HHS Public Access

Author manuscript

J Nutr Educ Behav. Author manuscript; available in PMC 2021 March 01.

Published in final edited form as:

J Nutr Educ Behav. 2020 March ; 52(3): 259–269. doi:10.1016/j.jneb.2019.09.019.

CHURCH LEADERS' VIEWS OF OBESITY PREVENTION EFFORTS FOR CHILDREN AND YOUTH

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Abstract

Objective: To examine church leaders' views of the role of faith-based organizations in promoting healthy eating and physical activity in children.

Design: Qualitative research using semi-structured in-depth interviews.

Participants: Leaders (n=26) from United Methodist churches (n=20) in South Carolina.

Phenomenon of Interest: Perceptions of health promotion efforts for children in faith-based settings, including primary health concerns, perceived opportunities, partnerships, and relationship of these efforts to the overall church mission.

Analysis: Interviews were transcribed verbatim and coded using a constant comparative method using NVivo software.

Results: Five themes emerged related to (1) multiple concerns about health issues facing children, (2) existing church structures influencing health behaviors, (3) potential partnerships to address children's health, (4) importance of role models, and (5) the need for a tailored approach.

Conclusions and Implications: Church leaders view childhood health behaviors as an important area of concern for the church and identified links between physical and spiritual health. They identify multiple existing and potential organizational and community structures as important in improving healthy eating and physical activity. Faith-based organizations can play an important role in developing and delivering health programming for children but desire assistance through partnerships with subject matter experts.

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Keywords

Pediatric obesity; exercise; healthy diet; community health

INTRODUCTION

Overweight and obesity affect approximately one-third of U.S. children and adolescents.[1] While experts recommend a healthy diet and daily physical activity (PA) to achieve and maintain healthy body weight,[2,3] few children meet these guidelines.[4,5] Healthy eating (HE) and PA behaviors related to overweight/obesity risk are complex and may be impacted at multiple levels of influence.[6,7] Ecological models provide insight into psychological, social, organizational, and environmental influences on health behaviors and can serve as a framework for comprehensive approaches to reduce childhood obesity by addressing HE/PA.[7–9]

While a substantial portion of youth behavior is influenced inside the home, organizations may play key roles in development and maintenance of youth HE/PA habits.[9] A settings approach to health promotion[10] encourages consideration of all contexts where children grow, learn, and play and how characteristics of those contexts can be used to tailor programs or interventions, making them more acceptable to stakeholders. Outside of the home, organizations like schools, faith-based organizations (FBOs), afterschool programs, and clubs can serve as an outlet for child development and social interaction.[11,12] Within organizations, children may be exposed to diverse peer influences, environmental structures, expansive or limited availability and accessibility of products, media messages, cultural norms, and policies or rules about behavior that could impact childhood obesity.[11,12] Current childhood obesity research skews heavily toward school-based programs and partnerships,[13,14] but additional community settings where children are active should be considered in more detail.[10]

FBOs have a successful history of implementing health programming, and have been identified as strategic partners by several public health organizations.[15–18] Faith-based health promotion programs are broad-reaching but often focus on behavior change among adults.[19,20] Though more recent and detailed estimates are needed to describe regular religious service attendance across childhood, studies show that having a school-aged child increases the likelihood of regular religious service attendance among U.S. families,[21] and regular religious service attendance is higher among parents compared to non-parents (74% compared to 67%).[22] For these reasons, FBOs could serve as important partners in improving children's health. FBOs also boast the advantage of already offering child-specific activities.[22–24]

FBOs are trusted organizations with existing structures to disseminate health information and programming, yet few studies have examined child-focused health promotion in FBOs. Three pilot studies are available to describe outcomes and acceptability of obesity prevention or PA programs for children in FBO settings. *Go Girls*,[25] a nutrition and PA program for adolescent African-American females delivered weekly at churches, was well-received by participants but only produced significant BMI reduction among a small subset of

participants. The *Shining Like Stars*[26] pilot intervention incorporated PA into existing Sunday School curriculum for elementary-aged children. The program was highly-rated by instructors (90% satisfaction) and resulted in significant PA increases during Sunday School as well as decreased screen-time at home, but no difference in outside-of-church PA time between intervention and control arms. Finally, the *Jewish Day School Wellness Initiative*,[27] a culturally tailored intervention in a religious school, used an ecological approach that included school wellness policies, health and physical education, and family involvement to increase student health knowledge and the percentage of students meeting PA guidelines. However, these studies represent only a small portion of documented FBO health interventions[20,28,29] and an even smaller proportion of organizationally-based children's health interventions.[13,14] At the same time, several religious traditions and denominations have formalized programs or statements on the importance of children's health including PA and HE behaviors,[30–32] and some evidence is available showing that church leaders are receptive to involvement in obesity prevention efforts. He et al.[33] examined church leaders opinions of obesity prevention programs for Latino children, and identified strong potential for faith-based organizations to serve as an intervention setting for this population.

However, little is known about the underlying motivations, understandings, or existing approaches to influence children's health, specifically HE/PA and childhood overweight/obesity, in FBOs, information that is important to a deeper understanding of organizational culture and the potential for public health programming. Therefore, the purpose of this qualitative research is to examine church leaders' views of the role of FBOs in promoting children's HE/PA and addressing childhood overweight and obesity.

METHODS

This qualitative study was conducted between January and July 2018 and consisted of in-depth interviews with church leaders from the South Carolina Conference of the United Methodist Church (SCUMC). The SCUMC was selected based on an existing research partnership between SCUMC and the University of South Carolina Prevention Research Center to disseminate the Faith, Activity, and Nutrition (FAN) Program, an ecologically-based HE/PA intervention described elsewhere.[34,35] In brief, FAN is an evidence-based program designed to help churches create healthy church environments that support HE and PA. All SCUMC churches were invited to participate in the program between 2017–2018. Independent of this partnership, the Global UMC initiated a denomination-wide health initiative in 2017 called Abundant Health that emphasizes improving children's health globally and locally through HE, PA, mental health, and substance-free living.[36] Abundant Health programmatic elements include encouraging health ministry activities, promoting healthy communities, and focusing on connections between spiritual and physical health (churches are not required to participate).

