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# Weight Loss Attitudes and Social Forces in Urban Poor Black and White Women

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# Abstract

**Objective**—To explore differences between Blacks and Whites in perceived influences on weight-related behaviors among obese urban poor women.

**Methods**—Participants (N = 27) received physician referrals to a weight loss program located in Federally Qualified Health Centers and either never attended or stopped attending. We conducted in-depth, in home interviews using a script informed by focus groups, pilot discussions, and the theory of planned behavior (TPB) to learn about participants' weight loss attitudes, social forces and perceived behavioral control.

**Results**—White women reported having more social support and social pressure for weight management activities. Black women reported eating for positive reasons whereas white women associated eating with negative emotions.

**Conclusion**—Social networks and emotions may be critical factors in weight management and lifestyle program participation.

# Keywords

urban; poor; social support; obesity; perceptions

The Institute of Medicine report on comparative effectiveness research supports identification of effective methods for treating obese populations and gives particular emphasis to high-risk populations such as the urban poor.<sup>1</sup> Moreover, leading obesity scientists have highlighted the need for greater research examining the role of physical and particularly social environments in racial disparities.<sup>2,3</sup> Nearly one-third of non-Hispanic white women and one-half of non-Hispanic black women in the US are obese.<sup>4</sup> Published

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Human Subjects Statement

This study was approved by the Indiana University Institutional Review Board IRB Study Number 0805-71.

**Conflict of Interest Statement** 

The authors of this paper have no conflicts of interest to disclose.

randomized clinical trials (RCTs) of weight loss<sup>5</sup> including large RCTs,<sup>6,7</sup> show that black women experience up to 50% less weight loss when compared to white women.

*Healthy Me* is a lifestyle weight loss program that has been implemented by Eskenazi Health (http://www.wishard.edu/our-services/healthyme), the third largest safety net health system in the US. *Healthy Me* is modeled after the interventions of large RCTs such as the Diabetes Prevention Program (DPP)<sup>8</sup> and the Look AHEAD study.<sup>6</sup> Presently, there are 5 health coaches located in 9 Federally Qualified Health Centers (FQHCs) across the city of Indianapolis. As with the published RCTs, black women in *Healthy Me* have experienced approximately 50% less weight loss than white women.

Existing literature suggests that black women have less support for weight loss and are exposed to social networks with more prevalent obesity.<sup>1-3</sup> A 2013 review of weight loss interventions in black women identified preferences for larger body size and lower social support for weight loss behaviors as high priority for future research.<sup>10</sup> Moreover, both social and physical environments have been shown in experiments to have powerful effects on weight-related behaviors,<sup>11,12</sup> Although obesity prevalence in the most recent decade leveled out among white women, obesity prevalence continued to climb among black women.<sup>13,14</sup> The prevalence of mild to moderate obesity (BMI 30-40) in middle-aged black women is double that of middle-aged white women (62.7% vs 31.8%) and the prevalence of severe obesity (BMI 40 or more) is triple (23.0% vs. 7.3%).<sup>13</sup> Obesity rates and racial disparities are highest in middle-aged women.<sup>14</sup> To explore black and white racial differences further, we performed in-depth home interviews with a sample of obese urban black and white women who received a provider referral to the *Healthy Me* program but either never attended or attended briefly but then stopped. Guided by the Theory of Planned Behavior (TPB), <sup>15</sup> we focused particularly on these women's attitudes, social forces, and perceived control in regard to weight-related behaviors.

# METHODS

# Design

Given the limited information about the socio-cultural factors and life experiences of obese urban poor women, we used a qualitative research design intended to reveal common themes.<sup>16</sup> After reviewing the literature, consulting a team of medical and qualitative research experts, and conducting 4 pilot interviews with *Healthy Me* participants, an interview script was developed by the authors. The interview method provides in-depth subjective data. We did not approach our problem "deconstructed." Instead, we used 4 unstructured focus groups in addition to the 4 pilot interviews as well as our experience in this population as guides to theory selection. Subsequently, our interview script was informed by the TPB. Briefly, this theory states that behavior is determined by one's intention to perform the behavior. The actual intention is determined by a combination of attitudes about the behavior, perceptions of social pressure to perform the behavior (social forces), and perceptions about the level of ease or difficulty of performing the behavior including environmental factors (perceived behavioral control). The script began with a brief note of body weight's importance to overall health and the purpose of the research. The script then recommended interviewers use approximately 10 minutes to get to know the

participant. Another 20 minutes was recommended to ask the participant about health and weight history (attitudes). Next, the script moved to approximately 20 minutes of discussion about the participant's perceptions in regard to family and community norms (social forces) and physical environments (perceived behavioral control). The script closed giving the participant an open opportunity to comment on their expectations of a weight loss program. The complete home interview script is shown in Figure 1.

