

# A Qualitative Study to Assess Barber Perceptions of the Feasibility of the Employer as a Health Advisor for Obesity Prevention

American Journal of Men's Health  
2018, Vol. 12(5) 1450–1462  
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DOI: 10.1177/1557988318768586  
journals.sagepub.com/home/jmh  


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## Abstract

Obesity has become a serious issue affecting millions of Americans, especially in the southern United States. One avenue for addressing obesity is the workplace setting. This formative research study examined the feasibility of an obesity prevention worksite intervention in the barbershop for African American barbershop owners (employers) and barbers (employees). The study proposes an intervention where the owner of the barbershop would be trained to educate his barbers about obesity prevention. Twenty in-depth interviews were conducted with the owners ( $n = 5$ ) and barbers ( $n = 15$ ) of five barbershops in Statesboro, Georgia, to determine the feasibility of the intervention. The results of this study indicated that the owners and barbers all felt that the intervention was feasible and could be implemented in the barbershop. The owners and barbers felt that obesity was an important issue in their community. Additional themes identified include program benefits, empowerment of owners and barbers, and motivational components to help produce healthy habits. The owners felt comfortable educating their barbers about obesity prevention, and the barbers were receptive toward the idea of being educated by their employer. In order for this intervention to be implemented and effective, it must be tailored to fit within the barbershop environment. This intervention addresses known health disparities that exist in the African American community and underscores the need for additional worksite health promotion programs in medically underserved communities.

## Keywords

barbershop, health promotion, health disparities, obesity

Received August 16, 2017; revised December 4, 2017; accepted January 8, 2018

Obesity is a risk factor for many chronic diseases, including type 2 diabetes and cancer. People who are overweight are more likely to suffer from high blood pressure, and high levels of blood fats and LDL cholesterol (Obesity and African Americans, 2017). More than one-third (37%) of U.S. adults are obese, which is defined as having a body mass index (BMI) of 30 kg/m<sup>2</sup> or higher (Adult obesity facts, 2016). Obesity rates are highest among middle-aged individuals (ages 40–59) with a rate of 40% (Adult obesity facts, 2016). Furthermore, African Americans have the highest obesity rates among racial/ethnic groups with African American men having a 48% obesity rate (Adult obesity facts, 2016). In 2015, African Americans were 20% less likely to engage in active physical activity as Non-Hispanic whites (Obesity and African Americans,

2017). Obesity has been found to develop more often in individuals living in the southern United States (Adult obesity prevalence maps, 2016). Specifically, Georgia has an adult obesity rate of 30.7%, which is currently the 19th highest adult obesity rate in the United States (The state of obesity in Georgia, 2015). These high obesity rates among

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adults are due to a multitude of factors, including easy access to unhealthy foods, lack of safe places to exercise, and less walkable communities with fewer sidewalks and parks, especially among low-income populations. Given the increasing rates of obesity in the United States, traditional health promotion and wellness programs that target obesity, such as ones that focus exclusively on lifestyle factors, have been ineffective in producing sustainable, positive health outcomes (Strickland et al., 2015). More innovative approaches, such as worksite health promotion programs that take into account factors at multiple levels, are needed to address the issue.

Based on a systematic review of worksite health promotion programs targeting obesity, specifically nutrition and/or physical activity, these programs have reported a consistent but modest reduction in weight (Anderson et al., 2009). A meta-analysis of nine programs reported that program effects are consistent, with a net loss of 2.8 pounds among workers at 6–12 months follow-up. In addition, programs that incorporated multiple program components often resulted in greater weight loss among participants versus programs with a single component. Worksite wellness studies have also measured the cost-effectiveness of programs (Anderson et al., 2009). One study reported a reduction in disability and major medical costs of \$1022.96 per participant for a worksite physical fitness program over a 1-year period.

Healthy People 2020 has developed objectives that aim to “increase the proportion of worksites that offer an employee health promotion program to their employees” with a specific emphasis on worksites with fewer than 50 employees (U.S. Department of Health and Human Services, 2016). Worksites in the state of Georgia can benefit from concerted efforts to achieve this objective in the area of obesity prevention and control. Data from the Georgia Department of Public Health (2009) indicate that only 40% of worksites have programs or policies to promote physical activity. The Healthy People 2020 objectives illustrate the emphasis toward the development and implementation of programs in the workplace. The current study proposes a worksite obesity prevention intervention focused on barbershops in which the employer, who is defined as the owner of the barbershop, educates his employees or barbers about obesity prevention. Barbershops were chosen because African American men, a population that suffers from high obesity rates, make up the majority of individuals who go to barbershops.

Barbershops are becoming a more popular and effective venue for disseminating health information on a wide variety of health issues such as prostate cancer, colorectal cancer, hypertension, and obesity (Luque et al., 2015). These programs provide health education information to African American men in the barbershops. Barbershops

are a promising avenue for delivering health education, such as information on physical activity and nutrition.