Recruitment and Sample

The primary level of sampling was the church. The research team recruited a purposeful sample of representatives from SCUMC churches (n=20) (Table 1) who were either participating or not participating in the FAN Program. The research team sought to recruit a

sample from participating and not participating churches to provide a breadth of perspective on health promotion efforts. Pastors were contacted by email and phone and invited to participate at their convenience, and female pastors were oversampled compared to the general demographic breakdown of leadership within the state conference to provide diverse perspectives. Participation was voluntary, and all participants provided consent prior to interviews. The University of South Carolina Institutional Review Board reviewed study procedures and materials and determined this research to have exempt status because research activities presented no risk or less than minimal risk to participants.

Participants initially included twenty pastors (Table 2), representing twenty congregations (n=10 participating in the FAN Program; n=10 not participating). Pastors were asked to provide names and contact information for an additional staff or congregation member identified as having knowledge about the topic. Snowball sampling resulted in six additional church leaders from within these same 20 churches (e.g., health committee chairs, youth pastor) (Table 2), all representing FAN churches, willing to participate. All participants were offered a $20 gift card incentive and could elect to donate their incentive to the UMC Epworth Children's Home (facilitated by the research team).

Data Collection

In keeping with theoretical underpinnings of the ongoing research partnership, interview guide development, data collection, and coding were rooted in a conceptual model incorporating elements of Cohen's structural model of health behavior and the UMC Statement on Health and Wholeness,[37,38] and conducted using a phenomenological approach.[39] In brief, Cohen's structural model of health behavior served as the theoretical foundation for the development of the FAN program and is comprised of four factors that impact health: (1) availability of protective or harmful products, (2) physical structures, (3) social structures and policies, and (4) media and cultural messages. The UMC Statement on Health and Wholeness,[38] published in the Book of Discipline (a book of denominational law and doctrine), describes health as having multiple dimensions built on the concept of spirituality. Accordingly, the interview guide included sections pertaining to: (1) general health/physical health, (2) the church environment, (3) media, (4) health opportunities, (5) programs, and (6) policies. The interview guide was evaluated by experts in qualitative methods and faith-based health intervention research and by partners within the SCUMC. After the first three interviews, refinements were made to the interview guide to improve the clarity of two questions. Selected interview questions and probes from the final interview guide relevant to the current research are available in the Appendix.

The interviewer, a White female (CGD), remained the same throughout data collection. To build rapport with participants and establish a shared point of understanding, the interviewer's guide introduction noted that CGD was a member of the UMC and had previously worked in youth ministry. Semi-structured interviews were conducted by phone, lasting on average 56 minutes (range 33–89 minutes). All interviews were audio-recorded and transcribed verbatim using a professional transcription service. Identifying information was removed and pseudonyms assigned to recordings prior to transcription. No church leader declined audio recording. The interviewer wrote field notes after interviews and notes

were discussed by the interviewer and a second research team member (JAB). Based on interviewer's notes and research team discussions, it is estimated that saturation was reached after 16 interviews, but data collection continued based on research protocol until 10 churches were recruited from each condition (participating or not in FAN), for a total of 20 churches (n=26 interviews).

A phenomenological approach to interview guide development, data collection, and analysis was deemed appropriate by the research team in order to examine perspectives, feelings, understandings, and experiences of church leaders (pastors and lay leaders) with respect to the individual contexts, backgrounds, and lived experiences of participants. Because participants in this study held different leadership roles and represented churches both participating and not participating in the FAN program, a phenomenological approach allowed the research team to compare responses at multiple points during analysis.

Data Analysis

Data analysis was facilitated by using NVivo qualitative data analysis software (NVivo version 11, QSR International Pty Ltd., Melbourne, Australia) through the following steps: (1) Two trained coders, CGD and JAB, independently coded five interviews using an *a priori* codebook based on the conceptual model and interview guide and used emergent coding to identify new themes and describe content, (2) CGD and JAB met to discuss patterns among themes that arose across double-coded interviews and to collapse or expand themes where needed, (3) thematic elements were discussed with SW and CB, who provided input on thematic structure and overlap and to assign names and definitions to themes, (4) CGD and JAB continued to code 10 additional interviews to establish coding consistency using the refined codebook, meeting with the larger research group to discuss new themes if they emerged, (5) CGD independently coded the remaining interviews using constant comparative methods to identify similarities and differences in interviews while CGD and JAB met weekly to discuss themes, define new themes if they emerged, and to consolidate themes if needed.

RESULTS

Five themes emerged related to church leaders' views on the role of FBOs in promoting HE/PA and addressing childhood overweight/obesity: (1) Church leaders have multiple and differing concerns about health issues facing children in their congregation and community, (2) Church leaders identify existing church structures that play a role in health behaviors, (3) Church leaders identify partnerships as important to addressing childhood health behaviors, (4) Church leaders believe that adults are role models for children in their churches, and that churches and church members are role models in the community, and (5) Addressing health concerns about obesity among children and youth will need to be tailored to the spiritual environment of the church and tailored for individual churches. These themes and their subthemes are described below. No differences in themes or subthemes were seen when examining responses from leaders at churches participating in the FAN program and those not participating.

