerly et al. (2020) and Orpinas et al. (2020), promotoras experience significant work-related and training challenges in their journeys as valuable public health partners. The present study's findings confirmed similar challenges, including inconsistency in education and training and paperwork burden. Promotoras' training ranged from 48 hours during research and intervention programs to 4 years of undergraduate training as a health educator. Additionally, the study confirmed findings from Orpinas et al. (2020) that showed promotoras faced day-to-day challenges balancing work with family commitments, earning minimal pay, being undervalued by some organizations and individuals, managing a perceived imbalance of power with men, dealing with a sense of discouragement when not losing weight, feeling disheartened by

the cultural beliefs of some program participants, and providing transportation for themselves and the community to encourage program participation. Despite these challenges, all participants expressed enjoyment, strong motivation, and significant benefits to their personal and professional roles. They appreciated the unique opportunities afforded them to reach the Latinx community and impact knowledge and awareness to reduce disease burden and disparities.

Perceived Attitudes/Beliefs and Customs Regarding Physical Activity and Healthy Diet

This study showed that culture, acculturation, and multiculturalism impacted PA and healthy diet outcomes. All participants discussed the Latino community's mixed feelings and misconceptions about weight loss, creating barriers to participation in healthy lifestyles. This study included a detailed exploration of barriers that have prevented weight loss. Participants shared the cultural problems of shaming people who lose weight, considering thinness less desirable, and celebrating obesity by multiple generations of Latinx. Many studies have shown that women are conflicted about the desirability of weight loss based on the Hispanic culture, with thinness misunderstood as a symptom of illness, frailty, or low sexual attractiveness (Cachelin et al., 2002; Lindberg et al., 2013; Lindberg & Stevens, 2011; Tung & McDonough, 2015).

Similarly, participants noted that acculturation, or the individuals' length of time in the United States, influenced diet, leisure-time PA, and sedentary behavior among the Latinx community (Arredondo et al., 2016; Benitez et al., 2016; Chaplain et al., 2020). All 15 participants acknowledged that coming to the United States accelerated obesity because there are so many more fast foods than in their countries of origin. The

prevalence of unhealthy foods made it difficult to follow a healthy diet in the United States, as most immigrants wanted to assimilate and adapt to the American foods, forgetting their traditional fare. Participants in previous studies had acknowledged that Latino family foods needed to be healthier in their new country (Villeges et al., 2018). Over 40% of participants emphasized that acculturation has the benefit of ensuring immigrants are not hungry while also facilitating access to unhealthy foods; hence, there is a need for a balance, as shown by Arredondo et al. (2016). Additionally, similar to my findings, Chaplain et al. (2020) and Joseph et al. (2018) found a link between higher acculturation levels and limited PA, as Latino women who were immigrants or daughters of immigrants reported a greater reliance on transportation in the United States. In their home countries, they walked everywhere: attending church, shopping daily at the market, and visiting family; in the United States, they could not go anywhere without depending on their spouses. This lack of mobility negatively impacted participation in programs and overall PA.

Parra-Medina & Hilfinger (2011) reported similar findings from the ENLACE study, with Latino women explaining that migration contributed to less motivation to exercise and participation in leisure-time PA. The participants had walked daily to local bakeries and visited family and markets; in the United States, walking was no longer a source of PA. The promotoras in this study shared that being aware of these barriers as community members and leaders enabled them to design successful strategies, such as neighborhood walking groups, to foster community walks similar to practices in the various home countries. These strategies built trust and facilitated participation.

This study also yielded insights into the challenges of multiculturalism. Although participants embraced and took into consideration multiculturalism during interventions, most voiced that cultural pluralism, or diversity (as within a society, an organization, or an educational institution, as described by Lindberg et al. (2013), made it difficult and more expensive to influence participation in PA and healthy diets. Similar to past studies, most promotoras stressed not considering Latinos and Hispanics as homogenous when designing culturally appropriate programs. Barriers and misconceptions pertaining to PA and dietary practices surrounding obesity made Latino women less inclined to appreciate the seriousness of obesity, consider the associated comorbidities, and express the desire to lose weight (Chaplain et al., 2020).

Social Networks/Social Support

In this study, promotoras leveraged social networks and social support as strategies of influence. Aware of the cultural, environmental, and societal barriers, they partnered with families, churches, community organizations, schools, workplaces, and neighborhoods to build capacity and further their efforts. These locations became hubs for communication and practice. According to Brown et al. (2018), peer support and partnership (*comadres, gran amigas)* have shown success in motivating behavior change. Similarly, the promotoras in this study explained that individuals who choose to lose weight are most likely to succeed with support. Promotoras understood the benefits of collaboration to bring everyone together in long-term efforts to build stronger communities (Sanchez et al., 2021).

This study further indicated that effectively influencing Latino women required appreciating the breadth of the challenges they faced and the support they needed. As Latino women living in the community and facing similar emotional, childcare, time, transportation, and stress related to other environmental challenges, promotoras forged the necessary relationships for ongoing social support. Ingram et al. (2007) defined social support as the “availability of people whom an individual trusts, on whom they can rely, and who make them feel cared for and valued as a person” (p.161). Some researchers showed how perceived social support by promotoras effected behavior changes and clinical outcomes (Ravindran, 2014). This study’s participants felt they were in a better place to provide this support and focus on building lasting relationships for ongoing support within the complex networks where Latino women live.