The overall purpose of this study was to examine aspects of the feasibility of a proposed intervention where owners would be trained to deliver an obesity prevention education intervention to their barbers within the barber-shop environment. The workplace setting is an integral part of everyday life for many people and is a place where they can be reached. Barbershop owners and barbers were identified and interviewed regarding the administration of an obesity prevention education intervention using an evidence-based, adapted curriculum that was presented during the interview. Barbershop owners were chosen to administer the potential intervention rather than external obesity experts due to the potential for cost savings and the potential for intervention sustainability, especially for small organizations who may not have the resources to hire an external expert to administer the intervention.

## Methods

### Study Design

Interviewer-administered in-depth interviews were conducted to collect qualitative data from a convenience sample of barbershop owners and employees. This study was a qualitative, cross-sectional, feasibility study where data were collected throughout a 3-month period. The in-depth interviews were conducted with both the owners and barbers individually to gain a better understanding of their attitudes and perceptions toward the proposed intervention.

### Theoretical/Conceptual Framework

This study used the Social Ecological Model (SEM) as a guiding framework to assess barber perceptions of different aspects (acceptability, demand, practicality) of the feasibility of the proposed intervention (Bowen et al., 2009; Glanz, Rimer, & Viswanath, 2008). The various levels of the SEM were used to explain the multitude of factors that influence the feasibility of implementing the proposed intervention in the barbershop. The intrapersonal or individual level of the SEM refers to the characteristics of the owners and barbers that influence behavior change, such as their knowledge and attitudes toward the intervention. The interpersonal level is associated with the social network/social support systems (family, friends, coworkers) that can influence individual behaviors. The organizational level assesses how the barbershop (organization) will be impacted due to the intervention. The community level refers to the owners' and barbers' perceptions of the impact that the intervention could have on

communities and how the surrounding communities impact the barbershops and its employees (Glanz et al., 2008). The policy level of the SEM was not found to be relevant to the feasibility of the intervention from a barber perspective and, therefore, not used.

### Data Collection

Following the Institutional Review Board's (IRB) approval of the proposed study, in-depth one-on-one interviews lasting between 20 and 45 min were conducted with the owners and barbers separately at their barbershop. Interview questions assessed the overall feasibility of the intervention by asking questions regarding the employers' and employees' attitudes and perceptions about the intervention, facilitators, and barriers regarding implementation of the intervention, and willingness to participate in the intervention. These interviews were conducted from November 2015 to January 2016 in Statesboro, GA. A total of 20 interviews were completed with the owners ( $n = 5$ ) and barbers ( $n = 15$ ). The inclusion criteria were as follows: (a) owner works at site; (b) less than 50 employees; (c) interviewees understand English; and (d) shop located in Statesboro, GA. Employees of these barbershops could have been full- or part-time employees and must have been at least 18 years of age in order to participate in the study.

### Data Analysis

All interviews were audio-recorded and transcribed verbatim by the principal investigator and a professional transcriptionist. All transcripts were analyzed at the phrase level. The transcribed data were imported into QSR NVivo 10 for data management and analysis. Two graduate-trained doctoral student coders coded the transcripts to identify themes. Four of the twenty transcripts (20%) were randomly selected using a random number generator for the two coders to independently code in order to establish a high initial intercoder reliability. A consensus approach was used where initial disagreements were identified and resolved and 100% agreement between the coders was reached. Inductive thematic analysis and elements of the grounded theory approach was used to analyze the data (Grounded Theory, 2008). First, the transcripts were read and re-read to become familiar with the data, paying close attention to patterns within the data. Notes were made during this process; similar types of data began to emerge and were grouped together to form preliminary categories. Following this open coding process, the axial coding process took place. The preliminary categories were examined to confirm that the categories accurately represented the interview responses and then were labeled as codes (Grounded Theory, 2008).

Themes emerged from these categories/codes and were used to examine the feasibility of the proposed intervention. Following the coding process, the codebooks and code reports were generated. The codebooks contained the codes and their definitions while the code reports consisted of quotes from the participants that corresponded to each code.

### Development of Feasibility Assessment

**Feasibility focus areas.** Bowen et al. note that feasibility studies are conducted in order to produce findings that will help determine whether an intervention should be implemented and recommended for efficacy testing (2009). They are typically used to determine whether an intervention is appropriate to undergo further testing. This study assesses feasibility based on the areas of focus for feasibility as defined by Bowen et al. (2009). The study sheds light primarily on the acceptability and demand of the proposed intervention. Interview questions were developed based on these components of feasibility. The responses to the questions provided information on satisfaction of the proposed intervention, perceived appropriateness, fit within organizational culture, interest/intention to participate in the intervention, and perceived demand for the intervention (Bowen et al., 2009). The interview questions will help assess the "Can it Work?" phase of intervention development to determine if there is evidence that the intervention can be implemented in the barbershop (Bowen et al., 2009).