Church leaders have multiple and differing concerns about health issues facing children in their congregation and community

Holistic health.—When asked what types of health the church should address among young members of their congregation and community, church leaders most often mentioned "holistic health" or "whole person health." Leaders identified "spiritual" health, or the relationship with God, as most important, but included "physical," "emotional," and "mental" health as parts of "holistic health" while emphasizing that overall spiritual health could be impacted by these other types. One pastor stated:

> "I think that it's important to eat right, to get enough exercise, to sleep well, to have good emotional and spiritual health, to have good relationship health. I mean, good health includes so much, and it's important for us to be wholly healthy. And that sort of health can help us to do the work of building the Kingdom of God."

Health behaviors more concerning than obesity.—When probed about their concerns for the physical health of children, church leaders often described health behaviors, specifically PA, increased screen time, and poor diet as more worrisome than overweight/obesity. One leader mentioned:

> "I don't see a lot of obesity in the congregation, but I see a need for children to participate or get out more and do things that are not associated with games and phones."

Inactivity and increased screen time were described as concerning across multiple interviews. Several leaders discussed perceived decreased PA opportunities for "children today," often stating that there are fewer opportunities for children to be active outdoors than for past generations. Leaders were also concerned about the amount of time that children spent with screens, including "tablets," "phones," "TV," and "computer games." Leaders identified these behaviors as being related to one another, with increased screen time causing decreasing PA. One pastor described the concern:

> "Screen time, too much screen time, not using the resources outside. Not going outside playing like we've done in the past, they're just on their phones and staying inside."

Perceptions of poor diet were related to increased fast food or "convenience food" intake and parents being "too busy" to cook. Additional dietary concerns were related to community characteristics like lack of access to healthy foods and increased access to fast food. A subset of leaders identified cultural food traditions, primarily Southern food traditions or the "low-country" diet, as contributing to poor dietary intake among children.

Concerns differ between church and community.—Several church leaders described health concerns that differed for their congregation compared to the larger community, often related to childhood overweight/obesity and food security. When asked about childhood overweight/obesity in her congregation, one leader commented:

> "In my congregation, it is not an issue. But in the community, it is certainly an issue."

These differences were often related to economic differences between congregations and the surrounding community. Leaders who identified these differences mentioned the "affluence" of their congregation as a reason for low rates of childhood obesity and indicated that children in their congregation were "well taken care of." In contrast, leaders assessed that children in their community may not have the same level of "support." One leader stated:

> "We just have so much abundance in spots. And then there are spots where there isn't abundance, and children struggle to get a good meal, and are very dependent on the food programs…"

Existing church structures may play a role in influencing child health behaviors

Multiple activities and programs exist to encourage healthy behaviors.—

Leaders described multiple opportunities to encourage healthy behaviors, most often as part of existing programs:

> "Every one of them at every turn have some kind of physical activity as a component of what we do, and to at least offer healthy options when we have meals and snacks."

Several leaders described PA opportunities built in to church activities like Sunday School, youth group, Vacation Bible School, and choir practice. However, activities were not always included as an effort to intentionally increase PA for health but identified as a method to calm children prior to church events. One leader described:

> "I think we've done this with our youth because I think our youth are a little hyper. In order to have a 15-minute program for young people, you need to wear 'em out a little."

Another pastor mentioned:

> "We allow for physical movement and we encourage it in some places, or some activities, but it's not systematic, thought out, or meant to really address that except for the fact, hey, kids need to burn off some energy."

Opportunities for unhealthy behaviors exist.—

Leaders described several activities in the church that could allow unhealthy behaviors among children, almost exclusively related to eating. Several described using food to entice children; examples included serving pizza in youth group, ice cream socials, doughnuts or cookies as snacks, and providing candy to children during Children's Church. One leader said:

> "I know on occasion youth group will have donuts to try to lure them in."

And another stated:

> "Why do I have to give the kids candy at the end of talking to them at Sunday church? Oh, otherwise they won't want to come up anymore."

Some described attempts to reduce unhealthy opportunities or to provide healthy options at events like "family meals" and "Wednesday night dinners." However, leaders also identified barriers related to church traditions and Southern cuisine. One leader said:

> "In the Methodist Church, when you have a potluck or anything like that, you're not eating a salad. You're getting cheese and noodles… I think that's also a thing, too, it may be a cultural issue."

The only unhealthy PA-related opportunity was movie night, where leaders described a two- to three-hour span where children were sedentary. However, none saw this as a problem behavior because the event occurred "once or twice a year."

Churches have physical structures that can be used for PA.—When children were physically active in the church environment, leaders described multiple physical structures where PA could take place. These included "playgrounds," "fields," "gymnasiums," "fellowship halls," and other large indoor spaces. Leaders also mentioned sports programs, hosted either by the church or in partnership with other churches and community organizations, where children and youth could participate in PA, including "basketball," "volleyball," and "tee-ball."

Churches have existing methods of communicating health information to children and families.—Church leaders mentioned communicating HE and PA information as important to improving health behaviors, and one of the most significant things that churches could do to influence children's health. Leaders mentioned established means of communication within the church including "messages from pulpit," "bulletins," "newsletters," "email," "curriculum," and "bulletin boards." One pastor expressed:

> "I think we have the capability, the same means we use to communicate other things are available, for us to do the same thing with health for children."

While established methods of communication were identified as the preferred method to reach children and families, several leaders mentioned the need to adapt health message delivery for children using technology and social media. One pastor's suggestions included:

> "So, I'm thinking that we need to meet the kids where they are, and not always expect them to come to us. So, if they do YouTube, then we do YouTube. If they do Snapchat, then we do Snapchat. That's how we reach out to them. That's how they don't feel concerned, because we're doing what they want done, and not saying you have to come to us."

Partnerships are important in improving children's health behaviors

Churches identify families and caregivers as the most important partners.—Church leaders most often thought of parents or caregivers as responsible for children's health behaviors including what they eat and how active they are. Subsequently, they suggested creating programs for parents and asking parents how the church could be more involved in children's health. Leaders acknowledged that encouraging healthy behaviors for children would need to be reinforced at home. One leader expressed:

> "The church also has to continue trying to educate parents, and the parents have to help at home, because we can't just try to do it at church, and then the parents just let the children continue to eat fast food when they are away from church."