This study’s participants provided and nurtured social support as described by Koniac-Griffin et al. (2015), including emotional support during COVID-19 and weight loss struggles. They also supplied informational support on completing forms for financial benefits, WIC, and SNAP. They incorporated the tenets of the promotora model (Albarran et al., 2014; Koniak-Griffin et al., 2015; Larsen et al., 2013) as they helped Latino women navigate the system of health care access and migration to a new country. They provided tangible support on coping skills with social isolation and physical support with childcare and transportation to PA and diet programs. These efforts built trust and reinforced promotoras' abilities to influence participation. Lucia stated, “I believe that people knowing there is someone that cares about them brings good feelings, so they do what you tell them to do.”

The sharing of food, services, and stories to encourage others is important in Latino communities (Agne et al., 2012). The women in this study advanced the idea of supporting one another; as one explained, women were willing to share salt or food to ensure no one went hungry. Hurly and Hu (2015) posited that the SEM approach to lifestyle and behavioral modification integrated the social environment with the social networks of family, friends, worksites, culture, and organizations, reinforcing acceptability and participation with sustained outcomes.

Based on an awareness of food insecurity issues, promotoras leveraged their social networks and mobilized social support to combat the fear of community members going hungry. Sanchez et al. (2021) found that food insecurity from the stress of not having enough money to purchase food increased the consumption of sugary drinks and exacerbated obesity-related and overall poor health outcomes among Latino women. Similar to this study, the promotoras in Sanchez et al.'s research used their cultural sensitivities to facilitate Latino women's adoption of healthy lifestyles. The promotoras succeeded because they were available, communicating secure and comfortable feelings that motivate others.

Environmental Influences

The physical environment and social infrastructure emerged as significant barriers to participation in PA and healthy diets, making the participants' jobs as promotoras more difficult. The participants lamented having more fast food restaurants than grocery stores in their community, driving unhealthy dietary behaviors and obesity. All identified inequalities of physical and social infrastructure whereby communication was difficult

among Latino communities due to frequent moves and phone number changes because of work and family pressures. The social determinants of health contributing to obesity disparities have shown correlations with neighborhood-built environments (Hurly & Hu, 2015). Barriers related to a lack of park space, healthy food access, and walkability contributed to lack of PA and healthy diet with worsening obesity disparities. Lee et al. (2012) and Parra-Medina et al. (2011) found that environmental influences, such as the lack of pedestrian walkways, traffic lights, crossing guards, and bike paths in areas where Latino women live, negatively impacted the ability to adopt leisure PA. Promotoras who were part of the community encountered similar barriers, and organized neighborhood group walks to motivate one another. This study's participants believed the government could play an important role in regulating fast foods and promoting grocery stores and walkable communities for healthy lifestyles.

Participants confirmed these findings related to environmental barriers. Villeges et al., (2018) found similar barriers to food availability contributed to lack of participation in healthy lifestyles. Through their lived experiences, they provided unique strategies to recruit and retain Latino women in lifestyle modification programs by reducing barriers and attrition. Suggestions included providing individual resources, tracking down dispersed populations, staying connected with those changing phone numbers through partnerships with families and communities, building trust, and advocating for Latinos who did not participate or access care due to fear of deportation (Seguin et al., 2019).

In this study, the neighborhood emerged as a relevant social infrastructure that influenced healthy PA behavior and provided needed social support through relationships and social interactions. Promotoras leveraged their neighborhood knowledge to influence participation by offering support with childcare and transportation, bringing programs to the neighborhood to address issues of time related to feelings of overwhelm with home and work responsibilities. These strategies reduced barriers, which motivated and reinforced participation among Latino women. Parra-Medina et al. (2011) found that when barriers are addressed, Latino women are more likely to participate. When promotoras led PA interventions, they found several factors contributing to lack of participation, such as the dominance of work and family responsibilities, lack of time, social isolation, absence of social support and social motivation, and costs of childcare and transportation. Overcoming these barriers by employing promotoras added layers of social support and improved PA (D'Alonzo et al., 2017). The promotoras in this study indicated the need to address these barriers to improve obesity outcomes. Contrary to Parra-Medina & Hilfinger's research, this study's participants did not express feelings of social isolation and lack of social support. Instead, they identified the need to acknowledge these feelings, get needed support, and to participate in group programs with other Latino women. Participants discussed their abilities to bring the community together to create lasting relationships and ongoing social support.

Cultural Values as Motivators

In this study, the promotoras demonstrated that incorporating Latino cultural values influenced Latino women. The first value was simpatia (small talk, politeness,

pleasantness), especially during classes and group activities. Through their awareness of the community struggles, promotoras could give women opportunities to share issues of domestic violence, problems with children, and struggles with mental health. Latinx do not trust health care professionals; even worse, machoism keeps them from accessing help. These classes offered ample opportunities and fostered trust within communities. Another value, respeto, is an ancient custom promotoras used by respecting senior citizens and men as the head of the household (Arrendondo et al., 2016). Promotoras found it easy to influence others when doing so with respect, calling the men "*señor*" and the women "*señorita*." The participants knew how and when to talk to people. Other values stated by participants included familismo and personalismo, adding the value of formal friendship. The cultural values of respeto, simpatia, and personalismo guide interpersonal interactions among immediate and extended family members (Edwards & Cardemil, 2015). Promotoras also expressed confianza in their positions as personal advisors on health and wellness, which translated into cultural confidence. The value of familismo offered opportunities for promotoras to play mother and father roles to Latino women when necessary. Among immigrant families, parents or children are sometimes not yet in the United States, leaving a void (Flores et al., 2021). Promotoras filled the absence of companionship and social and relational support, providing the interpersonal relationships highly emphasized through familismo (Comas-Diaz, 2013).