**Description.** The steps in the process of conducting this feasibility assessment included the recruitment of owners and barbers, curriculum building, interview guide development, and conducting the in-depth interviews with the participants. Conducting these steps helped to determine whether the owners would be willing to implement the intervention in their barbershop, whether the owners would be willing to be educated on physical activity and healthy eating, whether the owners would be willing to educate their barbers about physical activity and healthy eating, and whether the barbers would be willing to learn about obesity prevention from their employer. The recruitment of the owners and barbers for participation in the in-depth interviews occurred at the barbershop. The curriculum that was presented during the interview was an adapted version due to time and resource constraints on the barbershops. The adapted version was developed based on previous studies utilizing adapted versions of the same curriculum. Each in-depth interview was conducted using the same procedures to ensure the reliability and validity of the data obtained from the interviews. In-depth interviews were chosen over focus groups due to the low number of barbers in each barbershop.

### *Recruitment*

**Employer.** Five barbershops in Statesboro, GA were recruited to participate in this intervention due to proximity and familiarity with the researcher. The owners of the barbershops were approached about the possibility of being interviewed and having their barbers interviewed for the study. The owners were given information about the study and how the study benefited them. An information packet (employer narrative) was given to the owner at this introductory meeting outlining these benefits as well as introducing the study, stating the purpose of the study, the need for the study, why the intervention might be effective, the logistics of the study (specifics about interviews, etc.), and outlining the tasks associated with the study. There were no direct benefits to owners for this study, but they were able to see the results of the study after the data had been analyzed. Also, they were given an opportunity to participate in a study that promoted obesity prevention awareness and received an incentive for participating in the form of a \$25 Wal-Mart gift card.

**Employees.** The recruitment of the barbers was based on owner approval and the barbers' desire to participate in the study. All barbers 18 years of age and above were eligible to participate in the interview. After receiving permission to recruit the barbers from the owners, the barbers were approached individually by the researcher and flyers were used to help recruit them for the study. The owner was not used to help recruit the barbers due to the potential for coercion and pressure to participate in the study from the owner. Incentives in the form of \$25 Wal-Mart gift cards were given to each barber who participated in the interview to aid the recruitment process for barbers.

**Curriculum building.** The curriculum that was presented to the owners and barbers during the interviews was an evidence-based curriculum used for the Diabetes Prevention Program (DPP), which is a clinical research study led by the National Institutes of Health and supported by the Centers for Disease Control and Prevention (Curricula and Handouts, 2017). This curriculum contained information on healthy eating habits, recommendations to increase physical activity, positive thinking, the process of lifestyle change, managing stress, and ways to stay motivated. Chapters 2 (Be a Fat and Calorie Detective), 3 (Three Ways to Eat Less Fat and Fewer Calories), 5 (Move Those Muscles), and 6 (Being Active—A Way of Life) were reviewed with the owners and barbers during the interviews due to time and resource limitations. These chapters were chosen due to previous literature that used an adapted version of this curriculum and emphasized the importance of these chapters (Candela et al., 2012; Kramer, Cepak, Venditti, Semler, & Kriska, 2013; Porterfield, Hinnant,

Jones-Bell, Dolina, & Wenter, 2008). Two of the four chapters (2 and 3) emphasized nutrition while the other two (5 and 6) emphasized physical activity; nutrition and physical activity are two important components of obesity prevention which was another reason why these chapters were chosen. Therefore, although this curriculum was intended to address diabetes prevention, these chapters can be used for an obesity prevention program. These chapters provided the owners and barbers with enough information to help determine if they would like to see the education intervention implemented in their barbershop.

The content for these four chapters was presented to the owners and barbers during the interview in a clear and concise manner. They were told that the four chapters would be presented in four separate sessions over a 4-week period in a group setting consisting of the owner of the barbershop and the barbers of that shop. The participants first had an opportunity to view all of the content from each of the four chapters. While viewing the content, the interviewees were first given a brief overview of the content including the name of the chapter, followed by the parts that make up the chapter, how long each part would take if the intervention was implemented, the description for each part, an example from each part, and the learning objectives that provided barbers with tasks that they should be able to do after the chapter is taught. The learning objectives were presented last for each chapter because they provided a good summary for each chapter and broke the information down in a simple manner for the interviewees. This format was intended to give the owners and barbers a good idea about the content that would be taught while not overwhelming them with too much information.

**Interview guide development.** The interview guide was developed to cover a wide range of topics assessing the feasibility of the proposed obesity prevention intervention. These topics included initial thoughts on the intervention, facilitators and barriers associated with implementing the intervention, thoughts on the curriculum, likes and dislikes regarding the intervention, preference for intervention implementation in the barbershop, feasibility of implementation in the barbershop, intervention sustainability, and perceived effectiveness of the intervention. The guide was developed based on previous literature that discussed eight areas of focus that should be addressed by feasibility studies (Bowen et al., 2009). These areas of focus, as mentioned previously in the literature review, included acceptability, demand, implementation, practicality, adaptation, integration, expansion, and limited-efficacy testing. The questions from the interview guide were developed with these areas in mind. The questions were all open-ended allowing for a greater perspective from the participants and more meaningful data. Demographic questions were asked of each participant at the end of the interview.