#### Recruitment

Women who were referred to *Healthy Me*, but either never attended or attended briefly, but then stopped, were recruited for this research. *Healthy Me* is delivered in FQHCs serving a generally low income, low health literacy, urban population in Indianapolis. Literature, guidelines, and input from primary care providers (PCPs), administrators, and patients guided structure and content of this clinic-based weight management program. We have described *Healthy Me* in detail elsewhere.<sup>17</sup>

*Healthy Me* is available for patients 18 years of age. An electronic review of medical records is used to determine age and body mass index (BMI) eligibility. A positive screen (ie, age 18 and BMI 30) results in an electronic eligibility reminder that PCPs see when all other prescriptions and referrals are written. At this time, providers may refer patients to the *Healthy Me* program which offers individual behavioral counseling meetings with a lifestyle coach located in the clinic, support group and education classes including exercise, weekly weigh-ins, navigation of community resources, and ongoing lifestyle counseling inperson or by telephone. In a 12-month period, 9197 obese women aged 35 to 64 years visited a FQHC that contained a *Healthy Me* program; of those, 5483 were black women and 3714 were white women. Among black women, 1964 (35.8%) received a referral from their provider to *Healthy Me* and 738 (37.6%) attended *Healthy Me*. Among white women, 1048 (28.2%) received a referral and 332 (31.7%) attended.

For this research study participants were recruited from a list of FQHC patients meeting our criteria. This list was generated using the Regenstrief Medical Records System (RMRS).<sup>18</sup> Eligible participants were black or white obese women (BMI 30) who were aged 30 to 64, received a *Healthy Me* referral and either attended *Healthy Me* support groups for a brief time then stopped or never attended *Healthy Me*. Providers were presented with the names of their eligible patients. Patients with severe illness, a history of bipolar disorder or psychosis, or severe cognitive impairment (3 errors on a 6-item cognitive screen) were excluded from the study. Patients who were unwilling or unable to provide informed consent, pregnant or nursing in the past 6 months, or substance abusers also were excluded from the study. Each provider was asked to give or withhold permission to contact each listed patient for potential participation in the study. For those patients receiving provider approval, the RMRS analyst generated a weekly list of appointments and sent them electronically to the Practice Based Research Network (PBRN) research assistant at each FQHC. Eligible patient's routine FQHC medical visit.

Over the 5-month recruiting period, 226 eligible participants came to a primary care appointment, of which 32 total patients were approached, 5 refused to participate, and 27

consented to be interviewed. After the participants consented, the study coordinator scheduled in-home interviews. The recruitment and data collection phases occurred simultaneously and recruiting ended when we were certain that we were learning no new information and all recruited participants were interviewed.

### **Data Collection**

The interviewers were trained research assistants with a BS or MS degree in psychology or health promotion with experience in facilitating interviews. Interviewers and study participants were race and sex matched; 2 black female research assistants interviewed the black female participants and 2 white female research assistants interviewed the white female participants. Our research team agreed that it was important to have a same race and sex interviewer to promote participant comfort and openness. Male and female faculty members accompanied the interviewers on pilot interviews (N = 4; pilot data not reported in the current paper). After the pilot interviews, we reviewed audio-recordings and discussed similarities and differences in interview methods to establish consistency across interviewers. At that point we agreed that the most successful interviews occurred when the interviewers referred to the script to ensure consistency among the interview topics covered. Interviews lasted approximately 1.5 hours and were conducted as conversations.