Incorporating these values encouraged sharing among neighbors and communities, helping each other unconditionally, and celebrating each other. Prior researchers had found such values contributed to community alliances and a collective

approach that empowers all (Edwards & Cardemil, 2015). The promotoras' values reinforced trust, persistence, resilience, compassion, confidence, and familiarity, providing strategies to influence acceptability and participation in PA and diet programs. Awareness of Latino cultural values and norms ensured cultural competence and improved access and utilization of traditional health care services with opportunities to interact and influence acceptability among Latino women (Flores et al., 2021; Johnson et al., 2013).

Perceptions of the Government as a Partner in Reinforcing Healthy Lifestyles

This study's findings showed that participants had mixed views of the federal government's role. Although financial support, food banks, and programs such as SNAP and WIC were helpful strategies to prevent food insecurity, there was a sense that the food was not healthy, complicating promotoras' jobs as influencers. To overcome these concerns and build trust was challenging; as part of the community, promotoras had to create rapport and trust with community members, vowing to protect them despite their immigration status (Manzo et al., 2018). One participant advocated for health care coverage for individuals without legal status, and this gesture instilled trust. Ingram et al. (2007) found similar results, noting that promotoras used advocacy as a form of tangible social support for migrant farmworkers facing marginalization due to their immigration status. Also, promotoras in this study engaged in lobbying the government to mandate more grocery stores and fewer fast foods in their neighborhoods. Promotoras faulted the government for instilling fear of deportation and allowing unhealthy foods at food banks.

Relationships with the government are mixed because promotoras need these officials yet expect more support for their efforts in influencing Latino women.

Being advocates for the community facilitates promotoras' influence on Latino women. This was a finding similar to those of Manzo et al. (2018) and Sanchez et al. (2021), as promotoras felt a sense of responsibility to engage in lobbying the government to procure resources for their communities. Promotoras in this study felt the system was set up for them to fail and wanted the government to be more valuable partners to influence healthy lifestyles in their communities. Prior research has shown that promotoras fight against exclusion by getting involved, understanding the politics, and taking action to address the needs of their communities (Manzo et al., 2018; Sanchez et al., 2021).

Disconfirmed Findings

This study showed that language was easily overcome and thus not a barrier to acceptability. Prior researchers had focused on language as an intercultural barrier and bridge to ethnocentrism, stereotypes, prejudice, and mutual respect (Kim et al., 2011). Kim et al. (2011) emphasized that language barriers limited connection, generated negative emotional and cognitive responses, and prevented communities from taking necessary health and wellness actions. Palmer-Wackerly et al. (2020) confirmed that language played a critical role in cultural connections and building trust among Latino communities, facilitating and influencing acceptability.

In the present study, participants clarified that although language was important and relevant for daily living, it was a nonissue in regard to accessing necessary needs.

They added that most families had at least one person serving as a translator, and most information was available in the citizens' language of choice, thus minimizing the impact of language issues. Also, although income and SES negatively impacted healthy lifestyles and transportation issues, these factors were lesser barriers than the environments. The promotoras indicated that community members with higher income and SES levels also faced barriers due to limited grocery stores, safe parks, and pedestrian walkways and living in food deserts compared to their counterparts in wealthier communities.

Revelations/Insights

According to Creswell (2013), facial expressions and verbal cues are powerful communication tools in qualitative research during face-to-face interviews or focus groups. Although telephone interviews did not permit me to observe the participants, I could deduce that the promotora model had significant impacts. Looking at the themes and relationships, I was intrigued by the similarities and connections among participants. Each participant shared with pride the strength of the model, which summarized who promotoras were: promoters. They gave a similar answer to how they have successfully influenced Latino women over the years: the promotora model.

I allowed ample time for each participant to share her distinct connection to the model and how she applied it in her practice as a promotora. From these conversations, I concluded that the meaning of these experiences was that promotoras were highly aware of their impacts. They stressed the flexibility of the promotora model, recommending that researchers and public health practitioners incorporate the model in programs designed for the Latino community for prevention, infectious and chronic disease management. All

15 promotoras leveraged their knowledge of the culture and created a larger footprint of remote workers accessing Latino women within their ecosystem. This decentralized model of bringing PA or diet programs to meet women where they lived reduced barriers, such as time, childcare cost, and transportation, leading to increased participation and overall outcomes. Isabelle remarked, "The promotora model is about social support, whether it is to deliver health care, education, improve access, and that direct engagement by promotoras in partnership with community partners is key to success." Others responded by asking if I was familiar with the model.

The phenomenological analysis showed that the impact of the role on individual promotoras was a genuine love for their jobs. The essence of their common experiences was empowering and far-reaching. During the interviews, promotoras expressed frustration, feelings of overwhelm, the burden of paperwork, multiple cultural barriers, and the need for government to be more supportive with policies to facilitate healthy lifestyles. Nonetheless, every participant expressed great joy for the role, all saying, "I love my job," which motivated them to continue, despite any challenges. The reported challenges were many, including income and people resisting knowledge; however, love for the role fostered a sense of resilience and drove success for the community. The promotoras in this study expressed a strong desire and compassion to help people, even those in danger of deportation. A fear of immigration status could not keep the women from their roles as promotoras because of the love of the job.

