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Issues Encountered by Parents in Continuing School-based Obesity Prevention Programs at Home

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Walden University
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Abstract

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by

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MPH, Purdue Global University, 2018

MBBS, Bangalore University (India), 2002

Submitted in Fulfillment

of the Requirements for the Degree of

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Abstract

Childhood obesity is a public health problem that can lead to various chronic health diseases such as cardiovascular disease and diabetes later in life. School-based obesity prevention programs are a public health recommendation to reduce and prevent obesity in schools through increased physical activity and better nutritional habits. This qualitative research involved exploring the reason for the discontinuation of school-based interventions at home using multi-theory model (MTM) constructs for health behavior change. A convenience sample of three focus groups of consenting parents whose children participated in the Wolf Pack Coaches Challenge (WPCC), a school-based obesity prevention program in Nevada, was selected for this study. Discussion questions were derived from MTM constructs and directed content analysis was used with NVivo software to analyze collected data. Results revealed facilitators increased parental interaction and bonding with their children, encouraged positive behavior changes, and understanding of program materials. Time and financial constraints, poor communication, and difficulty adapting were barriers that parents faced at home. Parental involvement in the program, the need for more resources such as money, time, and experts, and information accessibility were addressed by participants in focus group sessions. Results justify the use of the MTM to understand parents' perceptions and develop sustainable school-based interventions to prevent childhood obesity and advance social change in communities by encouraging policy changes to promote lifestyle behavior changes in schools, abate risk factors, and prevent disease.

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God bless.

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Chapter 1: Introduction to the Study

Obesity is described as being overweight due to the accumulation of surplus fat in the body, which leads to health issues and obesity-related deaths. According to the World Health Organization (WHO, 2022), global obesity in children and adolescents increased from 4% to 18% between 1975 and 2016. Childhood obesity persists as a growing public health problem in the United States (U.S.) and increases the risk of children developing many chronic diseases in the future (Sanyaolu et al., 2019). Children are the country's future, and preventing obesity can lead to a healthier future generation. Program leaders of Wolf Pack Coaches Challenge (WPCC) implemented in many schools in Nevada strive to increase physical activity and nutrition in elementary schools. I sought to understand if there was a need for support for parents to follow program goals at home.

The lifestyle choices children develop are influenced highly by their parents and communities around them. Communities and the environment in which children live play a role in influencing childhood obesity outcomes (Ayala et al., 2021). Appleton et al. (2017) explored the impact of parents' habits and behaviors on the health of children and concluded it is crucial to be aware of beliefs, attitudes, and norms of parents and the importance of culturally -aware interventions to combat childhood obesity in terms of communities and the surrounding environment. Classroom-based physical activities can play a critical role in increasing physical activity among children and youth and help improve academic outcomes (Watson et al., 2017). Sanyaolu et al. (2019) found that educating parents was essential to educating youth to promote healthy behaviors as they enter adulthood (Sanyaolu et al., 2019). Developing culturally competent interventions to

increase physical activity and promote healthy food habits in schools will be key to preventing children from adopting behaviors that can cause obesity as they move into adulthood.

This chapter includes the introduction, background, problem statement, purpose, research questions, theoretical framework, nature of the study, assumptions, limitations, delimitations, and significance of the study. In Chapter 2, I review various current studies and relevance of this study in terms of designing and implementing interventions. Chapter 3 includes an explanation of the method of inquiry, design, sampling, data collection, and rationale for choosing this methodology. In Chapters 4 and 5, findings and results are analyzed and presented. Discussion and limitations of results are also addressed.

Background of the Study

Obesity prevention programs to promote healthy behaviors and prevent obesity are common in school systems across the U.S. (Shirley et al., 2015). Obesity prevention programs positively affect preschool parents and children in terms of motivating the development of healthy behaviors as families (Bridge et al., 2019). Puga et al. (2020) addressed disparities effectiveness of community-based interventions and confirmed students from low-income families were at a higher risk of being overweight or obese and had ineffective outcomes to the program, and they also indicated the importance of such community-based programs to prevent obesity in schools. Day et al. (2019) explored perceptions of school staff regarding barriers that prevent obesity prevention programs

from being successful and concluded there is a need for supportive tailored interventions and provided recommendations to implement successful obesity prevention programs.

The literature indicates importance of multicomponent interventions and strategies involving schools, teachers, and communities in which children live to combat childhood obesity. Many multicomponent interventions indicated the importance of shared experiences to explain factors that should be considered while developing interventions (Gittelsohn et al., 2018). Involving families to support and continue the any obesity prevention program at home will help improve sustainability.

This study may help to address the gap the WPCC faces in terms of continuation of the program at home by students and parents. Appleton et al. (2017) explored the impact of parents' habits and behaviors on their children's health and concluded that is vital to be aware of parents' beliefs, attitudes, and norms and the importance of culturally aware interventions to combat childhood obesity. There is a need for family-oriented interventions that promote healthy lifestyles and support parents in following through with weight loss interventions (Schalkwijk et al., 2015).

Sharma (2015) emphasized the importance of using the multi-theory model (MTM) instead of other theories such as the health belief model due to its limitation in terms of predicting behavior change, unadaptable constructs, and the inability of the theories to work at different population levels and across cultures. The MTM can be used as framework to promote initiation and maintenance behavior change through behavioral confidence, emotional transformation, and changes in the physical and social environment (Sharma et al., 2018). I addressed health behaviors, predicted behavior

change, and barriers using the MTM to concentrate on challenges faced by the WPCC program and promote lasting behavior changes and continuity of the program.

Sharma and Nahar (2018) identified detrimental effects of reduced physical activity when children move to a secondary school from elementary school and stressed the need for interventions in upper elementary school to promote physical activity. MTM-based interventions would be beneficial in reinforcing behavior change and promoting physical activity in children (Sharma & Nahar, 2018). The MTM can help predict intention to change behaviors in terms of increased physical activity or healthy eating among participants.

The MTM was used to explain parents' barriers to increasing physical activity in elementary schools and promoting lasting healthy behavior changes. Evidence was beneficial in terms of evaluating the WPCC program, understanding barriers, and providing solutions to make the program more sustainable. Analyzing results using directed content analysis may aid in understanding parents' perceptions of the WPCC program and facilitative forces and barriers they confront when trying to continue the program at home. Results may also support adapting sustainable changes to the WPCC program in order to make it easier for parents to follow the program at home. Childhood is the best stage to promote healthy behaviors; I explored the need for support with obesity prevention programs for school children in low-income families to prevent childhood obesity.

Problem Statement

The specific research problem addressed through this study was the inability to continue the WPCC program at home which impacts the program's sustainability. Childhood obesity rates are growing in the U.S. despite many school-based obesity interventions. This growing public health problem predisposes children to chronic diseases in adulthood, which reinforces the benefits of using classroom-based physical activities to combat childhood obesity (Arteaga et al., 2018; Centers for Disease Control and Prevention [CDC], 2020; Watson et al., 2017).

In a systematic review, Ash et al. (2017) analyzed family-based childhood obesity prevention interventions using quantitative content analysis to understand the various gaps in implementing obesity prevention interventions. They found gaps in content used in implementing interventions and concluded it resulted from lack of representation of minorities and nontraditional families and an overrepresentation of Latino families (Ash et al., 2017). This indicated the need for targeting diverse populations, including nontraditional families such as single-parent households, to better understand behaviors before designing and implementing interventions that do not serve all student populations equally.

The ability of schools to reach large populations of students in one place makes it an optimal environment to implement obesity prevention interventions and promote healthy food habits. Developing effective school-based prevention programs for families, schools, and healthcare settings will be valuable in terms of combating childhood obesity (Arteaga et al., 2018). Implementing adaptable interventions in schools to improve school

lunch nutrition requires nutritious food changes, as well as education and parents' involvement (Sutherland et al., 2019). Sutherland et al. (2019) implemented SWAP IT, a multicomponent mobile application that encourages healthier food choices that follow school nutritional guidelines and target parents' education and learning about barriers they faced in terms of packing nutritious lunch boxes and such interventions were feasible and widely accepted by parents. The importance of family involvement indicates the need for parental education and knowledge of reasons for such interventions failing. Parents are very significant in terms of influencing and controlling behaviors such as diet and physical activity of their children, which signifies the need for tailored interventions that target different populations and households, including nontraditional families (Ash et al., 2017). I gathered data regarding environments, traditions, and barriers that influenced children's diet and physical activity.

The specific research problem addressed through this study was the inability to continue the school-based obesity prevention program at home, which was prompted due to the gap in the literature on why such programs are not sustainable at home.

Purpose Statement

I aimed to understand WPCC program parents' views, perceptions, and needs regarding continuing the WPCC at home. I addressed facilitators and barriers parents encounter in terms of following WPCC program goals at home and if there was a need for support to sustain the program. Okely and Hammersley (2017) stated most school-based interventions are unsuccessful because of failure to follow the program at home.

Home-based interventions that involve focusing on children and parental behavior changes reduce children's body mass index (BMI; Pamungkas & Chamroonsawasdi, 2019). I collected data from parents whose children participated in the WPCC using focus groups to understand their views, perceptions, and needs regarding continuing the WPCC at home.

The components of the MTM, initiation and sustenance, were used in this study to understand reasons for the current behavior and promote long-lasting behavior change. The three primary constructs of initiation were used to encourage behavior change. I also evaluated sustaining long-term behavior change using the three constructs of sustenance. I used qualitative directed content analysis research to test whether the MTM can be used to explain sustainability of school-based obesity prevention efforts at home to reduce childhood obesity. Available research on school-based obesity prevention interventions lacks information about why these interventions are not sustainable. Data gathered from parents of students who participate in the WPCC program will be advantageous in terms of implementing future tailored interventions that will improve sustainability of the program.

Research Questions

RQ1: What are the views of parents regarding facilitative forces and barriers they confront when trying to continue working on their children's obesity prevention objectives at home?

RQ2: What are the experiences of parents about additional resources and support needed for their children to continue working on obesity prevention from home?

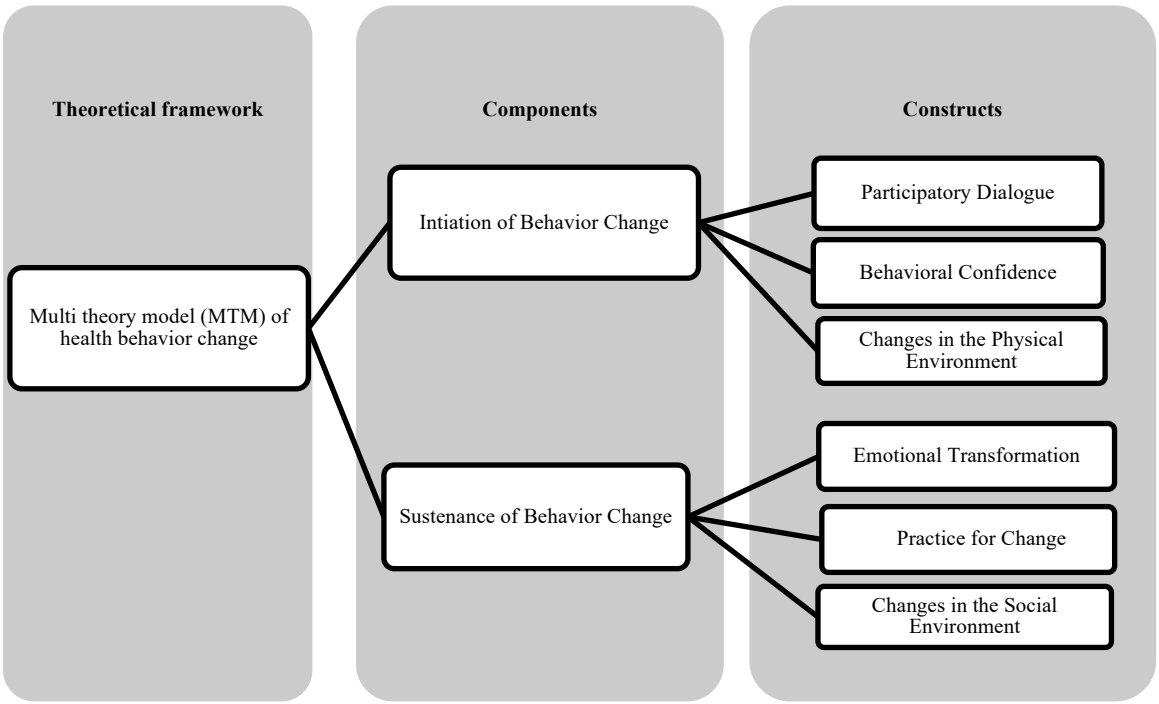
Theoretical Framework

Theoretical frameworks are used to connect various concepts in order to develop and ground the study (Varpio et al., 2020). Researchers follow chosen theory and build a structure for an investigation to pursue and explain the phenomenon that is being investigated (Varpio et al., 2020). The theoretical framework for this study was Sharma's MTM for health behavior change, which was explicitly developed to promote and predict health behavior change

The MTM is used to address limitations of existing popular theories, such as the health belief and transtheoretical models, and focus on population-level behavior change. The two components of the MTM, initiation and sustenance of health behavior change, can be used to understand reasons for current behaviors and promote long-lasting behavior change. The MTM was used to understand reasons for behavior change and barriers to continuing new health behaviors at home. It was used to assist with understanding the WPCC program's obstacles that prevent behavior change and factors that will make the program more sustainable (see Figure 1).

Figure 1

Constructs of the MTM



The initiation component and its three constructs encourage short-term behavior change. The constructs participatory dialogue, behavioral confidence, and changes in the physical environment helps in terms of initiating and understanding participants' perspectives and reflecting on advantages and disadvantages of health behavior changes (Sharma et al., 2022). In this study, the MTM assisted in understanding WPCC parents' perceptions, initiate culturally specific dialogue, and assisted in changes to their surroundings to make the behavior change. Sustenance the second component of the MTM theory involves creating sustainable long-term health behavior change using emotional transformation, practice for change, and changes in the social environment (Sharma, 2015). This component will bolster efforts to reconstruct behaviors that hinder

WPCC parents and their children from making long-lasting changes. Chapter 2 includes information about the MTM and explain why it was chosen to explain barriers and facilitative forces that will help continue obesity interventions at home.

Nature of the Study

An explanatory research design and directed content analysis were selected to address research questions for this study. I used a qualitative approach involving focus groups with parents of students enrolled in the WPCC program. Directed content analysis in qualitative research involves using a theory to identify and interpret collected data and builds of the framework selected (Hsieh & Shannon, 2005). Directed content analysis identified the link between the data collection, the MTM theory, and analysis using open-ended and targeted questions to explore the participants' experiences. I gathered data by recruiting participants and conducting focus group discussions with parents of elementary school students participating in the WPCC program. A set of predetermined questions based on the MTM served as a guide. It covered potential barriers, facilitative forces, resources, and support that was needed. I interviewed focus groups on their perceptions of the WPCC program. I also asked questions regarding their need for support and resources which were needed to continue the program at home.