The number of interviews was determined by the literature and through the consensus of our research team. Crabtree et al<sup>19</sup> state that completing 8 to 10 interviews per study is a general rule of thumb. However, Douglas<sup>20</sup> states that 25 interviews are generally necessary and Seidman<sup>16</sup> states that the number cannot reasonably be set and depends on sufficient population representation. We decided the best approach would be to use this information to set a goal for subgroup representation (10 to 15 per group). The number of interviews performed for each subgroup was reached when it became apparent that no new information was being obtained (ie, no new themes, domains, or dimensions emerged) within each group. For white women, this occurred after the first 3 cases. We interviewed 8 additional white women and were unable to identify any new themes. Eleven interviews of white tenth interview and we interviewed 6 additional black women but were unable to identify any new themes. Sixteen interviews of black women occurred.

Health literacy was objectively measured using the New Vital Sign instrument.<sup>21</sup> Participants were presented a nutrition label from an ice cream container and asked 6 questions about the nutrition label (eg, If you eat the entire container, how many calories will you eat? If you are allowed 60g of carbohydrates, how much ice cream could you have?). Participants with more than 4 correct answers are unlikely to have low health literacy and those with less than 4 correct responses are more likely to have low health literacy.

Body Mass Index (BMI) was determined from an electronic review of medical records which (1) recorded BMI that existed in the medical record from a recent primary care

provider visit at the time of the study, or (2) calculated BMI that used height and weight at

the time of the study to determine BMI. Calculated BMI was used only when recorded BMI was not available. Participants received a \$40 gift card for completing the interview and survey.

## Analyses

We examined whether there were group differences in age, BMI, or health literacy. Group comparisons were made using t-tests for independent samples. Transcripts were analyzed using a team that included the interviewers, a sociologist, an exercise physiologist, and a linguistic scientist all of whom listened to the electronic audio-recordings to identify common themes and subthemes and created a coding system. The audio-recordings were then transcribed and the coding system was used to code each transcript. We conducted the coding by hand, individually reading transcripts to identify themes and then discussing themes for each transcript at team meetings. Two varying members of the team coded each transcript and all members of the team discussed results at meetings. This process occurred over the course of 3 months until all transcripts were coded and discussed.

Following 3 major components related to the TPB model, we classified themes under Schifter and Ajzen's<sup>22</sup> variables that can be related to weight loss: positive or negative opinions regarding the weight loss behavior (weight loss attitudes), perceived social pressure to lose weight (social forces), and perceived control over weight, including physical environment factors.<sup>22</sup> A fourth theme, strategies related to weight loss (reported behavior and intentions), was also identified.

# RESULTS

Black participants were 37 to 66 years old (mean = 51.3; SD = 7.6) and white participants were 39 to 63 years old (mean = 54.1; SD = 8.2). There was no significant age difference between the groups (p = .42). The health literacy scores for black participants were 0 to 4 (mean = 1.9; SD = 1.5) and 1 to 4 for white participants (mean = 2.4; SD = 1.1). There was no significant difference in health literacy between the groups (p = .38). BMI scores for black participants were 31.5 to 46.2 (mean = 37.9; SD = 4.6) and 32.9 to 41.4 (mean = 37.8) for white participants. There was no significant difference in BMI between groups (p = .48). Themes are summarized in Table 1 and described in detail in the following sections in no particular order of importance or frequency of occurrence.

# Weight Loss Attitudes

Weight loss attitudes included life satisfaction discussions related to weight. Women described how happy or unhappy they were with their weight in the context of their lives. White women attributed health problems to obesity. This group reported that weight negatively affected their lives. Eighty-two percent identified weight as being related to physical health problems and 73% said that weight was related to mental health problems. Participants from this group reported that weight influenced breathing, depression, and chronic illness

"...the things that I want to do, I can't do anymore... I mean, like I used to do." "... I used to be a lot more healthier than I am right now. Yeah, I'm not as healthy as I used to be. I wish that I were."

Black women were less consistent with their attitudes toward weight loss. One participant was unhappy with the way she looked in her clothes. Another said: "*Being overweight is devastating*." Another said that she was not happy because of her weight and called it "*depressing*." A participant said her weight caused her mental health problems including avoidance of social interaction and lack of self-care (eg, showering, combing hair, and other hygiene-related activities). Approximately 19% of the black women were unhappy with their weight whereas approximately 12% of the participants from this group reported that mood was unrelated to weight. Fifty percent of the women in this group were comfortable with being obese.