The promotora role had a positive impact on the participants as Latino women, and their commitment to the Latino community was unshakable. The women's

descriptions of the love they felt showed how they succeeded in influencing this difficult-to-reach population despite multiple barriers. Among participants' responses were: "I love the job and care about the people and not the money" (Julieta); "Though it is hard, we must do it. If we don't do it, no one else can. I just love it" (Catalina); "beautiful profession" (Lucia); and "I really enjoyed the job because it helped me grow as an individual and offered lots of professional opportunities" (Elena). Despite the stresses of managing the multidimensional role and infighting described by Angel, love for the job made it easy to continue their work as promotoras. Angel explained that the limited number of hours and low pay could lead to altercations among promotoras, who sometimes disrespected and belittled their peers with minimal education, making the job that much harder. She highlighted her resilience in the face of job challenges and why she was able to overcome them, saying, "I still love the job so much that I cannot quit being a promotora. I was born to be a promotora, and no one can change that."

Theoretical Framework Application

The application of the SEM enabled me to examine the interactions between Latino women, promotoras, and their environments at multiple levels of human behavior and what influences that relationship toward acceptability and participation in lifestyle modification programs. I could understand what enhanced community engagement through the application of accumulation, amplification, facilitation, cascade, and convergence strategies through individualized and tailored interventions to meet the needs of Latino women (McCormack et al., 2017). The research question developed based on the SEM as a means of exploring how promotoras are able to influence lifestyle

modification among Latino women provided the opportunity to understand the multiple interconnected factors involved in behavior change (McLeroy et al., 1988). The SEM was an appropriate theoretical foundation for the data collection and analysis processes because it grounded the research question. Thus, I was able to examine the influences of promotoras on Latino women through their lived experiences at each multilevel interaction of the SEM.

The application of the multifaceted SEM levels enabled an exploration of the mechanisms through which promotoras have influenced Latino women's participation in PA and diet programs (see Figure 6). Through this qualitative lens, I explored the contributing factors to obesity; promotoras' roles; Latino cultural values, traditions, and norms; the roles of the community, the environment, and the federal government in this relationship. The examination further showed how the interconnectedness of these relationships influenced Latino women.

Figure 6

SEM Depicting Spheres of Influence Over the Interacting Relationships of Promotoras and Latino Women

Through SEM application, I was able to view the effects of the influences on participants' lived experiences and individual behaviors as Latino women and how this influenced lifestyle modification and obesity outcomes. The study showed overarching themes specific to the interacting and reinforcing influences on the relationships between promotoras and Latino women. Similar to Haughton et al. (2015), I used SEM to explore the promotoras' influence on individual women within the context of the complex

environments where they live. Haughton et al. selected the SEM due to the influences of social, cultural, economic, and environmental factors on individual behavior. In the current study, I incorporated the five SEM levels to explore the interactive and reinforcing influences on the relationship between Latino women and promotoras. The findings confirmed intrapersonal, interpersonal, community, organizational, and public policy influences over these relationships.

The Social-Ecological Model

Intrapersonal/Individual Level

The SEM levels significantly influenced data collection through semistructured interviews and thematic analysis. At the intrapersonal level, the findings showed that knowledge and awareness of the contributing factors to obesity—specifically, PA and healthy diet—empowered promotoras and facilitated their influence over Latino women's acceptability. Additionally, individual experiences through years of practice and training enhanced promotoras' unique skill set, confidence, and self-efficacy to influence Latino women's participation in healthy lifestyles. There were significant influences from the cultural beliefs, norms, and traditions that guided food and leisure activities. Perceptions toward thinness and obesity served as barriers to acceptability, and a lack of access to traditional foods and ingredients contributed to unhealthy food preferences and obesity. These influences made it difficult to motivate behavior change and acceptability, which is critical to understand when designing promotoras-led interventions to address obesity.

Interpersonal Level

The social networks provided lasting partnerships and ongoing social support in the interactions between promotoras and Latino women. Emotional, physical, and informational support motivated and facilitated participation. Latino women felt supported, heard, and valued by promotoras. The church, community resource centers, neighborhood markets, community partners, and health care providers helped build community capacity through which promotoras motivated and facilitated acceptability and participation. These interconnected elements were necessary for promotoras to help Latinas adopt healthy lifestyles despite environmental, policy, and cultural barriers. At the interpersonal level, the promotoras model became a key tool for social support that enhanced the acceptability of PA and diet programs.

Community Level

At the community level, there was a strong influence from friends, families, and social networks, serving as a foundation for the promotora model and social support necessary to propel these communities to success. The greatest influence on the interactions between promotoras and Latino women occurred at this level. Promotoras viewed their roles as a gift from God, and some felt they were born to be promotoras. Incorporating cultural values in their day-to-day roles fostered sacred trust and lasting relationships in their interactions with Latino women. Flores et al. (2021) echoed this feeling and complete commitment to serve their communities in examining the impact of promotora roles on promotoras to better understand the essence of what they did. It is fair to conclude that, despite the influences from the lack of knowledge, cultural, and

traditional barriers at these levels, the combined intrapersonal, interpersonal, and community influences were pivotal in these relationships by motivating and facilitating acceptability among Latino women to act and live healthy lifestyles.

