AN EXPLORATORY STUDY OF CHILD OBESITY CONCERNS

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ABSTRACT

Childhood obesity is reaching epidemic levels in the United States with current prevalence rates at more than three times the "Healthy People 2000" goal. African Americans, other minorities, and low SES populations are disproportionately affected, and the adverse cardiovascular, respiratory and endocrine health implications typically associated with adult obesity are now evident in children. Developing effective child obesity communication messages and interventions to reach African Americans is critical if the prevalence trends and health disparities are to be reversed. This exploratory study sought to add to the literature by examining the knowledge, attitudes, and behaviors of an indicated group of young overweight African American children and their parents, and by better describing their felt experience. Principles of community psychology informed the philosophy and implementation of the study, as resulting guidance for community-based interventions was sought. This area of psychology also offers a collaborative approach to entering and working with communities, such as African Americans, who have shown suspicion to traditional research and also in this instance may not be motivated for change. Eighteen subjects participated in separate parent and child focus groups, and the data were analyzed using Strauss and Corbin's (1998) grounded theory method. Nine key qualitative themes and directional implications from a parent survey are described in the results. Additionally, in order to understand clinical implications, two hybridized case studies representing prototypical client presentations were developed from the data and analyzed using Fishman's (1999) pragmatic case study method. The cases represent a client who might be more responsive to intervention and one whose clinical presentation

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and situational characteristics suggest more barriers to treatment. A detailed case comparison further explicates attendant factors that are likely to affect communication messages, outreach, and treatment outcome with these types of clients. Study limitations are discussed, and the report concludes with implications for future community-based research and treatment, specifically with African Americans.

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CHAPTER I

INTRODUCTION

There can be few medical topics that have received so much publicity in recent years as obesity and its treatment. Programmes have been devoted to the subject on radio and television, and women's magazines are constantly producing pages of helpful advice for the would-be slimmer.

With all this attention focused on a condition whose treatment (and serious consequences if left untreated) is well-known, an improvement in the incidence might have been predicted. Unfortunately, the converse is true and the percentage of overweight people in the populations of the USA and Great Britain is steadily rising. At present this is most clearly shown among adults but the increase in obesity in schoolchildren is considerable. (Mortimer, 1968, p. 29)

What an apropos opening for understanding the state of the public health problem

that obesity represents in the US and increasingly in other Westernized countries. Yet amazingly, this statement was not written in 2008, *but in 1968* by the head physician in charge of a public health department weight control clinic in London, England! Unfortunately, the state of affairs has only worsened in the ensuing four decades and the portent of the problem of childhood obesity is now evident.

The Centers for Disease Control and Prevention (CDC) hosting a *Weight of the Nation* 3-day conference in July 2009, unveiled a latest study that estimates the obesity epidemic cost the United States \$149 billion annually in health-related expenditures (Finkelstein, Trogdon, Cohen, & Dietz, 2009). The alarming rates of obesity in the adult population and its associated health consequences such as diabetes, cardiovascular disease, high blood pressure and increased rates of certain cancers have caused some experts to posit that this could be the first American generation not to outlive its predecessors (Fontaine, Redden, Wang, Westfall, & Allison, 2003). Improvements in adult rates of obesity have fallen far short of the Healthy People 2010 goal of 15%, while the current rate of 16% obesity among children is more than three times the target goal of 5% sought for young people (CDC, n.d., *NHANES surveys*).

The steady rise in obesity rates for children over the past three decades has resulted in some of the same compromised health conditions in adults, particularly an alarming increase in Type II diabetes among children, formerly known as "adult-onset" diabetes. The growth in incidence of childhood Type II diabetes is widely accepted to be the primary result of much greater rates and levels of child obesity. Researchers from Mount Sinai School of Medicine recently reported that hospitalizations for children 2-19 years old with a primary or secondary obesity-related diagnosis, almost doubled from 1999 to 2005 (Trasande, Liu, Fryer, & Weitzman, 2009).

While most consider the U.S. to be in the midst of an obesity epidemic, with an estimated 66% of all adult Americans being classified as overweight (BMI 25-30) or obese (BMI greater than 30), several ethnic minority populations show even greater prevalence of overweight and obesity than the general population. Another recent CDC study announced "New Obesity Data Shows Blacks Have the Highest Rates of Obesity" reporting that for 2006-2008, data from the Behavioral Risk Factor Surveillance System (BRFSS) show African Americans have a 51% greater prevalence for obesity than Whites. Adult Black females had the highest prevalence followed by Black men and Hispanic women (Pan et al., 2009). In line with this profile for minority adults, the CDC consistently has reported higher obesity prevalence rates among Black and Mexican-

American children which far outpace those of White children (CDC, n.d., *Obesity among racial/ethnic groups*).

Research has also demonstrated that obese children are at greater risk of becoming obese adults, and parental obesity increases the risk more than two-fold for both obese and non-obese young children (Whitaker, Wright, Pepe, Seidel, & Dietz, 1997). In the Bogalusa Heart Study, there was a greater likelihood of severe obesity in adulthood if there was an early onset of child obesity before age 8 (Freedman, Khan, Dietz, Srinivasan & Berenson, 2001). Additionally, the finding that "pediatric and adolescent obesity are related to subsequent morbidity and mortality more than 50 years later, even controlling for adult weight" (Goldfield & Epstein, 2002; p. 573) highly underscores the need for prevention and early intervention with children and their families if we are to impact the overall obesity and compromised health trajectory. Finally, the relatively limited success of current treatments for adult overweight and obesity would also suggest that our greatest opportunity for sustainable improvements in health and disease prevention and perhaps the most cost-effective approach may be to focus on the problem in children (Goldfield & Epstein).

In James Kelly's (2006) book *Becoming Ecological*, he opens with an introductory section entitled, "Being Autobiographical: Roots and the Varied Soils for Ecological Inquiry" (pp. 3-21). In it, he discusses some of the biographical events that led to the particular evolution of his work and interests in the pioneering field of *community psychology* – a field in which the investigator seeks to immerse him or herself within the knowledge, motivations and strategies of the community of interest in an attempt to bring about more sustainable, long-term, and wider-impact interventions.

While as a graduate student, I certainly claim none of the accomplishments of such a noted psychologist professional, I recount here some seminal events that shaped my interests in child obesity and ultimately led to the development of this dissertation research.

Like many trained in psychology and other health professions, we get into this field because we observe human conditions that are distressing and about which we hope to make a difference for the better. For me, I vividly recall thinking what a shame it was that a young Hispanic girl I observed outside her home on several occasions, seemed to have to "sit on the sidelines" and watch while other kids played. I guessed she was 6 or 7 years of age, and visibly she was grossly overweight. Without knowledge of her particular case, observing her engendered a feeling of anger at her caregivers and at a society that would put her at major health risk at such an early stage in her life. I made the plausible assumption that her weight problem was in large part the result of her environment. And, within my own African American ethnic culture, in every day observations obesity abounds, particularly among women and too often their children.

Additionally, while working in our university's eating disorders clinic, I received occasional calls usually from mothers or grandmothers who felt they needed help with their child's weight problem. I was distressed to find that even though I worked with one of the foremost psychological authorities in eating and weight disorders, he knew of few local resources that we could specifically recommend. We were in a locale with several leading hospitals, both of which had major children's sections; we existed in a state with some of the leading pharmaceutical and healthcare companies; and our university is a major research institution with strong ties to the community and local medical training

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facilities. If there were anywhere in which intervention resources should have been evident and accessible, it should have been here. Those were the circumstances under which my passion developed for this topic and my search began for ways to study child obesity, particularly in one of the most affected and high-risk groups, African Americans. The aim was to assess the current knowledge about the problem within this targeted child population and develop additional learning that would lead to more stringent needs assessment and program planning for implementing community-based interventions.

When working with people to change their behavior, who also may not be motivated for change and may be suspicious of mainstream interventions and research, factors which have been found with African Americans, one place to look has been to the principles of community psychology. How those principles might address some of the barriers will be discussed. In considering the scope of the obesity public health problem and evidence regarding limitations of the current best available treatment paradigms in the Black community, a community psychology approach may hold advantages and foster advances in intervention and service delivery where the more modernist, scientific treatment approaches have fallen short.

This dissertation will describe the scope, prevalence and some of the posited factors in the growth of child obesity, particularly among African American children and their families. Given the considerable health profession and general population energy devoted to this public health concern, an overview of some current prevention and indicated treatment approaches will be presented including a mention of some of the *popular culture* initiatives that have appeared over the last several years. An examination of both the scientific/academic and "general" community responses will then be

synthesized with data gathered from this study of the knowledge, attitudes and behavior of an indicated population in order to generate intervention and future research implications.

CHAPTER II

LITERATURE REVIEW

The following literature review will examine statistical data on obesity prevalence, particularly among children and African Americans; discuss what research currently helps us to understand about both sides of the energy equation – intake and expenditure; reflect both individual and environmental factors influencing child obesity; portray an overview of the various types of treatment interventions developed and researched over the last several decades; and finally lay out an argument for the appropriateness of a community psychology approach to addressing this public health phenomenon and describe how the present study reflects this viewpoint.

The United States Obesity Epidemic - Overall and High-Risk Group Prevalence

The prevalence of childhood obesity in the United States has increased for all age groups in the past 30 years, with rates tripling for adolescents 12-19 from 5% to 17.6% (CDC, n.d., *NHANES surveys*). The CDC currently defines child obesity as "greater than or equal to the 95th percentile of the age- and sex-specific BMI" (BMI = body mass index, defined as weight in kilograms divided by height in meters squared). By this standard, approximately 16.3% of all children ages 2-19 are *obese* (Ogden, Carroll, & Flegal, 2008). However, there is not a consensus on the definition of overweight for

children, and many have suggested that BMI: $\geq 85^{\text{th}}$ and $< 95^{\text{th}}$ percentile, should be used to classify children as *overweight*, or certainly "at risk for overweight" (Nelson, Chiasson, & Ford, 2004; Wilfley & Saelens, 2002). By this more liberal standard, the most recent CDC statistics gathered through the National Health and Nutrition Examination Study (NHANES) suggests that nearly one-third of all children 2-19 are either *at risk for overweight or obese* (Ogden et al., 2008).