"Weight loss doesn't make you beautiful." "If I lose weight, I'm happy, if I don't, I'm happy." "I love everyone regardless of their weight." "I'm tired when I'm losing weight and perky when I'm healthy [obese]." "My weight doesn't give me any problems; nothing can stop me."

# **Social Forces**

Fifty-five percent of the white women and 38% of the black women discussed weight and weight loss with their friends and families. These women reported joking about weight with family members, discussing diets with family members, and changing dietary and exercise habits with family members. Seventy-three percent of the white women reported currently feeling social pressure for weight loss from friends or family members. Current or past desire to lose weight was reported to result from perceived pressure from family members, friends, or healthcare providers. One woman from this group described looking at old photos with her daughter who said: "*Mom, you're as big as you've ever been. You need to lose weight.*" Another said her mother told her: "*You better lose some weight, you're getting big girl.*" None of the black women reported feeling external pressure to lose weight from friends or family members.

For both black and white women, food was central to social life and pleasure. Thirty-six percent of the white women said they socialized around food and 18% reported eating for enjoyment. One white woman reported eating around social functions:

"Thursday is the...meeting. And then, after the meeting and all, they're going up to Country Buffet and have their lunch...going to get their money's worth."

Another 18% of the women from this group reported binge drinking as a source of weight gain. Twenty-five percent of the black women reported that food was central to their social life and 63% said they ate for enjoyment.

Eighty-two percent of the white women reported support for physical activities. "I've got a friend and she had a kidney transplant a couple of years ago. She does a lot of walking...she said, come and walk with me." Another said: "...when my daughter and I went on the diet... I realized I depended on her. You know, it's a give and take. You're helping somebody, and that's my personality, I like to help people." White women more frequently reported having

access to exercise equipment and other exercise opportunities. Only 25% of the black women reported support for physical activity.

#### **Perceived Behavioral Control and Environment**

Both groups reported weight cannot be controlled by the individual. Ninety-one percent of white women stated that health and weight were genetically determined. One white participant indicated that pregnancy caused her diabetes "...and then it just blossomed...well either you're going to have it or you're not, okay?" Another stated: "I was losing weight because the Lord wanted me to. I have no control." One participant from this group reported that everybody in her family looks like her: "Fat. We're all good eaters." Sixty-nine percent of black women also believed obesity was an inherited trait. "Being overweight just runs in our family," a participant reported that her daughter was small and just, "got it," when she turned 18. Another participant reported that her kids and her husband's side of the family are "all small" and her side is "all big." Another reported that her "small sisters eat whatever they want and don't gain weight. " Another explained that she had to eat because of her diabetes: "If I don't eat I'll pass out."

Multi-generational caregiving duties were reported by 36% of the white and 25% of the black women. In both groups, extended family members more frequently lived in the house. Two black women and one white woman lived alone. Fifty percent of the black women reported that they could not attend *Healthy Me* or other weight loss programs because of conflicting work and family schedules. When describing her average day, a woman from this group discussed taking one daughter to work, another daughter to get her hair done, and her grandson to sports practice: "*I run a lot of errands… just what mammas do.*" A white woman said: "*I have too much going on to manage my weight.*" All of the women (100%) from both groups, even those who lived alone, felt they had little control of their discretionary time or the time available to give attention to weight loss activities.

Few black (<1%) and white (1%) women reported environmental barriers related to activity. White women most frequently (55%) reported walking for transportation and/or recreation as their main form of exercise. One participant from this group discussed being more active when she used to play recreational volleyball. Another said she was more active when she played backyard sports with her children when they were younger. White women who walked, did so intentionally to improve their physical fitness. Only 19% of black women reported exercising or participating in physical activities. These included walking for transportation and for enjoyment and playing softball. The softball players did not recognize the sport as physical activity or exercise. Only one black woman participated in exercise intentionally to improve her physical fitness. Even when they had opportunities to exercise 25% of black women reported that they did not need to exercise because they got enough exercise running around for their families. When asked about increasing her physical activity or exercising her weight one participant from this group said that she did not think about increasing her physical activity but only the amount of time she needed to exercise.