Organizational-Level Influences

Meanwhile, organizational influences indicated the role of systems and environmental inequity, in individuals' lived experiences and Latino communities' expectations. The 15 participants in this study expressed disappointment with the systems set up for them to fail. Wealthier communities have walkable pathways, safe parks, grocery stores within the communities, and less fast food compared to the food deserts with rotten or less-healthy fruits and vegetables and not-so-safe neighborhoods of poor communities, posing further barriers to acceptability. Furthermore, the neighborhood provided strategies that promotoras used to build capacity and foster social support among Latino women. These behaviors, such as childcare, transportation, space for walks, and classes, reduced barriers to participation and reinforced healthy behaviors among community members. The neighborhood influences made it easier for promotoras to do their jobs.

Additionally, schools and worksites provided practice environments that were safe and secure, allowing promotoras to bring in programs to meet the women where they work and play. These reduced barriers, reinforced the interactions and promoted participation.

Public Policy and Societal-Level Influences

Participants expected the federal government to mandate healthy environments and grocery stores in poor communities; similarly, they hoped for pedestrian walkways and safe parks. Fear of deportation was a barrier to citizen participation in programs. Promotoras lobbied the government to extend health insurance to all, regardless of immigration status, and relax deportation when people sought access to health and wellness. Promotoras exhibited mixed perceptions toward the government's lack of support in addressing obesogenic environments and reinforcing their efforts. However, they appreciated the positive influence based on their recognition as a critical resource in delivering health programs, creating respect and self-efficacy to influence Latino women.

Through SEM application, these multilevel and multisectoral influences showed that influencing Latino women's acceptability and participation in PA and a healthy diet required understanding barriers and incorporating the different strategies into PA and diet interventions for weight loss.

Limitations of the Study

The findings of this study merit consideration within the context of the research design and question due to limitations. Like most qualitative research, this study's sample size was relatively small, preventing the generalization of findings to the entire Latino population. There were strict participation criteria, further limiting the findings to this selected group of Latino women working as promotoras who were between 18 and 65 years old and spoke English. Although the 15 participants provided invaluable insight, not all promotoras had the opportunity to participate in the study. Additionally, because

most recruitment occurred through the snowball method, including mass emails that attracted passionate promotoras, the views presented from their lived experiences could have undergone influence by the location and relationships of those recruited and not represent the larger promotora population. Also, although sampling was purposive to accommodate the heterogenicity of the population, it was nonrandom with limited opportunity for generalization, with all promotoras not having an equal chance to participate. Selection bias could be a concern with convenience sampling, again indicating the nonrepresentativeness of the sample.

An inevitable limitation is the researcher bias inherent in qualitative studies. I began each interview with a welcome and shared my interest in the Latino community; in most instances, it was clear that participants viewed me as a doctoral student with the power to obtain knowledge for my project and then disappear like others. Most indicated my lack of cultural understanding and competency exhibited through the language barrier prevented honest and truthful conversations about the culture. Though not coerced or forced to participate, they felt they had to do it for their communities while assuming I had power over them. Being interviewed by a doctoral student and non-Spanish speaker might have exerted unintended pressure over some participants. Most strongly suggested that if I were truly interested in their communities, the least I could do is to learn their native language.

The findings from this study represent the lived experiences of the 15 Latino women who have served as promotoras within a specific period. During the interviews, participants had to remember past experiences, which could have introduced recall bias.

Additionally, despite the consistent, systematic data analysis process, coding was subjective, with themes derived from the limited number of interviews; thus, the findings were not representative of all promotoras' and Latino women's views. Accordingly, although the findings shed light on promotoras' roles within the promotora model as influencers of Latino women's acceptability of PA and healthy diets, there are limitations due to the limited experiences of 15 participants.

Another limitation was the telephone interview format, which prevented analyzing nonverbal cues and body language to support the verbal responses. Although the format provided an opportunity to gather significant, quality, and consistent data from participants, the inability to conduct the interview visually created a limitation, preventing the collection of critical information to support the findings.

Recommendations

This study generated insights into specific strategies relevant to the mechanisms through which promotoras, applying the constructs of the promotora approach (model), were able to influence Latino women's acceptability of PA and diet programs for weight loss. The recommendations in this area are twofold: for practice and future research.

Practice

Public health practitioners could incorporate these strategies into the design of culturally relevant obesity programs led by promotoras to improve acceptability and participation and reduce obesity disparities. Prior researchers designed culturally congruent interventions to address obesity with limited impact on recruitment and attrition that defines acceptability. Findings from this study shed light on the promotoras

phenomenon and specific strategies for success while elucidating how they managed challenges during their multidimensional lived experiences.

Future Research

Because this study was limited in scope, it would be valuable to conduct a larger qualitative study exploring how and why promotoras are successful in influencing Latino women in accessing health and wellness. Such a study could include a diverse group of promotoras from multiple communities and geographical regions to explore a broader range of lived experiences and validate these strategies. Additionally, a mixed methods or quantitative study would be beneficial to test the hypothesis that promotoras led studies are more successful in influencing Latino women than culturally relevant studies without promotoras, as posited by Seguin et al. (2019) and Koniak-Griffith et al. (2015). The qualitative element would provide the opportunity to capture robust information from program participants that could enhance the understanding of quantitative data for effective program development (Creswell, 2013). Likewise, it would be advisable to test and compare which strategies are most influential in the relationships between promotoras and Latino women. This approach would add to the academic knowledge of strategies to incorporate when designing intervention programs or research for difficult-to-reach populations. Such a study could also contribute information to increase community programs for capacity and positive outcomes and deimplement strategies that are not working, thereby managing costs and redistributing funds to successful programs.