It should be noted that there is still considerable variation in the use of terminology to classify child obesity. This appears to result from a recognition by most researchers of the negative stigmatizing aspects of the *obesity* label and according to Voss, Metcalf, and Wilkin (1995) a lack of consensus on the threshold level at which BMI denotes health risks in children; however, it results in inconsistency in terminology in the literature, and therefore one will find the terms "obese" and "overweight" are both used to represent the $\geq 95^{\text{th}}$ percentile for BMI; likewise both "overweight" and "at risk for overweight" are used interchangeably for the BMI classification $\geq 85^{\text{th}}$ and $< 95^{\text{th}}$ or for a broader categorization of all children $\geq 85^{\text{th}}$ BMI percentile. For consistency of terminology in this document, the term *obese* will be used for the higher percentile category, unless noted otherwise.

Nearly two-thirds (66%) of all adult Americans are considered overweight (BMI between 25-30) or obese (BMI greater than 30). African Americans, Hispanics and Alaska-Native/American Indians show considerably greater prevalence of overweight and obesity than the general population. For example, 53% of Black women and 51% of Hispanic women aged 40-59 years were classified as obese versus 39% of White women.

Among women 60 and older, 61% of Black females are obese, almost double that of White women of the same age. Prevalence of obesity among adult men does not differ significantly by race/ethnicity (Ogden, Carroll, McDowell, & Flegal, 2007).

Specific to child obesity, the latest NHANES results through 2005-2006 (Ogden et al., 2008) also reported considerably greater obesity prevalence rates among Black and Mexican-American children. The highest obesity figures were for Black adolescent girls age 12-19 (27.7 percent) and Mexican-American boys age 6-11 (27.5 percent). Overall, compared to White children, Black and Mexican-American children are both considerably more obese (at \geq 95th percentile; 14.6% versus 20.7% and 20.9% respectively) and more overweight (at \geq 85th percentile; 30.7% versus 34.9% and 38.0% respectively). These recent results also included a new *heaviest* cut-point for BMI classification at the 97th percentile; here as well Black and Mexican-American children far outpace the obesity rates of White children. Additionally, the some of the largest *increases* in prevalence since 1988 occurred among adolescent African American boys and girls (CDC, n.d., *Obesity among racial/ethnic groups*).

Lower socio-economic status has also been associated with greater rates of child obesity, although the picture is more complex when both race/ethnicity and gender are considered. In general, NHANES surveys after the mid-1970s found higher rates of obesity among low-income children. In a study which derived data from the *Monitoring the Future* annual surveys of 8th, 10th and 12th graders, this finding was upheld with youth from low SES backgrounds significantly more likely to be overweight than middle and higher SES youth (Delva, O'Malley, & Johnston,2006). Racial and ethnic differences were similar to other studies in which Hispanic boys and African American girls had the highest overall rates of overweight. Yet Kumanyika and Grier (2006) cite mixed findings when looking at SES within gender and ethnicity. They note that studies show the inverse pattern of decreasing rates of obesity with rising rates of income/education among White children; but they refer to the NHANES 1988-94 study, where among Black and Mexican-American girls, obesity increased with increased income. Similar results were noted in the National Heart, Lung and Blood Institute (NHLBI) Growth and Health Study in which the expected inverse relationship between obesity and parental income and education was evident in White girls however not with Black girls. There was no consistent pattern for boys (Kimm et al., 1996; Ttoiano & Flegal, 1998, as cited in Kumanyika & Grier, 2006). Since greater percentages of the African American population are in lower SES categories compared to Whites (U.S. Census Bureau, 2000), being of lower SES status provides an additional risk factor and explanation for greater rates of obesity among African Americans. In summary, the literature suggests that higher SES appears to provide some protective benefits for Whites, yet this is not necessarily the case for African Americans.

General and Specific Factors Affecting Child Obesity Among African Americans

There is a great deal of data on the general causative factors of childhood obesity, and in recent decades, more specific learning has been gained related to higher risk for African American children. As stated in the introduction, one of the strongest associations with child obesity is parental obesity. Although there may be some genetic risk transmission for obesity, it is thought that parents primarily convey this risk through environmental exposure and social modeling. Parents are strong gatekeepers on where and how their children live. Certainly at the youngest ages, they greatly effect what children eat, their involvement in physical activity, and to a large degree influence their attitudes and beliefs regarding food, exercise and body image. Since African American women have extremely high rates of overweight and obesity, their children are also at the greatest risks, particularly since it is still most common for mothers to have primary control of food in the household. While more men report sharing food purchasing and preparation in the modern American household, Black families have some of the highest rates of female-headed households – this further strengthens the associative links between African American women's attitudes and behavior and those of their children.

The Role of Energy Intake

Ikeda and Mitchell (2001) cite findings which demonstrate that diets of American children do not conform to Dietary Guidelines and recommendations in the Food Guide Pyramid. Food intake studies confirm that the vast majority of children don't meet even minimum recommendations from the food groups, with the exception potentially of dairy intake. National policy officials suggest strong improvement in children's diets particularly increasing fruits, vegetables and milk products.

Instead eating patterns have changed substantially over the past several decades, with a greater intake of foods high in fat and sugar and low in nutrient value, a significantly greater proportion of foods eaten outside the home, and a progressive increase in portion sizes of many foods and beverages. For example, data from USDA surveys between 1977 and 1995 indicated a dramatic increase in soft drink consumption among children and adolescents, and studies have demonstrated a strong association between excess soft-drink consumption and excess overall calorie intake. Soft-drinks have low nutrient density and are also implicated in tooth decay and potentially suboptimal bone health, particularly since in children, they may substitute for the consumption of milk and therefore decrease calcium intake. The Institute of Medicine (IOM, 2005) reported that Americans spend nearly 50% of their total food expenditures in restaurants and on fast food. Bowman and colleagues (2004) demonstrated that 30.4% of children and teens ate at least one fast food meal per day and also established that those who ate fast food consumed more daily calories compared to children who did not. Finally, in the two decades since 1977, Nielsen and Popkin (2003) showed that portion sizes for most foods eaten at and away from home increased for children age 2 and over.

Among African American children and families, a number of additional problem factors related to energy intake have been described. Research has found that African Americans have a greater propensity for the consumption of high fat (i.e., pork) and high sugar foods as well as a lower consumption of dietary fiber; there is also greater use of less healthy food preparation methods (i.e., frying foods) compared to Whites (Kumanyika, 2002). Ethnic culture also presents a strong influence on food occasions like traditions of eating such foods at and after church and family gatherings.

Additionally, African American children have poorer eating habits, particularly those associated with weight gain. According to Delva et al. (2006), data from the *Monitoring the Future* annual surveys showed that Black teens ate breakfast significantly less frequently than White and Hispanic teens. And in a NHLBI longitudinal study of the dietary practices of Black and White girls, the former had significantly greater rates of

contra-indicated "weight-related eating practices" (p.30) such as eating with TV, skipping meals, always buying snack foods, and eating fast food \geq 4 times/week (McNutt et al., 1997).

Evidence is not yet equivocal, but research has also begun to focus on the very earliest exposures of a child, both intrauterine and infant feeding practices. For example, obesity is a risk factor for gestational diabetes, and while some studies suggest that children born to these mothers may have a greater risk of becoming obese later in life, this finding is not yet robust (Adair, 2008; Wilfley & Saelens, 2002). Breastfeeding has also been recommended as a strategy which could be protective against developing child obesity (DeMattia & Denney, 2008; Whitaker, 2003; see also World Health Organization, 2003 as cited in DeMattia & Denney, 2008). Yet DeMattia and Denney (2008) have called breastfeeding rates "dismal" (p. 91) in the United States, and among American mothers, low-income and Black women have even lower rates (Khoury, Moazzem, Jarjoura, Carothers, & Hinton, 2004). Rapid infant weight gain, overfeeding, and early introduction of solids are also infant feeding practices that have been suggested as more common behaviors among low income, African American and Hispanic parents, and are thought to contribute to the onset of childhood overweight and obesity (Dennison, Edmunds, Stratton, & Pruzek, 2006; Jain et al., 2001; Sherry et al., 2004).

A final but important area conveying a greater obesity risk to African Americans is an environmental factor: the availability of healthy, cost-effective foods. Studies have found that "regardless of income, predominantly African American areas had less access to fruits and vegetables" and that "communities with access to supermarkets had lower prevalence of obesity, while those with greater access to convenience stores had increased prevalence of obesity" (Baker et al. 2006 and Morland, Diez Roux & Wing, 2006, as cited in DeMattia & Denney, 2008, p. 89).

The Role of Energy Expenditure

Most suggest decreased physical activity and increased sedentary activity such as TV watching and video game playing are also prominent contributors to increasing obesity prevalence. It is well known that Americans live very sedentary lives. This is typically most prominent for women, particularly those of ethnic minority background and for those of lowest SES backgrounds. For example, data from the NHANES III (1988-1991) study demonstrated that all women have very low levels of vigorous physical activity with no groups, regardless of age or race, exceeding a rate of 5% (Crespo, Keteyian, Heath, & Sempos, 1996). In another study of women, which included several ethnic minority groups, Black women ranked second highest in the percentage deemed "inactive" at nearly 57% and ranked lowest of all groups in the "active" category (King et al., 2000). Caregiving duties and lacking energy to exercise were important barriers for all groups, but African American women identified an environmental factor "lacking a safe place to exercise" as their top-ranked barrier. In fact, Kumanyika (1994) suggested that high rates of obesity in African American women are due more to physical inactivity than to excess calorie intake.