Church leaders identified opportunities to reach children through parents, specifically because parents may be more involved in churches than at other child-focused organizations.

> "I know some parents who are minimally involved with school but are very involved with the church."

Church leaders are looking for partners with expertise.—Leaders expressed a desire to partner with community organizations or church members with subject-matter expertise (e.g., knowledge of dietary guidance, children's health experts, PA experts) to deliver programs or disseminate information. One leader stated:

> "I don't believe we should always reinvent the wheel."

Instead leaders identified community organizations such as the "YMCA," "schools," "universities," "hospitals," and agencies like the state public health department as potential expert partners. Internal to the church congregation, leaders suggested reaching out to church members with "qualifications" like "doctors," "nutritionists," and "coaches" to help create opportunities or programming.

Churches can provide to the community.—When probed about what churches can contribute to a community partnership to address childhood obesity, leaders described the church's physical characteristics as strengths. As stated by one leader:

> "We're blessed by size with some spaces and resources that other churches may not have or even some other pockets of the community may not have."

Another mentioned encouraging community members to use church resources:

> "When they come for our community activities, there are all types of children. All over our playground… We encourage it, and people, when they're here we always say, 'You're welcome to bring your children!'"

Along with physical space, leaders described the church as contributing through altruism or material supports. Leaders described meeting community needs was through mission work, specifically food assistance programs for children and families such as "backpack," "SnackPack," or "food pantry" programs orchestrated through the church to address hunger and HE. A church pastor described:

> "Our church is highly mission oriented. Our church does the SnackPack program where we make sure that for some of the kids at school, when they go home if they're on a school lunch program, or whatever when they go home for the weekends, they've got a couple of bags to take with them to get them through Saturday and Sunday to make sure they've got food to eat."

Role models

Leaders view adults as role models for children in the church.—Church leaders view adult church members as role models for children, and leaders described themselves as personally responsible for modeling health behaviors. One pastor stated:

> "As I think about the young people, and I'm thinking about my own, my responsibility is being an example for them."

Another applied the responsibility more broadly to any adult in the church, saying:

> "It doesn't have to be somebody who is in a leadership position on a piece of paper. Anybody who has influence over the youth can say that they have a good idea on how we can better take care of ourselves."

And when probed about actions that could reduce childhood obesity, another leader stated:

> "A good example from the pastor and the adults and all the leaders in the church. If we're taking care of our bodies, then youth are going to be … We have a lot of youth who look up to us."

Leaders view churches and church members as role models in the community.—Leaders also viewed church members and the church organization as role models in the community by setting an example through spirituality and behavior. One leader described the church in the broader context of the community:

> "Just as the pastor is a good example for the church, the church is a good example, or should be, for the community."

And another leader said:

> "[The church] can be the lone voice speaking out above the crowd about why it's important to take care of your body from a spiritual perspective, rather than because the government said you should, or because culture says that we should. Those are voices that change, but the Word of God does not."

Leaders also described how church members might act as role models within their community by demonstrating HE and PA behaviors and speaking to others about the connection between faith and health. One pastor described children as role models in their own social circles, saying:

> "Hopefully our kids would be models for that … our kids have this opportunity when they're outside of the church or in schools or in extracurricular activities to have their faith be an important part of who they are and why the like to play and grow and learn."

The need for a tailored approach

Spiritually tailored programs.—Church leaders consistently identified the connection between spiritual health and physical health as part of an acceptable approach to improving children's health behaviors. While physical health was important, leaders expressed that any program or opportunity to address childhood obesity, HE, or PA should be tailored to include a spiritual component for relevance in the church environment. Suggestions for tailoring included connecting messages to scripture, incorporating health programming into Sunday School, and discussing the connection between God's concern for the spirit and for the body. One pastor illustrated this:

> "I think that anything we do needs to fit within our mission. I think that being healthy is definitely in our mission, but making and nurturing disciples of Christ is with every church. There needs to be a spiritual component, even if it's nothing more than just remembering God is at the center of all we do."

Another pastor confirmed this sentiment:

> "Just encouraging them to take care of bodies as the temple the Scripture tells us they are. As long as we take Scripture to heart, we're also going to incorporate better ways of living and discourage childhood obesity."

Efforts should be tailored to individual churches.—Church leaders described a need for individually-tailored approaches based on church size, member demographics, decision-making policies, staffing, and existing programs. Procedures and policies may differ between churches, and decision-making responsibility may be variable with different individuals or committees responsible for making decisions about HE/PA opportunities for children. Leaders attributed this decision-making power to "parents," "pastors," "teachers," "members," "youth ministers," "children's ministers," "kitchen chairperson," "program staff," and "health committees." Even within one church, decision makers might change based on scheduling or the program type. Describing who had decision making power over the health behaviors of children that attend her church, one leader said:

> "Quite honestly, the person who's running the program."

Church leaders emphasized that encouraging HE/PA in their congregation may look different than in other churches due to member demographics. Leaders at small churches stated that addressing these issues may be difficult due to lack of interest or lack of participation. One pastor acknowledged:

> "I think one of the challenges that small churches face is they're either all older adults with a few young families with children."

Another leader mentioned that, even within a single church, variable youth attendance year-to-year may impact this ability:

> "This year our enrollment was too small to start because our children are aging to such a place where the schools are having programs after school, sports programs, so we didn't have the participation this year like we would have in years past."