Definitions

Behavioral confidence: Ability and determination of individuals to make changes in the future. This depends on the individual's internal ability to make the change and the support available from others involved in the individual's life. It measures the certainty of the person to make their behavior change in the future.

Change in social environment: Supportive relationships in the immediate surrounding environment that facilitate behavior change. Health educators can also be involved in providing support to promote behavior change.

Change in physical environment: The physical environment does not involve individual social circles, but rather surroundings that will encourage or help behavior changes in terms of resources and their accessibility. The physical environment includes places to perform exercises, such as playgrounds and parks.

Emotional transformation: Amending emotions to facilitate health behavior changes. This is used to measure participants' emotional ability to change current behaviors and adapt to new behaviors.

Health educators: Professionally trained individuals who promote health behavior changes among individuals and communities. They educate, create opportunities, and provide resources to encourage healthy behavior outcomes.

Participatory dialogue: Communication about advantages and disadvantages of health behavior changes which involve participation of both health educators and participants of the study (Nahar et al., 2016). This involves initiating conversations with positive and negative outcomes and exploring the need for behavior change.

Practice for change: Current behavior and constant courses of action involved with changing behaviors, such as developing strategies and overcoming obstacles that prevent behavior changes.

Assumptions

Participants were asked questions without coercion. I assumed answers to interview questions accurately represented participants' behaviors, attitudes, and perceptions.

Scope and Delimitations

I interviewed parents of elementary school children who participate in the WPCC program about what facilitative forces and barriers they faced when continuing the program at home. Participants were interviewed in focus groups about their perceptions regarding the WPCC program. Questions regarding need for support and resources needed to continue the program at home were also asked. Only English-speaking parents were included to facilitate dialogue and conversations. This study included single families, grandparent families, and extended family structures.

Transferability of a study depends on the extent to which the study can be transferred and generalized to other contexts (Forero et al., 2018). Clarity and validity of the data collection process was established by describing in detail all methods of the study, including similarities and differences, verbatim participant transcriptions, and member checking. Credibility and validity of the data collection process was established by describing in detail all methods, taking extensive notes, and reviewing transcripts with participants. Reflexive journal notes taken after focus group discussions were valuable in terms of data analysis and interpreting concepts. Detailed notes of focus group discussions that were reviewed and confirmed by participants were used to affirm

transferability and dependability of this study. Audio recording and transcriptions were valuable for confirming concepts during analysis.

For this study, it was essential to inform participants that their anonymity was preserved, and personal information was kept strictly confidential. I sent informed consent forms ahead of interviews to ensure anonymity and confidentiality.

Limitations

A limitation was that recruiting parents for focus group discussions was challenging due to parents' busy schedules. Only English-speaking parents were included for this study. Due to the COVID-19 pandemic, in-person focus groups were not feasible due to gathering restrictions. Focus groups were conducted via Microsoft Teams.

Significance

This study is significant and may help combat childhood obesity, a growing public health problem in the U.S. The WPCC program strives to increase physical activity and promote healthy eating in elementary schools in the community. In many instances, this program is not continued at home, and identifying why this program is not followed at home through this study was valuable for program leaders to make sustainable changes. I sought to understand views of parents and barriers they confront to continuing the program at home.

Findings from this study were valuable in evaluating the current WPCC program and advocating changes that will make such programs more sustainable. I also explored the need for support among parents to follow program goals. Results from this study may help in terms of developing strategies and making changes to current and future school-

based obesity prevention programs in order to make them more sustainable at home. Continuation of this program at home will significantly impact reducing childhood obesity in the community by encouraging healthy lifestyles among students and their families.

Education and support of parents, providers, friends, peers, and family are essential in terms of reducing childhood obesity. This study's findings may lead to an integrated approach to combat childhood obesity. Findings include evidence-based information that could be beneficial in terms of collaborating with government, private, and nonprofit organizations to increase awareness of the need for interventions in schools to prevent childhood obesity. Policymakers can use the MTM to develop guidelines and standards for physical activity and nutrition in schools. Public health educators and other health professionals can be trained to use the MTM to initiate and maintain health behavior changes in their clients. This research can also be a guide to policymakers in order to make decisions about school health programs and allocate resources to promote healthy behaviors among schoolchildren.

Summary

This study involved accentuating the gravity of childhood obesity as a growing public health problem in the U.S. Various comprehensive and evidence-based studies suggest childhood obesity predisposes children to many chronic diseases in the future, and obesity prevention programs that are implemented at the community level can prevent obesity in this population. I tested whether the MTM was ideal for predicting and promoting health behavior changes involving obesity prevention interventions that were

implemented in schools in Nevada. The MTM was necessary to evaluate the current WPCC program and advocate for changes that will make the program more sustainable.

Continuation of this program at home will significantly reduce childhood obesity in the community by encouraging healthy lifestyle changes among students and their families. In this chapter, an overview of the study was presented. In Chapter 2, I review and provide information about literature regarding behavior changes that help obesity prevention programs reduce obesity, as well as challenges related to obesity prevention. This includes evidence about factors that promote behavior change, the MTM and how it supports behavior change, and evidence-based strategies that influence lifestyle changes.

Chapter 2: Literature Review

I aimed to explore attitudes and understand experiences of parents whose children participate in the WPCC program in Washoe County, NV. Okely and Hammersley (2017) stated most school-based interventions are unsuccessful because of the failure to follow the program at home. WPCC program leaders encounter barriers in terms of sustainability of the program at home. Home-based interventions that focus on children and parental behavior change prove to be successful in reducing BMI in children (Pamungkas & Chamroonsawasdi, 2019). I collected data from parents to understand views, perceptions, and needs regarding continuing the WPCC at home.

I discuss literature on school-based obesity prevention programs and also focus on the MTM, which was the theoretical framework. The literature search yielded studies on the effectiveness of school-based obesity prevention programs, but there is a lack of information on why such programs are not sustainable at home. The MTM was used to promote a better understanding of why many obesity prevention programs are unsuccessful and strategies to improve the sustainability of school-based obesity prevention efforts at home. I found that evidence regarding parent views, perceptions, and needs in terms of continuity of school-based obesity prevention programs at home was insufficient.

Literature Search Strategy

The search strategy implemented for this study involved addressing studies about school-based obesity prevention programs and parent perceptions regarding obesity prevention programs offered by schools or other organizations. I searched for sources

which were published between 2016 and 2021. I used the following databases: Thoreau multi-database search, PubMed, CINAHL, ERIC, and Google Scholar to locate relevant literature using the following keywords: *childhood obesity*, *school-based childhood obesity prevention programs*, *multi-theory model (MTM) of health behavior change*, *community-based obesity interventions*, *health behavior change*, *childhood health and nutrition*, *obesity prevention in elementary school children*, *youth nutrition and obesity*, *childhood health and nutrition*, *physical activity in school children*, *parent perceptions*, *healthy eating*, *community health advisors*, *risk factors in childhood obesity*, *environment factors*, *physical activity and youth*, and *school wellness policy*.

Theoretical Foundation

Theories are used in healthcare to understand reasons for behaviors as well as educate and augment healthcare practice and policymaking. Qualitative researchers look for patterns and themes to understand and explain behaviors and induce explanations from collected data (Ravitch & Carl, 2016). Theories are used to help organize and rationalize collected data and already existing research (Ravitch & Carl, 2016). In this study, the MTM was used to frame research questions and understand the research problem. The MTM will also help future development and evaluation of childhood obesity prevention interventions.

MTM

The MTM builds on many different existing theories such as the health belief model and the transtheoretical model. This theory is culturally cogent, valuable in resource scarce settings, and can be used in individual, group, and community settings to

encourage behavior change (Panjwani et al., 2022). The MTM can be applied to understand different barriers that WPCC program leaders face that prevent behavior change, as well as factors that will make the program more sustainable. Constructs of this theory were useful to understand reasons for preventing behavior change after the intervention was implemented.

Hayes et al. (2018) revealed MTM constructs can be a powerful tool in terms of initiating and sustaining healthy behaviors such as physical activity by promoting confidence and making positive changes. Sharma et al. (2020) found using the model was a serviceable framework to understand and improve obesogenic behaviors. The MTM can be used as a framework to understand why the WPCC is not sustainable at home in most instances and what can be done to make the program more sustainable.

The MTM was a guide to institute and fortify behavior changes such as increased physical activity and healthy food habits in students. Sharma and Nahar (2018) stated MTM-based interventions are beneficial in terms of reinforcing behavior change and promoting physical activity in children. Sharma et al. (2018) addressed college students who were not eating at least five cups of fruits and vegetables per day and indicated the MTM constructs can bolster initiation and sustenance of behavior change through behavioral confidence, emotional transformation, and changes in the physical and social environment.

Starting a new behavior and maintaining it can be challenging for anyone, especially students who experience various environmental and social challenges. Nahar et al. (2020) used a survey to understand stress management behaviors in veterinary

students and found that MTM constructs can provide a framework for predicting the initiation and maintaince of any health behavior change. The MTM was beneficial to evaluate the program, explain barriers parents faced in terms of continuing the program, and understanding what needed to be implemented to increase physical activity among elementary school students (Nahar et al., 2020). Constructs of this theory can help in building effective interventions to combat childhood obesity and create sustainable lasting behavior changes.

Constructs of the MTM

The MTM has two main components which are initiation and sustenance of health behavior change, and their constructs are independent, unrelated, and promote the outcome of health behavior change (Sharma et al., 2022).

Initiation

This involves initiating a behavior change by addressing personal and environmental factors that help with behavior change. The three constructs of this component that encourage behavior change are: participatory dialogue, behavioral confidence, and changes in the physical environment (Sharma et al., 2022). Participatory dialogue is initiated by the health educator to discuss advantages and disadvantages of making behavior changes (Sharma et al., 2022). Discussing views, advantages, and disadvantages among parents whose children participate in the WPCC program go through can lead to addressing on what needs to be done by the program creators to improve participation outcomes.

The courage to make a behavior change can occur only if the confidence and motivation to make the change is present. The second construct, behavioral confidence focuses on personal confidence and the support system that will inspire confidence to make the behavior change (Sharma et al., 2022). A behavior change can be initiated by identifying barriers that prevent relaxation behaviors and using the construct of behavioral confidence to initiate the use of relaxation techniques in the students to reduce chronic stress (Nahar et al., 2020).

Changes in the physical environment, the third construct of initiation of behavior involves changes in the physical environment and availability of resources (Sharma, 2015). Agyei-Baffour et al. (2020) conducted a focus group study with healthcare providers using MTM constructs as a framework to investigate the HPV vaccine uptake in Ghana, social factors, HPV knowledge, and vaccination recommendation practices. The results revealed various problems regarding HPV vaccine recommendations and reasons for decreased uptake including other health priorities, no standard eligibility requirements, and lack of awareness (Agyei-Baffour et al., 2020). This construct was used to identify and promote a better understanding of the parents' knowledge and needs regarding obesity prevention programs.

Sustenance

The component sustenance encourages a long-term behavior change by continuing the changed behaviors. Emotional transformation, practice for change, and change in the social environment are three constructs of sustenance of behavior change (Sharma et al., 2022). Emotional transformation examines the feelings involved in

making the behavior change and applying it towards making the behavior change (Sharma, 2015). The construct of emotional transformation encourages new health behaviors such as fruit and vegetable consumption and sleep activity; the focus is on combating hesitancy and motivating to change their behavior by changing the mentality of participants with low esteem (Nahar et al., 2020). Researchers found that to prevent burnout among veterinary students and professionals in veterinary schools' interventions can be formulated with the MTM model constructs the constructs of behavioral confidence and emotional transformation as the substratum (Nahar et al., 2020). This construct can be used to guide an individual to think about the barriers that prevent them from changing their behavior and making the changes needed.

The construct, practice for change, encourages constant reflection on the health behavior change and making the changes needed to continue the behavior change (Sharma et al., 2022). Journaling about the changes and preparation for action are activities that promote behavior change with the help of this construct (Sharma et al., 2022). In order to sustain a health behavior of increasing awareness and improving HPV vaccination rates, the researchers found that reminder phone calls and home visits could be beneficial (Agyei-Baffour et al., 2020).

The third construct change in the social environment involves creating a social support system that can include the health educator (Sharma et al., 2022). The social environment in which an individual's life can bolster confidence and give support to make the changes needed to achieve a behavior change. Long-term behavior change is

complicated and often unsuccessful; these constructs can be used to formulate effective obesity prevention programs.

Researchers who Used the MTM as a Framework

The MTM model can be used as a framework to continue the behavior change of healthy eating and increased physical activity at home. The studies indicate the MTM constructs can be used to initiate and sustain behavior change in children who participate in the WPCC program and understand the reasons for failure to sustain the behavior change (see Table 1).