So, like the influential role that Black women play regarding their children's energy intake, they also exert influence on physical activity. Certainly lack of role modeling is evident from the high levels of physical inactivity by African American women, but also the environmental role is cited by these women as a deterrent to allowing their children to play outdoors. Burdette and Whitaker (2005) also demonstrated that children of mothers who reported the least safe neighborhoods also had the highest percentage of screen time, a sedentary activity often implicated in the overall energy equation imbalance.

Numerous studies report that physical activity, including participation in formal school physical education declines with age. This was confirmed in the *Monitoring the Future* study, where the percentage of youth *getting vigorous exercise* declined with increasing grade levels. Black female adolescents, who as previously reported have the highest levels of obesity, also had the lowest activity levels. Additionally, Black and low SES students had the highest number of TV viewing hours (Delva et al., 2006). A final environmental factor also likely contributes to child obesity: walking or biking to school was much more commonplace several decades ago and is now relatively rare (DeMattia & Denney, 2006; IOM, 2005).

The Role of Body Image and Weight Beliefs, Attitudes and Preferences

What we *think* may be one of the biggest influences of how we *behave*, and there is a consistent literature demonstrating that African Americans have less negative perceptions of overweight and less stated worry about the negative effects of overweight on their children. Numerous studies show Black women and girls are less concerned about their own weight and weight reduction, show greater body satisfaction, and have a higher ideal body size compared to their White counterparts (L.A. Anderson, Eyler, Galuska, Brown, & Brownson, 2002; Hebl and Heatherton, 1998; Kumanyika, Wilson, & Guilford-Davenport, 1993; Sherry et al., 2004; see also Flynn & Fitzgibbon, 1998 for substantive literature review). For example, Kumanyika and colleagues (1993) found that only 36% of severely overweight Black women reported that their partner thought they were overweight. Additionally, about half the sample of 1700 overweight and obese women age 40 and over were satisfied or very satisfied with their body size (L.A. Anderson et al., 2002).

Other study results further demonstrate this attitudinal profile regarding children specifically. In the qualitative study by Sherry et al. (2004), African American groups believed that children would outgrow being overweight or that having high weight as a child was healthy. While low income groups overall in this same study cited underweight as a greater concern than overweight, low income African American parents still demonstrated a markedly higher threshold for what they considered overweight than Whites and Hispanics when viewing body schematic drawings to define thresholds for overweight. A study examining the cross-cultural equivalence of feeding beliefs and practices of African American and Hispanic parents confirmed similar results (C.B. Anderson, Hughes, Fisher, & Nicklas, 2005). The least "concern" of all groups was expressed by lower-educated Black parents. While higher educated African American parents expressed more concern than those who were lower-educated, they still perceived their overweight children to be less overweight than higher-educated Hispanic parents. As the authors stated, both minority groups underestimated the weight of their overweight children, but African Americans showed the greatest disparity between perception and reality.

Jain et al. (2001) wrote about concurring findings among WIC (Special Supplemental Nutrition Program for Women, Infants, and Children) mothers of preschoolers in Cincinnati, Ohio. The prevailing attitude was that family predisposition made it "nearly impossible" to alter a child's weight as evidenced by one mother's quote: "I'm big; I'm thick. So she's going to be thick" (pp. 1140-41). Jain and colleagues also suggested that with adolescent mothers, grandmothers play a strong role in deciding what infants should eat and in shaping these young mothers' overall parenting styles. Finally, in a screening study identifying potential diabetes risk, nearly 70% of the children were obese, but only 44% of parents answered "yes" that their child's weight was a health problem. The majority of parents did not appropriately assess their child's size, eating or exercise habits, and many did not make the association between their child's weight and health risks – this was despite obesity health risks being highly prevalent in their families as gathered through family history questionnaires (Young-Hyman, Herman, Scott, & Schlundt, 2000).

Other Environmental Contributors to Child Obesity among African Americans

An ecological perspective on public health problems takes into account environmental contributors in addition to individual factors. Media influence supporting unhealthy food choices and portraying larger body types is also strong in the Black community. A study examining nutrition advertisements found "lower proportions of advertisements on fruits and vegetables" (p. 518) and "limited attention paid to advertisements on weight control issues in the Black oriented magazines" (p. 517) of Ebony and Essence compared to Ladies Home Journal, a popular women's magazine with a predominantly White readership (Pratt & Pratt, 1996). Another study which looked at food messages on African American TV shows demonstrated that Black primetime programming contained a greater number of food commercials compared to general prime-time shows and featured more overweight characters as well as ads for candy and soft drinks (Tirodkar & Jain, 2003).

The potential negative influence exerted by corporate entities such as the food & beverage and grocery industries is also evident in the Black community. Companies such as Coca-Cola and McDonald's routinely target African Americans with their impressive marketing resources, and one of the many effects is a greater density of fast-food outlets in urban communities. Research findings also show that these and other snack food companies have begun to highly influence in-school food choices as well (Levine, 1999). Finally, as earlier discussed, a lack of large supermarkets in the inner cities, where minorities make up disproportionate percentages of the residents, has been found to affect the choices, availability and costs, particularly of fresh fruits and vegetables (Blocker & Freudenberg, 2001); and limited recreational opportunities, often influenced by perceived neighborhood safety can exert a strong inhibitory effect on physical exercise.

Child Obesity Treatment and Intervention Approaches

As the problem of child obesity has increased, many intervention approaches have been developed, a good number researched and chronicled to one degree or another over the last several decades. The overview below represents a broad stroke of the main types of programs and initiatives as well as some analysis of effectiveness where available. It is by no means exhaustive in presenting details behind each program but should provide the reader a good initial understanding of the types of interventions utilized in addressing child obesity.

This review of *what has been tried* is organized by individual/group-based interventions including self-help programs; school-based initiatives; and public health policy initiatives. Finally, since public attention to the obesity problem has intensified, this analysis will end with listing a small sampling of some of the popular obesity programs that the everyday person might have come across in the last several years.

Individual and Group-based Interventions (including self-help programs)

Johnston and Tyler (2008, abstract) reviewed the literature for "evidence-based" treatment approaches and suggested those that are behavioral-based have the most empirical support. A number of these programs have been submitted to randomized control trials, and while many are clinical based initiatives, a good number have also been conducted in schools and will be described in the next section. Ten years earlier, Epstein and colleagues (1998) described the major treatment interventions for pediatric obesity and also held that the majority of reviewed studies involved a combination of behavior program interventions. Some of the primary elements and key learning from that review as well as more recent studies include the following:

 Weekly group treatment programs, although the number vary with different studies. In the report by Epstein, Valoski, Wing, & McCurley (1994) detailing the ten-year outcomes of their family-based treatment, their studies typically included 8-12 weeks of weekly meetings, followed by monthly meetings for 6-12 months from the start of the program. A recent treatment program for morbidly obese low-income adolescents was designed to be a year in length with weekly CBT, monthly nutrition education classes, 12 weeks of a physical exercise program and medical monitoring (Kirschenbaum, Germann, & Rich, 2005).

- Nutrition education and the use of a modified diet such as the "traffic light diet" featured in many studies for preschool and preadolescent children; it includes a structured eating plan (900 to 1300 kcal) that groups foods into categories of green (go) foods, yellow (caution) foods and red (stop) foods;
- Interventions targeted at energy expenditure; many studies have included exercise
 in combination with dietary intervention; several studies focused on aerobic
 exercise but some data suggest that less structured lifestyle exercise (i.e.
 incorporating more day-to-day activities such as taking the stairs instead of the
 elevator; walking instead of driving, etc.) may be superior for weight control
 (Epstein et al., 1994); additionally, specific efforts focused on decreasing
 sedentary activity have been efficacious in effecting weight change, possibly even
 superior to efforts targeting increased activity (Epstein et al., 1995) and in one
 study, actually sufficient as a singular intervention (see Robinson, 1999)
- Specific emphasis on behavioral techniques such as consistent food selfmonitoring and stimulus control, which teaches parents and children to modify their environment (i.e. only eating in set places in the house, and not eating in front of the TV)
- Inclusion of the parent and child in treatment; this appears important to maximizing effectiveness of child interventions, and general support from family and friends has been shown to be predictive of outcome.

Further to the findings above, Kirschenbaum et al. (2005) found that participant and parental self-monitoring in particular were predictive of the greatest amount of weight loss over the first three months of the program, and participants whose parents self-monitored attended significantly more sessions. In an early study of Black adolescent girls by Wadden and colleagues (1990), mothers' participation was also significant in which the more sessions they attended "the greater their daughters' weight losses" (p. 345). Child obesity interventions with "parents as the exclusive agents of change" was also cited in the Johnston & Tyler 2008 treatments review and was shown to be superior to the conventional approach (child as the target of the change initiatives) demonstrated by dropout rate and percentage of weight loss (Golan, Weizman, Apter, & Fainaru, 1998).

Additionally, problem-solving as a specific target behavior for parents has been suggested as an additional programmatic element to the usual family-centered behavior program. Yet studies have differed on whether it showed incremental benefit to child weight change (Epstein, Paluch, Gordy, Saelens, & Ernst, 2000). However, it should be noted that in this latter study by Epstein's group, the sample population was 97% White. Many researchers working with disadvantaged ethnic minority and/or low socioeconomic children and families find that a preponderance of life stressors is ever-present and frequently a barrier to engagement and retention in treatment. Problem-solving around quite serious but different challenges and barriers than might be faced by middle-class subjects may result in an enhanced outcome.

Nevertheless, the longest-term and most successful follow-up research incorporated the elements above in various combinations across four different treatment studies by the Epstein group. They reported *positive 10-year outcomes*, where 34% of the children had decreased their percentage overweight by 20% or more and 30% were not obese (Epstein et al., 1994). In a more recent review, Epstein, Paluch, Roemmich, & Beecher (2007) maintained that "the efficacy of the family-based behavioral approach to treating pediatric obesity replicates over a 25-year period" (Abstract) when they also included four additional studies published from 2000-2006 (Table 1). Still, it is suggested that there is great "variability in the result of pediatric obesity treatment based on the types and length of the interventions and the characteristics of the subjects" (Goldfield & Epstein, p. 576).