The demographic questionnaire was developed by the research team and consisted of primarily closed-ended questions asking about participants' age, gender, race/ethnicity, type of health insurance, marital status, highest educational level obtained, and annual household income. The order of the interview guide questions was determined based on a logical flow of conversation with the first question asking about the participant's initial thoughts about the intervention and the last few questions asking about the feasibility of implementation and program sustainability. The questions were also ordered from general questions that were asked in the beginning of the interview to more specific questions that were asked throughout the middle and latter stages of the interview.

The questions for the owners and barbers were mostly identical but differed in certain areas. For example, a question that was asked to the owners about their thoughts on the format of the curriculum was not asked to the barbers due to its relevance. Additionally, the question regarding the concept of the owner as a health advisor and the question regarding curriculum content were phrased differently for the owners and barbers. Both sets of questions totaled 14 each for the owners and barbers. All of the questions were developed to better understand the feasibility of a potential obesity prevention education intervention implemented in the barbershop.

## Results

### Demographics

Table 1 reports the characteristics of the employers (owners) and employees (barbers) who participated in the study. All of the participants were male, with a majority identifying as African American, including 80% of the employers and 93% of the employees. Sixty percent of the employers and 40% of the employees were between the ages of 30 and 39. Only one study participant (employee) was over the age of 50. In addition, 60% of the owners and 33% of the barbers identified as having private insurance. There were three participants who reported having employer health insurance indicating that they were working another job in addition to the one in the barbershop since none of the barbershops offered health insurance. There were four participants who did not have any form of health insurance. The majority of participants were married/living together, including 80% of the employers and 73% of the employees. Eighty percent of the employers and 73% of the employees had more than 12 years of education. The household income level for the barbers ranged from the \$10,000–\$19,999 bracket to the \$80,000 and over bracket. The majority of barbers fell within the \$10,000–\$19,999 and \$40,000–\$49,999 brackets. There were no owners who were below

the \$40,000 threshold. The majority of the owners were in the \$40,000–\$49,999 and \$50,000–\$59,999 range.

### Themes

Four themes were identified based on owners' and barbers' attitudes and perceptions toward the intervention: importance, benefits, empowerment, and motivation.

### Importance

Both the owners and the barbers found the issue of obesity to be very important and relevant to the African American community. The owners and barbers understood the impact that obesity has on the African American community because many of them have experienced the issue through family members and friends. Both owners and barbers felt that the issue was one that needed to be addressed in their community and thought that the barbershop was a good place to start. The owners and barbers also expressed the importance of making people aware of the issue in order to facilitate and inspire action.

### Benefits

Both the owners and barbers felt that the program was very appealing in large part due to the benefits of the program. For example, both groups talked about the potential for the program to improve the relationships between the barbers. Improved productivity and job performance were additional benefits identified by the barbers that this intervention could provide. One of the owners identified "feeling better" as a potential benefit and the ability of this feeling to keep him committed to being healthy. The barbers not only mentioned benefits that would positively impact them physically, but they also mentioned benefits that would positively impact them mentally, such as increased focus, increased self-confidence, and being in a better mood.

### Empowerment

A third theme that was identified was the potential for the program to empower the owners and barbers by providing them with the knowledge and encouragement needed to succeed in becoming healthy. Both groups pointed to the ability to use the information learned to help others. The owners talked about using the information to help the barbers become healthy, and the barbers talked about potentially helping customers by talking with them about physical activity and healthy eating. Both groups also mentioned that they could use the information learned to help their families become healthier. In addition, the owners recognized the power of knowledge and expressed enthusiasm about acquiring knowledge to help others.

**Table 1.** Demographic Characteristics of Employers (Owners) and Employees (Barbers).

Characteristic	Employers		Employees	
	Number (n = 5)	Percent	Number (n = 15)	Percent
Gender				
Male	5	100	15	100
Race/Ethnicity				
African American	4	80	14	93
Other	1	20	0	0
Missing	0	0	1	7
Age				
20–29	0	0	3	20
30–39	3	60	6	40
40–49	2	40	5	33
50+	0	0	1	7
Health insurance				
Private	4	80	7	46
Government	0	0	3	20
Other	0	0	2	13
None	1	20	3	20
Marital status				
Single	1	20	3	20
Married/Living together	4	80	11	73
Divorced	0	0	1	7
Education level				
Less than high school	0	0	2	13
High school/General Educational Development	1	20	2	13
Some college	3	60	8	53
Bachelor's degree	1	20	3	20
Household income				
\$9,999 or less	0	0	0	0
\$10,000–\$19,999	0	0	4	27
\$20,000–\$29,999	0	0	1	7
\$30,000–\$39,999	0	0	1	7
\$40,000–\$49,999	2	40	4	27
\$50,000–\$59,999	2	40	0	0
\$60,000–\$69,999	0	0	1	7
\$70,000–\$79,999	0	0	1	7
\$80,000 and over	1	20	3	20