Table 1

Studies Using the MTM

Author and year	Population	Design	Findings
Sharma et al. (2017)	410 college students	A cross-sectional study	A multiple regression analysis revealed that the MTM for the component initiation, the constructs behavioral confidence changes in the physical environment had a variance of 61.8%. The component sustenance using the constructs, emotional transformation practice for change had a variance. The results indicated developing tailored interventions to increase the consumption of water among college students.
Sharma et al. (2021)	1,284 participants in Florida	Cross-sectional Study.	An independent-samples-t-test and hierarchical multiple regression revealed 73.6% variance in initiating sunscreen usage behavior and 59% of the variance for

			the sustenance component of MTM.
Sharma et al. (2020)	281 college students	Cross-sectional study	Stepwise multiple regression modeling was done for both the components of the MTM model revealed the constructs of behavioral confidence had 57.5% of the variance in the initiation of intentional outdoor nature contact behavior. All the three constructs of MTM for the component sustenance, emotional transformation coefficient = 0.204, p = .002) were statistically significant, and showed a total variance (31%) for the sustenance of the behavior.
Khanna et al. (2020)	214 upper elementary school children participated using 38 questionnaires on physical activity	Cross-sectional study	Stepwise regression analyses done revealed a 12.5% variance in the intention to start PA behavior change from the initiation model and a 5.3% variance in the intention for the sustenance of 60 minutes of PA every day. The sustenance model also showed the two constructs of emotional transformation and practice for change as significant predictors
Sharma et al. (2018)	175 college students completed the 38-question survey that included criteria of at least 18 years of age and eating less than 5 cups of fruits and vegetables per day.	Cross-sectional study	Stepwise regression analysis was done to predict initiation of fruit and vegetable consumption which showed behavioral confidence and changes in the physical environment were statistically significant

			predictors with a variance of 40.2%. Emotional transformation, practice for change, and changes in the social environment were statistically significant predictors for the intention to sustain fruit and vegetable consumption and accounted for 30.4% of the variance.
Agyei-Baffour et al., 2020	Three 60-minute focus group discussions using Sixteen semi-structured open-ended questions based on MTM constructs	Qualitative study using directed content analysis	Theoretical constructs of the MTM theory were used to find themes and concepts. They concluded that There was general knowledge about HPV and gaps in knowledge about HPV vaccination.
Bashirian et al. (2019)	34 Students were recruited for semi-structured, individual interviews	Directed content analysis	104 final codes around the six themes of predetermined MTM constructs The findings of this study showed that this model has the potential to explain behavior reduction.
Nahar et al. (2020)	140 students took a 54-item survey	Cross-sectional study	The main predictors of reduction in behavioral confidence, social environment change, and participatory dialogue. Hierarchical multiple regression analysis revealed 49.5% of the variance for the initiation component and 50.4% variance for the sustenance component
Batra et al., 2022	Online questionnaire of 263 parents	Cross-sectional study	Multiple logistic regression analyses revealed 42% of the participating parents

			hesitant to get their children vaccinated for COVID-19. The constructs behavioral confidence and participatory dialogue were statistically significant predictors of COVID-19 vaccination hesitancy
Jovein et al., 2023	Descriptive study of 400 women, and then 128 eligible women were selected for educational intervention	A quasi-experimental study	The results showed a significant difference between the intervention and control groups in all the MTM constructs. Six months later BMI, waist circumference and amount of consumption of sugary substances decreased significantly in the intervention group ($p < 0.05$).

Prevalence of Childhood Obesity

Childhood obesity persists as a significantly growing public health problem that increases the risk of children to many chronic diseases in the future. According to the WHO (2021), 38.2 million children under the age of 5 years were overweight or obese in 2019. In 2016, it was estimated that 340 million children and adolescents between the ages of 5–19 were considered obese (WHO, 2021). Spinelli et al. (2019) revealed that one in four children were severely obese, and it was more common among children with mothers with lower education. Childhood obesity affects all aspects of a child's life such as physical health, academic performance, social and emotional well-being, and self-esteem; most obese children progress to adulthood being predisposed to chronic diseases (i.e., diabetes) and cardiovascular diseases (Sahoo et al., 2015). The growing numbers in

obesity rates indicate the urgency in which the childhood obesity problem needs to be addressed and prevented.

The abundance of food and resources in developed countries has always been associated with obesity. Obesity is not only considered a public health problem in high-income countries (WHO, 2021). Middle-income and low-income countries have also declared obesity as a public health concern in their countries; it also adds to the economic burden these countries already face with malnutrition and infectious diseases still major health issues (WHO, 2021). Rural areas have a higher BMI when compared to other regions; in low- and middle-income countries, it is 80% higher (Lee et al., 2019). The global action plan designed by the WHO encourages countries to implement a "system-based approach" and emphasizes the importance of developing policies and addressing gaps according to the needs of the country (WHO, 2018). The development of plans like the global action plan can help introduce changes in health behaviors that combat obesity through both upstream and downstream approaches.

Prevention of obesity by promotion of healthy food choices and increased physical activity with support from the community and environment the individuals live in can be valuable. Changing environments to increase resources that can expand the ability of individuals to make better choices regarding food and physical activity will be very beneficial in preventing childhood obesity. On a community level, implementation of evidence-based policies, and at an individual level, encouragement of healthier dietary changes and increased physical activity can promote healthier lifestyles and prevent obesity (Smith et al., 2020). Creating consequential partnerships with multiple sectors

and governments, empowering communities, and creating programs that improve the knowledge of the community regarding physical activity and healthy eating can establish long-term changes in behaviors and change social norms (Nau et al., 2021). Families and individuals can make better responsible choices when there are policies and programs in place to assist with their busy lifestyles.

School-Based Obesity Prevention Programs

Obesity prevention programs are implemented to provide support and guidance to combat childhood obesity. Healthcare and education systems strive a toward common goal of reducing childhood obesity using evidence-based behavior change programs and school wellness policies respectively (Narayanan et al., 2019). Research conducted by Narayanan et al. (2019) revealed that collaboration between academic settings and communities around them can be efficient in improving healthy behaviors among children. Bleich et al. (2018) described school-based interventions as programs that are implemented in schools during school hours or after-school hours. School-based interventions are implemented to guide schools in adapting healthy meal guidelines and increase physical activity in schools (Shaya et al., 2008). Classroom-based physical activities can play a critical role in increasing physical activity among children and youth and help improve academic outcomes (Watson et al., 2017). Children spend most of their time at school, which presents the best opportunity to implement targeted interventions to combat the obesity epidemic.

Parents and routines at home play a critical role in the diet and activity of children. Interventions that have a multicomponent approach and involve partnerships

with parents show better outcomes (Smith et al., 2020). Since these interventions are not panoptic, the outcomes are not uniform and often not sustainable (Shaya et al., 2008). Okely and Hammersley (2017) stated the reason for most school-based interventions being unsuccessful was the failure to follow the program at home. Often, the inability to continue the program at home can be due to a lack of support or information for parents, which impacts the program's sustainability. School-based obesity prevention programs are practical and successful when there is support from the community. Lambrinou et al. (2020) investigated various school-based childhood obesity prevention interventions and stressed the importance of schools, teachers, and families' role in promoting interventions. Involving parents, teachers, and community organizations can be an effective solution to creating and implementing successful school-based obesity prevention programs.

Despite implementing many school-based obesity prevention programs in schools, the outcomes are still inadequate, which justifies the need to focus on barriers these programs face to attain successful outcomes. Day et al. (2019) conducted a qualitative research study to explore the perceptions of school staff regarding the barriers that prevent obesity prevention programs from being successful. Day et al. concluded there is a need for supportive tailored interventions with recommendations to implement successful obesity prevention programs. There is a lack of methods to evaluate the effectiveness of school-based obesity prevention programs and a need for future research on measurements to evaluate such programs (Schaap et al., 2018). Knowing the barriers

and understanding the reason for them will help design and implement effective and successful programs.

Physical Activity and Nutrition in Schools

According to the U.S. Department of Health and Human Services (DHHS), children and adolescents should participate in 60 minutes or more of moderate-to-vigorous physical activity daily (Piercy & Troiano, 2018). O'Leary et al. (2019) investigated a school-based intervention called Project Spraoi implemented in elementary schools in Ireland, which consisted of several components that promoted physical activity and nutrition. The study concluded that a multicompetent school intervention such as Project Spraoi showed favorable outcomes, including positive impacts on physical activity, nutrition, and behavior of the children (O'Leary et al., 2019). Multi-component school-based obesity prevention intervention involves different levels of interventions such as increased physical activity in school, nutrition education, changing environment to promote healthy behaviors, culturally adaptive, and support for school staff and parents (County Health Rankings & Roadmaps, n.d.). Shirley et al. (2015) indicated the importance of obesity prevention programs in U.S. elementary schools that focus on different components to reach better outcomes.

Sahoo et al. (2015) encouraged the role of parents and schools in promoting healthier food habits and physical activity in children. Project SMART, a game-based intervention that focuses on increasing physical activity in elementary school children, implemented as a pilot study indicated the need for such interventions with better support for the teachers in implementing such programs (Julien et al., 2021). Teachers expressed

the benefits of partnerships with the various community organizations when the obesity intervention was implemented (O'Leary et al., 2019). Children and adolescents with resources and opportunities to participate in physical activity can improve their development, promote healthier eating habits and help foster long-term behavior changes (Piercy & Troiano, 2018). Since children spend most of their time in school, it is advantageous to incorporate physical activity and nutrition interventions to instill long-term behaviors in children who grow to be adults.

Behavior Change

School administrators and teachers can be crucial in implementing effective school-based interventions that can improve students' health and promote lasting behavior change. Bridge et al. (2019) explored the impacts of obesity prevention programs on preschool parents and children. They concluded that obesity prevention programs positively promote healthy behaviors in parents and children who participated in the program (Bridge et al., 2019). Multi-level multi-component interventions and strategies that involve the community the child lives in to are beneficial to combat childhood obesity (Gittelsohn et al., 2018). Changes in health behaviors in children seen in the 18th month of the Louisiana health school-based obesity prevention emphasizes the importance of long-term interventions to make lasting behavior changes (Hawkins et al., 2018). Supportive tailored interventions can reduce barriers and improve the effectiveness of obesity prevention programs (Day et al., 2019). Knowledge of the barriers encountered in a school when these programs are implemented can be beneficial in creating sustainable programs.

Effectiveness of School Based-Obesity Prevention Programs

A Cochrane Review voices the importance of interventions that promote healthy weight in elementary children through physical activity and nutrition and link better-thinking skills and school performance to children with a healthy weight (Martin et al., 2018). Martin et al. (2021) evaluated the impact of school-based interventions to prevent weight gain among elementary school students from grades four to six and the effects of physical activity and nutrition on a student's health and well-being. They found that BMI reduced in children who received the intervention on nutrition, but there were no significant changes in BMI in other categories that received the intervention (Barnes et al., 2021). Ward-Begnoche et al. (2009) designed and implemented 9-week school-based obesity prevention to promote physical education for grade seven to nine. The results from the questionnaire completed after the 9-week period revealed that behaviors of physical activity and nutrition had a beneficial effect on the students, and it was positively received by parents (Ward-Begnoche et al., 2009). Hawkins et al. (2018) suggested reexamining school cafeteria lunches to reduce the consumption of foods with high sodium and extra added sugars.

To explore if added sugar and sodium can be reduced in school lunches, Hawkins et al. (2018) conducted a randomized controlled study with a 28-month long school-based obesity prevention called Louisiana health and concluded reducing sodium and added sugar consumption in school cafeterias can be done. Community participatory research can be used to examine the role of culture and environment in obesity and can help design and implement culturally sensitive obesity prevention interventions (Ward-

Begnoche et al., 2009). These studies demonstrate the need for reforming school policies and providing evidence to make changes in school meals by reducing calorie-dense foods, implementing obesity prevention interventions, and providing more opportunities for physical activity in schools.

Factors that Contribute to Childhood Obesity

Obesity is dependent on many factors such as socioeconomic, environmental, and behavioral factors. Understanding the role these factors play in obesity is essential in preventing and creating sustainable interventions. Although high intake of calorific foods and reduced physical activity are the main factors that contribute to obesity, factors such as environment and culture also play an essential role in childhood obesity (Sahoo et al., 2015). The multiple factors that cause obesity necessitate the combined efforts of various health sectors and communities to prevent obesity.

Environmental Factors

Access and availability of food are important factors that increase the risk of obesity in many populations. Increased prevalence of obesity can be associated with the neighborhoods individuals live in with unequal access to healthy food choices. Geographical areas where access to food is scarce, there are calorie-dense options, and the occupations have limited physical activity, lead to high-calorie food intake without a balance in calorie expenditure and higher rates of obesity (Lee et al., 2019). The reason for this is the long distances to the supermarkets, health care settings, and fewer resources to practice healthy habits (Lee et al., 2019). A food desert is a region where access to healthy and affordable food options is minimal; this does not prove that places with more

supermarkets have reduced obesity rates (Lee et al., 2019). Food swamps are neighborhoods that have easy access to high calorie-dense fast food compared to healthier alternatives, which can be associated with the placement of such restaurants in low-income and minority neighborhoods (Cooksey-Stowers et al., 2017). Researchers Cooksey-Stowers et al. (2017) examined if food deserts or food swamps were predictors of obesity and determined that food stamps were a better predictor of obesity rates at a county level. The easy availability and low cost of fast foods can force families to choose calorie-dense fast foods than healthier alternatives to support their busy lifestyles. The ability to choose healthy foods or exercise is not feasible if children's environment does not provide them with healthier options and resources, especially in places such as schools where children spend most of their time during the day.

There must be a community-wide effort to change the environment children live in, such as healthier food lunches, increased physical activity in schools, and policies that make healthier food choices affordable (Kansra et al., 2021). Easy access to fast high-calorie foods and food advertising targeting children can also contribute to the increase in obesity (Lee et al., 2019). Behaviors in a family (i.e. foods consumed, lack of physical activity, and busy lifestyles) can influence children leading to obesity at an earlier age (Sahoo et al.,2015). Children are exposed to increased screen times, which reduces their daily physical activity levels, leading to obesity, sleep problems, and poor diet choices (Kansra et al., 2021). Only policies changing the availability of fast foods is not feasible without providing other alternatives and strategies to maintain a healthy lifestyle without causing food insecurity issues (Cooksey-Stowers et al., 2017).

In 2009 in the United States, it was estimated that physical activity due to transportation had reduced by 17.8% due to the increased availability of automotive vehicles and infrastructure that did not support walking to places (Lee et al., 2019). The increase in the use of cars reduces the need to walk to places, which leads to decreased physical activity. An integrated effort from all sectors of the community, health systems, and policymakers combined can help reduce obesity.

Socioeconomic Factors

The socioeconomic status (SES) of a family or an individual not only includes education and finances but can also encompass the well-being of a person or family according to the opportunities available. Spinelli et al. (2019) indicated that school-based interventions could reach diverse populations such as families from different socioeconomic backgrounds, which can help address health inequalities A high SES can predispose someone to better opportunities due to better social positions leading to better health outcomes than someone with a low SES (Lee et al., 2019). A qualitative study by Lappan et al. (2020) among low SES parents of 3 to 8-year-old children identified risk and protective factors with health behaviors related to childhood obesity. They concluded that health disparities were related to low SES, and risk factors such as chronic poverty, income inequality, and barriers to health promotion resources played a significant role in the cause and maintenance of childhood weight gain (Lappan et al., 2020).

Parents play an influential role in their children's' life especially in early childhood when routines and habits are shaped. Davodi and Ahadi (2021) elaborated on the influence parents have on their children's eating habits and their feeding styles. Their

study was conducted on elementary school children to determine if the feeding styles and eating habits of parents affected children (Davodi & Ahadi, 2021). They discovered that parent feeding styles such as encouraging feeding style had positive effects on the eating habits of children than controlling feeding style (Davodi & Ahadi, 2021). It is important to remember parents and their attitudes towards food can influence the eating habits of children, which can be a causative factor in weight gain.