Regarding group vs. individual therapy treatment approaches, the majority of child obesity treatment programs have navigated towards group therapy treatment, although as Latner (2001) suggests, there is no equivocal evidence of the superiority of individual vs. group treatment. While this is the case, a few studies have actually found advantages for the latter format, where peer support and modeling can be strong factors for participants, and group treatments are less time- and cost-intensive than individual sessions. These latter factors are also present in "self-help" type programs for the treatment of obesity, such as those mentioned below.

While there is still much to learn about the effectiveness of self-help groups, Latner (2001) offers that for long-term maintenance of treatment effects for obesity, selfhelp groups may offer an economically feasible option for continued care, "and as an adjunct to more intensive, specialty therapies" (p. 87). A number of these groups have been formed for adult overweight individuals, from TOPS (Take Off Pounds Sensibly), which has been in existence for about 50 years, to The Trevose Behavior Modification Program (TBMP), which has about 1000 members and is led by volunteers. The Trevose program uses behavior therapy principles and considerable social pressure and consequences as a strategy for adherence to weight loss.

Commercial self-help programs are well known to most Americans, through organizations like Weight Watchers and Jenny Craig. Yet many have pointed out the high attrition rates in these commercial programs as well as the high cost to the consumer, as opposed to non-profit volunteer initiatives. Finally, there appears to be a lack of self-help group programs specifically targeted at children. However programs are being researched using bibliotherapy and guided self help with minimal therapist support, and it is likely that these types of approaches can be used in a family-centered treatment for mild to moderate cases of child overweight and obesity as well as for maintenance of gains from prior intensive treatment. (See Latner, 2001 and Latner & Wilson, 2007 for more information).

School-based Initiatives

In the IOM's *Preventing Childhood Obesity* report (2005), an entire chapter is devoted to the role of schools. It states that "the school environment has the potential to affect national obesity prevention efforts both because of the population reach and the amount of time that students spend at school each day" (p. 237). This has been recognized by many clinical research groups, and two recent reviews of school programs have been published.

The most recent was a literature review of 51 studies over a twenty-year period beginning in 1986 (Shaya, Flores, Gbarayor, & Wang, 2008). Of these studies, a nearly equal number targeted either physical activity or educational/behavior modification strategies exclusively, with another twenty focused on both areas. These authors found that an impressive 40 of the 51 studies achieved positive significant results; however, they concluded that long-term maintenance of results was lacking and suggested the need for this type of follow-up in future interventions. An earlier review of school-based interventions was more strictly defined. Although 46 interventions published in peerreviewed journals and focused on one or both sides of the energy equation were identified, the authors limited their analysis to only those that focused on prevention and had what they considered an "appropriate research design and...statistical analysis procedures" (Thompson et al., 2006, p. 162). Eleven interventions met their criteria, but only 3 of the 11 achieved statistically significant results in body composition measures (see "Planet Health" and Robinson's TV intervention in the descriptions below for examples of two of the three interventions).

Below are examples of a number of prominent school-based prevention and intervention initiatives, several of which had positive results. Others, while lauded for their comprehensiveness (i.e., CATCH and Pathways, most notably) failed to produce reductions in body mass index in particular. Still, these programs demonstrate the potential to make large-scale impacts upon the obesity issue. In addition many targeted and measured not only quantitative body composition measurements but also qualitative results such as attitudes and knowledge, which may be necessary precursors to more objective and sustained behavioral change. CATCH, The Child and Adolescent Trial for Cardiovascular Health, funded by the National Heart, Lung & Blood Institute (NHLBI), was termed "the largest school-based health promotion study ever done in the U.S." (NHLBI press release, March 13, 1996). The trial involved 96 elementary schools across 4 states and included the participation of more than 5000 children. CATCH's health promotion efforts targeted both the children's behaviors and the school environment with four main types of interventions: food service, physical education, classroom curricula, and family involvement. Results showed that in the CATCH intervention schools, students had a lower daily calorie intake from fat and that school lunches were successfully improved to meet Federal percent fat guidelines. These changes were seen in the intervention students' home eating patterns also. The CATCH interventions also exceeded the Federal Year 2000 goal of having students spend at least 50 percent of their time in physical education classes being moderately to vigorously active. The improvement extended beyond the classroom with intervention school students reporting significantly higher levels of vigorous activity throughout the day. However, there were no statistical differences in body composition measurements found for intervention school students versus those in control schools.

<u>PATHWAYS</u> was a comprehensive, multi-site, 3-year school-based intervention "designed to lower percent body fat in American Indian children" (Steckler et al., 2003, S80; see also Snyder et al., 1999), another particularly high at-risk group for obesity. The program was implemented in 21 intervention schools with children in the 3rd-5th grades, and reached several thousand students. One of the most notable features of the Pathways program was its adherence to several suggested principles of successful prevention initiatives. Nation and colleagues (2003, p.451) highlighted the "importance of having several interventions addressing the problem behavior." Pathways had four comprehensive and coordinated program thrusts to address both individual and environmental factors: 1) a culturally-relevant classroom curriculum designed to promote healthy eating and greater physical activity as well as incorporating a "5-minute exercise break" into the daily classroom routine; 2) a physical activity component through PE classes; 3) a food service intervention designed to reduce fat in school meals; and 4) a program for family involvement including take-home family packs linked to the class curriculum and school-based family events during the year.

The program's embodiment of other important prevention principles (see Nation et al., 2003) was also noteworthy and is highlighted below:

<u>"Varied Teaching Methods</u>" such as didactic nutrition and physical activity information integrated into the curriculum and elements such as snack preparation and taste-testing; <u>"Sufficient Dosage"</u> – The Pathways study was implemented for three years, throughout the entire school year, and across three grade levels (so kids beginning the program in 3rd grade benefited with getting a repeat message for three full years). <u>"Positive Relationships and Socio-Cultural Relevance"</u> – The researchers used efforts to counteract hesitancy by the American Indian community toward research programs by focusing on gaining the trust of and building a partnership with the food service staff, as well as having an American Indian as part of the Pathways project team and including family events. <u>"Well-trained Staff"</u> – The emphasis on training was evident with curriculum training across all three grade levels, averaging 95.9% attendance, and physical activity and food service trainings, both of which had 100% attendance. <u>"Outcome Evaluation"</u> – Extensive attention was paid to process evaluation, overall and by each component, with a total of 18 measurement instruments used, as well as qualitative methods such as selective one-on-one interviews with teachers and food service personnel.

Pathways was effective in significantly reducing the percent of energy from fat in school lunches and physical activity levels were also somewhat higher in the intervention schools, although not statistically so. Yet there were no differences found in dieting behavior or body composition measurements.

<u>ROBINSON'S (1999) INTERVENTION</u> involved two schools with one randomly assigned to receive a 6-month, 18 lesson classroom intervention for reducing children's television viewing and aimed at 8- to 10-year olds. The program showed strong results on key outcome measures such as decreased body mass index, waist circumference, and decreased TV viewing as well as meals eaten in front of the TV.

<u>PLANET HEALTH</u> – a school-based intervention for obesity among boys & girls in grades 6 to 8. 1295 ethnically diverse students in four Massachusetts communities participated. The intervention was effective in reducing the prevalence of obesity among girls but not boys; increasing fruit and vegetable consumption and resulting in a smaller increment of total calorie intake among girls and reducing television viewing in both sexes (Gortmaker et al., 1999).

<u>NEW MOVES</u> – was a school-based obesity prevention program for adolescent girls (Neumark-Sztainer, Story, Hannan, Stat, & Rex, 2003) because previous research had demonstrated that physical activity decreases more significantly for adolescent girls than boys (U.S. Department of Health and Human Services, 1996 as cited in Neumark-Sztainer et al). The 16-week program included physical activity 4x/week, social support, such as videos on body image and relation exercises, and nutritional guidance, such as monitoring of eating patterns and small-group and class discussions, once every other week respectively. Although there was strong program satisfaction and high indications for program sustainability, there were no differences between the intervention and control schools. Girls in the intervention group, however, did show progress in their physical activity from baseline to follow-up.

<u>HEAD START/HIP HOP TO HEALTH JR</u>. – Over 800,000 children are serviced by Head Start each year, with more than 90% from low-income households and over 35% are African American. Key components of Head Start include nutrition services and guidelines, and many children count on government-funded school meal programs for their daily consumption of essential nutrients (Fleishhacker & Achterberg, 2003). These authors also suggest that Head Start can be part of a "systems perspective or ecological model" (p. 1583) for researching and developing effective interventions for the at-risk "low-income, ethnic minority, preschool population."

Accordingly, Fitzgibbon and colleagues (2002) described a 5-year randomized program in 24 Head Start programs in Chicago, 12 of which are primarily African American and 12 primarily Latino. The behavioral health program for 3 to 5 year olds, also involves parents, and includes elements to alter diet choices, increase physical activity and reduce TV viewing. While the intervention group preschoolers measured a decrease in BMI and an increase in BMI occurred in the control group, the differences were not statistically significant. However, sedentary behaviors were reduced significantly in the intervention group. Several key community principles were at the heart of this intervention such as an emphasis on prevention given the age group targeted, socio-cultural relevance, and process evaluation including taking learning from a pilot intervention stage to improve full-scale implementation.

<u>GEMS, GIRLS Health ENRICHMENT MULTISITE STUDIES</u>, is a group of interdependent studies aimed at reducing obesity among African American girls. In contrast to those described previously, these interventions may involve community-based implementation or school collaborations. In a pilot study, the Stanford GEMS project focused on increasing physical activity through after-school dance classes and reducing sedentary behavior such as TV viewing. The intervention group's TV viewing decreased significantly compared to control, however there were no significant differences in BMI between the two groups (Robinson et al., 2003 as cited in DeMattia & Denney, 2006). The Stanford ongoing project concluded in 2007.