Twenty-five percent of black women reported safety concerns and 2% reported affordability as barriers to exercise. One black woman said that she feels safe when she walks because

she carries a big stick to protect her from both people and dogs. Participants from this group were afraid to go walking because of aggressive neighborhood cats and living in high traffic areas with no sidewalks. Exploring other inexpensive opportunities for exercise also was reported:

"I mean, I've went to like aerobics that they have at [the] park. You know, I used to go there and it was like maybe eight or nine people, and a Karate class. And those services were like free..."

One woman reported that she attempted to exercise at home because she "...*didn't have gas to get around*." None of the white women cited safety and 3% reported affordability as barriers to exercise.

# **Reported Behavior and Intentions**

Black women did not report any current attempts to lose weight. Ninety-one percent of white women consistently reported attempting to lose weight.

"...it's a constant struggle...it's all the time." "...I mean I'll do real well too, for 2 or 3 months at a time, and then just all of a sudden...I'll slack off."

Methods women used to lose weight in the past were also discussed. Seventy-three percent of white women and 25% of black women reported a history of using fad diet strategies and weight loss supplements to help them lose weight. Weight loss strategies for both black and white women included cutting back on certain foods (ie, breads and sweets), not eating after 6PM, fasting or not eating, fad diets and the use of dietary supplements and weight loss pills. One black woman said:

"Most of the people I know are heavy. But I was doing that [taking weight loss pills] 'cause it was on TV, where they had the Alli and that Dexatrim, 'cause I tried all that. I haven't tried the Alli, but I tried the Dexatrim and it makes me jittery. Anything that affects me in the wrong way, I don't deal with it."

Both black and white women reported desiring a quick fix approach to losing weight. One white woman said:

"I mean, it's just, like, as far as losing weight, it's kind of like a cold. You know, you'd just like to get a shot and not have a cold the rest of your life. Get a shot and not be fat the rest of your life."

White women (82% compared to 18% of the black women) reported eating in response to negative emotions.

"When I'm depressed I eat, when there's nothing else to do, I'll eat." "...maybe it's when I'm down that I want potato chips...and chocolate."

Black women (63% compared to 18% of the white women) reported enjoyment in eating. One black woman's statement described her pleasure with eating,

"...Eat, eat, eat when at home...eat when I'm out...I love to eat...I love to bake...I love fruits and vegetables."

"The heavier you are the more harder it is to exercise and anytime you don't exercise then when you try it's harder each time...because it's going to hurt anyway...You're already hurtin' and so I hurt more I guess." "Last spring, I thought I'd go walking...but I got poison ivy. So I quit doing that. I mean, it's all these little things. You're going to do it. And I can't...I hate cold weather, and so it's...it's really hard to do that. Then I thought I'd walk at the mall or something, but just getting there is just...once you get in at night ...or in the morning, it's cold. You don't want to go out. I'm just lazy, basically."

None of the women from either group discussed any intention to increase exercise or physical activity as a method of obesity reduction.

# DISCUSSION

Guided by the TPB, we interviewed urban poor, black and white women to explore whether there were racial differences in attitudes, social forces, perceived control, and reported behaviors around weight and weight loss. Participants from both groups were referred to an in-clinic weight management program and either attended briefly and stopped, or never attended. In this comparison of black and white obese women, several similarities were identified. Both black and white women consistently reported that obesity was caused by more than caloric imbalance and that behavior modification would not address the underlying health issues that were related to the cause of their obesity. Neither group believed a clinically significant amount of weight could be lost by engaging in healthy behaviors and also reported being unlikely to change physical activity or exercise behaviors. Both groups had employed the use of fad diets and attempted other strategies that might promise quick and easy weight loss and reported that their caregiving responsibilities presented a barrier to weight loss.

In some cases there were mixed responses where white women generally responded in a similar manner and the responses of some black women were consistent with those of white women, whereas other black women responded differently. For example, most of the white women wanted to lose weight whereas some black women did, and others did not and reported being happy with their weight. Most white women reported their weight was related to poor mental health and some black women agreed; still others reported their weight had no influence on their mood. We found that black women more frequently reported that their weight did not currently give them any physical problems but might later in life.

Two potentially important differences between groups were identified. First, when compared to black women, white women reported having more social support and social pressure for weight management activities. Second, black women reported eating for positive reasons (enjoyment and relaxation) whereas white women associated eating with negative emotions (being bored, depressed or upset).