DISCUSSION

This qualitative research examined church leaders' views of the role of FBOs in promoting children's HE/PA and addressing childhood overweight/obesity among a diverse group of leaders from the SCUMC. Findings are consistent with previous qualitative work examining connections between faith and health:[33,40,41] that physical health is important to holistic health; religious leaders are willing and interested in promoting health; and approaches should consider organizational context. Prior work has broadly examined the topic of a faith-health connection. For example, in a sample of 33 African American church members and clergy, Holt et. al.[40] found that when exploring the connection between faith and health,

participants discussed the connections between mental, physical, and spiritual health and identified social structures of the church as being important touchstones for health and health information. Similarly, but in a larger (N-413) sample of Caucasian church leaders, Webb et. al.,[41] identified and discussed themes such as holistic health, linking health to scripture, and the potential for institutional factors (e.g., supportive church doctrine) to influence health and health promotion. One previous study, conducted by He et. al.[33] examined Latino faith leaders' perspectives on childhood obesity prevention strategies and researchers documented similar responses, noting specific emphasis on the role of the church in Latino communities and how the church could play a role in holistic health promotion. The current study builds on this previous work by focusing on existing and potential health promotion efforts for children, by describing key features of church leaders' understandings of these efforts that are applicable to current and future programming, and expanding this analysis to a diverse group of faith leaders. Taken together, this study and previous findings support the idea that churches and houses of faith hold promise as health promotion partners for children due to preexisting spiritual and social belief structures. Findings presented here also outline specific organizational and interpersonal characteristics found at churches that could promote healthy behaviors in this population.

Across church leaders, the connection between spiritual and physical health was a common focus, as was the need for a Biblical basis in health promotion programs targeting younger congregants. To date, only two interventions have addressed children's HE/PA using a spiritually-tailored approach.[26,27] However, tailoring successful ecologically-focused faith-based interventions presents an opportunity to reach all church members, including children. Several faith-based interventions have focused on creating healthy church environments for all congregants and demonstrated small but significant health behavior improvement (e.g., increased physical activity, increased fruit and vegetable consumption) with broad reach in the target population,[34,42–44] but these interventions lack outcome data for members under 18 years old. Because these programs are spiritually-tailored and adaptable to the specific context of individual churches, elements may be expanded to address HE/PA needs of children and youth and simultaneously address leaders' desire for scripturally-relevant programming.

Consistent with recent trends suggesting that screen time[45] and fast-food consumption[46] are increasing among children and adolescents, leaders often described unhealthy behaviors as more concerning than childhood overweight/obesity. Though this view may be rooted in leaders' belief that overweigh and obesity are not issues among the youth in their congregation, health promotion practices that focus on behaviors instead of weight may prevent conferring negative weight stigmatization on children, which has been shown to result in maladaptive eating and PA behaviors.[47] Similar to other organizations, churches and their public health partners should consider how health programs and messages for children are framed to avoid negative consequences. Programs focused on improving HE and PA behaviors are generally effective in childhood obesity prevention, while those focused on weight status or weight loss can increase weight stigma and unhealthy adaptive behaviors.[48]

Church leaders identified several potential and existing social, physical, and organizational structures that either could be or already are being used to improve child health. These approaches are consistent with ecologically-framed health promotion theories suggesting that organizational change across multiple domains (e.g., messages, opportunities, physical structures, socials structures) may impact health behavior.[9,10,37] Leaders described existing programs for children like Sunday School, Vacation Bible School, and youth group where PA and HE could be incorporated. Some leaders also suggested incorporating health messages into curriculums. These approaches are similar to school-based approaches incorporating health messaging and healthy opportunities into K-12 curriculum, which may help prevent long-term weight gain,[49] but may be limited if their focus is on individual behavior change. At the same time, leaders described organizational activities that could promote unhealthy behaviors. These activities almost exclusively centered around eating and are consistent with research suggesting that church meals and potlucks represent unhealthy eating opportunities.[50] Several church leaders spoke about increasing healthy options at church meals to address these unhealthy opportunities, but more emphasis may need to be placed on decreasing practices such as enticing children to events with unhealthy foods.

Approaches to improving health behaviors for children in faith-based settings should also consider social structures that may be important in the development and maintenance of PA and HE habits. Conceptual models exploring childhood obesity identify social interactions with adults as having influence on behaviors that can impact weight status.[9] In this study, leaders described themselves and other adult church members as role models for youth. These findings are consistent with previous qualitative research among pastors, who self-identify as role models, teachers, or motivators, and perceived themselves as having influence over the development of eating behaviors based on their own eating identities and role in the church.[51] Leaders' perceptions of parents not only as role models but as gatekeepers for child behaviors is consistent with previous school-based research.[52] Though this view may represent an oversimplified understanding of the causes of childhood obesity by neglecting the role of environmental, social, and structural forces, including parents as stakeholders in FBO programming may appeal to church leadership and improve program acceptance. Therefore, faith-based programming for children may necessitate involving adults in intervention components to model behaviors, educate, or inspire, suggesting an ecological approach to increasing HE/PA in the FBOs that includes all member subgroups may be advisable.

While childhood overweight/obesity did not emerge as a concern for many congregations, leaders did identify this as concerning for children in their communities and often related to poverty or lack of access to healthy foods. Leaders described these issues as the responsibility of the church, regardless of membership within the congregation. Though the overarching goal of faith-communities is religiously and spiritually focused, most promote service-oriented activities and community outreach efforts that make them well-positioned to address community health too.[53,54] Leaders described limited approaches to addressing these issues, mostly focused on sharing space for PA (e.g., playgrounds) or food relief efforts including backpack programs for children, which often include items of mixed or low dietary quality.[55,56] In addition to community programs, preschools, daycares, and religiously affiliated schools housed in churches are an area for consideration in future

research and intervention because these programs present unique opportunities to shape family health behaviors for church and community members as those families are forming.