Summary and Conclusion

The literature review revealed that using the MTM as a framework for this study will help in terms of recognizing facilitative forces and barriers parents confront when continuing obesity prevention program objectives at home. Home-based interventions that focus on child and parental behavior changes prove to be successful in terms of reducing BMI in children (Pamungkas & Chamroonsawasdi, 2019). In Chapter 3, I delineate the research approach.

Chapter 3: Research Method

In this chapter, I discuss the methodology used to conduct this study. I address the purpose of the study, methodological procedures, research design, and rationale for selection of participants. I also address sample size, data collection, instrumentation, and an explanation of why this research is necessary. Validity and ethical procedures are also discussed. This study will be instrumental in terms of addressing barriers and whether there is a need for support to continue the WPCC at home.

I aimed to understand WPCC parents' views, perceptions, and needs regarding continuing the program at home. I addressed facilitators and barriers parents encounter in terms of following program goals at home and if support was needed to sustain the program. I collected qualitative data from this population to understand views, perceptions, and conditions that were conducive to continuing school-based obesity prevention programs at home. The MTM and its components initiation and sustenance were used in this study to understand reasons for current behaviors and promote long-lasting behavior change. I used constructs of initiation to encourage increased physical activity and better food choices and advance conversations about improving support systems in the community. Sustenance facilitates long-term behavior change through its three constructs behavioral confidence, emotional transformation, and changes in the physical and social environment.

Research Design and Rationale

Research Questions

RQ1: What are the views of parents regarding facilitative forces and barriers they confront when trying to continue working on their children's obesity prevention objectives from home?

RQ2: What are the experiences of parents involving additional resources and support that are needed for their children to continue working on obesity prevention from home?

Qualitative Exploratory Design with Directed Content Analysis

The qualitative exploratory design was used to understand reasons for discontinuing the program at home and help in terms of filling informational gaps about barriers as well as resources that can help children pursue the program in the long term. Qualitative exploratory research involves clarifying observations and factors (Hunter et al., 2019). This design allows researchers to describe, interpret, and analyze data to understand why issues occur (Hunter et al., 2019). Researchers implement the exploratory design to learn more about a research problem when there is a gap in information that is available. This research design and MTM were used to reveal barriers encountered by those who are part of the WPCC program and encourage policymakers to promote research and allocation of resources.

A qualitative exploratory design was used with directed content analysis using the MTM as the framework to evaluate the WPCC program, analyze data, and address applicability of MTM components and constructs. The rationale for choosing an

exploratory design was to understand perceptions and views of parents whose children participate in the WPCC program. Data helps me to understand needs, changes, and resources that are needed to make the program sustainable.

Role of the Researcher

As the researcher, I moderated the in-person focus groups and used a recording device to record conversations. The moderator of focus groups should be skilled in terms of managing relationships and creating comfortable environments for all participants (Nyumba et al., 2018). There was a prepared focus group discussion protocol (see Appendix A) with open-ended questions to encourage conversation among focus group members. Skilled researchers should be able to facilitate discussions by reading participants' body language and communicating during silences and disagreements (Nyumba et al., 2018). During focus group meetings, I communicated with participants, defused conflicts, and facilitated conversations during silences or gaps in communication. It was essential to keep the factor of fatigue in mind and encourage breaks and activities to break the monotony and discuss time that was needed.

Recorded focus group discussions were transcribed verbatim. The research site provided list of teachers whose classes participate in the WPCC program. Teachers were a valuable resource who helped me connect with parents who were participants of this study. Sanjari et al. (2014) suggested that the role of the researcher should be well defined in order to avoid influences and bias, and adequate planning for interviews should be done before starting the process. For this study, it was important to inform participants that their anonymity would be preserved, and their personal information

would be kept strictly confidential. As the moderator, my involvement was clearly outlined to avoid any influences or bias during sessions. Predetermined and open-ended questions use during sessions alleviated ambiguity of power and prejudice.

Participant Selection

I recruited 26 parents of students who participated in the WPCC program to collect data through three separate focus group discussions. Nyumba et al. (2018) suggested using local contacts and incentives to encourage participation. $30 Walmart gift cards were offered to participants to participate in focus groups. In the invitation, I ensured their names and their children's names and personal information was not made public. Informed consent forms were signed and collected before focus groups began.

Since the topic was views and perceptions of parents who have elementary school children, it was valuable to see what this population thought about their experiences with physical activity and nutrition involving their children. A convenience sample selection was used to reduce bias and increase the study's credibility. Data saturation is repetition of data collected as compared to previous data, thus leading to informational redundancy (Saunders et al., 2018). Researchers can decide to stop further data collection if there is a recurrence of information during interviews (Saunders et al., 2018).

All participants had children who were enrolled in the county elementary public school and participated in the current WPCC program. Parents were required to sign informed consent forms. Only one parent from each family was required to participate. For the purpose of this study, all participants spoke English. Parents whose children did not participate in the WPCC program were excluded. The research site emailed the with

teachers whose classes participated in the program. Teachers connected with parents and forwarded invitations for this study to them.

Data were collected in March 2023 from parent discussions after the WPCC program for the current year was implemented. Focus groups were conducted at a venue convenient to all participants' schedules. The focus group discussions were conducted via Microsoft Teams. The recordings were transcribed after the discussions, and the participants were sent a copy of the transcript to verify if there are any objections to sharing the transcribed data. All personal information of the participants was deidentified before transmitting the data to other researchers or Washoe County Health District members who implement the program.

Instrumentation

In qualitative research, focus group discussions are used to attain a deep understanding of social issues by using a selected group of individuals that represent the population being studied (Nyumba et al., 2018). Focus groups were used in this study to understand the perceptions and views of the parents regarding the WPCC program. The discussions were recorded using a phone; this helped with transcription and analysis. Although focus groups are sometimes thought to be like interviews due to the ability of focus groups to reveal perceptions and values like interviews, the role of the researcher during the focus groups as a moderator is a very critical difference (Nyumba et al., 2018). During focus group discussions, the researcher facilitates conversations to keep the forum moving, unlike one-on-one interviews where the researcher asks investigative questions

(Nyumba et al., 2018). The ability of the researcher to listen, acknowledge and respond will be conducive to keeping the conversation in motion.

A focus group protocol (see Appendix A) helped reduce anxiety and stress the interviewer can experience by helping guide the conversation and providing a checklist of what was already asked to avoid repetition. A focus group protocol acted as a guide for the researcher during the discussions to explore concepts of the phenomenon of interest, the constructs of the MTM model, cultural sensitivity, and family habits. Morgan (2019) suggested when creating a guide, there are a few conditions that need to be addressed, such as time limit and sense of flow, using the "funnel down approach" with starter questions, structured in-depth questions, and wrap-up questions (p. 67). The main questions were developed keeping the phenomenon of interest, the MTM model, and the research questions in mind. The follow-up questions, along with "probes" help navigate the conversation in depth and clarify any concepts that emerge (Rubin & Rubin, 2016, p. 139). The moderator should start by introducing the topic and asking incisive questions and probes to keep the continued discussion among the group (Morgan, 2019, p. 66). The role of the parent in the home and the daily schedule were also considered while asking questions to understand the family's physical activity and nutritional habits.

The goal was to frame questions that followed the constructs of MTM and helped understand the parents' culture, perceptions, and barriers to adopting the program goals. Patton (2015) mentioned that knowledge questions help understand the interviewee's knowledge about the program and services available. A knowledge question was critical in this research study to understand the parent's knowledge of the WPCC program and its

goals and objectives. The answer to this question indicated how much the participants knew about the program, which could move the discussion towards the perceptions and barriers to continuing the program at home.

The venue for the focus groups should have good space, be comfortable, and be easily accessible to all participants (Nyumba et al., 2018). For this study, the location was selected considering accessibility and ease of travel for the participants. A room at the local library will give the participants privacy to share their thoughts. The site was changed to online due to extreme weather, which was favorable due to travel time.

The credibility and validity of the data collection process were established by describing in detail all methods used, recording the focus group discussions, taking extensive notes, and reviewing the interview transcripts with the participants. The reflexive journal notes taken during and after the talks were valuable in data analysis and interpreting concepts mentioned during the focus groups. Audio recording and transcriptions were beneficial for confirming concepts during analysis. To improve content validity, the focus group protocol was reviewed by experts of the WPCC program and peers.

Data Analysis Plan

The research questions in this qualitative study were addressed and analyzed using the transcribed data collected from focus group participants who were parents of students enrolled in the WPCC program. The qualitative content analysis concentrates on exploring the perceptions and experiences shared during the discussions and interprets the patterns and themes that develop (Renz et al., 2018). Content analysis is used to code

data systematically the themes and patterns that emerged in the transcripts, understand the emotional reactions, and clarify the constructs of the theory using the theory as a framework (Hsieh & Shannon, 2005; Morgan, 2019; Nyumba et al., 2018). The types of content analysis approaches are conventional, directed, and summative and are differentiated by how the codes and themes are analyzed (Hsieh & Shannon, 2005). The directed approach uses existing findings or an existing theory as a guide to analyze the data and develop answers to the current problem or build on the existing theory (Hsieh & Shannon, 2005).

In this study, the directed content analysis approach was used with MTM theory as a guide to analyze the collected data. The directed content analysis approach identified the link between the data collection, the MTM theory, and analysis using open-ended questions and targeted questions to explore the participants' experiences. This approach identified and interpreted the participants' perceptions, emotional experiences, and knowledge of the research problem and helped improve or add to the theory (see Hsieh & Shannon, 2005). The data were collected with quotes based on MTM constructs without compromising the integrity of the discussion. A comprehensive discussion of the topic cannot be done with just a single group discussion; therefore, there may be an obligation for more meetings until theoretical saturation is reached (Nyumba et al., 2018). In this study, focus group discussions were conducted only once for each group. It was critical to keep in mind that having more than one discussion for each group was not feasible due to the busy lifestyles of the participants.

The notes and transcripts collected during focus group discussions were analyzed to understand and solve the research problem. Qualitative research studies have extensive notes and transcripts that can become tedious to analyze manually; therefore, software programs have become popular to aid the analysis of qualitative data (Renz et al., 2018). Niedbalski and Ślęzak (2021) suggested using Computer-Assisted Qualitative Data Analysis Software (CAQDAS) to aid with the systematic and detailed interpretation of data. CAQDAS is a supportive tool that helps manage enormous amounts of data to increase flexibility, accuracy, and transparency of data along with an audit trail (Hsieh & Shannon, 2005; Morgan, 2019). The choice between manual and CAQDAS should be made according to the demands of the research data, such as size, time, and user capabilities (Saldaña, 2016). The qualitative data analysis CAQDAS software used was NVivo to increase efficiency and save time. NVivo uses multiple codes in the same text fragment to help understand comparisons and links between topics (Saldaña, 2016). For this study, NVivo wase valuable in managing and interpreting the data collected during the focus group discussions.

Issues of Trustworthiness

To maintain credibility and validity, all the steps taken to obtain permission from the research site and gain access to participants should be meticulously described in the research study (Creswell & Creswell, 2018). Credibility can also be attained by interviewing the right people with the correct information and ensuring the data collected are accurately written down without bias (Rubin & Rubin, 2016). A regular peer debrief is an excellent strategy to maintain the study's credibility (Forero et al., 2018).

Researchers Kebede et al. (2021) suggested debriefings with peers and experienced colleagues on the codes and procedures used to increase trustworthiness and credibility. Confirmability can be achieved by using reflexive journals and transcriptions that can be confirmed by other researchers (Forero et al., 2018). Maintaining data validity can be resolved by vetting participants' responses and the transcribed data (Konlan et al., 2021). Interpretations of the results that past experiences of the researcher might influence need to be described to show reflexivity and credibility (Creswell & Creswell, 2018). This was prevented by taking verbatim notes during the focus group discussions and reflexive journal notes after. Dependability of study can be ensured by creating detailed reports of the qualitative inquiry to allow it to be recreated again (Forero et al., 2018). The credibility and validity of this study's data collection process were established by describing in detail all methods used, taking extensive notes, and reviewing the transcripts with the participants. A convenient sample selection of the parents to participate in focus groups reduced bias and increased the credibility of the study.

In order to ensure the trustworthiness of the data, qualitative researchers include strategies to minimize bias during data collection. Trustworthiness can be increased by quoting text without using predetermined initial codes (Hsieh & Shannon, 2005). Researchers Konlan et al. (2021) suggested using the same question guide throughout to increase reliability and trustworthiness. Using software programs to analyze results can not only make large amounts of qualitative data but also increase the results' trustworthiness by reducing researcher bias (Renz et al., 2018). In this study NVivo software was used to analyze the results and improve trustworthiness of the study.

Another strategy to improve reliability when analyzing qualitative text is establishing an audit trail and clearly outlining all procedures and steps used in the study (Renz et al., 2018). An audit trail can be used to prevent researcher and participant bias, which are said to be common causes of qualitative data collection (Hsieh & Shannon, 2005). The participants were sent a copy of the transcript to verify and check if there were any objections to sharing the transcribed data to help reduce researcher bias. The transferability of a study is the extent to which the study can be transferred and generalized to other contexts (Forero et al., 2018). Convenience sampling can help increase the transferability of this study. The reflexive journal notes taken during discussions were valuable in data analysis and interpreting concepts mentioned. Audio recording and transcriptions were useful for confirming concepts during data analysis.

Ethical Considerations

Sanjari et al. (2014) explored the ethical challenges qualitative researchers encounter and concluded that factors contributing to it are anonymity, confidentiality, informed consent, and the researcher's influence or bias. Interpreting what is observed and extracted from the participants during the interviews requires the researcher to have excellent interview skills (Sanjari et al., 2014). It was necessary for me as the moderator of the focus groups to understand participants' values and cultures and take informed consent taken ahead of the interview critical to maintaining anonymity and confidentiality. The participation of participants should be voluntary, both written and verbal consent to participate and the ability to anytime (Konlan et al., 2021). After the recordings were transcribed, the participants were sent a copy of the transcript to verify if

there were any objections. All personal information of the participants was deidentified before sharing the data with other researchers or members of the Washoe County health district officials who implement the program.

Summary

In this chapter, the methodology was detailed, including instrumentation and data analysis. Sampling strategies, focus group discussion protocol, information about conducting focus groups, and a detailed data analysis plan were addressed in this chapter. A comprehensive account of issues involving trustworthiness and ethical concerns was also included with solutions to strengthen and validate research results. In Chapter 4, I present a documented analysis of results and deductions from findings. In Chapter 5, I include recommendations and conclusions.