### Motivation

There were multiple aspects of motivation identified by the owners and barbers, such as individual, family, and social support. The owners and barbers felt that motivation would play a key role in the success of the program by giving each other the support and encouragement needed to produce behavior change via increased physical activity and healthy eating. The owners and barbers believed that having the support from others makes behavior change much easier than taking on the task alone. Both groups suggested that working together as a group to become healthy makes each member of the group accountable and ensures that each member is fully

committed to the process. The owners and barbers talked about developing good habits from the program and maintaining those habits, especially if they see results, throughout their life. If they were to stop living a healthy lifestyle, the owners and barbers mentioned that they would feel the negative effects of the unhealthy lifestyle which would encourage them to go back to living a healthy lifestyle. The owners also talked about family playing an important role in motivating them to be healthy, which as one owner pointed out, is not surprising because of the importance that African Americans place on family. Figure 1 shows quotes from participants associated with this theme, as well as the other themes

(a) Themes	SEM Level	Quote
Importance	Intrapersonal	"It does sound appealing. Why? Because I have diabetes. My mother has diabetes. My grandmother had diabetes. Her mom had diabetes."
	Interpersonal	"For me, as far as looking at my family, looking at uncles and aunts, great aunts and great uncles, you know, hearing how they had to cut off a toe, and then the toe went to the leg, and the leg went to -- and they wouldn't stop eating crazy stuff, you know, some of them ate themselves to death, I think, because of the condition they created."
	Organizational	"I think it's good, I mean whenever you talk about diabetes, and we're looking at -- you're dealing with barbershops, African American barbershops, diabetes is a big thing in the African American community."
	Community	"Diabetes is a big thing in the African American community."
Benefits	Intrapersonal	"Yes, I think it could. I think it could be beneficial to all of the workers and, like I said, if you feel better, you're healthier. Your day goes better. You can perform your job better. You can focus."
	Interpersonal	"Plus a lot of barbers -- we have a lot in common by cutting hair, but our mindset is different. Something like this would put us on the same path, because he might be ready to go to the track and race some cars. He might be ready to go hang out with his wife early and go see a movie. I might wanna stay here all night and work. So now that's gonna put us, give us the same train of thought every day."
	Organizational	"I mean I'm a person that with numbers and money that will give us a name like oh man you know you go to [BARBERSHOP], they're also teaching you about healthy, about being healthy and wellness."
	Community	"I think it'll be beneficial a good idea in that aspect as far as being a barber and then he's relating what's good and bad as far as health wise to us as employees and we can relay that to our customers like a chain event effect."
(b)		
Empowerment	Intrapersonal	"It gets me excited, saying okay [OWNER] can teach me this so I can become healthy."
	Interpersonal	"Oh yeah, I think so 'cause you know, I gotta -- Thank God, I got a good clientele, so the people see me slimming down and be like, "Man, what are you doing?" And I can pass on what I've learned to them."
	Community	"I mean something like this is kind of like a no-brainer to me. You know just information about diabetes and then you know the information that we receive could spark something in us to where when we are talking to a client..."
Motivation	Intrapersonal	"It's up to the individual, man. You know, it's the people. It's what they wanna do, you know? If they wanna continue to be active, or continue to eat healthy, because that's what they actually want, then they gonna do it. But if they don't want it, they ain't gonna do it."
	Interpersonal	"Any time you bring people's families into it, like for me, one of the big motivations for me is my children are growing up and I want to see their children and their children's children, and I want to be active, I want to be, you know, able to play all the different sports with my kids and always beat them, you know, as old as I get, I want to be active, so that's my motivation."

Figure 1. Attitudes and perceptions toward participating in an obesity prevention education intervention disseminated by the employer.

Themes	SEM Level	Quote
Barriers	Intrapersonal	"Some people are not interested in their health and some people are. That's just how that is."
	Interpersonal	"We just got to get everybody together, just find out what's a good time for everyone."
	Organizational	"Here, we kind of don't have a back room to where you maybe can bring in a healthy meal or something like that, anything like that."
	Community	"Basically, what you do is you going to one of these fast food restaurants to get something to eat."

**Figure 2.** Challenges affecting employers' and employees' willingness to participate.

discussed previously, and how they are categorized into various levels of the SEM.

### Barriers

The two primary barriers identified by the owners and barbers were time and barber constraints. Both groups brought up the potential challenge of finding time to implement the intervention. The owners voiced concerns about finding time to implement the intervention given their busy schedules and the schedules of the barbers. The unpredictable nature of customer flow in and out of the barbershop makes it difficult to establish a set time to do the intervention. Based on their comments, the owners seemed to think that this barrier could be easily overcome by talking with the barbers in advance and setting aside a time each week for implementing the program. Barber constraints are factors that prevent barbers from living a healthy lifestyle due to their occupation. According to the owners, the barbers stand the entire day and cut hair and do not get the opportunity to do much physical activity during the work day. The barbers also do not have time to eat a healthy meal. The barbers also felt that these factors prevent them from engaging in healthy behaviors at work. The barbers also identified a willingness to change as a potential barrier for the program. Although the owners and barbers acknowledged the presence of barriers to intervention implementation, they also felt that these barriers could be overcome. Quotes from the owners and barbers identifying additional barriers are shown in Figure 2.