This study had several limitations. Church leaders in this sample represented only one religious denomination from a Christian tradition and were geographically confined to one Southeastern state. This may limit the generalizability of the results presented here. This study also employed a purposeful sampling strategy, meaning that participants who self-selected to be involved in the study may have strong opinions or previous knowledge of the subject compared to the larger population of SCUMC leaders. However, a goal of the current research was to examine perceptions among a sample of church leaders from a denomination already advocating for health programming for children. While the purposeful sampling strategy may fail to include all perspectives, the data gathered provided information about strategies currently being implemented in churches, illustrating real-word examples in addition to proposed approaches. Finally, most study participants in this sample were church employees. Adding additional perspectives from parents and caregivers could expand views on this topic and provide additional and increasingly diverse perspectives.

This study also had several strengths. In addition to senior pastors, this research included perspectives from leaders in diverse positions within the church, including lay leaders, and pastoral leadership with responsibilities for children and youth programming. These diverse perspectives proved important as several leaders identified multiple individuals, councils, and groups as having decision-making power over the healthy opportunities that children are exposed to in the church environment. Trained researchers conducted in-depth interviews, collecting rich data to provide diverse perspectives about health promotion efforts for children. This study also provided insight into potential faith-community partnerships and highlighted the role that church leaders believe their organization may play in community health. Finally, this research was informed by and conducted with the cooperation of a denomination advocating for efforts to improve children's health, potentially providing previously described existing efforts that may be useful to other FBOs interested in similar work.

IMPLICATIONS FOR RESEARCH AND PRACTICE

This research demonstrates that church leaders are interested and willing for FBOs to serve as partners in health promotion activities for children, specifically improving HE and PA behaviors, and provides a useful framework for research and practice in this setting. Future research should include community participatory approaches to designing and implementing health promotion activities. Such approaches have the potential to acknowledge and address important contextual factors raised in this study – for example church membership, congregational age, existing programs, or church resources (e.g., budget, physical structures). This research also highlights the potential for evaluation of existing efforts by FBOs to improve HE and PA among children, both in their congregations and communities.

Acknowledgements:

The project described was supported in part by the Olga I. Ogoussan Doctoral Research Award from the Department of Health Promotion, Education, and Behavior in the Arnold School of Public Health, University of

South Carolina. This study was also supported in part by Cooperative Agreement Number U48DP005000 from the Centers for Disease Control and Prevention. Its contents are solely the responsibility of the authors and do not necessarily represent the official views of the Centers for Disease Control and Prevention. No other financial disclosures were reported by the authors of this paper.

The authors thank the leaders of the South Carolina Conference of the United Methodist Church, especially Rev. Kathy James and the participating pastors and lay leaders for their support of this work.

Appendix

Appendix Table 1.

Selected interview questions and probes used in a qualitative study on the role of FBOs in addressing childhood obesity.

Interview Question	Probes (follow-up questions)
What are some health concerns you have for young members of your congregation and community?	• Tell me more about why [health concern] as an issue for young members of your congregation/community. • To what extent (and why) do you view inactivity among children as an issue in your congregation? In your community? • To what extent (and why) do you view unhealthy eating among children as an issue in your congregation? In your community? • What about childhood obesity is concerning, what is problematic about childhood obesity?
Can you describe where children are involved and active in your church (both physical spaces and programs)?	• Where in your church can children be active and play? • When (during what events) can children be active and play in your church? • Can you describe any events that your church has in the community (community partnerships) where children might be active and play?
What types of activities or events does your church hold where children might eat or drink?	• What are events or activities that are specifically held for children where they might eat or drink? • What are events or activities held in your church for all members where children might eat or drink? • Can you describe any events that your church has in the community (community partnerships) where children might be eat?
Who do you see as having decision-making power about the health behaviors of children and youth that attend your church, such as how active they are and what they eat?	• Who do you consider to be responsible for making decisions about children's health (healthy eating, physical activity)? • Who are advocates in your church for healthy eating and physical activity for children and youth? • Tell me about your role in making decisions that might impact the health behaviors of children and youth.
What are key features of the church or church mission that you think are important when addressing childhood obesity?	• How can churches participate in reducing childhood obesity? • What potential challenges/difficulties do you see in addressing childhood obesity within your church, community? • What potential opportunities do you see in addressing childhood obesity within your church, community?

References

1. Ogden CL, Carroll MD, Lawman HG, et al. Trends in obesity prevalence among children and adolescents in the United States, 1988–1994 through 2013–2014. JAMA. 2016; 315: 2292–2299. [PubMed: 27272581]

2. Office of Disease Prevention and Health Promotion (ODPHP). 2008 Physical Activity Guidelines for Americans. 2008 Available at: https://health.gov/paguidelines/pdf/paguide.pdf. Accessed September 2019.

3. United States Department of Health and Human Services (DHHS). 2015–2020 Dietary Guidelines for Americans. 2016 Available at: https://health.gov/dietaryguidelines/2015/guidelines/. Accessed June 18, 2019.

4. Centers for Disease Control and Prevention (CDC). 2018 State Indicator Report on Fruits and Vegetables. 2018 Available at: https://www.cdc.gov/nutrition/downloads/fruits-vegetables/2018/2018-fruit-vegetable-report-508.pdf. Accessed September, 2019.

5. National Physical Activity Plan. United States Report Card on Physical Activity for Children and Youth. 2016 Available at: https://www.physicalactivityplan.org/reportcard/2016FINAL_USReportCard.pdf. Accessed September, 2019.

6. Story M, Neumark-Sztainer D, French S. Individual and environmental influences on adolescent eating behaviors. J Am Diet Assoc. 2002; 102(3 Suppl): S40–S51. [PubMed: 11902388]

7. Sallis JF, Glanz K. The role of built environments in physical activity, eating, and obesity inchildhood. Future Child. 2006; 16(1): 89–108. [PubMed: 16532660]

8. Story M, Kaphingst KM, Robinson-O'Brien R & Glanz K. Creating healthy food and eating environments: Policy and environmental approaches. Annu. Rev. Public Health. 2008 29, 253–272. [PubMed: 18031223]

9. Davison KK, Birch LL. Childhood overweight: a contextual model and recommendations for future research. Obes Rev. 2001;2(3):159–171. [PubMed: 12120101]

10. Poland B, Krupa G, McCall D. Settings for health promotion: An analytic framework to guide intervention design and implementation. Health Promot. Pract 2009 10, 505–516. [PubMed: 19809004]

11. Harris JR. Where is the child's environment? A group socialization theory of child development. Psychol Rev. 1995; 102(3): 458–489.