Other GEMS studies demonstrated that higher levels of two physical activity measurements were associated with lower BMI and insulin levels in African American girls (Alhassan & Robinson, 2008); that prevalence estimates of metabolic syndrome in preadolescent girls vary greatly due to "disagreement among proposed definitions" (Chi, Wang, Wilson & Robinson, 2006, abstract); that sexual maturation is an important factor to consider in the classification of overweight and in obesity development in adolescence (Himes et al., 2004); that "interventions to increase physical activity among preadolescent African American girls may benefit from a parental component to encourage support and self-efficacy for daughters' physical activity" (Adkins, Sherwood, Story & Davis, 2004, abstract); that higher levels of parental cultural orientation and identity were correlated with lower levels of "girls' body image discrepancy and weight concerns": yet the culture and identity measures failed to illuminate a "consistent picture" of the interface of parental perspectives and child attitudes and behaviors (Beech et al., 2004, abstract); and that "summer day camp appears to offer promise for initiating health behavior change"; yet using the internet as an intervention follow-up needed to be enhanced to increase its effectiveness (Baranowski et al., 2003, abstract). Additional results are expected from ongoing analyses of these intervention studies.

Finally, as M. Levine (1998) suggest "prevention programs [need] to develop a long range perspective...[that goes] beyond an emphasis on individuals, into a fuller appreciation that we live our lives in social settings and in communities" (p. 203) – this is probably the hallmark of those school-based initiatives that have been more successful – they look to affect not only the school environment, but also the family environment; and many recognize and appreciate the complexities of the individual communities in which they are attempting to intervene. However, while there have been great strides made with numerous school-based initiatives, the conflict represented by aggressive food industry marketing in schools continues to mitigate sustained child obesity prevention and intervention efforts (J. Levine, 1999; Stitzel, 2003).

Public Health Policy Initiatives

What kinds of public health policies and initiatives are being undertaken in the U.S. to address childhood obesity?

One does not have to look far for evidence of government attention to the obesity epidemic. In 2001, the U.S. Department of Health and Human Services (HHS) released *The Surgeon General's Call to Action to Prevent and Decrease Overweight and Obesity.* "The report outlined strategies that communities can use in helping to address the problem. Those options included requiring physical education at all school grades, providing more healthy food options on school campuses, and providing safe and accessible recreational facilities for residents of all ages." (US Dept. of HHS, Office of the Surgeon General, 2001). While it is heartening to see large-scale, systemic initiatives like CATCH, many have suggested that these types of collaborative and ecological efforts are too few and far between. It is also unlikely that many of the positive results that are engendered are sustained when the funding or intense research project attention ends. And unfortunately the evidence demonstrates the lack of overall effectiveness to date of most initiatives at the highest levels of our policy structure. As Kumanyika (2001) reported, The Healthy People 2000 goal of reducing overweight prevalence was not only not met, but the trend during the 1990s was in the opposite direction. The current Healthy People 2010 objectives are even more aggressive. The 2005 IOM report takes the position that it is a national duty to address the obesity epidemic and reverse the trend.

Yet some posit the following inhibitory factors will continue to hamper child obesity efforts: lack of intense push for *national* preventive initiatives like changes in school food choices and increased support for physical education; lack of improvement in socio-economic inequities such as poverty and affordable/accessible health care; and the lack of effort to increase resources, especially in deprived communities, for healthy food choices and safe/available outlets for physical activity.

So while coordinated national efforts are still debated, there are a number of state initiatives and legislative actions taking place. One example is the *North Carolina Prevention Partners (NCPP)*, a statewide coalition of organizations involved in public health initiatives like obesity and physical activity. Among other effects, the NCCP efforts have led to increased nutrition and fitness benefits provided by at least 50% of the state's health plans (Dietz, Groves Bland, Gortmaker, Molloy, & Schmid, 2002). These researchers also described some aggressive statewide public policy initiatives in Missouri, holding out this example as a model of the type of legislative policy initiative that is taking a "socio-ecological" and primary prevention approach to obesity.

In two recent articles, researchers began to examine and define the nature of the legislative work occurring across the nation regarding childhood obesity prevention. They determined that only 17% of the 717 bills introduced were adopted. The topic areas with the most introduced legislation included "school nutrition standards and vending machines...physical education and physical activity...and studies, councils, or task forces." Yet, "community-related topic areas of walking and biking paths... farmers' markets...and statewide initiatives...had the highest proportion of bills adopted, followed by model school policies...and safe routes to school..." (Boehmer, Brownson, Haire-Joshu, & Dreisinger, 2007, Abstract results). Boehmer and colleagues (2008) also analyzed factors that were predictive of bill adoption. The content areas mentioned previously and bipartisan sponsorship were among a number of other factors identified with the intention of helping child obesity advocates to better strategize for political success.

Finally, one of the other major public health programs in the U.S. that can be a key player in the fight against childhood obesity and especially important as a prevention vehicle is the *Special Supplemental Nutrition Program for Women, Infants, and Children (WIC)*. According to Nelson et al. (2004), approximately 45% of all U.S.-born infants are served by WIC at some time, and the program services nearly 4 million children ages 1 to 4 years old each month. WIC provides food assistance and nutrition education to low-income families, and often serves populations of high racial and ethnic diversity. Recent research has shown that "although increased rates of overweight are observed in

4- to 5-year old children, they are not observed in 2- to 3-year-old children" (Fitzgibbon et al., 2002; p. 289). These findings further underscore the opportunity for early prevention and intervention efforts, in fact much earlier in age than most efforts have targeted.

A number of recent studies have been conducted about the perceptions of mothers receiving WIC, as well as those of the WIC counseling professionals who work with them. The findings have shown that the counseling "is failing to increase awareness and action in mothers about the problem of obesity in their children" (Chamberlin, Sherman, Jain, Powers, & Whitaker, 2002, p. 663). An earlier study showed that mothers of overweight preschoolers do not perceive or identify their children as overweight, and this is a barrier to addressing the problem (Jain et al., 2001). Subsequent conclusions have better quantified the risk in various WIC populations (Nelson et al., 2004); have allowed for better understanding of the role and perceptions of WIC health care professionals in the challenge of preventing and treating childhood obesity (i.e. they felt "they might offend mothers when talking about weight"; Chamberlin et al., 2002, p. 662); have elicited programmatic suggestions such as "working with primary care physicians to create a more uniform approach to counseling on obesity" (p. 662) and have offered some common ground between mothers' and professionals' aims for the children such as agreement on the need for healthy diets and physical activity (Jain et al., 2001).

These public policy initiatives in particular have the potential to address the child obesity issue from a population perspective by using vehicles which reach millions of youth; by focusing on prevention, and by targeting large at-risk groups specifically.

Other Types of Initiatives

A number of other treatment programs are being tried although with typically less frequency than the types of initiatives described previously. More intensive therapies that have been used to treat child and adolescent obesity include bariatric surgery, drug treatments and very-low-calorie diets. Epstein et al. (1998) report that surgical treatments have been shown to have very costly side effects and have not enjoyed strong recommendations in the medical community. A 2003 review by Sugarman and colleagues turned up only 33 cases of adolescent bariatric surgery from 1981 to 2001, although the procedure appeared to be effective in producing long-term weight loss in most patients and has likely increased in its usage since that review. Although drug treatment and research is flourishing for adult obesity interventions, there have not been many treatment studies with children, and those that have been conducted did not provide strong evidence of the efficacy of pharmacotherapy for pediatric obesity (Epstein et al., 1998). Increasingly, however the medical profession is appreciating the importance of a collaborative, inter-disciplinary approach to child obesity. Programs such as the hospitalbased "HealthWorks", a weight management program for children and adolescents is one such initiative, which includes a team from nutrition, medicine, psychology and exercise science and incorporates both a behavioral and medical perspective (Hipsky & Kirk, 2002).

Finally, there has been reluctance to take a *strict dieting* approach to child obesity, often due to a particular concern about fueling a rise in eating disorders. However, Attwood (1998) strongly suggests that low-fat diets for children are sensible and safe, and that while "frowned upon" (p. 77T) by many pediatricians and dietitians, he suggests

these attitudes are mired in myths that are doing harm to the many kids on course to develop serious medical consequences from the traditional high-fat American diet. Ikeda and Mitchell (2001) point out that because nearly one-third of fifth-grade girls report having dieted, the more agreed approach has been to improve the nutritional content of children's diet. Yet for those children already struggling with overweight and obesity, there has been a growth in children's weight loss camps, most often residential but some are conducted as day programs. An 8-week U.S. program achieved substantial decreases in BMI and overall body fat and the BMI remained lower at a 1-year follow-up (Gately, Cooke, Butterly, Mackreth, & Carroll, 2000).

A sampling of Popular Treatment Approaches

According to the IOM's 2005 report, public interest as measured by media coverage has increased substantially. Additionally, the study suggests that recent public opinion polls indicate a great number of adults and parents are concerned about childhood obesity and that about half of adult respondents consider obesity a public health problem. Therefore, the following list is a small sample presented to demonstrate some of the growing interest and types of popular public initiatives that have been undertaken in just the last several years:

- Popular reality TV show: The Biggest Loser
- Shaq's Big Challenge: a reality TV show featuring NBA superstar, Shaquille
 O'Neal helping obese children lose weight and get fit

- One-Million Pound Challenge sponsored by State Farm and promoted by African American spokesperson, Dr. Ian Smith – often a guest on popular Black radio shows and websites such as the syndicated Steve Harvey Morning Show
- American Heart Association initiative launched with President Bill Clinton
- National Basketball Association "NBA Fit" public initiative to promote physical fitness and healthy nutrition for kids, families and adults
- "Play 60", a National Football League initiative to combat childhood obesity by encouraging kids to be active at least 60 minutes per day; also builds youth fitness zones in local communities
- SUBWAY Fresh Fit Meal Choices, Fresh Fit Kids Meal, and Story/TV endorsement with Jared Fogle, a former university student who lost 245 lbs. with a diet that included two subs per day
- Beginning nutritional initiatives by other restaurants to include healthier alternatives (i.e. fruit, yogurt and milk are now routinely offered with kids meals in fast-food restaurants)

A Community Psychology Approach to Childhood Obesity

In beginning the review of a community approach to the childhood obesity problem, the then Surgeon General Satcher's following quote provides a contextual opening around which the ensuing years have engendered a consensus among multidisciplinary professionals working in this area: Many people believe that dealing with overweight and obesity is a personal problem. To some degree they are right, but it is also a *community responsibility*. When there are no safe, accessible places for children to play or adults to walk, jog or ride a bike, that is a *community responsibility*. When school lunch rooms or office cafeterias do not provide healthy and appealing food choices, that is a *community responsibility*. When new or expectant mothers are not educated about the benefits of breastfeeding, that is a *community responsibility*. When we do not require daily physical education in our schools, that is a *community responsibility* [emphasis added; U.S. Department of Health and Human Services, 2001, page XIII-XIV].