### Feasibility

Different components of feasibility, such as role comfort, owner buy-in, issue comfort, trust, ease of implementation,

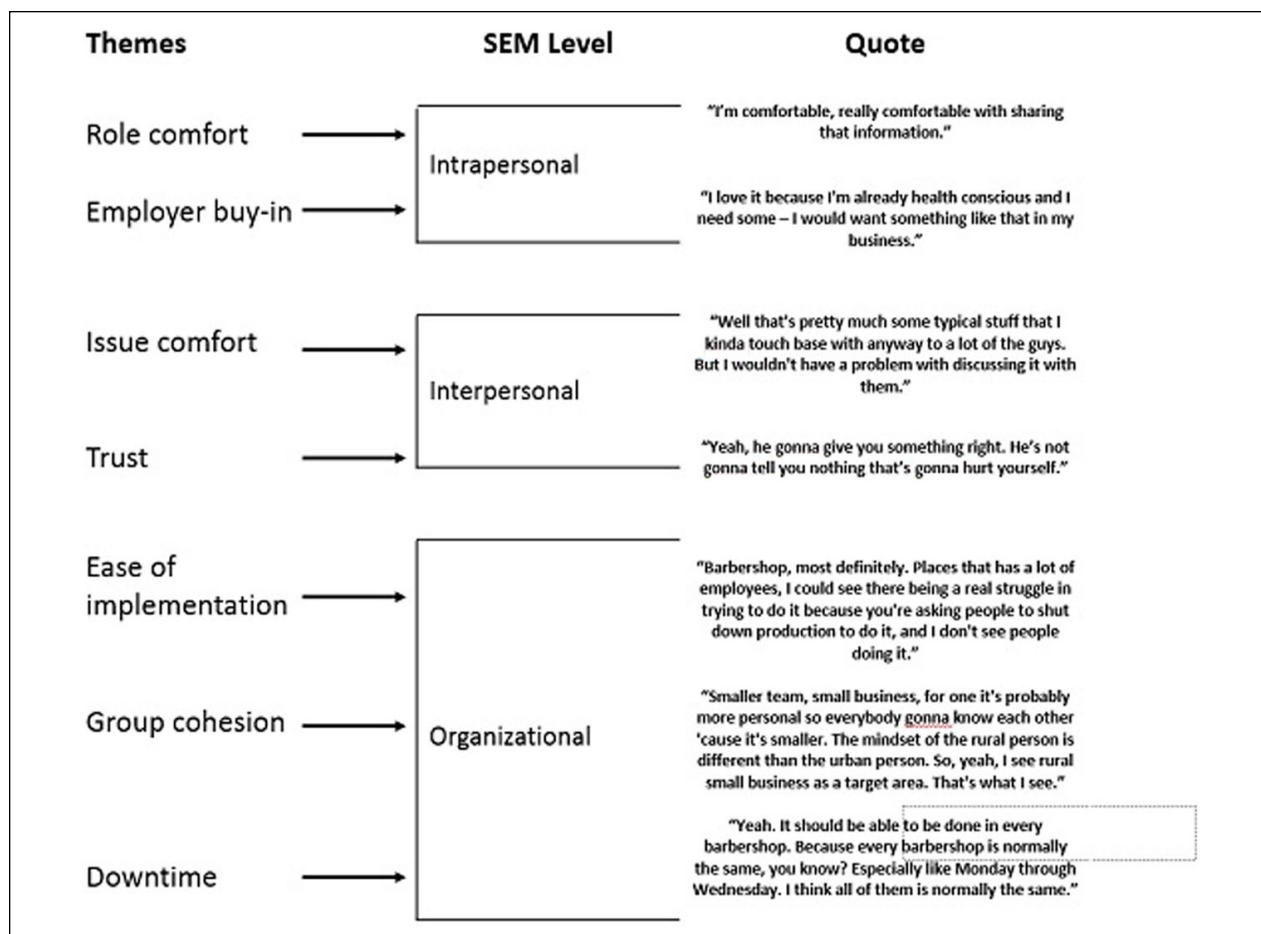
group cohesion, and downtime, were additional themes identified. The owners and barbers all felt that the intervention could be implemented in the barbershop. They all expressed a willingness to participate in the program and a majority of them were excited to get started. Their excitement primarily stemmed from the potential benefits of the program and understanding the importance of the program. In addition, the owners felt comfortable educating the barbers about obesity prevention, and the barbers thought the owners were a good choice to teach them. An additional key finding associated with the feasibility of the program was the owners' understanding and agreement with the target audience for the program. The owners felt that small businesses in a rural area would be the ideal audience for the program. The owners and barbers also talked about the practicality of the intervention and mentioned that finding the time and space to conduct the program would not be an issue. Quotes corresponding to each theme associated with feasibility are shown in Figure 3.