12. Birch LL, Fisher JO. Development of eating behaviors among children and adolescents. Pediatrics. 1998; 101(3 Pt 2): 539–549. [PubMed: 12224660]

13. Bleich SN. Vercammen KA, Zatz LY, Frelier JM, Ebbeling CB, Peeters A Interventions to prevent global childhood overweight and obesity: a systematic review. Lancet Diabetes Endocrinol. 2018, 6: 332–346. [PubMed: 29066096]

14. Wang Y, Cai L, Wu Y, et al. What childhood obesity prevention programmes work? A systematic review and meta-analysis. Obes. Rev. Off. J. Int. Assoc. Study Obes. 2015; 16: 547–565.

15. United States Department of Health and Human Services (DHHS). The Surgeon General's Call To Action To Prevent and Decrease Overweight and Obesity 2001. 2001 Available at: https://www.cdc.gov/nccdphp/dnpa/pdf/CalltoAction.pdf. Accessed September, 2019.

16. Centers for Disease Control and Prevention (CDC). A Diabetes Community Partnership Guide. 1999 Available at: https://www.orau.gov/cdcynergy/web/db/content/activeinformation/resources/db_diabetes_community_partnership_guide.pdf. Accessed September, 2019.

17. National Physical Activity Plan Alliance (NPAP). National Physical Activity Plan. 2016 Available at: http://physicalactivityplan.org/docs/2016NPAP_Finalforwebsite.pdf. Accessed September, 2019.

18. World Health Organization (WHO). More active people for a healthier world: Draft global action plan on physical activity 2018–2030. 2018 Available at: http://apps.who.int/iris/bitstream/handle/10665/272722/9789241514187-eng.pdf. Accessed September, 2019.

19. DeHaven MJ, Hunter IB, Wilder L, Walton JW, Berry J. Health programs in faith-based organizations: Are they effective? Am J Public Health. 2004; 94: 1030–1036. [PubMed: 15249311]

20. Tristão Parra M, Porfírio GJM, Arredondo EM, Atallah ÁN. Physical activity interventions in faith-based organizations: A systematic review. Am J Health Promot. 2018; 32(3): 677–690 [PubMed: 29214856]

21. Blom-Hoffman J, Wilcox KR, Dunn L, Leff SS & Power TJ. Family involvement in school-based health promotion: bringing nutrition information home. Sch. Psychol. Rev 2008: 37; 567–577.

22. Pew Research Center. Religious Landscape Study.2015 Available at: http://www.pewforum.org/religious-landscape-study/. Accessed September, 2019.
23. Bartkowski JP, Xu X, Levin ML. Religion and child development: Evidence from the Early Childhood Longitudinal Study. Soc Sci Res. 2008; 37(1): 18–36.
24. Duff JF, Buchkingham ABJ. Strengthening of partnerships between the public sector and faith-based groups. The Lancet. 2015; 386(10005): 1786–1794.
25. Resnicow K, Taylor R, Baskin M, McCarty F. Results of Go Girls: A weight control program for overweight African-American adolescent females. Obes Res. 2005; 13(10): 1739–1748. [PubMed: 16286521]
26. Trost SG, Tang R, Loprinzi PD. Feasibility and efficacy of a church-based intervention to promote physical activity in children. J Phys Act Health. 2009; 6(6): 741–749. [PubMed: 20101917]
27. Benjamins MR, Whitman S. A culturally appropriate school wellness initiative: Results of a 2-year pilot intervention in 2 Jewish schools. J Sch Health. 2010; 80(8): 378–386. [PubMed: 20618620]
28. Bopp M, Peterson JA, Webb BL. A comprehensive review of faith-based physical activity interventions. Am J Lifestyle Med. 2012; 6: 460–478.
29. Burton WM, White AN, Knowlden AP. A systematic review of culturally tailored obesity interventions among African American adults. Am J Health Educ. 2017; 48(3): 185–197.
30. United States Conference of Catholic Bishops. Why We Should Care About Children's Health and the Environment. Available at: http://www.usccb.org/issues-and-action/human-life-and-dignity/environment/why-we-should-care-about-children-s-health-and-the-environment.cfm. Accessed September, 2019.
31. The Church of Jesus Christ of Latter-Day Saints. Physical and Emotional Health. Available at: https://www.lds.org/youth/for-the-strength-of-youth/physical-and-emotional-health?lang=eng. Accessed September, 2019.
32. United Methodist Church. Discover Abundant Health. Available at: https://umcabundanthealth.org/. Accessed September, 2019.
33. He M, Wilmoth S, Bustos D, Jones T, Leeds J, Yin Z. Latino church leaders' perspectives on childhood obesity prevention. Am J Prev Med. 2013; 44(3 Suppl 3): S232–239. [PubMed: 23415188]
34. Wilcox S, Parrott A, Baruth M, et al. The Faith, Activity, and Nutrition Program: a randomized controlled trial in African-American churches. Am. J. Prev. Med 2013; 44:122–13. [PubMed: 23332327]
35. Wilcox S, Parrott A, Baruth M, et al. The Faith, Activity, and Nutrition (FAN) program: Design of a participatory research intervention to increase physical activity and improve dietary habits in African American churches. Contemp Clin Trials. 2010; 31(4): 323–335. [PubMed: 20359549]
36. United Methodist Church. Abundant Health to Children: Healthy Lifestyle Choices. Available at: https://www.umcabundanthealth.org/wp-content/uploads/2016/09/Abundant-Health-Suggested-Activities.pdf. Published 2017. Accessed September, 2019.
37. Cohen DA, Scribner RA, Farley TA. A Structural model of health behavior: A pragmatic approach to explain and influence health behaviors at the population level. Prev Med. 2000; 30(2): 146–154. [PubMed: 10656842]
38. United Methodist Church. The Book of Resolutions of The United Methodist Church: 2016. United Methodist Publishing House, 2016.
39. Patton MQ. How to Use Qualitative Methods in Evaluation. SAGE Publications Inc, 1987.
40. Holt CL, McClure SM. Perceptions of the religion-health connection among African American church members. Qual Health Res. 2006; 16(2): 268–281. [PubMed: 16394214]
41. Webb B, Bopp M, Fallon EA. A qualitative study of faith leaders' perceptions of health and wellness. J Relig Health. 2013; 52(1): 235–246. [PubMed: 21409482]
42. Wilcox S, Laken M, Bopp M, et al. Increasing physical activity among church members: community-based participatory research. Am J Prev Med. 2007; 32(2): 131–138. [PubMed: 17234487]
43. Resnicow K, Campbell M, Carr C, et al. Body and Soul. A dietary intervention conducted through African-American churches. Am J Prev Med. 2004; 27(2), 97–105. [PubMed: 15261895]