Chapter 4: Findings

The problem in this study was the inability of parents to continue the WPCC program at home due to lack of support or information for parents, which impacts the program's sustainability. In the U.S., rates of childhood obesity are growing despite implementing school-based obesity interventions (Sanyaolu et al., 2019). This growing public health problem predisposes children to chronic diseases in adulthood, requiring classroom-based physical activities to combat childhood obesity (Arteaga et al., 2018; CDC, 2020; Watson et al., 2017). Although there is literature on the effectiveness of school-based obesity prevention programs, there is a lack of information regarding why such programs are not sustainable at home. This qualitative explanatory study involved understanding parents' views, perceptions, and needs regarding continuing the WPCC at home. I sought to answer the following two research questions which guided the study:

RQ1: What are the views of parents regarding facilitative forces and barriers they confront when trying to continue working on their children's obesity prevention objectives from home?

RQ2: What are the experiences of parents about additional resources and support needed for their children to continue working on obesity prevention from home?

I neutrally and objectively present findings of the study. I present data via a clear text narrative that is supported by tables. Chapter 4 includes the setting, demographics, data collection, data analysis, trustworthiness of data, results, and a summary. Findings are organized by research question.

Setting

The planned setting that was approved by the Walden University Institutional Review Board (IRB) with approval number 01-20-23-0985961 on January 20, 2023 was a private room in a local library. All recruitment material, including consent and demographic forms were prepared for in-person focus group settings. Due to drastic weather and scheduling issues, the original setting had to be changed. I reformatted recruiting materials to include video conferencing through Microsoft Teams as recommended by the Walden University IRB. After t expressing interest in participating, consent forms were emailed to prospective participants. They had to reply to emails with the phrase “I consent” to provide consent to participate in focus groups. After consent was provided, demographic forms were sent by email to participants. They were instructed to return filled demographic forms before their focus group sessions ended. All participants were emailed $30 Walmart gift cards as incentives after focus group discussions. Participants were not influenced by any organizational or personal conditions and were no budget cuts or changes of personnel. Interpretation of results of this study was not influenced by organizational or personal conditions.

Demographics

In this study, 26 parents from different families were included in this study. They were parents of elementary school children. All participants spoke English. All participants were enrolled in a Washoe County school and participated in the current WPCC program.

Real names of the participants were known only to me. Because anonymity and confidentiality of participants was paramount in this study, pseudonyms were used during focus group sessions. I created fictitious names for each participant, which were used instead of their real names. Using names as pseudonyms was particularly important because it helped maintain a sense of personhood and presence in a natural setting, which is consistent with a qualitative approach. Assigning a pseudonym to each participant also helped to ensure their identities were protected. In focus group 1, nine participants participated (see Table 2).

Table 2

Focus Group 1: Participant Pseudonyms

Focus group 1 participants	Pseudonym name
P1	Ashley
P2	Nate
P3	Nancy
P4	Julia
P5	Jamal
P6	Natalya
P7	Michele
P8	Gabriel
P9	Florence

Focus group 2 also included a total of nine participants (see Table 3).

Table 3

Focus Group 2: Participant Pseudonyms

Focus group 2 participants	Pseudonym name
P1	Sylvia
P2	Daniel
P3	Philip
P4	Alicia
P5	Beatrice
P6	Jackson
P7	Bianca
P8	Stephanie
P9	Maurice

Unlike the first two focus groups, the third focus group had only eight participants (see Table 4).

Table 4

Focus Group 3: Participant Pseudonyms

Focus group 3 participants	Pseudonym name
P1	Belinda

P2	Chad
P3	George
P4	Juanita
P5	Anne
P6	Jamal
P7	Josephine
P8	Jacob

All 26 participants stated they were willing and prepared to engage in focus group interviews that lasted for 45 to 60 minutes. They were parents of diverse races most were in their 30s and 40s. All focus groups had a mix of both male and female participants. Demographic information of the participants is summarized in Table 5.

Table 5

Participant Demographics

Participant pseudonym	Gender	Race	Has child enrolled in Washoe County Elementary Public School	Child participate in current WPCC program
Ashley	Female	Black	Yes	Yes
Nate	Male	White	Yes	Yes
Nancy	Female	Multi-racial	Yes	Yes
Julia	Female	Black	Yes	Yes
Jamal	Male	White	Yes	Yes
Natalya	Female	Multi-racial	Yes	Yes
Michele	Female	White	Yes	Yes
Gabriel	Male	White	Yes	Yes
Florence	Female	Multi-racial	Yes	Yes
Sylvia	Female	White	Yes	Yes
Daniel	Male	Multi-racial	Yes	Yes
Philip	Male	Multi-racial	Yes	Yes
Alicia	Female	White	Yes	Yes
Beatrice	Female	White	Yes	Yes
Jackson	Male	Black	Yes	Yes
Bianca	Female	Black	Yes	Yes
Stephanie	Female	Asian	Yes	Yes
Maurice	Male	Multi-racial	Yes	Yes
Belinda	Male	White	Yes	Yes
Chad	Male	Multi-racial	Yes	Yes
George	Male	Hispanic	Yes	Yes
Juanita	Female	Hispanic	Yes	Yes
Anne	Female	Multi-racial	Yes	Yes
Harriet	Female	White	Yes	Yes
Josephine	Female	Black	Yes	Yes
Jacob	Male	White	Yes	Yes

Data Collection

In the approved proposal for this study, the number of participants for the three focus groups was eight to 10 participants for each session. The approval number from Walden University's IRB for this study is 01-20-23-0985961. The 26 participants recruited for the focus group discussions for this were divided into three groups of nine,

nine, and eight participants to collect data to answer the two research questions of this study. The number of participants was an appropriate number as it allowed me to conduct in-depth discussions easily.

The three focus group interviews were conducted online using Microsoft Teams, each lasting for a period of 45–60 minutes. Data were recorded with the use of the default Microsoft Teams recorder, which allowed me to record the online meetings. Permission to record was first obtained from the participants before the recording. During the focus group discussion sessions, open-ended questions and probe questions for follow-up were used as detailed in the focus group protocol. The appropriate follow-up questions were only asked when I did not fully understand a given response, when the answers were ambiguous or vague, and when more detailed information was warranted.

The focus group sessions were conducted, all recordings were uploaded all recordings were stored on a password-protected computer. I hand transcribed the focus group recordings and the transcript Microsoft Teams provided after each session. All recordings and transcripts were stored on my password-protected computer and will remain secure until destroyed, per Walden University's IRB guidelines. Reflexive notes were taken with the use of paper and pen in each focus group discussion. This was important during the sessions, including physical cues, facial expressions, and extended pauses. There were no variations in data collection from the plan presented in Chapter 3. There were no unusual circumstances encountered during the data collection.

Data Analysis

The exploratory nature of this study using DCA for data analysis allowed further investigation into the research problem. Using NVivo Version 12 software helped me manage and interpret data efficiently and save time. DCA allows the researcher to sift through the data shared in the discussions, understand experiences, and interpret the patterns and themes that developed in the knowledge of the research problem and will help improve or add to the theory (Hsieh & Shannon, 2005; Renz et al., 2018). The deductive approach of DCA to the analysis of qualitative data in which a researcher starts with an existing framework or theory and uses data to either build upon or support that particular framework (Assarroudi et al., 2018). The deductive approach of DCA was utilized in this study to build upon the MTM theory, which was the theoretical framework for this study. The process of analyzing data through the use of the DCA approach involved two major phases, preparation and organization.

Phase I: Preparation

The first step in Phase I was the acquisition of general skills. As a qualitative researcher, I developed the skills necessary to analyze the gathered data. These include analytical abilities, self-critical thinking, sensitive interpretive skills, continuous self-reflection, scientific writing, creative thinking, data gathering, as well as self-scrutiny. In addition, I educated myself on the qualitative data analysis CAQDAS software NVivo Version 12. The second step in Phase I entailed deciding on the analysis of the transcription of the focus group sessions and reflexive journal based on the aim of the research study. The reflexive journal had my interpretations of participants' posture,

sighs, pauses, silences, and laughter. To obtain a deeper understanding of the data, I immersed myself in the data, read and reviewed the transcribed focus group discussions multiple times, taking the following questions into account "who is talking? what was happening? when? and why? These questions allowed me to get immersed in data and enabled me to extract related meanings. The third step was entering all the data into NVivo Version 12. The software was used to organize the data, determine codes and develop themes efficiently, thus saving time.

Phase II: Organization

This phase of DCA has multiple steps, which I followed to use the essential data gathered into categories, themes, and patterns. The first step was developing a formative categorization matrix. The formative matrix is derived from an existing theory or previous research that consists of main categories and subcategories (Assarroudi et al., 2018). I deductively derived a formative matrix of major categories and related sub-categories from the MTM theory. The second step was the theoretical definition of the main categories and sub-categories. The theoretical definitions, which were derived from the MTM theory, were both objective and correct. The third step was to determine coding rules for major categories. The coding rules provide an undeviating separation between the major categories of the matrix and thus help to improve a study's trustworthiness (Assarroudi et al., 2018). Based on the theoretical definitions, I developed the coding rules as the description of the properties of the main categories. The fourth step was to choose and specify words identifiable for each major category. An anchor sample refers

to a short identifier of a major category that is selected from elements of the study (Assarroudi et al., 2018; Mayring, 2014).

The major categories selected here for this study were facilitative forces, barriers, and additional resources and support. The anchors selected were communication, information, finance, adopt change, and time. The fifth step was about performing the main data analysis. In this step, I selected anchors from the reviewed content related to the study's purpose and categorization matrix. I then summarized them and gave them preliminary codes. I grouped and categorized the preliminary codes in accordance with their differences, similarities, and meanings. Fifteen preliminary codes were developed for this study, which were then categorized into the major categories. All the data were categorized, and pertinent themes were identified using key concepts of the MTM theory. The six constructs of the MTM theory were applied as initial key concepts. These were: (a) participatory dialogue, (b) behavioral confidence, (c) changes in the physical environment, which are within "the initiation of the behavior change," (d) emotional transformation, (e) practice for change, and (f) changes in the social environment, which are within the "sustenance of behavior change" component. The operationalizations of these six constructs were then sorted into 10 themes, as shown in Table 6.

Table 6

Directed Content Analysis

MTM Theory components	Initial key concepts (MTM Theory constructs)	Operationalization of key concepts	Emerging Themes
Initiation of behavior change	Participatory dialogue	• Positive impact of the program on children • Positive impact of program on parents and other family members • Program materials easily readable • Lack of money to make the necessary changes or modifications in diet and physical activity • Healthy meals are expensive • Lack of time to participate in the program • Lack of effective communication with teachers	• Program has positive impact on the whole family • Parents interact more with their children and bond with them • Program materials easy to read and understand • Time and financial constraints • Having to adapt to new program and change one's schedule • Poor information sharing and communication between parents and teachers
	Behavioral confidence	• Health educator teach importance of healthy lifestyle including physical activity and eating healthy foods • Need to maintain healthy weight and prevent diseases	• Program has positive impact on the whole family
	Changes in the physical environment	• Availability and obtainability of resources for physical activity • Accessibility of resources • Convenience of resources • Readiness of resources	• Financial constraints to modify physical environment
Sustenance of behavior change	Emotional transformation	• The need to stay healthy	• More resources like time money, and experts
	Practice for change	• Integrating modifications to existing behavior change strategies • Managing barriers • Focusing on health behavior change	• Involve families • More resources like time money, and experts
	Changes in the social environment	• Developing social support within the environment • Health educators, health coaches, dieticians, nurse educators help to facilitate transformations	• Parental involvement • Community involvement • Improve communication and available of information for parents • More resources like time money, and experts

Evidence of Trustworthiness

Trustworthiness is understood as the level of confidence in data, interpretation, as well as methods utilized to ensure the quality of a given research study. It refers to the truthfulness, authenticity, and quality of findings (Lincoln & Guba, 1985). Four specific criteria usually used to judge the soundness of qualitative research called Guba's constructs for trustworthiness include credibility, transferability, dependability, and confirmability (Shenton, 2004).

Credibility

Credibility is the internal validity of qualitative studies. The credibility and validity of adopting appropriate research practices, such as obtaining permission from the research site to gain access to participants, should be meticulously described in the research study (Creswell & Creswell, 2018). For this study, permission was obtained from officials in the Washoe County health district and the school district to send invitations to the parents of students to participate in the study. Credibility can also be attained by interviewing the right people with true information and if the data collected are recorded accurately without bias (Amin et al., 2020; Rubin & Rubin, 2016).

In the current study, several strategies were utilized to establish this criterion of trustworthiness. One of them is triangulation, which entails the use of different types of procedures or sites from the field to establish identifiable patterns repetitively, and strategies to ensure the participants are honest (Shenton, 2004). To establish triangulation in this study, participants were recruited from different schools in the school district, and the participants were given many opportunities to leave the discussions if they felt

uncomfortable sharing information. The credibility of this study's data collection process can also be established by describing in detail all methods used, taking extensive notes, transcribing recordings verbatim, and reviewing the recordings of the discussions. A convenient sample selection of the parents to participate in focus groups reduced selection bias and increased this study's credibility. The trustworthiness of this study was elevated by quoting participant responses without using predetermined initial codes.

Transferability

Transferability is the second major aspect of trustworthiness. For this study, this criterion of trustworthiness was established through the thick description provided as follows. The respondents in the current study were parents of elementary school children who speak English. Their children were enrolled in a Washoe County public school and participated in the WPCC program. By collecting data from the participants through focus group interviews, I was able to gain an in-depth understanding of parents' views, perceptions, and needs regarding continuing the WPCC at home. The transferability of a study is the ability of the study to be transferred to other contexts, which makes it important for the researcher to communicate to the reader the confines of the study and all aspects of the study, such as the number of participating organizations, restrictions involved, number of participants, detailed account of data collection and time involved in data collection (Forero et al., 2018; Shenton, 2004). The trustworthiness of the study depends on the standard plan of conducting a similar study and does not depend on the exact details of the study since it depends on organizational requirements and community needs (Shenton, 2004). The importance of circumstantial changes in qualitative research

is key since the researcher has to take into account the organizational requirements and participant needs, which can be different in other settings. In the case of this study, changes had to be made to accommodate participants due to extreme weather.

Dependability

Dependability is utilized in demonstrating or measuring the reliability and consistency of the study's results. This criterion of trustworthiness is mainly focused on whether the same results would be attained if the same study is conducted two times (Shenton, 2004). For this study, dependability was established such that if another researcher wanted to replicate the study, adequate information is provided in the report to do so and support obtaining similar findings as the current study.

The dependability of the study is contingent on creating and providing detailed reports of the qualitative inquiry to allow it to be recreated again and a detailed audit trail (Forero et al., 2018; Konlan et al., 2021). The strategies that were used to establish dependability were triangulation and audit trail. According to Nowell et al. (2017), an audit trail refers to the transparent description of the steps taken in a research study from the beginning of the project until when the findings were reported. In the current study, the gap was identified after determining what to research and looking through secondary data and research, including research reports and studies carried out previously, and the methodology was chosen. The research plan included focus group sessions with open-ended questions chosen for data collection, information regarding the timelines, goals of the research, dependencies, and participant scope were documented and presented in the report to maintain a detailed audit trail.