### Discussion

Bowen et al. (2009) identify aspects of feasibility, such as acceptability, demand, implementation, practicality, adaptation, and efficacy, that are important in determining whether an intervention can be implemented and its potential effectiveness. This study primarily focuses on the acceptability and demand of an obesity prevention intervention in the barbershop. Assessing feasibility in terms of these aspects will help determine if this intervention should be implemented in the barbershop by providing some evidence that the intervention might work (Bowen et al., 2009).

The target population's acceptance of the issue of obesity and understanding of its relevance is critical to the





**Figure 3.** Overall views regarding the feasibility of the intervention.

success of the program as it will unify the owners and barbers and inspire them to address the issue (Glanz et al., 2008). Some owners and barbers talked about their own health scares, such as obesity, and their desire to be healthy because of it. The majority of the owners and barbers were aware of the importance of obesity but sought more knowledge about the issue so that they would be fully informed and be able to take action to improve their health. The owners and barbers mentioned that obesity is a very appropriate issue in the barbershop given the number of African Americans that visit the barbershop. Their willingness to take ownership of their health is an indicator that the issue chosen for the intervention is an issue that the barbershop community feels strongly about and will consequently help build up the organization (Glanz et al., 2008). This point illustrates the acceptability and demand of the proposed intervention by the owners and barbers in the form of the perceived appropriateness and fit within the organizational culture of the intervention (Bowen et al., 2009).

Bowen et al. (2009) identify practicality as another area of focus for feasibility studies. This aspect of

feasibility includes the potential positive effects on target participants (Bowen et al., 2009). The owners' and barbers' identification of potential benefits of the intervention speaks to these positive effects. For example, the potential benefit of improved relationships between the barbers brought up by the owners and barbers is significant because it could result in a better work environment for the barbers and also increase the barbers' organizational commitment, resulting in improved productivity. These benefits make up part of the return on investment (ROI) that the owners would gain for implementing the program (Carnethon et al., 2009). ROI is an important component to consider when examining the cost analysis of the intervention, which is an outcome of interest when assessing practicality as well (Bowen et al., 2009). Additional benefits brought up by the owners and barbers allude to the sustainability of the program. Based on these benefits (i.e., "feeling better,"), the barbers would want to maintain their good health to avoid the negative effects of an unhealthy lifestyle. It was made clear by barbers that mental health was part of good health. These mental benefits broaden the appeal of the program and improve the

barbers' health from a holistic perspective. The benefits identified by the owners and barbers underscore the acceptability of the intervention by illustrating their satisfaction toward the intervention, perceived positive effect on the barbershop, and intention to continue to participate in an intervention that would provide these benefits (Bowen et al., 2009). These potential benefits also serve as factors that would make it easier to implement the intervention, thus increasing the potential practicality of the intervention (Bowen et al., 2009).

Empowerment contributes to the practicality of the intervention as well by giving the barbers the ability to carry out intervention activities (Bowen et al., 2009). Empowerment is an important component of community organization and community building, which is key to a successful health intervention (Glanz et al., 2008). The owners' recognition of the power of knowledge and willingness to acquire knowledge to help others is significant because it underscores the owners' approval of the program and reinforces the importance of leadership buy-in. Empowerment also contributes to the sustainability of the program by giving participants the ability to become healthy at any time or maintain their health throughout their life. Previous literature has discussed the importance of program sustainability and the need to find ways to produce positive, sustainable health outcomes among individuals and communities (Aldana et al., 2006; Carnethon et al., 2009; Rolando et al., 2013).

The sources of motivation identified by the owners and barbers increase the likelihood of their "intent to continue use," an outcome of interest when examining the acceptability of an intervention (Bowen et al., 2009). Both the owners and barbers identified working together with coworkers as a source of motivation that contributes to the sustainability of the program since the group will continue to be working at the barbershop after the program is complete and be there to remind and support each other to maintain their health. Previous literature has reported that social support can have a positive effect on the sustainability of a program (Umberson & Montez, 2010). An additional aspect of sustainability addressed by the owners and barbers associated with motivation was the ability of the intervention to produce results and help develop good habits, such as regular exercise and healthy eating, among the participants, which underscores the potential effectiveness of the intervention in the eyes of the owners and barbers. The aspects of motivation also help to illustrate the demand for the intervention given the perceived positive effects and organizational fit identified by the owners and barbers (Bowen et al., 2009).

Previous literature has also identified time as a barrier to implementing health interventions (Hannon et al., 2012; Laing et al., 2012; Harris, Hannon, Beresford, Linnan, & McLellan, 2014). Although finding time to

implement the program was identified as a barrier, both the owners and barbers felt that the barrier could be overcome by planning ahead and identifying a consistent time each week to conduct the education sessions. This result suggests a commitment to implement and participate in the program by the owners and barbers due to their willingness to find solutions to problems that may arise. The identification of barber constraints as a barrier to being healthy suggests that barbers are at a disadvantage when it comes to their health, which emphasizes the need for this program. Resources, including commitment from the owners, are in place to overcome barber constraints and allow for the successful implementation of the intervention. A few barbers also identified a willingness to change as a potential barrier for the program. However, they felt that this barrier would be overcome due to the explanation given as to the importance of healthy behaviors and factors such as social support among the barbers. Since the owners and barbers felt that the primary barriers identified could be overcome and not hinder implementation, these barriers have limited negative impact on the practicality of the intervention (Bowen et al., 2009).