Future research following these recommendations will add value, rigor, and trustworthiness, with generalizable findings and far-reaching impacts on Latino

communities. The results could impact obesity and other health disparities with the potential to reduce the overall cost of obesity and accompanying burdens to these underserved communities and the nation as a whole. The findings from this study are informative to future program design and studies, whereby insightful data generated could be broadly applicable to understanding how promotoras influence Latino women across multiple weight loss programs.

Recommendations for Action

Recommendation 1: The Case for Program Sustainability

A major theme in the findings was promotoras' roles as influencers of acceptability of PA and healthy diet. Two of these roles are advocacy and sustainability of programs through fundraising. A recommendation that emerged from analyzing the personal and collective narratives of the promotoras' lived experiences through advocacy was the need for program sustainability and the benefits to sustain social change in the Latinx community. The incorporation of promotoras has become increasingly widespread to enhance the impact of programs targeting Latino communities (Koskan et al., 2013). There appears to be a sense that promotoras prefer to focus on promoting individual promotoras' growth to ascertain social mobility instead of the sustainability of the program to simply maintain their role within the program (Koskan et al., 2013). Nonetheless, this study's participants called for a need to extend the benefits gained from PA and healthy diet programs through ongoing program support, funding the promotora approach to continue outreach needs and program continuation within the community. They suggested it would be beneficial to train promotoras specifically for obesity-related

health program delivery to disseminate ongoing information through social networks. Training could be through alliances with other promotoras across the nation to build capacity and raise funds to support the programs.

Participants discussed the value of training promotoras who are actively involved in outreach and support to the community leaders and members. They asserted that a Train the Trainer program would help sustain promotoras who address community health needs. Such a program would build confidence and improve outcomes because they will be empowered to reach the most resistant and vulnerable individuals.

Additionally, there was a recommendation for program leaders to voice their sustainability intentions at the beginning of implementation. Participants felt that, routinely, leaders come to their communities intending to sustain the program but share no concrete strategy on how to fulfill this plan. The promotoras recommended funding for long-term needs to show genuine respect for people during these programs. Others added that researchers should not just pack and leave after the program is over because people fall back into their old, unhealthy behaviors. Participants shared that in certain instances, they formed partnerships to raise funds to support the program. At the intrapersonal level, promotoras themselves provided the intervention to sustain the benefits without a salary or incentive—simply for the love of the job and responsibility to the community. Some strategies rendered were for community-based organizations to solicit funding to support promotoras in this effort. There is usually added stress when promotoras need to work to support their families while balancing their roles to enable sustainability; the issues of time and money complicate the commitment. Latino women

feel their primary responsibilities to care for the family than to themselves dominates their day-to-day activities (Parra-Medina & Hilfinger, 2011), which reinforced the perception of no time to participate in leisure-time PA. Participants discussed grassroots efforts that have supported promotoras. Support came from health care providers, churches, neighbors, and community organizers recruiting others to become promotoras to share in the responsibility of educating the community. Also, help was needed to raise funds to pay promotoras' salaries or stipends so they could commit to the role and not work multiple other jobs to care for their families.

Findings from the present study show that although some promotoras prefer social mobility based on the skills acquired during program implementation, there is a general consensus for program leaders to sustain programs for continued healthy lifestyles. Participants acknowledged that the federal government recognized promotoras as viable health care resources; however, the lack of financial and political support for the role remains a barrier to social mobility and program sustainability. This was a notion reported earlier by researchers focused on sustainability (e.g., Koskan et al., 2013).

Recommendation 2: A Toolkit of Multiple Strategies to Influence Acceptability

The participants in this study identified obesity as a multifaceted problem requiring multiple strategies. To expand on their role for advocacy, they indicated the need to design a toolkit with culturally relevant strategies that other promotoras, researchers, and public health workers could use individually or in combination to influence Latino women. The strategies contributing to the major themes described in Chapter 4 are in consideration of the multilevel influences within the SEM model and

provide helpful resources to train and further build capacity to address obesity barriers in Latinx communities. This toolkit will be similar to the one available to CHW for the prevention and management of diabetes, stroke, and heart disease (CDC, n.d.) and could include: (a) utilizing recipes relevant to Latinos for healthy diet and nutrition programs; (b) having open conversations that foster collaborative engagement and trust involving discussions of Latinos exercising less than the recommended 150 minutes a week and the inclusion of fruits and vegetables acceptable to Latinx; (c) incorporating cultural exercises such as dance (e.g., Zumba), housework, and time management strategies; (d) having cooking discussions and demonstrations, (e) setting goals, to include coaching and leadership; (f) not implementing programs during holidays; (g) addressing mental health, stress management, and body image; (h) expanding the resource center in all communities; (i) implementing flexible scheduling, including creative and individually tailored approaches for participation, such as school drop-off and pickup times; (j) offering incentives for participation and good health habits, including cash, health dollars, and prescriptions for walking and coupons for using food stamps to purchase healthy foods; (k) incorporating childcare and transportation into program implementation; and (l) using positive reinforcement through positive press for Latinos. Participants expressed the difficulty of always reading negative information about Latinos in health, crime, poverty, immigration, and education news. Program designers should purposefully incorporate positive press to motivate action. Findings from this study suggested that promotoras are an expensive resource; however, the benefits of incorporating these strategies to enhance the positive effects of programs are great and warranted.