A detailed description of selecting the participants, scheduling focus group interviews, preparing for online group sessions, and preparing equipment, including using the online Microsoft Teams default recorder, was documented. Notes were taken using pen and paper for backup. An audit trail was kept of all the notes taken in each of the three focus group interviews conducted. The reflexive journal notes taken during discussions, video recordings, and transcriptions were useful for confirming content data analysis and interpreting the concepts mentioned.

The data analysis was done systematically using reflexive journal notes and transcribed recordings. A trustworthy qualitative study demonstrates a systematic and exhaustive data analysis with enough detail to enable the reader to determine whether the process is credible and reliable (Nowell et al., 2017). Preliminary and secondary revision of all notes and transcriptions provide dependability to this study. Retaining an audit trail and the use of software programs to analyze results can reduce researcher bias, thus increasing the results' trustworthiness (Hsieh & Shannon, 2005; Renz et al., 2018). Coding and synthesizing the data to find insights was done with a directed content analysis approach with the assistance of NVivo Version 12 software. Important records are kept about what I did during the investigation. These include information on how the data collection instrument was developed; all raw data and notes taken during each focus group interview; trustworthiness notes pertaining to confirmability, dependability, credibility, and transferability; and a Microsoft Excel spreadsheet codebook showing a listing of all the codes that were utilized in the data analysis process.

The audit trail describes all the steps taken to complete this research project successfully from the beginning until the findings are reported. By following it, other researchers will be able to obtain the same results. Dependability is established.

Confirmability

The final component of trustworthiness that was established in this study is confirmability. Confirmability can be achieved by using the question guide, reflexive journals and transcriptions, and a detailed audit trail that can be confirmed by other researchers (Forero et al., 2018; Konlan et al., 2021). It also refers to the ability of the researcher to remain neutral. Shenton (2004) stated for a qualitative researcher to maintain objectivity, steps should be taken to ensure all ideas and the experiences and ideas of the participants are accurately documented and accepted, rather than the elements and inclinations of the researcher. It denotes that the findings are founded upon the study partipants' responses and not on the researcher's personal motivations or bias. In the current study, this criterion of trustworthiness was established through an audit trail, which was provided. It highlighted each step that was taken during the analysis of data so as to provide a justification for the decisions that were made.

Results

NVivo Version 12 software was used systematically to carry out the analysis of all the transcribed data obtained. To address the results of the study, the analysis focused on two research questions using the themes, categories, and patterns that emerged from the transcribed data from the participants of the three focus group sessions conducted.

I sought to understand parents' views, perceptions, and needs regarding continuing the WPCC at home. The major categories selected here for this study were facilitative forces, barriers, and additional resources and support. Key "anchor" words were used to code, and all themes that emerged were enumerated. Research questions and the corresponding themes were related subsequently. In total, 10 main themes were identified. The results of the data analysis are organized by the research questions. The themes and their related research questions are summarized in Table 7.

Table 7

Research Questions and Corresponding Themes

Research questions	Themes used to address the research question
RQ1: What are the views of parents regarding the facilitative forces and barriers they confront in trying to continue working on their children's obesity prevention objectives from home?	Theme 1: Parents interact more with their children and bond with them Theme 2: Program has positive impact on the whole family Theme 3: Program materials easy to read and understand. Theme 4: Time and financial constraints Theme 5: Change schedule to adapt to the program Theme 6: Poor information sharing and communication between parents and teachers
RQ2: What is the experience of parents about additional resources and support needed for their children to continue working on obesity prevention from home?	Theme 7: Improve communication and availability of information for parents Theme 8: Involve families and the community in the program Theme 9: More resources like time, money, and experts Theme 10: Parental engagement and involvement in the program

RQ1

For this study, RQ1 was: What are the views of parents regarding the facilitative forces and barriers they confront in trying to continue working on their children's obesity

prevention objectives from home? To answer the first research question, I asked six questions that included open-ended questions detailed in the focus group protocol (see Appendix A). Probe questions were pursued when an answer was clear or needed more information. Six themes or categories were identified that address this question. These were: (a) Theme 1: Parents interact more with their children and bond with them*;* (b) Theme 2: Program has positive impact on the whole family; (c) Theme 3: Program materials easy to read and understand; (d) Theme 4: Time and financial constraints; (e) Theme 5: Having to adapt to new program and change one's schedule; and (f) Theme 6: Poor information sharing and communication between parents and teachers. Table 8 illustrates the number of participants who mentioned each theme.

Table 8

RQ1 Themes

Theme	Number of participants contributing to this theme (*n*=26)	Number of references to this theme in the data
Theme 1: Parents interact more with their children and bond with them	9	10
Theme 2: Program has positive impact on the whole family	20	40
Theme 3: Program materials easy to read and understand.	9	9
Theme 4: Time and financial constraints.	8	9
Theme 5: Having to adapt to new program and change one's schedule.	12	13
Theme 6: Poor information sharing and communication between parents and teachers.	14	15

Theme 1: Parents Interact More with their Children and Bond with Them

In line with this theme, one of the facilitative forces for the parents in trying to

continue working on the program objectives at home is that they were able to interact more with their children and bond with them. This was mentioned by nine participants in the focus group interviews, and they mentioned it ten times.

In Focus Group 1, Nate mentioned:

> For me the experience has been great. I have interacted with my kid more because after class you have to extend the program, as a parent…Like we spend more times in the park riding bicycles, less time on tv, it used to be. So right now, we spend more time in the swimming pool, the physical exercises at the park, riding bicycles, playing games, football with their fellow kids and we take more fruit and vegetables compared to ice creams and chocolates and it's such a nice experience….

In Focus Group 2, Maurice noted that, "For me, the program has helped me create more time to interact with my children. I have been having a tight schedule, but then after the program, I was forced to create more time to interact with them."

According to Daniel, also in Focus Group 2:

> For me, it was not really hard to include this, but bringing up something new, coming up all of a sudden, you have to try to adjust to add it to your timetable. Kids come back and say, "Daddy, daddy, let's go play football outside." You have to adjust. They're having the fun so you feel like you should go in with them. Let's have fruits, let's do this, let's do it. So, you just have to adjust even though it's not really favorable for you.

In Focus Group 3, Jacob mentioned:

> It gladdens my heart that my kids, they have to involve me in these activities. Well for me, I would say it has created a bond between me and my kids. Usually before I have to stay in the office for so long without coming back. But due to these activities, I have no choice but to come back home and join them…. So, I think it has really strengthened that bond between me and the kids. Similarly, Jamal in the same group noted that " This program has really helped to strengthen the bond relationship between my kids….. with this program, the closeness I'm having with the boy's getting stronger and stronger.

Theme 2: The Program has a Positive Impact on the Whole Family

Another facilitative force for the parents in trying to continue working on program objectives from home is the fact that the program has a positive impact not only on the children, but also on the parents, and other members of the family. This was mentioned by 20 participants in the focus group sessions and it was referenced 40 times. Nate mentioned, "It helps students in physical activities, eating habits. It helps them engage in physical activities, playing with their friends, helps them also in their mental state."

According to Natalya, "This program helps kid get into good shape. It also improves his health and immunity. It also puts a child into a particular kind of schedule that helps the kid navigate through his days activity."

Similarly, Julia noted that "For me, as much as it has had a positive impact on our kids, I think it's also impacting us as their parents positively because we have taking part in the activities, physical activities, the good eating habit."

Bianca reported that "For me, I can say that the program has helped me to

minimize using junk foods on my children. So, it has taught me to eat healthy."

Likewise, Daniel stated that "For me, I think is the physical activity. My son ….. playing some football. And so, I think with regards to the physical activity, it did deliver."

Another participant George mentioned that "Regarding the health benefits in terms of the physical, the ability of also relieve some stress and also the exercise strengthen our bone and also leave very healthy….. the program is really helping in terms of that."

Theme 3: Program Materials That are Easy to Read and Understand

As per this theme, the other facilitative force is that the program materials are easy to read and understand. This was mentioned by nine participants, nine times. Ashley mentioned that "So for me it was quite easy because there was some communication between the class teacher and I. It became quite easy to go through the same….." When asked to clarify she said she was referring to the reading material.

Julia reported, "The internet everything has been made easy….. we could figure out what it is. So it wasn't that hard."

According to Gabriel, "It was pretty easy understanding the curriculum."

When I asked Focus Group 2 whether anybody had any issues regarding the language or understanding the material, Daniel simply stated, "No, I think it was clear where it was that."

Theme 4: Time and Financial Constraints

This theme related to barriers confronted by parents who took part in this study while working on the program objectives from home. Time and financial constraints as some of the barriers. This was mentioned by eight participants nine times.

Ashley mentioned,

> So, I think the first bit is that bit of the financial constraint ….required so you have to spend more. Also, there is much attention that is needed because literally you have to follow everything that is required, so that attention bit much is needed, and much money is involved in the same.

Nate reported that "…just can't afford healthy plan diets for their kids. So, I think maybe providing financial support or just trying to figure out those kids whose parents can't afford so that they can also take part in the programs comfortably."

When talking about the constraints she faced, Julia stated,

> …..the issue with time constraint because before my kids could be, would always be in the house watching or playing video games and they required minimal supervision. But now with this other system I had to be there to supervise them because these are the activities that they can't do on their own. They need supervision. So, the time constraint also an issue but it's getting better with time.

Similarly, Jacob stated that, "….the time factor really affected me …."

Juanita pointed out,

> Time is a big factor. Some days maybe you are at work and you are getting late and maybe reaching at home will take time. So, you have to engage with some activities but it's already late so you find yourself coming already late and not even engaging with a kid and finding the kid maybe having …. if you are financially strapped, being like go introduce your kid to a new fruit, that can be really expensive. There's a huge financial impact to trying a dragon fruit, which are like $9 at the store, but your kid wants to and you don't want to deny them of that either."

Theme 5: Changing Schedules to Adapt to the Program

Another barrier the parents confront is adjusting to the new program and changing their schedules. This was mentioned by 12 participants 13 times.

Anne stated,

> I had to change my meals before we were taking a lot of junk food so now we had to eat a lot of food in the family. So, it was difficult at time but now we're okay.
>
> Changing my schedule. I had to create more time for my kids than before. I have several jobs. So, I had to quit one to create more time for them.

According to Daniel in Focus group 2, "Bringing up something new, coming up all of a sudden, you have to try to adjust to add it to your timetable."

Jackson mentioned, "For me I think it's hard, especially on weekdays, because a lot of time you are busy…."

Julia noted,

> For me I think first of all I had a problem with adapting to the new system. So, before we were used to playing video games, watching TV and now we had to change to other activities like swimming, jumping….

Alicia stated, "I can say that's the greatest hurdle or barrier I face is balancing between these activities, balancing between my personal activities or my duties at work."

George indicated "…adding it to my schedule, irrespective of the fact that I'm there. I'm always busy ….."

Theme 6: Poor Information Sharing and Communication Between Parents and Teachers

As per this theme, poor information sharing and poor communication between teachers and parents is another barrier confronted by the parents. This was mentioned by 14 participants 15 times.

Chad stated,

> We just got the flyer and we read it, but it doesn't give you more information …really general information. The thing is we don't have information. Maybe if we have, as she's saying, a checklist or more information, it will be easier for us to support them. But because there's not enough information, we don't know.

Belinda indicated, "I would have loved more information about what exactly they were going to be receiving points on."

According to Gabriel, "the information to the program was not well detailed."

Julia stated "…. emphasizing on what Belinda said, they should give information that is easy to understand… give proper guidelines and guidelines from the

information, the sheets and the flyers, videos and everything, so that information can be easily understandable."

RQ2

RQ2 was: What is the experience of parents about additional resources and support needed for their children to continue working on obesity prevention from home? Four themes were identified that address this question. Those were (a) Theme 7: Improve communication and availability of information for parents; (b) Theme 8: Involve families and the community in the program; (c) Theme 9: More resources like time, money, and experts; (d) Theme 10: Parental engagement and involvement in the program. Table 9 illustrates the number of participants who mentioned each theme.

Table 9

RQ2 Themes

Theme	Number of participants contributing to this theme (*n*=26)	Number of references to this theme in the data
Theme 7: Improve communication and availability of information for parents	16	17
Theme 8: Involve families and the community in the program.	5	5
Theme 9: More resources like time, money, and experts.	5	5
Theme 10: Parental engagement and involvement in the program.	8	9

Theme 7: Improving Communication and Availability of Information for Parents

This theme pertains to additional resources and support parents would need to continue working on the program home. This was mentioned 17 times by 16 participants. Ashley stated, "…. should just be incorporated is that bit of communication. I think once

that is worked out well it becomes quite easy to deal with the program."

Belinda reported, "…more information about what exactly they were going to be receiving points on… I didn't know any of that in that information."

Chad noted,

> ….that will be really great by having that information in one place where you can download checklists or you can again see the benefit or you can see recording meetings when someone is explaining you, maybe in a short video ….definitely information should be available for parents in one place

George stated, "…. because the information dissemination is really, really very bad. And I think they should work towards that for other people to know and also get involved."

Theme 8: Involving Families and the Community in the Program

This theme suggests that the parents want families and the community to be involved in the program for their children to continue working on obesity prevention from home. This was mentioned five times by five participants. Jamal noted, "…. educate everybody on the problem…."

Julia mentioned, "…. making it available to the other people in the community." George stated that full involvement of the family can help to improve the program. He mentioned, "I believe that full involvement (of parents) can help to improve this program."

Theme 9: More Resources like Time, Money, and Experts

This theme relates to more resources such as money, experts, and time are also

needed for parents to allow their children to continue working on the program from home. This was mentioned five times by five participants. Stephanie noted, "…. the money, the time and everything …."

Belinda mentioned, "…if you are financially strapped, being like go introduce your kid to a new fruit, that can be really expensive…..."

Daniel stated that he sometimes may not have the time because of feeling unwell or not being in the mood. He noted, "…. time comes with availability. ..."

Anne stated,

> …. maybe a health practitioner can be doing these things at school maybe let's say twice a week instead of putting all the burden to the parents out of school when the kids are at home, who will be so much easier to the parents. As much as we care about the welfare and the physical wellness of our kids, we also have things to do, we have jobs. So, it'll be much easier if schools could just, maybe get someone who could be taking kids through all these stuff at school and not running it to home.