Previous studies have assessed the feasibility of physical activity/healthy eating interventions for underserved populations in order to determine whether a program can and should be implemented (Bowen et al., 2009; Whittemore et al., 2009; Jaber et al., 2011; Dodani & Fields, 2010). Multiple aspects of feasibility, including the acceptability, demand, and practicality of the intervention, should be examined when deciding on whether to implement the intervention (Bowen et al., 2009). The owners and barbers for this study all felt that the intervention could be implemented in the barbershop. The owners and barbers all expressed a willingness to participate in the program and a majority of them were excited to get started. Their excitement primarily stemmed from the potential benefits of the program and understanding the importance of the program. In addition, the owners felt comfortable educating the barbers about obesity prevention, and the barbers thought the owners were a good choice to teach them. These findings help to confirm the acceptability and demand for the program. In addition, the owners felt that small businesses would be the ideal audience for the program. This finding further indicates the owners' acceptance and buy-in of the intervention and emphasizes its acceptability. The right target audience is an essential element of a successful community intervention, and everyone must agree that there is a need for the intervention in order to maximize its success (Glanz et al., 2008). The barbers also felt that the issue was relevant to them. Furthermore, an important aspect of feasibility is the practicality of the intervention (Bowen et al., 2009). The owners and barbers talked about the practicality of the intervention and mentioned that finding the time

and space to conduct the program would not be an issue. An additional aspect of feasibility is adaptation (Bowen et al., 2009). The owners and barbers suggested ways to adapt the intervention to them and the barbershop setting including splitting up each education session to account for customer flow and holding the education sessions in the beginning of the week since there are fewer customers during that time. Together, the acceptability, demand, practicality, and adaptation of the intervention will allow the intervention to be successfully implemented in the barbershop and further explore its feasibility.

## Strengths

There were several strengths of this study. Consistency of the interviews was the greatest strength of the study, as all 20 interviews were conducted by the same researcher. In addition, strong relationships were established with the owners and barbers prior to conducting the study. The established relationships with the participants may have increased the level of trust between the researcher and the participants, which could have produced more honest responses from the participants. The SEM was used as an organizational analysis tool. The SEM allows for a broad and more thorough understanding of the themes that were identified. The study also used multiple coders during the data analysis process, which increased the reliability of the analysis and helped to eliminate the inherent researcher bias that is associated with qualitative research. The study utilized qualitative data analysis software NVivo, which allowed for a more thorough examination of the data collected and emerging themes.

## Limitations

There were limitations associated with conducting this study as well. A limitation of this study was that a convenience sample was used to identify participants for the study. The use of a convenience sample introduces selection bias into the study and prevents the chosen sample from being representative of the entire population. An additional limitation of this study was that the sample size of 20 for the study was limited due to accessibility and limited resources, such as time and money. However, pilot studies such as this one generally have smaller sample sizes. A third limitation of the study was the issue of time during the interviews. Some of the barbers had less time to commit to the interview than others, which may have led to less detailed responses from those barbers. An additional limitation of the study was the inherent researcher bias introduced during the analysis process. This bias occurred primarily in the codebook development and coding phases of the study and may have influenced the results of the

study to portray a certain outcome. Multiple coders were used to help limit this bias.

## Implications

This study demonstrates the acceptability and demand for disseminating preventive health information to a medically underserved community in the barbershop. Dissemination is a critical component of effective health interventions. Identifying opportunities to disseminate effective health interventions to communities will result in an increase in the number of healthy communities. The findings from the study also suggest a potential for improved quality of life among barbers. Barbers will not only experience the benefits of a healthy lifestyle (physical and mental), but also experience benefits associated with the workplace, such as an improved workplace environment via improved relationships and increased productivity. Therefore, the barbers will see improvement in all aspects of their life from the program.

## Future Research

An avenue for future research includes the implementation of the intervention and measuring its effectiveness. Additional avenues for future research include comparing barber attitudes toward health interventions in rural and urban barbershops, exploring other health issues in the barbershop that disproportionately affect African Americans, identifying innovative approaches to improve the health of barbers in barbershops, and exploring the feasibility and effectiveness of health interventions in beauty salons and other small, locally owned businesses in rural communities.

## Conclusion

This intervention addresses the significant health disparities associated with obesity that exist in the African American community. The results of the study identify that an obesity prevention/weight management intervention is acceptable to conduct in barbershops and that to be most successful, the intervention should be tailored to fit the needs of the employers and employees within this specific working environment. Future studies should explore additional aspects of feasibility of an obesity prevention intervention in the barbershop including implementation, adaptation, and efficacy.


## Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

## Funding

The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: Funding for this research has been provided by the Jack N. Averitt College of Graduate Studies at Georgia Southern University.

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