Recommendation 3: Call for Standardized and Equitable Training

Furthermore, to address one of the significant challenges promotoras encountered as influencers, the participants called for standardized and equitable training so that others would take the profession seriously. They advocated for similar training content and length, including what it means to be a promotora, challenges, and coping mechanisms. They also suggested the need for certification to set the role as a specialty practice within the public health and health care continuum to include information on economic data, policies impacting the communities, and creating healthy environments. The promotoras wanted a formal curriculum to include hands-on training and presentations on fundraising skills and process evaluations to build their skill set for social mobility while sustaining the programs. This call from promotoras was consistent with previous studies (Albarran et al., 2014; Koskan et al., 2013; Reinschmidt et al., 2006; Sanchez et al., 2021). Participants emphasized the need for standardization, ongoing training, certification, culturally sensitive content, and a train-the-trainer approach to enhance promotoras' health-related knowledge and self-efficacy in delivering and leading programs.

Implications

This study has implications for social change. The newly acquired knowledge on specific strategies promotoras use to reduce barriers to participation among Latino women could contribute to the design of culturally acceptable PA and diet programs. The impacts of such application would be broader recruitment, less attrition, greater

participation in PA and diet programs focusing on weight loss, and overall positive obesity outcomes in this population.

The application of the multiple SEM levels to explore the reinforcing and interactive forces on the relationship show that knowledge and awareness of obesity at the intrapersonal and individual levels, PA, healthy diets, and contributing factors and disease burdens helped to reduce misconceptions about thinness, obesity, and weight loss. Therefore, the findings could influence action among Latino women. Subsequently, the interconnectedness of the levels and the influences of the system, culture, and environments on promotoras' and Latino women's relationships are far-reaching, enhancing social and public health behaviors. Furthermore, the study's participants elucidated additional recommendations for future researchers and public health practitioners for positive outcomes and social change.

Conclusion

Despite a growing body of evidence showing promotoras' success in influencing Latino women's acceptability of PA and diet programs designed for weight loss, there remained literature gaps regarding who they are, what their roles are, and how they have been able to succeed. The findings from the present study showed that enacting their roles as promotoras through the application of the promotora model had benefits for the Latino communities. Promotoras are aware of the multiple barriers from the various levels of the SEM; overcoming the barriers and influencing Latino women's acceptability of PA and diet programs requires strong partnerships, engagement, and incorporation of Latino cultural values. The following sections present the themes within the SEM to

show the interacting, reinforcing, and enabling factors that influenced the relationships between promotoras and Latino women through their lived experiences.

Intrapersonal-/Individual-Level Influences

The study showed that at the intrapersonal/individual level, knowledge and awareness on obesity, PA, healthy diets, and mechanisms to channel sociocultural strategies were critical to acceptability by both promotoras and Latino women in correcting misconceptions of obesity, PA or healthy diet, and response to thinness. Individual years of practice and training enhanced promotoras' confidence and self-efficacy to motivate behavior change and influence Latino women's acceptability and participation in healthy lifestyles. Promotoras appreciated the influences from the cultural beliefs, norms, and traditions that guided food and leisure activities and the need for interventions that target these multilevel interactions simultaneously.

Interpersonal-Level Influences

At the interpersonal and community levels, interacting and reinforcing social networks, neighborhoods, and community partnerships facilitated the social support and capacity-building needed to influence Latino women. The social networks provided lasting partnerships and ongoing social support in the interactions between promotoras and Latino women. These interconnected elements were necessary for promotoras to motivate Latinas to adopt healthy lifestyles despite environmental, policy, and cultural barriers. Additionally, the promotoras model became a key tool for social support that enhanced the acceptability of PA and diet programs.

Community-Level Influences

At the community level, there was a strong influence from friends, families, and social networks providing a foundation for the promotora model and social support necessary to propel these communities to success. The most significant influence on the interactions between promotoras and Latino women occurred at this level. Promotoras expressed the positive impact of their work. They incorporated the cultural values in their day-to-day roles to foster trust that motivated and facilitated acceptability among Latino women.

Organizational-Level Influences

Promotoras acknowledged the influences from systems and environmental inequity, individual lived experiences, and expectations of Latino communities. Unsafe neighborhoods, parks, lack of walkable pathways, inadequate grocery stores within the communities, and over-availability of fast food posed significant barriers to acceptability. The interacting behaviors within the neighborhoods, including sharing, reduced food insecurity, while childcare, transportation, space for walks, and classes reduced barriers to participation and reinforced healthy behaviors among community members. Additionally, schools and worksites provided practice environments that were safe and secure and facilitated promotoras bringing programs to meet the women where they work, which promoted participation.

Public Policy and Societal-Level Influences

In this study, participants understood that the government and society influenced their interactions. Therefore, promotoras expressed mixed perceptions about the

government. They reported a lack of support in their efforts to motivate Latino women to adopt healthy lifestyles; however, they appreciated recognition as a critical resource in delivering health programs. They were aware of the influences of fear and immigration status on the Latino community's engagement.

The socioecological approach enabled a focus on the cultural, socioeconomic, environmental, and policy influences on the complex relationships between Latino women and promotoras throughout this research project. By exploring the lived experiences of promotoras at the multilevels of the SEM model, I was able to understand the impact of the various influences on their interactions. Similarly, I could appreciate the strategies they employed to navigate the complex relationships and influence acceptability and participation in PA and healthy diets.