Study results and emerging literature indicate social networks and emotions may be critical and understudied factors in weight management, in particular, and lifestyle program participation, in general.<sup>23</sup> Patients of FQHCs tend to have higher rates of emotional disorders, social network influences that are absent or negative in regard to several positive health behaviors, and resource limitations that create significant physical barriers to participation.<sup>24</sup> Alternative approaches, tools, and interventions are needed that can address or bypass emotional and social network influences.

Emerging work is offering new ways of thinking about the roles of immediate and momentary context in decision-making and behavior.<sup>25</sup> Future weight management programs designed for urban poor and black women may need to explore whether interventions at the level of social networks (eg, supporting networks of trusted peers) are feasible and whether interventions can be designed that provide a partial substitute for or interruption of the social and emotional roles of food. Future work addressing physical environment factors may prove effective as well.

Our findings are limited by the small sample size, but this sample allowed for more in-depth exploration. Participant responses could have been influenced by the presence of our research assistants. However, the research assistants had no relationship with Healthy Me and there were deliberate steps in the protocol (race and sex matching of the interviewer to the participant) and the script (time at the beginning to get to know the participant) to make the participants comfortable enough to give open, honest interviews. We did not weigh participants or measure their height during the in-home interview as this could have influenced participant responses or perception of the research assistant (viewed as a clinician rather than an interviewer). We also did not query the participants about their education or income as they were all recruited from FQHCs that generally see low socioeconomic status groups. It is also possible that the authors' personal biases of people who are referred to Healthy Me and never attend or stop attending influenced the interpretation of the results. Two members of our research team had never interacted with *Healthy Me* participants at the time of the study. They were as involved with the coding as the 2 members who interacted with Healthy Me participants remaining in the program. This study excluded patients who were 18 to 29 and those who were over 64 years old. Men also were excluded from this research. This research was intended to illuminate the attitudes of middle-aged women as this is the age range where the prevalence of obesity is highest.<sup>1</sup> Both older and younger women may have views that are different from participants in the present study when discussing weight loss attitudes, social forces, perceived control, behavior, and intentions. Our results are based on the urban poor patients of one health system who were referred to that health system's weight loss program. Our findings, and in particular, the comparison of black and white women, could be biased by the views of those referred to this program. Black and white women not referred to this program may have different views. No attempt was made to observe behavior or environments; all findings are based on our team's interpretation of the attitudes and reports of the women in the sample. Other qualitative studies investigating the views of obese black women or comparisons of obese black and white women exist in the literature but ours focused specifically on the urban poor; a high risk and complicated population in terms of obesity and weight loss.

Similar to many obese individuals, *Healthy Me* participants have had limited success in terms of clinically meaningful weight loss and black women in particular have had poorer success.<sup>26</sup> Obese individuals frequently fail to complete weight loss programs, do not lose weight, or regain weight after their attendance to the program ends.<sup>22</sup> This is true despite Healthy Me having removed several barriers to weight loss program participation.<sup>15</sup> Participants were referred to the program by their primary care providers eliminating the requirement of identifying a program that met their medical needs. Healthy Me was delivered in the FQHC where the participants received their primary care - a familiar and accessible location. The program had a dedicated staff person who offered free individual and group counseling and referral to an in-clinic registered dietician and an in-clinic or community-based exercise program (both free of charge). There were incentive programs in place and educational resources, none of which involved any dollar cost to the participant. Through the use of a script grounded in the TPB, we identified themes related to why some patients failed to participate in the weight management program and/or lose weight by interviewing women who were referred to Healthy Me, participated for a short time and stopped, or never participated. Some themes revealed in this research indicate removal of classic barriers alone may not improve weight loss success. For example, participants believe obesity cannot be improved by healthy behaviors (attitudes), is genetically predetermined (perceived behavioral control), or turn to food for comfort and entertainment while alone and with others (social forces). One traditional approach to addressing this might be brief patient education on obesity causes and its impact on health delivered by providers prior to referral to Healthy Me.