Key Tenets of Community Psychology

Community psychology is a section of psychology which grew out of a critique that the dominant positivist individual-focused treatment paradigm in clinical psychology left much to be desired in terms of its ability to affect large-scale and long- term change for many of the thorniest mental and public health issues of the day. Within this field, which harkens back to the 1965 Swampscott Conference, are key organizing tenets which guide both the philosophy and intervention approaches. They include 1) a *focus on a population* versus individuals only; 2) *an emphasis on prevention*; 3) *collaboration with stakeholders*; 4) *an ecological perspective* often entailing multi-component interventions across multiple settings; and 5) values of *social justice and respect for diversity*. Another useful community psychology concept that can inform prevention approaches is the importance of assessing and fostering a "sense of community" in attempts to bring about normative change.

Wandersman and Florin (2002) suggest that community level interventions, ostensibly guided by a community psychology approach, have been developed in large part due to the scope of the types of problems to which community psychologists attend. Some of these have included youth substance abuse, teen pregnancy, violence and delinquency and other major public health concerns such as smoking prevention and reduction. The aim has been to prevent dysfunction and promote well-being among a population. A criticism has been that a focus on individuals downplays the contexts in which people live as well as the interaction of the events, institutions, communities, and larger social and cultural forces that also exert their effects. Toward this end, and related to a focus on whole populations has been the development of ecological frameworks to obesity, which look at not only personal etiologic factors but also environmental ones which affect energy imbalance (See Figure 3-1 and 3-2 in IOM, 2005, pp.83-85; and Davison & Birch, 2001).

Also in the IOM 2005 chapter on "Local Communities" is a discussion of the different types of "institutions, organizations, and groups in a community that have significant roles to play in making the local environment more conducive to healthful eating and physical activity" (p. 194). This chapter both illuminates the community key tenet of collaboration among stakeholders and discusses characteristics for actualizing the most effective coalitions. One of those is "build a sense of community", a principle Murray Levine (1998) credits to prominent community psychologist Seymour Sarason. This concept embodies the social network of a community of persons who value each other's opinions and support. Levine goes on to suggest that "if we are to be broadly effective in preventing undesirable end states…preventive interventions must contribute to normative change....when we accept norms, we have a basis for a sense of community as well" (p.190). Therefore effective preventive measures encompass more than individuals; they affect a common social culture. Yet Levine stresses that while changing norms is necessary, the difficulty in changing them should not be underestimated.

Respecting and even prioritizing underserved populations with an emphasis on eliminating health and other social justice disparities follows on from the community focus. Norms are often the basis by which we understand and define cultures, and those working in community efforts have begun to understand the importance of targeted and culturally-relevant interventions to reach defined communities. Finally, as aptly recognized in the IOM 2005 "local communities" chapter, "because these populations traditionally have been disenfranchised, special efforts must be made to gain their trust, both among individuals and at the community level" (p. 200).

Yet incorporating this much more complex way of work is a departure from our more traditional research controlled experimental focus in psychology. As Kelly (2006) stated, respect for diversity of settings suggested that "any intervention had to take into account the particular place as well as express itself according to the community" (p. 10). However he recognized that this went against the dominant paradigm in psychology that valued generalizability and replication. "What is effective, useful, and sympathetic in design of research for…laboratory studies is inappropriate…in natural settings and uncontrolled environments" (p. 72). Respecting this point of view, one nevertheless understands the need to honor systematic inquiry processes and evaluation and be able to identify and use treatment and intervention strategies that reliably demonstrate some ability to bring about desirable behavioral end states. It is for these dual and sometimes competing aims and research/intervention values that the paradigm of "pragmatic psychology" may offer a way forward.

Relevance of Pragmatic Psychology and The Case Study

Daniel Fishman (1999) in his book, *The Case for Pragmatic Psychology*, suggests a new approach to bridge the dialectic between traditional, positivist-oriented psychology, which focuses on quantitative, group research, and newer, postmodern psychology, which focuses on qualitative, individual-case-based research. It is in line with the postmodern idea that "reality is constructed by individuals and groups as a result of particular beliefs and historical, cultural, and social contexts" and thus that "the nature of reality is relative..." (p. 95). Fishman argues that the psychological theoretical perspective to be taken towards any particular, real-world problem situation should be chosen on pragmatic grounds, that is, the perspective should be selected for its ability to solve problems in their particular contexts. The best way to take into account these contexts is to identify the basic unit of research as the case study, studied both quantitatively and qualitatively. By collecting more and more cases of attempts to solve similar problems in individuals and groups, through induction it becomes possible to develop general theories of assessment and intervention for application to future such problems.

The emphasis in case-based pragmatic psychology resonates with the focus on multiple levels of context in community psychology. Fishman's pragmatic psychology also recognizes the more postmodern type of relationship community researchers have with the people whom they study and help. That is, instead of attempting to be "value neutral" and to study "subjects," community psychology researchers develop collaborative relationships with those with whom they work and focus on trying to empower these individuals in helping them to solve their problems (Fishman, 1999, pp. 147-149).

Purpose of The Study

This study will be informed by a community psychology approach and seeks to a) extend previous work examining cultural factors around childhood obesity, specifically giving an emphasis to the experience of the child; b) provide data to illuminate prime motivating factors for seeking intervention and change; c) explore mobilizing a sense of community among African Americans as an essential element to sustainable change around this public health issue; d) provide some initial program feedback to the organizers of a school/community-based child obesity intervention initiative; and e) provide input on factors that may be important for implementing and/or adapting future community-based child obesity prevention and early intervention treatment programs.

CHAPTER III

METHODOLOGY

This section will review the primary methodology used in this study, describe the subjects who participated, the procedures and instruments used, and provide an overview of the two data analysis techniques utilized to describe the results of the research.

Overview

The primary purpose of this research was to engage in a preliminary exploration of child obesity attitudes, perceptions and current behavioral patterns of a group of African American children and their primary caregivers. Secondarily, this research was designed to gather some initial feedback from the study participants regarding a schoolbased child obesity intervention program in which they were currently involved. Because of the desire to broadly survey an indicated group of African Americans regarding childhood obesity, this research used a qualitative study design. Qualitative research is often used within a grounded theory approach in which the researcher seeks most fundamentally to gain depth in understanding participants' experiences; and from there, initial hypotheses are generated and theory becomes grounded in this preliminary knowledge as additional questions and study are contemplated and developed (Patton, 2002; Strauss & Corbin, 1998). Specifically, the primary data gathering tool was focus groups, a procedure that has made a rich contribution to community-collaborative research. This technique allows the researcher to gather information from a targeted group whose views are important to understanding the phenomenon under study, and it is often used in exploratory or preliminary studies. To the participants, focus groups often provide a venue to discuss a topic of particular salience to the members and often to find a social network who shares the members' interests. As Krueger (1994) summarized, "a focus group is a carefully planned discussion designed to obtain perceptions on a defined area of interest in a permissive, nonthreatening environment. The discussion is comfortable and often enjoyable for participants as they share their ideas and perceptions" (p. 6).

Sampling Pool

An elementary school in a diverse suburban city in the North East of the United States was in its second year of a school and local public health collaboration for child obesity prevention and intervention. The program, "Fit Rules" (name disguised in order to maintain confidentiality), was targeted at 3rd-5th graders with an aim toward improving nutrition and fitness and towards reducing the overweight and obesity status of those children who were already overweight. To participate in the program, a student did not have to have an overweight problem, but the vast majority did. Parents were invited to enroll their students in this after-school initiative in which students received nutritional snacks, nutrition education and an opportunity to engage in physical fitness activities three times per week. In the initial year, the latter programmatic aspect was managed by

student participants from a local university along with local YMCA officials. In this second year of the program, due to funding constraints, only the YMCA continued involvement in running the student fitness activities. The overall program, including the nutrition component, student and family educational and intervention outreach, and collection and maintenance of student health and weight data were managed by a registered nurse, who officially worked for the local health department. The school and local health department set up a health clinic within the school, which was charged with providing some primary medical care to students and also housed this specifically-developed initiative to address child obesity as well. This initiative was termed the "Fit Rules" program.

The school and local community demographics were racially and ethnically diverse, with African American and Latinos representing a majority. Accordingly, this program provided a prime opportunity sampling pool from which to select participants. However, in line with the community psychology principles also guiding this study's approach, collaboration on methodology was necessary with the community gatekeepers -- the school and local health officials specifically. Therefore, while this study's focus was limited to African Americans, it proved to be problematic to the school to be exclusionary in our solicitation of subjects, and this accommodation was granted. The final procedures, in turn, addressed how resulting information specific only to African Americans could be segmented and over sampling of African Americans could occur should that have proved necessary.

Participants

The study included eighteen participants in total, six female adult parents and 12 children. The adults all participated in one parent focus group, while there were three child focus groups, two boys' groups with 3 and 4 participants respectively, and one girls group with 5 participants. The child focus groups were specifically separated by gender because consultation with other child researchers suggested this would be most productive and least distracting for the child discussions. The adult group was open to parents of either gender, although only female parents participated.