The study added knowledge about the promotora model as a viable approach and resource to reach the underserved Latino community for success in remote data collection and program participation. Significant findings from the study provide evidence that promotoras are more successful in motivating and facilitating acceptability and participation in PA and diet programs among Latino women. Their success is linked to their abilities to be culturally sensitive and competent in delivering sociocultural strategies that make Latino women feel comfortable and secure to adopt behavior changes. The findings include a call to action on the need for program sustainability after researchers and public health leaders leave. In addition, the findings indicated the need for a toolkit comprising multiple strategies for successfully influencing Latinos and

recommended for future use individually or together when designing a culturally relevant program led by promotoras for the Latino communities.

Throughout the interviews, promotoras conveyed a sense of resignation that the system was set up for Latinos to fail. Although the participants acknowledged that behavioral, individual, and cultural barriers contributed to obesity disparities, some insisted that the system had a greater impact. On the other hand, some strongly felt that despite these barriers, the Latinx community had the resilience to overcome with a little help from others. Embracing these perceptions forces public health leaders and health care practitioners to view systems, cultures, institutions, and outcomes as interconnected and multifaceted problems. Therefore, addressing an issue such as obesity among the Latinx community would require a socioecological approach, incorporating and addressing the influences from all levels of the SEM.

This study of promotoras' lived experiences showed participants' awareness of obesity disparities, and collectively, they identified reasons for these disparities. They also shared culturally relevant strategies that promote the adoption of healthy behaviors within the complex and multilevel interactions between promotoras and Latino women. The findings provided potential strategies to address the contributing factors, improve acceptability of PA and healthy diet outcomes, and potentially reduce overall obesity disparities among Latino women.

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Appendix A: Prescreening Tool

Prescreening Questions To Assess Demographics and Study Eligibility

1. Do you self-identify as Latina?
2. Are you between the age of 18 and 65?
3. Have you lived in the United States for more than 5 years?
4. If born outside the United States, what is your country of origin?
5. Have you been a promotora for more than 5 years?
6. Have you worked for a weight loss program focused on physical activity and diet?
7. Do you reside in Prince Georges, Montgomery County, Frederick County, or Washington DC?
8. Do you live and work in the same community?
9. Are you interested in learning more about volunteering for this study?

Appendix B: Interview Guide – English

I want to thank you for taking the time to meet with me today. My name is Gladys Tataw-Ayuketah. I am a Walden University Student in Public Health specializing in Epidemiology. I plan to conduct this interview in English, except if you have any concerns.

For the past several years, I have dedicated part of my career to improving the health of the Latino community. Today I will like to talk to you about how you have been able to influence Latino women to participate in physical activity and diet programs for weight loss. I am interested in your unique experiences as a promotora and community member influencing your community to adopt healthy lifestyles. There are no right or wrong answers. Everything you say is very important.

Interview Format

The Interview will last approximately 45 minutes. I will be audio recording the session so will like to encourage you to please speak louder since I do not want to miss any of your responses. During the session, I will also be taking down some notes. All your responses will be secured and confidential; therefore, the report will not identify you as a respondent. I will only share with my Research Committee. Be assured that you may end the interview at any time, and you do not have to talk about anything that makes you uncomfortable.

Do you have any questions before we begin? Once again, thank you for your time.

Start of the Interview

Study Criteria: Intrapersonal

1. How long have you been a promotora? (Intrapersonal)
2. How long have you lived in the United States?
3. What weight loss program have you worked for?
   Name of the program you worked for
   What was your role; leader?
4. Tell me about your experiences as a promotora?
   Probe: what helps or makes it difficult; environment, culture, acculturation, multiculturism,
5. Tell me about any beliefs or customs that guide your practice as a promotora?
   Probe: cultural, spiritual, environment,
6. Tell me about your training as a promotora.
   Formal, informal, length, certified

Role as a Promotora (Intrapersonal, interpersonal, Community, Policy)

7. Describe your typical role as a promotora in a physical activity or diet weight loss program

   Probe: social support, coach, teacher, friend, defined or not defined
8. Tell me how you balance being a promotora and community member with similar experiences
   Probe: environmental safety, income, food influences
9. Describe any policies that help or hurt your success as a promotora leading a weight loss program
   Environment, food, marketing
10. Describe the role of social support during weight loss for Latino women
    Probe: family, church, community partnerships, other influences
11. Tell me how you have been able to influence Latino women to participate in physical activity and diet weight loss programs

What helped, any barrier?

What about the impact of being a member of the community?

Have you always succeeded, and why not?

Knowledge of Obesity, Physical Activity, and Healthy Diet (Intrapersonal*)*

12. Describe your understanding of obesity as a Latino woman and promotora
13. What do you consider to be physical activity?
    Probe: type of activities or exercise
14. What do you consider to be a healthy diet?
    Probe: foods, vegetables, portion sizes, ingredients

Challenges

15. Describe how weight loss or physical activity and diet program are viewed in your community
    Probe: challenges, barriers, enjoyment, favorable
16. Do you have anything else to add?

I will be reviewing our discussion today and may need to contact you for clarification. May I use an email, phone, or mail? Or would you prefer a face-to-face meeting again? I will use only your preferred method of communication

Once more, thank you so much for your time.