Theme 10: Parental Engagement and Involvement in the Program

This theme demonstrated that parents believed that parental engagement and involvement in the program was also needed for their children to continue working on obesity prevention from home. This was mentioned nine times by eight participants. Nate reported, "I also think they should create more time in the program where parents come to participate with the kids. We make it compulsory for the parents to come and also learn more about [the program]."

Ashley stated, "…. there was less parental involvement in the program. …"

Stephanie indicated, "I believe that the part that didn't really work well is the area of parents that we are not really part of the program. So, I believe that we parents, are supposed to be there."

Belinda reported:

> "……make it super fun for the parents as well and somehow really involve them in the home aspect of it and give them a little bit more information so that they can get on board, they can change their lifestyle habits as well".

Summary

In this chapter, I discussed in detail processes and procedures employed in this study to collect data, as well as participants' demographics, data analysis of three focus group discussions, evidence of the study's trustworthiness, and results for each research question. I aimed to understand parents' views, perceptions, and needs regarding continuing the WPCC at home. I sought to answer two research questions. Results of RQ1 indicate facilitative forces that include parents interacting more with their children and bonding with them, the program's positive impact on children as well as parents and families, and easy-to-read and understand program materials. Results also included barriers such as time and financial constraints, poor information sharing and communication between parents and teachers, and having to adapt to the new program and change one's schedule. Results for RQ2 demonstrated the need for parental engagement and involvement in the program, more resources such as money, time, and experts, and improved communication and availability of information for parents.

Chapter 5 includes a detailed account of interpretations of findings in terms of the MTM, limitations of the study, recommendations for future research, and implications for social change.

Chapter 5: Discussion, Conclusions and Recommendations

The purpose of this study was to understand parents' views, perceptions, and needs regarding continuing the WPCC program at home. School-based obesity prevention interventions are ineffective due to discontinuity at home, and classroom-based tailored interventions involving the family could promote increased physical activity and healthy food habits among school children (Okely & Hammersley, 2017; Sanyaolu et al. 2019; Watson et al., 2017). Findings from this study lead to insights regarding what families deal with and can provide local policy developers and public health professionals with protocols and guidelines for developing and implementing future interventions for school children.

To identify and analyze participants' perspectives and knowledge regarding the research problem, including potential barriers, facilitative forces, and additional resources and support, I employed the MTM and used directed content analysis. MTM constructs were used to guide understanding of initiation and sustenance of behavior change in terms of behavioral confidence, emotional transformation, and changes in the physical and social environment. Focus group discussions were used to collect data, and research was guided by open-ended questions. As the researcher, I intended to comprehend how parents perceived and experienced the WPCC program and determine tools and supports that were required to continue the program at home. This chapter includes interpretations of findings, conclusions, recommendations, and future implications. Study limitations and implications for social change are also addressed in this chapter.

Interpretation of Findings

Findings from this study indicated the involving facilitators and barriers parents face, as well as additional resources and support that are needed to continue the program at home. Comparing results to peer-reviewed literature in Chapter 2 confirms facilitators and barriers influence continuation and sustainability of the WPCC program at home.

Facilitators

Facilitative factors are critical in terms of determining particulars of the WPCC program that are effectively implemented currently. One of the facilitative factors was the WPCC program's positive impact on parent-child relationships and healthy behaviors. Factors like favorable parent-child interactions can significantly influence child health outcomes, particularly regarding prevention of obesity (Appleton et al., 2017; Bridge et al., 2019). Findings from this study revealed the program increased parent-child interactions and influenced behavior change of the whole family. This study advances the existing body of research on family-based interventions by investigating how parent-child interactions can be enhanced through participation in physical activities and consumption of nutritious foods. The program promotes parent-child bonding by engaging in sports, outdoor walks and hikes, and spending time outdoors. The program emphasizes the significance of a nutritious and well-rounded diet, particularly in terms of integrating more fruits and vegetables into one's meals.

I examined facilitative factors that could lead to better outcomes in terms of school-based obesity prevention interventions and established that parent education and involvement positively affected development of healthy behaviors in families. This study

adds to knowledge indicating the positive influence of the WPCC program on health behaviors of families. When program information and materials were visually appealing and appropriate, and the language was easy to understand and tailored to the target audience, this improved the effectiveness of the implemented intervention (Malden et al., 2020; Narayanan et al., 2019; Sanyaolu et al., 2019). Designing program materials that are accessible and easy to comprehend for all participants is crucial. This was confirmed by participants of this study.

Since parents may have varying levels of health literacy, which can hinder their full participation in the program, making program materials easy to comprehend and use can be effective in terms of helping them achieve their goals.

Barriers

Knowledge of barriers can be beneficial in creating sustainable programs. Unsuccessful outcomes of school-based obesity prevention programs in schools affirm the need to focus on barriers. Day et al. (2019) voiced the importance of exploring supportive tailored interventions after understanding barriers. This study extends knowledge of barriers faced by parents who participated in focus group discussions. Participants identified barriers, which included time and financial limitations, changing one's schedule, and poor communication and information sharing. Families from different socioeconomic backgrounds experience health disparities, leading to barriers due to lack of finances and time to participate in health promotion programs (Lappan et al., 2020; Malden et al., 2020; Spinelli et al., 2019). This study extends existing knowledge by highlighting time and financial constraints that restrict parents' ability to

work on their children's obesity prevention objectives from home. Cost-effective and culturally diverse interventions that can be integrated into busy schedules may be more feasible for families.

Lifestyle changes involving obesity prevention can be challenging and require adaptation, and are challenges faced by families (Day et al., 2019; Schalkwijk et al., 2015). Findings from the study extend knowledge regarding how to make the program more sustainable. Lifestyle changes promote health and wellbeing by addressing these challenges and offering practical solutions. Participants noted the WPCC program could offer strategies for incorporating physical activity into busy schedules or provide healthy and easy-to-prepare recipes to help families make dietary changes.

Poor communication and information sharing can hinder successful interventions (Schalkwijk et al., 2015). This study extends existing knowledge by highlighting how poor communication can impact the success of family-based interventions for obesity prevention. Effective communication and information sharing between parents and teachers are essential to ensure successful implementation and outcomes.

Additional Support and Resources

Additional support and resources that emerged from findings are more time, money, and experts, parental and community involvement, and improved communication and availability of information for parents. Involving the community can promote a culture of healthy living and increase awareness about the program's objectives, potentially leading to more families participating. Participants from this study reiterated the literature review findings, confirming that the WPCC program should consider

additional support and resources for the parents, such as financial assistance, professional guidance, regular feedback, and parent involvement. Busy lifestyles are influencing children and their families in terms of making unhealthy food choices (Cooksey-Stowers et al., 2017; Lee et al., 2019; Sahoo et al., 2015). Cooksey-Stowers et al. (2017) suggested it is futile to change policies without providing other alternatives and strategies to maintain a healthy lifestyle. This study confirms parents involved with the program need support and professional guidance to make changes in their lifestyles.

Davodi and Ahadi (2021) specified the influence of parents in cultivating healthy eating habits in children. According to Sahoo et al. (2015), parents play a critical role in promoting healthier food habits and physical activity in children. Other studies in the literature review indicated the importance of culturally competent programs that involve families and provide parental support to promote long lasting sustainable changes (Appleton et al., 2017; Schalkwijk et al., 2015). The parents in this study confirmed that their involvement in the program will be helpful in continuing the objectives of the program at home. They also stressed the importance of improving communication between them and the teachers about the WPCC program.

Previously mentioned studies revealed the importance of involving community partners (i.e., public health professionals and healthcare providers) to help increase awareness with interventions related to obesity prevention (O'Leary et al., 2019; Schalkwijk et al., 2015). Researchers Kansra et al. (2021) stressed a community-wide effort to change the child's environment, such as healthier food lunches, increased physical activity in schools, and policies that make healthier food choices affordable are

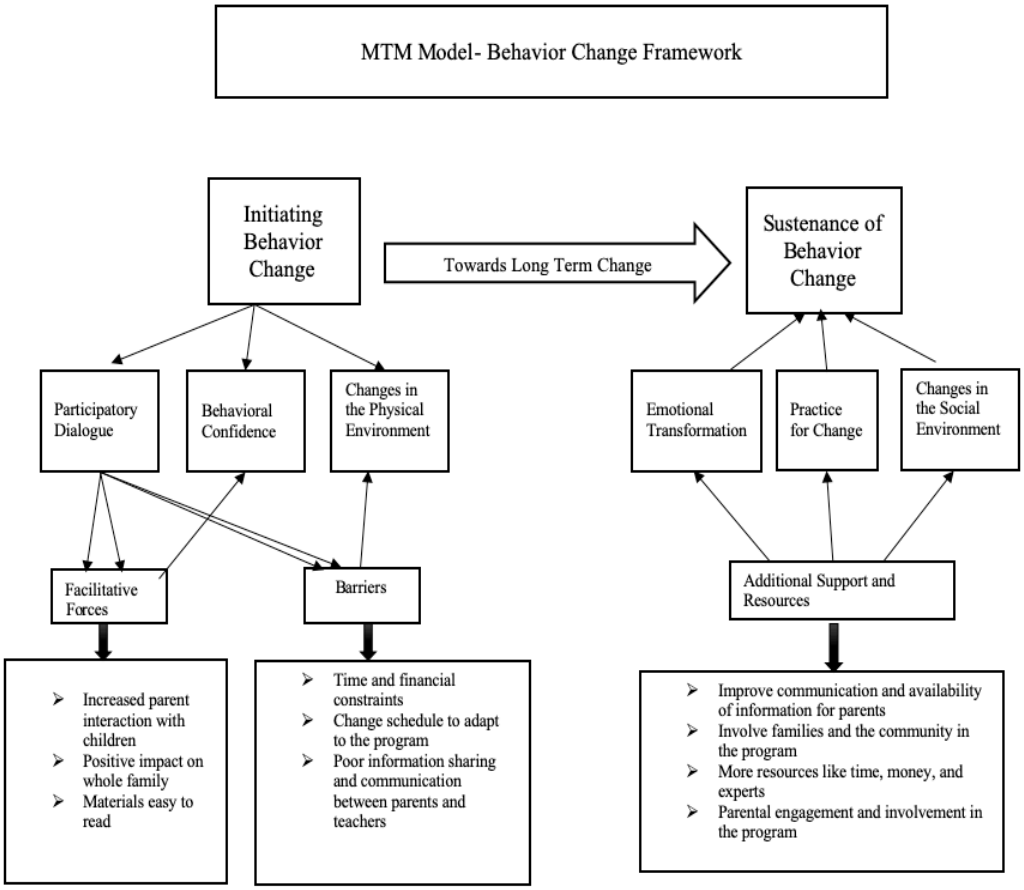
needed. This information presented in previous literature aligns with and confirms the information gathered in this study that emphasizes the importance of community-based interventions in promoting healthy behaviors in children. The program leaders should consider strategies to involve the wider community (i.e., partnering with local organizations, public health professionals, healthcare providers and promoting the program through local media channels).

Theoretical Framework Applications

I employed the MTM model as the theoretical framework to understand the parents' views, perceptions, and needs regarding continuing the WPCC program at home. Sharma's (2015) MTM model suggests that behavior change is influenced by multiple factors, including individual, social, and environmental factors. MTM was developed specifically to promote health behavior change (Sharma, 2015, 2020; Sharma & Nahar; 2018). Researcher Sharma (2020) studied the efficacy of the framework among U.S. college students and found MTM framework is suitable and advantageous in designing health promotion interventions to promote behavior change. In this study, I assessed the extent of the relationship between MTM constructs of the two-component model: (a) the initiation of behavior changes and (b) the sustenance of behavior. I identified 10 main themes that answered the two research questions. I used the MTM framework, its components, and constructs to understand the parents' perceptions, facilitators, barriers, initiate culturally specific dialogue, and assist in changes needed to their environment to follow the WPCC program at home (see Figure 2).

Figure 2

MTM and Findings



Initiation

The initiation component and its three constructs encourage short-term behavior change. The constructs of participatory dialogue, behavioral confidence, and changes in the physical environment helped initiate conversation and understand the participants' perspectives and reflect on the advantages and disadvantages of health behavior change (Sharma, 2015). In this study, the initiation component and its constructs initiated culturally specific dialogue and created valuable discussions with the participants on factors that prevented them from following the WPCC program at home. For the RQ1,

which was about the facilitative forces and barriers that parents confront while continuing the WPCC at home, the following six themes were identified: (a) parents interact more with their children and bond with them; (b) the program has a positive impact on the whole family; (c) program materials are easy to read and understand, time and financial constraints, having to adapt to a new program and change one's schedule; and (d) poor information sharing and communication between parents and teachers. The questions asked during the focus group sessions for RQ1 were based on the initiation component and its constructs. The themes that emerged for RQ1 broadened the knowledge and provided evidence on the facilitative factors and barriers of the WPCC program and supports using these constructs to develop culturally competent interventions that are complaisant with parents.

Participatory Dialogue. This construct initiates communication and dialogue between the health educator and the participant about the advantages and disadvantages of committing to health behavior change (Agyei-Baffour et al., 2020; Nahar et al., 2016; Sharma, 2015). In this study the key concepts that emerged from this construct were: (a) positive impact of the program on children, (b) positive impact of program on parents and other family members, (c) program materials easily readable, (d) lack of money to make the necessary changes or modifications in diet and physical activity, (e) healthy meals are expensive, (f) lack of time to participate in the program, and (g) lack of effective communication with teachers. The focus group discussions with the participants initiated the conversation on the changes they made to their diet, physical activity, and daily

schedules to accommodate the program recommendations. It also shed light on the barriers such as time and financial constraints to follow the program steps.

Behavioral Confidence. The construct indicates the determination of an individual to make the change, which can occur only if the confidence and motivation to make the behavior change is present. It focuses on the individual's internal ability to make the change and the support system that will influence the behavior change (Nahar et al., 2020; Sharma, 2015). In this study, the concepts for behavioral confidence became evident after identifying facilitators and barriers that prevent the parents from changing their behavior after participatory dialogue. The key concepts for behavioral confidence included: (a) a health educator teach importance of healthy lifestyle, including physical activity and eating healthy food and (b) the need to maintain healthy weight and prevent diseases. This confirms that a change will only occur if the individual realizes the importance of the change and understands the support systems available to make that change.

Changes in the Physical Environment. This construct refers to immediate surroundings that will encourage behavior change, such as the accessibility of resources (Sharma, 2015). The findings interpreted related to this construct were: (a) availability and obtainability of resources for physical activity, (b) accessibility of resources, (c) convenience of resources, and (d) readiness of resources. This confirms the changes in the environment needed for the parents to proceed to make the change. This construct also identifies the additional support and resources needed to alleviate the barriers the parents face that prevent them from making the change.