The vast majority of participants were African American with the exception of three Latinos, one parent, one girl, and one boy in the second boys' group conducted. The children were 8-12 years of age, in the 3^{rd} , 4^{th} or 5^{th} grade, and with the exception of one, all were categorized as overweight or obese based on the BMI data gathered by the program organizer. The parents' height and weight data was not collected but the researcher's visual observations suggested that only two of the parents were clearly overweight, with one of those being obese. The other four did not visibly represent overweight status, although the objective physical classification cannot be confirmed. The socioeconomic status of the participants ranged from low to low-middle based on educational attainment data provided by the parents. SES is also extrapolated by the school and community data. This factor along with other participant demographics is presented in Table 1 and Table 2. Figure 1 provides a graphic representation of the children were overweight or obese, and all of the boys (n = 7) were in the latter category.

Table 1Parent (Mothers) and Child Subject Characteristics

Number of Mother Subjects					
N = 6					
Ethnicity of Mothers					
African AmericanLatino/Hispanic $n = 5$ $n = 1$					
Mother's Highest Level of Education					
Less Than HS $n = 1$		HS or GED $n = 2$	Some College $n = 1$	College Degree $n = 1$	
Number of Child Subjects					
N = 12					
Gender of Children					
Boys n = 7	Girls $n = 5$				
Ages of Children					
8yo n = 1	9yo n = 5	10yo n = 3	11yo n = 2	12yo n = 1	

Table 2School and Community Characteristics

School Enrollment (2006)				
N = 450				
School Ethnicity Enrollment Data (2006)				
African American Latino/Hispanic				
53.2% 45.5%				
School % Eligibility for Discount/Free Lunch (2007)				
91%				
(Range for all public elementary schools in this northeast state: 0% to 96.9%)				
Single-Parent Households with Children (%; 2008)				
Single 1 drent IK	buseholds with emildren (70, 2000)			
School District	State			
28.0	10.7			
Median Household Income (In US \$; 2007)				
Community	State			
51,925	67,035			
Persons Below the Poverty Line (%; 2007)				
Community	State			
15.9	8.5			

Note: School data sourced from www.schooldatadirect.org and www.schooldigger.com – both sites use National Center for Education Statistics (NCES), U.S. Dept. of Education, the state department of education, and 2000 census of population and housing as primary sources for enrollment data; Community and State economic indicator data sourced from www.city-data.com; and state figures were able to be verified against quickfacts/census.gov. Community figures could not be verified for 2007 as latest census

figures were only available for 1999.

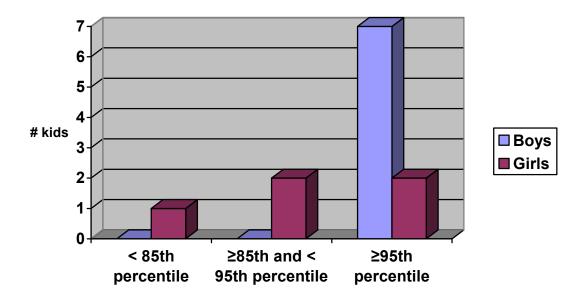


Figure 1. Sex-specific height/weight percentile BMI data for child participants.

Source: "Fit Rules" RN project coordinator

Procedures

Community Collaboration

Given the importance of collaboration with the community when working within a community psychology framework, I will briefly describe the context for the development of this collaboration between the researcher and the school/health center partnership. As the researcher sought to develop an opportunity sample for studying exploratory issues around child obesity in the African American community, it was necessary to engage in networking and discussions about a number of recruitment sources and strategies. Some of the most influential organizational groups in the Black community are the social service fraternities and sororities. The researcher is a member of one of these organizations and reached out to the chapter in the local area to announce the dissertation topic and interest in recruitment. A fellow member of the organization, whom the researcher did not previously know, obtained the announcement and contacted the researcher about the school health department initiative at her school. After inquiry and an initial meeting with the school representative who was in charge of community outreach, it was determined that the program's participants would be a good sample source for this exploratory study.

Recruitment

The intent was to recruit overweight African American students and their parents. These students were already enrolled in the "Fit Rules" program by parent permission. In consultation with the two program officials, the school community coordinator and the health department's registered nurse, it was determined that a recruitment solicitation coming from them on school letterhead would likely generate the highest response.

Attention to this aspect of the collaboration was important since there has historically been suspicion in the African American community to mainstream research, and parents can be quite guarded in enrolling their children in research (Boyd-Franklin, 2003). Therefore, engendering trust within the potential sampling pool was essential – the community coordinator, in particular, had built up a rapport and trust base with the parents with whom she worked. Since the "Fit Rules" program also included some students who were not overweight, the RN's database allowed her to target those students already overweight. As previously stated, while this study was specifically looking at African Americans, it was agreed that the letter would go out to all students in the overweight category and therefore not exclude Latino students or parents from participating. It was considered highly likely that the vast majority of study participants would be African American, particularly since the recruitment material indicated the focus groups would be conducted in English. This turned out to be the case.

The first recruitment phase targeted student participants through parent or guardian consent letters sent home under school letterhead and returned to the "Fit Rules" coordinator. In that child letter, parents were also informed they would be contacted to participate in a parent group. Child informed consent forms were returned to the RN, and the children were then scheduled into gender-specific groups of 3-5 participants each for a total of three groups held.

A separate parent recruitment letter followed after receipt of the child consent forms. The school coordinator and RN were also involved in making follow up calls to parents to solicit their participation and schedule them for the parent group. Again this personal contact was considered important in early discussions with school and community leaders and proved to be so. We solicited the parents of all of the children, and obviously some were unable to also do the parent group. However, there was one mom who participated in the parent group, even though her son had not participated in a child group – the mom had given permission for him to participate, but he had either declined or was absent on the days the boys' groups were scheduled. We also offered babysitting services for the parents to enhance their opportunity to participate. (See Appendix A for sample child and parent recruitment letters and consent forms.)

Conduct of the Focus Groups

The researcher was the facilitator of both the child and adult groups. The researcher had previous experience with arranging, conducting and observing focus groups from several years of work experience in marketing. Each of the groups was taped to facilitate collection of discussion feedback and to free up the facilitator from focusing on note-taking during the sessions. In both types of groups, the facilitator explained her role and that of the study and used informal language and a casual style throughout the sessions to put participants at ease during the discussions. All groups were held at the school in a private conference room near the health clinic. Both the children and parents were given a token thank you gift for their participation at the end of the respective groups. The children received a small battery-operated pocket radio (cost less than \$5), while the parents each received a \$15 Wal-Mart gift card.

The child groups were held at the school on different days during the after-school time period allotted for the "Fit Rules" program. About halfway through the group discussion, the children were provided with the same snacks the others were receiving in the program. These groups were scheduled for one hour since that is a typical maximum timeframe that children can productively accommodate. As Krueger (1994) noted, if child groups are held much longer than that, a researcher would typically be faced with "a bunch of bored kids." It is important to note that one hour did represent a time constraint, particularly in the first child group, which was also the first group held overall. As in many studies, subsequent "trials" or procedural processes benefit from adjustments after the initial ones. Therefore, there were less subject areas covered in the first group, the girls' group. Also, it is not atypical in focus groups that although there is a discussion guide, sometimes all information is not covered uniformly. This most typically happens because the facilitator may follow the lead of a rich discussion on a specific point in which the participants are engaged.

Both Krueger (1994) and other professionals with whom the researcher personally consulted suggested that it is prudent to vary the techniques used with child groups so that all of the discussion isn't just *talking*. Accordingly, one of the first activities of the group was a *warm-up* exercise to reinforce the message that it is okay to have different opinions. In a game called "vote with your feet," the children physically went to different corners in the room to demonstrate a choice that best described their preference - i.e., favorite sport, favorite breakfast food, etc. Also the researcher used other techniques to engage the kids such as giving them "stickers" (happy, neutral, or sad) to

use to indicate their opinions about different subject matters being discussed, or gathering opinion about an issue by telling a hypothetical story that included child characters.

Finally, particular attention was paid to language usage and phrasing of questions to reduce children's potential anxiety in talking about a sensitive area like obesity. Example phrases were "some kids in some families would love to do an activity, but..." or "some kids have said that being overweight gets in the way...do you know anyone who feels this way?" This helped to normalize the topics of discussion and take the spotlight off of a child directly should they have felt uncomfortable being specific about their personal experience.

The adult group was held in the evening for two hours, and a light dinner was provided. After explaining the purpose of the group, the researcher asked the participants to sign the consent form acknowledging their voluntary participation in the group. After completion and return of the forms, group member introductions began, and the participants were instructed to help themselves to dinner. Several of the adults brought their children, and babysitting services were provided in another room by two teen assistants, under the supervision of the school community coordinator. Those children and the assistants were also provided light dinner foods, and the assistants were also compensated by the researcher with the Wal-Mart gift cards.

The adults also participated in the *vote with your feet* warm-up exercise to emphasize that the researcher wanted to hear different opinions and to demonstrate that the focus group experience would hopefully be enjoyable. At the end of the focus group discussion, the parents completed a short anonymous questionnaire.

Treatment of Data

Written consent was obtained from all subjects. Additionally, verbal assent was gained from the children immediately prior to the beginning of their groups, since their parents had provided the formal written permission for their participation. Participants were informed the groups were being taped but that their information would be kept strictly confidential and that neither their personal names nor that of the school would be identified in any reports. Participants were informed of their rights to refuse to answer any question during the discussion and to leave the group discussion should they wish to do so.

The researcher of this study is an advanced clinical psychology doctoral student, trained in clinical assessment and intervention, and conducted the discussion groups. Although the subject matter may have produced an emotional response from some of the subjects, none reported any distress or required any psychological treatment.

The digital tape recorder, facilitator's notes, lists of participants, consent forms and any other materials with identifying information about the subjects were kept in a locked file in the researcher's home, only accessible to her. When the discussions were transcribed by the researcher, the names were replaced with a letter/number code i.e. M1 (member 1), M2, etc. The parent questionnaire did not contain the adult's names or other identifying information. When the research was reported, names of participants and identifying aspects of the program were changed. Specifically, the case material presented in the data analysis was "hybridized" to disguise identity while maintaining essential clinically-relevant aspects of the cases.