44. Campbell MK, Motsinger BM, Ingram A, et al. The North Carolina Black Churches United for Better Health Project: Intervention and process evaluation. Health Educ Behav. 2000; 27(2): 241–253. [PubMed: 10768805]
45. Kaiser Family Foundation. Generation M2: Media in the lives of 8- to 18-year-olds. 2010 Available at: https://www.kff.org/other/event/generation-m2-media-in-the-lives-of/. Accessed September, 2019.
46. Braithwaite I, Stewart AW, Hancox RJ, Beasley R, Murphy R, Mitchell EA. Fast-food consumption and body mass index in children and adolescents: An international cross-sectional study. BMJ Open. 2014; 4(12): e005813.
47. Puhl R. & Suh Y. Health consequences of weight stigma: implications for obesity prevention and treatment. Curr. Obes. Rep 2015: 4; 182–190. [PubMed: 26627213]
48. Golden NH, Schneider M, Wood C; Committee on Nutrition, Committee on Adolescence, Section on Obesity. Preventing Obesity and Eating Disorders in Adolescents. Pediatrics. 2016: 138; e20161649–e20161649. [PubMed: 27550979]
49. Brown T, Summerbell C. Systematic review of school-based interventions that focus on changing dietary intake and physical activity levels to prevent childhood obesity: an update to the obesity guidance produced by the National Institute for Health and Clinical Excellence. Obes Rev. 2009; 10(1): 110–141. [PubMed: 18673306]
50. Hargreaves MK, Schlundt DG, Buchowski MS. Contextual factors influencing the eating behaviours of African American women: a focus group investigation. Ethn Health. 2002; 7(3): 133–147. [PubMed: 12523941]
51. Harmon BE, Blake CE, Armstead CA, Hebert JR. Intersection of identities. Food, role, and the African-American pastor. Appetite. 2013; 67: 44–52. [PubMed: 23538172]
52. Turner GL, Owen S, Watson PM. Addressing childhood obesity at school entry: Qualitative experiences of school health professionals, Qualitative experiences of school health professionals. J Child Health Care. 2016; 20(3): 304–313. [PubMed: 26105059]
53. Levin J. Engaging the faith community for public health advocacy: An agenda for the Surgeon General. J Relig Health. 2013: 52; 368–385. [PubMed: 23519766]
54. Lasater TM, Wells BL, Carleton RA & Elder JP. The role of churches in disease prevention research studies. Public Health Rep. 1986; 101; 125–131. [PubMed: 3083467]
55. Byker C, Smith T. Food assistance programs for children afford mixed dietary quality based on HEI-2010. Nutr Res. 2015; 35(1): 35–40. [PubMed: 25483753]
56. Fram MS, Frongillo EA. Backpack programs and the crisis narrative of child hunger-A critical review of the rationale, targeting, and potential benefits and harms of an expanding but untested model of practice. Adv Nutr. 2018; 9(1): 1–8. [PubMed: 29438461]

Table 1.

Congregational characteristics of represented churches (n=20)

	n (%)
Faith, Activity, and Nutrition (FAN) participation status	
Participating in FAN	10 (50)
Not participating in FAN	10 (50)
Church size (number of active members)	
Small (≤100)	8 (40)
Medium (100–399)	9 (45)
Large (≥400)	3 (15)
Proportion of children and youth in congregation	
≤20%	10 (50)
>20%	10 (50)
Predominant race of congregation	
Caucasian	15 (75)
Black/African American	4 (20)
Native American	1 (5)
Youth-focused church programs	
Sunday School	19 (95)
Children's church	18 (90)
Sunday nursery care	15 (75)
Youth group	17 (85)
Children's/youth choir	13 (65)
Vacation Bible School	17 (85)
Afterschool care	1 (5)
Childcare/child development center	6 (30)

Table 2

Church leader characteristics (n=26)

	n (%)
Faith, Activity, and Nutrition (FAN) Participation status	
Congregation participating in FAN	16 (62)
Congregation not participating in FAN	10 (38)
Leadership role	
Pastor (Senior, Associate, Assistant)	18 (69)
Youth/children's pastor	3 (12)
Church Elder/Supply pastor	1 (4)
Health committee leader	4 (15)
Race	
White/Caucasian	20 (77)
Black/African American	5 (19)
Native American	1 (4)
Gender	
Male	10 (38)
Female	16 (62)
Age	
≤29	1 (4)
30–39	5 (19)
40–49	1 (4)
50–59	7 (27)
≥60	12 (46)