Sustenance

Sustenance encourages continuing behavior changing emotions and creating strategies and social support to make a long-term behavior change. The constructs, emotional transformation, practice for change, and change in the social environment, are geared toward making long term behavior change and encourages developing tailored interventions (Sharma et al., 2017). For the RQ2, which was with regard to the additional resources and support needed for children to continue working on obesity prevention from home, the following four themes were identified: (a) improve communication and availability of information for parents, (b) involve families and the community in the program, (c) more resources like time, money, and experts, and (d) parental engagement and involvement in the program. For RQ2, the questions asked were in reference to the sustenance component and its constructs. The emerged themes broaden the knowledge and provide evidence on the additional support and resources the participants noted the WPCC program should consider in predicting and encouraging a long-term behavior change.

Emotional Transformation. This construct involves reforming emotions and measures the person's emotional capability to change current behavior and adapt to the new behavior. Previously mentioned studies indicate this construct as a predictor of long-term behavior change (Khanna et al., 2020; Sharma et al., 2018). In this study, the finding shows this construct can be used to guide an individual to think about the barriers that prevent them from changing their behavior and making the changes needed. This

construct rests upon the participants' need to stay healthy and the additional resources and support that will be conducive to make long-term behavioral changes.

Practice for Change. This construct focuses on taking steps toward changing behaviors (i.e., developing strategies and overcoming obstacles that prevent the behavior change). The construct advocates constant reflection on behavior that needs transformation and steps to provoke vision to sustain a health behavior reminder phone calls and home (Agyei-Baffour et al., 2020; Sharma, 2015). In this study, this construct yielded the parents' need for managing barriers such as time with strategies to adapt to the program and their change schedule. Involving families, integrating strategies for reminders such as charts for the home, and better communication with parents also evolved from the focus group discussions, which indicate the steps that can be taken motivate continued interest in making the behavior change.

Changes in the Social Environment. This construct stresses the value of supportive social relationships in the immediate surrounding environment in the individual's life to facilitate behavior transformation. In this study, the need for additional support from experts such as health educators, dieticians, and nurse educators were indicated. The findings also showed that the parents wanted more communication from the teachers to sustain the program's objectives at home.

Limitations of the Study

In Chapter 1, the anticipated limitations of this study were sample size, population representation, and transferability. Although the sample size did not cause a limitation as the required eight to 10 participants were attained during the execution of this study, a

few other limitations arose during the execution of this study. One potential limitation was related to the data collection method. I relied on focus group discussions to gather data, which limited the depth of the data collected. Focus group discussions are valuable in qualitative research to understand better the issues or experiences of a specific representative group of the target population and involve a skilled facilitator to acknowledge and engage to keep the conversation moving along (Nyumba et al., 2018). Some participants in this study might have been hesitant to share their true thoughts and experiences in a group setting, which could have resulted in biased or incomplete data. As the facilitator, I had to ask different probing questions to get a clear answer or even participation from some participants.

Another limitation was related to the sampling technique in this study. A convenient sampling technique to recruit participants could limit the findings' generalizability. This study only included English-speaking parents, which might have excluded critical perspectives from non-English-speaking parents. Additionally, the representation of participants was reflective of a small portion of the population, and the poor representation in the sample of the Hispanic population may not represent the more significant population. Opinions expressed by the participants might not represent the views of the target population.

The initially planned focus group discussions approved by the Walden University IRB were for in-person sessions at a local library. Another unforeseen limitation was that severe weather conditions created various scheduling issues in the already busy lives of parent participants. The focus groups were conducted online through the video platform,

Microsoft Teams with the updated approval from the Walden University IRB. Conducting focus groups online limited the interaction between participants and me potentially reducing the richness of the data collected. To improve the trustworthiness of this study and limit researcher bias, reflexivity was maintained by recording the discussions and keeping reflexive journal notes of the focus group discussions. The detailed notes and transcribed recordings were very valuable in reconfirming collected data, which verified the transferability and dependability of this study.

Recommendations

In public health practice, obesity in children and its chronic implications in adulthood demands upstream primary intervention to promote lifestyle changes, restrain risk factors, and prevent disease. As mentioned in Chapter 2, school-based childhood obesity prevention interventions are essential in reducing obesity and promoting physical activity and healthy food behaviors when multi-sectoral partnerships are established to assist families considering their busy lifestyles (Lambrinou et al., 2020; Nau et al., 2021). Researchers stressed the need for collaborative partnerships between community organizations (i.e., healthcare and education systems) to promote using evidence-based school-based interventions (Bleich et al., 2018; Narayanan et al., 2019). The findings from this research study indicate the support needed from experts in educating and executing the objectives of the program. I urge community leaders and policymakers to take leadership in initiating and supporting programs like the WPCC and allocating resources to promote healthy behaviors and prevent chronic health problems in the children of their communities. This study's findings also revealed the use of the MTM

model as a tool to guide the design of health promotion interventions and predict the ability of an individual to make and sustain any health behavior change. The MTM constructs of the theory, initiation, and sustenance of health behavior change provide an understanding barrier for not continuing the behavior change at home. This led to my recommendation of the MTM model guide's effectiveness in designing and implementing future interventions. This could involve designing and implementing tailored interventions that address specific barriers (i.e., as lack of time or resources) and assessing their impact on program participation and outcomes.

The findings acquired in this study after content analysis implied some recommendations for future research. They are grounded in the strengths and limitations of this study. A recommendation for further research is to explore teachers' difficulties in implementing school-based obesity prevention programs in their classrooms and maintain sustainability. The findings from this study revealed a lack of communication between parents and teachers. Smith (2020) explored teacher practices in communicating with parents and found the need for communication that involved understanding barriers and time constraints of parents. Future research could uncover strategies to understand and overcome barriers of communication about a critically important intervention that can improve the lifestyle and health of the student and their families.

Finally, one of the limitations of this study was including only English-speaking parents. This could be the reason for the inadequate representation Hispanic population in the community. Future qualitative research can be done by expanding the sample to non-English speaking parents' views and perceptions of all groups in the community.

Researchers should explore alternative data collection methods such as online surveys or interviews with language interpreters to capture the experiences of underrepresented groups and a more convenient method for parents to provide an in-depth understanding of their perspectives and experiences despite their busy schedules.

Implications

Positive Social Change

I proposed positive social change to ensure positive outcomes from long-term health behavior change, which will help the whole community maintain a healthy lifestyle and reduce their future risk of chronic diseases. The results of this study lend a significant contribution to the limited research available on the perceptions and views of parents, the facilitators, and the barriers they confront to continuing the school-based obesity prevention program, WPCC, at home. This study's findings identified the influential factors that prevent parents from following the program objectives and additional support and resources needed to make sustainable changes.

At the individual level, this study's findings can help parents better understand the importance of their involvement in their child's early learning and development. By providing insights into the factors that facilitate or hinder parents' participation in the WPCC program, this study can inform interventions and strategies that support parents in this role in instilling healthy behaviors in their children. This can lead to improved outcomes for individual children and their families. This study's findings can support this at the family level by creating more inclusive and effective family engagement practices. The findings can help to identify ways to support better diverse families, including those

those from non-traditional family structures. This can lead to stronger family-school partnerships and improved outcomes for all children.

At the organizational level, this study can inform the development and implementation of more effective early childhood education programs for the community. The results of this study will provide program administrators of the WPCC program to incorporate strategies to improve program implementation and outcomes by identifying the factors that support or hinder parent participation. This will result in competent sustainable health promotion programs that better support children's learning and development. The results of this study will bolster the knowledge of public health educators and other health professionals to use the constructs of MTM theory to initiate and maintain a health behavior change in their communities.

Lastly, at the societal/policy level, this study provides evidence-based information that strengthens the need for an integrated approach to combat childhood obesity through collaboration with government, private, and nonprofit organizations. The results from this research and the MTM framework will be valuable information for policymakers in making decisions about school health promotion programs and allocating resources. This study can contribute to developing more equitable and accessible early childhood health policies and improved outcomes for children, families, and society. This study can inform policies that support and promote family engagement by highlighting the challenges diverse families face in accessing and participating in early childhood education programs.

Methodological, Theoretical, and Empirical Implications

Methodological implications of this study include the need for researchers to consider alternative sampling methods and data collection techniques to enhance the depth and richness of the data collected. This study's theoretical implications are using the MTM model to expand upon the literature on parent involvement in their child's health promotion activities and providing insights into the facilitative forces and barriers to continuing a parent-child intervention program at home. This study also highlights the importance of understanding parent perceptions and family needs for changing and continuing health behaviors. Lastly, the empirical implications of this study should include the need for further research to investigate the effectiveness of the WPCC program at home after addressing the barriers and providing the support needed to continue the program at home. The results of this study have provided valuable information to design culturally competent, tailored school-based obesity programs that promote successful outcomes, including long-term behavior change.

Recommendation for Practice

One recommendation for practice is to increase outreach efforts. Increased outreach efforts promoted program participation among families from diverse backgrounds and providing tailored programs with flexibility and resources leads to better outcomes (Arteaga et al., 2018; Martin et al., 2018). Increasing outreach efforts can ensure the program is accessible to a broader range of families and increase its potential impact. Another recommendation is to provide tailored support to address barriers to

participation, such as lack of time or resources. Practitioners and educators could offer flexible scheduling and resources to help with program fulfillment.

Creating a positive and supportive learning environment is also essential. Practitioners could offer positive feedback and encouragement, foster community among program participants, and provide opportunities for parent-child interactions. Finally, practitioners should promote parental and community involvement in health promotion interventions by providing information on the importance of parent-child interactions and offering opportunities for parents to participate with the children. Encouraging parental involvement in the WPCC program can positively impact parents and children.

Conclusion

This qualitative explanatory study was to explore and understand parents' views, perceptions, and needs regarding continuing the WPCC at home. In the United States, the rate of childhood obesity is a growing public health problem despite implementing school-based obesity interventions; this stresses the benefits of using classroom-based physical activities and nutrition education to combat childhood obesity (Arteaga et al., 2018; CDC, 2020; Sanyaolu et al.,2019; Watson et al., 2017). As stated in Chapter 1, obesity predisposes children to chronic diseases in adulthood, and incorporating health promotion programs to initiate and sustain school-based obesity prevention programs is essential to prevent chronic disease (CDC, 2020).

The specific research problem of this study is the inability to continue the program at home due to a lack of support or information for parents, which impacts the program's sustainability. The lack of literature on the sustainability of school-based

obesity prevention programs prompted this study and its two research questions. The literature review revealed the MTM as the framework will help understand parents' views and the issues, they face in continuing the obesity prevention program objectives at home. The study conducted an exploratory qualitative approach using MTM constructs as the research design to fulfill the research problem. Table 5 and Figure 2 reveal the key concepts, themes, and constructs that revealed the findings made in this study. The results established the facilitative forces and barriers to the parents' experience and additional resources and support needed to continue the WPCC program at home. The findings of this explanatory research have significant implications for early childhood interventions to promote healthy lifestyles and highlight parents' critical role in supporting their children's behavior change.

The study's identification of facilitative forces, barriers, and the need for additional resources and support underscores the value of targeted interventions to address these obstacles and ensure that the program's benefits are fully realized. By increasing outreach efforts and promoting parental involvement in school-based obesity prevention programs, practitioners and policymakers can work together to create a more equitable and accessible learning environment for all families, regardless of socioeconomic status or background. Ultimately, this study emphasized the importance of ongoing support for parents as they navigate their role as their child's mentor and the potential of school-based obesity prevention programs to help families achieve healthy lifestyle goals.

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Appendix A: Focus Group Protocol

Focus Group Protocol: Parents of students who participated in the Wolf Pack Coaches challenge (WPCC)

Purpose: research to understand perceptions of parents regarding WPCC program

Participants: Three focus groups of 8-10 members per focus group that consists of parents of students who participated in the WPCC program

Recruitment: This research intends to keep all the groups homogenous based on interested participants. An invitation will be sent to potential parent participants and an incentive in the form of a gift card of $30 will be offered to cover for time and transportation to the selected convenient location. In order to account for "no shows" 10 extra members will be recruited, if all show up the group will still be manageable.

Location: Convenient to the participants for face-to-face focus group discussions (FGDs). A possible location is the local library. If the face-to-face FGD is not possible videoconferencing will be used.

Time: 45 minutes – 60 minutes (plus 15 minutes for debriefing in which activities of the research will be explained and any misinformation during the group discussion will be corrected)

Moderator/ Facilitator: One moderator (researcher) will facilitate the FGD. It will be recorded with permission; flip charts will be used to document participant responses during the FGD.

Requirements: Name tags for each participant (first names only) and seating arrangement to facilitate effective participation if face-to-face or webcams (for video conferencing).

Opening Introduction: Hello, my name is Prenu Skaria. Nice to meet you. Thank you for taking the time to participate in the FGD for my Ph.D. dissertation. I am a student at Walden University pursuing a Ph.D. in Public Health. The purpose of this research is to collect the views of parents whose child(ren) participate in the Wolf Pack Coaches Challenge (WPCC) and understand the barriers and facilitators of parents to continue the program at home. The results of this study will evaluate the current program and also make changes to make the program more sustainable. I would like you to know that the information you share today will be shared with the program educators who implement the program at the Washoe County Health District. That said, I would also like to inform you that your personal information will not be shared with anyone. At this time, I would like to ask permission from you to record our conversation. Do you have any questions before we start?

List of Questions:

1. What have you heard of the WPCC program?

   Probe: Do you understand what the WPCC program is about?

2. How was your experience with participating in the activities of the program at home?

   Probe: Was it difficult to include it in your typical schedule

3. Are you aware of the health benefits of following the program for you and your family?

   Probe. What resources (staff, facilities, money, time) adequate to support high-quality delivery

4. Did you face any barriers in accessing the services?

   Probe. What barriers (money, time and facilities) did u face?

5. Where there any issues with program curriculum?

   Probe. Were there any issues (language, understanding material) related to program materials provided?

6. Does this program meet your expectations?

   Probe: In your opinion was the quality of services provided optimal? Can you suggest if any specific changes are needed to make the goals attainable for you?

7. In your opinion, what components of the program were delivered well?
8. In your opinion, what components of the program were not delivered well?

   Probe: What could be done to improve them?

9. Anything else anyone would like to add?

Closing: Thank you very much for your valuable contributions. We will be documenting the results of this focus group discussion in a report and submitting the data summary to Washoe County Health District. (Debriefing about privacy, any misinformation and elaboration on future activities of the program)

Data analysis and report writing: A direct content analysis using MTM framework and NVivo software to summarize the results.