Some themes indicate that removal of common barriers as well as those identified in this research may not motivate urban poor black and white women to lose weight. None of the women in the current research intended to address their obesity through behavior change. New intervention models based on "effortless" or automatic processing may have more potential in this population. For example, a recently published randomized trial of lifestyle intervention versus lifestyle intervention plus home environment modification (eg, kitchen cabinet "clean-out", monitoring of television time, and provision of home exercise equipment, digital body weight scale, full length mirror, subscription to an exercise magazine, and exercise video-tapes) showed the lifestyle intervention plus home modification resulted in 60% more weight loss (9.4 vs 5.9kgs) at 6 months among middle-aged women.<sup>27</sup> Identifying environment signals that elicit healthy and unhealthy behaviors and then addressing the signals rather than the individual is worth further investigation. Future research with alternative methods is needed to quantify the role of social and physical environments better, particularly the role of micro-environments, in the lives of the urban poor.

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#### INTRODUCTION

For some people, body weight is important to their health. We are interested in what you think about weight. We want to talk with you today about what you do to manage your weight and stay healthy. We are also very interested in how Eskenazi Health can help you manage your weight and health. I am going to ask you some questions about your weight, physical activity, and food habits. First though, I want to get to know you...

FIRST: Get to know the person.

TIME: 10 minutes

Who lives here with you?

Who are your family members? Do you have any children who are not at home?

[Ask about pictures on walls, interesting art, furniture, plants, etc.]

Do you take care of anyone?

Where do you spend most of your time? Work--what do you do at work? Home-what do you do at home?

How long have you lived in Indy?

How do you like your neighborhood? Do you see a lot of neighbors? Do you have a grocery store close that you like? Do you have close friends? Where do they live? Do you do things with them?

As I ask the following questions, keep in mind that there is no right answer...we want you to say anything. We really want to know what you think. Some of these questions might seem very personal. Please tell if you want to skip a question.

#### MAIN QUERY ONE: Health and Weight History

#### TIME: 20 minutes

1. What long-time health problems do you have? (Record list of health problems, if more than 3 ask patient to identify the 3 that give them the most problems.)

2. How do your health problems affect your weight? Why? How?

3. How do you feel about your weight? Do family or friends talk with you about their weight? Do you talk with them about your weight?

4. How does your mood affect your weight? How does food affect your mood? What about physical activity, like walking?5. How have you managed your weight over the years? What has worked for you or not? What advice would you have for a friend who wanted to lose weight? What would you tell someone who had lost weight and wanted to keep it off?

#### MAIN QUERY 2: Attitudes about Home and Community Environments

#### TIME: 20 minutes

6. Are there things that people in your home do to manage their weight? How do they feel about your weight? Does anyone encourage you to do physical activity and make certain food choices? What do they say?

7. Do you have friends or people you know who do things to manage their weight? What do you think about their weight? What do they do? Have you gotten any ideas from people you know or friends about how to manage body weight? How to get physical activity? What food choices to make? Are there foods or activities that you do with people? What do you do? 8. What things in your home make it hard to manage your weight? What things in your community make it hard? Anything that is helpful? Do you have parks or sidewalks that make walking enjoyable? Are their dogs? Traffic? Do you have an indoor place to walk? Is there a grocery store close? Does it have good produce? What foods seem expensive to you? Do you have transportation?

**Figure 1.** Home Interview Script

# Table 1

# Weight Loss Themes for Black and White Women

	Black Women	White Women	Both Groups
Weight Loss Attitudes	Negative, indifferent, or positive attitudes about obesity	Obesity negatively affected their health	
Social Forces	Less social pressure from friends and family for weight loss	More social pressure from friends and family for weight loss More support for physical activity	Discussed weight and weight loss with friends and family Food central to social life and pleasure
Perceived Behavioral Control and Environment	More frequently reported they got enough exercise through caregiving	More frequently reported being able to walk for physical activity Had more access to physical activity opportunities	Weight cannot be controlled by the individual Caregiving responsibilities negatively influenced ability to manage weight Environmental barriers related to activity
Reported Behavior and Intentions	Some recent weight loss attempts Eating reported as a positive, pleasurable activity	Consistently reported attempting to lose weight Eating more frequently reported as a response to negative emotions	Past strategies included fad diets, pills, adjusting food consumption behaviors (type or time) Desired a quick and easy obesity solution No current intentions to alter eating or physical activity behaviors to lose weight