Description of Instruments

A semi-structured list of question/topic areas governed the focus group discussions (See Appendix B). It was developed by the researcher to investigate attitudes, perceptions and behaviors regarding child obesity among African American children and parent/caregivers. Prior to conducting the groups, the guide was shared with several other qualitative and child researchers and their feedback was incorporated into the final product. The outlines covered similar topic areas for child and adult groups, but discussion exploration was tailored developmentally.

Additionally, a short self-administered questionnaire was developed by the researcher for completion by the parents at the end of their focus group. Its primary purpose was to gather more preliminary data about specific treatment motivation and intervention expectations. Unfortunately, self-administration of the questionnaire proved to invalidate use of the survey for a valid statistical summary because of the heterogeneous way in which some of the questions and directions were interpreted. Since this exploratory study included a small participant sample, this already limited interpretation of the questionnaire results; so only general qualitative reporting of the data is prudent and can be found in the first results chapter. (See Appendix C for Questionnaire).

Data Analysis

A grounded theory of analysis governed the initial review of the focus group data. With this approach, the intent is to build theory versus only testing existing theory. It also presents a rigor to the analysis to conform to the tenets of good scientific inquiry. One primary purpose is also to present a framework for the analysis that seeks to limit the assumptions and biases that are indicatively present in the researcher and the research process. Finally, this approach helps to build a dense, sensitive integration of the data such that the resulting explanatory theory is close to the real world phenomenon (Patton, 2002).

The four focus groups were transcribed and analyzed in detail by the researcher. Each tape transcription process was labor-intensive, typically involving 5-6 hours minimum. The transcribed data were then coded such that a label was attached to repeated phenomena, representing concepts (most of which eventually became or were grouped into thematic categories) that were considered relevant to the previous subject literature as well as the evolving theory. This approach follows a grounded theory procedure of theoretical sampling, where such sampling continued through the initial analysis process until theoretical saturation of each category occurs (Strauss & Corbin, 1998).

Additionally, due to time and resource limitations, the researcher was unable to have each of the transcripts independently coded. However, two of the de-identified transcripts and the initial thematic analysis were reviewed by another psychology doctoral student, and the analysis incorporated the independent reviewer's

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interpretational feedback. All of the transcripts were then reviewed multiple times by the researcher for the development of the final thematic categories representing the core presentation of central ideas. These "Key Focus Group Themes" are presented in the first results chapter.

Krueger (1994) discusses a continuum in levels of qualitative analysis from the dense raw data level to more refined "descriptive statements" to an interpretative level which has the researcher elevate the summary of the data to discuss the meaning and often implications according to the purpose of the study.

As discussed previously, the pragmatic case study method is part of a research approach that seeks to honor the goal of psychological research to "improve the lives of...individuals, groups, communities and societies" by addressing "a specific practical problem to be solved" (Fishman, 1999, pp. 131-132). The next analyses, presenting two hybridized case studies based on respondents in the study, occurred in two stages and specifically looked to lift out meaning from the data. With the availability of multiple matched parent and child data presentations, the intent was to comb the data to determine if profiles emerged of case characteristics that might describe typical child obesity "clients." The analysis comparing and contrasting the case studies along common headings represented the final stage of the analysis process to develop a higher level of understanding and implications emerging from the study's data. Presented and analyzed therefore in the subsequent two results chapters are two prototypical case studies, where one type of potential child obesity "client" might be expected to be responsive to intervention, and another type of client might present more barriers to change.

CHAPTER IV

RESULTS

Key Focus Group Themes

The following represents a descriptive categorization of the focus group results and key themes which emerged from this data. A summary of the information learned includes illustrative quotes, which are presented to further illuminate the participants' experiences. The child and parent group results are presented together, and where necessary, specific mention is made about information most relevant to one group or another.

<u>Theme 1: While parents are influential, even young children have increasing say over</u> what they eat; this is especially true as some moms mentioned they don't cook much, and <u>many moms echoed a loss of "control" regarding what their kids eat most of the time.</u>

Kids were asked about who was the primary influencer of their eating attitudes and behavior:

"Sometimes it's my mom and sometimes it's my dad," said one child. Yet, as expected, mom is the primary person buying and cooking food at home; however the majority of kids who lived with both their parents spontaneously mentioned dad as well (about 1/3 lived in female-headed single parent households). One gender difference was noted when three of the five girls commented specifically about dad's influence:

One girl said, "...when mom buys chocolate chip cookies, he sees me in the living room eating the whole box and he says 'you shouldn't be eating that'." In responding to the facilitator's inquiry, "who bugs you about what you eat?" another offered, "My dad. Even when I went to a party, and I came back with all those candies, and I wanted to eat some, he said 'you cannot eat all those candies'. He sees me eating candy, [and] he says 'I don't know where she learns this stuff. I'm not eating it'."

One of the boys said, "*I would say she has say over what she eats, but with me, if I say I want a sub, I get that.*" When moms were asked what happens when they don't buy certain things that their children like, one mother offered, "*he'll go to the corner store and get it.*" Another mom went on to echo how she also seems to cede control:

I cook a lot of healthy foods, but my son doesn't like the healthy foods...well he would prefer the unhealthy food. He'll find him something. He would not eat it (if he only had healthy foods to eat). If I cook, he'll tell me quick, 'I don't want that' and he will find himself something else...he would go somewhere. He'd go over her house (referencing another mother she knew who was also participating in the session); go over a neighbor's.

Still another mother summed up what was a general collective exasperation: "*They have ways and means...to get what they want.*"

The one dissenting parental viewpoint represented what is often seen as the more traditional "respect authority" norm in Black families. This mother said, "*not mine, cause I tell her she eats what I cook, or she doesn't eat.*" Her daughter was one of the youngest children, age 9; however, paradoxically, she was also one of the most overweight. This mom agreed strongly that it was parents who had the most influence

and speculated that because her daughter is with her father on the weekends, she was unsure what she eats then. The mother also admitted, however, that her own eating habits had become a less healthy model for her daughter: *"That's my problem, chocolate. I* gained 33 lbs. from September to now – all that candy I bought from the store."

All of the moms thought their kids overate, but they had varying attributions to explain it and several felt perplexed. From the mother who held the dissenting viewpoint about "control" over her child's eating:

Mine, I don't really understand because she doesn't eat a lot, but I think the sugar content of what she has, and maybe because she'll eat and go back to bed...you know, eating and going to sleep, is making her gain the weight too...I think it's where a lot of hers is coming from.

Two others offered:

"Yeah but sometimes they just see it and they...want it.

"That's right, because nobody in my house eats a lot."

Still another recognized that supplying a lot of convenience foods in the

household and possibly bingeing could be problems related to her son's overeating:

"He'll eat cereal at night, but he'll eat 4 bowls... I think it has a lot do with me... I don't

cook that often. So of course he's going to eat unhealthy things because you are going to

buy pizza and hot pockets and stuff like that."

Theme 2: Although the children in the study are enrolled in a school obesity prevention and intervention program, their "favorite food" choices still reflected the same types of high fat, high sugar, low nutrient and "fast" foods that have become all too typical in today's U.S. diet. While many children mentioned dinner-type meal foods such as "chicken and rice", "Favorite Foods" in general reflected the more unhealthy foods that have become major implications of the child obesity problem. The mothers mentioned pizza, juice, chocolate, fried foods, and 'junk'. Still, the vast majority of kids and moms said healthier eating occurs "at home." As one child mentioned, "*[at church] they have sweet tea and stuff...*" Another said, "*Sometimes at church, we have the same foods; sometimes we have pizza, fried chicken...*" One of the boys summed it up saying, "*yeah I eat better at home because my mom she makes healthy stuff, but when I'm out, I drink soda.*"

Yet unhealthy eating clearly occurs both at home and out of the home. Some of the children's comments reflected the contradiction that was inherent in the mothers' discussion about getting their children to eat healthy: *"I eat candy every day [at home],"* said one. Another offered, *"mom tries to make me [eat healthy at home]...everything she makes has to have vegetables"*; but despite his mother's best intentions, he still acknowledged, *"I don't eat healthy at home."*

Eating out also appeared to be a likely source of over-indulgence and poor food choices. "Red Lobster" and "buffets" were named specifically as favorite eating out places in the children's groups, and the mothers confirmed. "*Mine likes Red Lobster*," said one parent, and one of the girls stated, "*Every time I come home from church, we go to a buffet*." However, the other typical fast-food restaurants and options were prominent as well: "*KFC, pizza, McDonald's, Taco Bell, Burger King and Chucky Cheese*" were all spontaneously offered as answers to the facilitator inquiry, "other places kids spend a lot of time eating food."

Theme 3: As U.S. data indicates, the majority of these kids were also engaged in mostly sedentary activities after school.

"Play video games" or *"do computer stuff"* was echoed by most boys and girls. Many said they only *"watch a little TV"* after school due to their schedules, yet only onethird of the children mentioned any physical activity involvement:

"Ride my bike"

"Ride my friend's scooter"

"...I walk to the park [sometimes] by myself [or with his dad] and play basketball or football."

"I play for the Pop Warner [football team]...I play football and basketball." The moms affirmed that the majority is not engaged in regular physical activity, and this appeared especially influenced by weather: *"when it's cold, they only play video games and watch TV,"* said one mother.

Some of the kids also mentioned a cousin or older sibling who was involved in a competitive sport, but regular recreational physical activity was not the norm. Moms also recognized that their lack of "modeling" good exercise habits is a contributing factor: "*Maybe it's the fact that I don't get out there with them*," offered one mom. Another said, "*I think that's what it is with me...'cause I'm not active.*"

<u>Theme 4:</u> Financial limitations were not endorsed as a significant issue in food choices, nor were financial constraints reflected as a barrier to involvement in extracurricular physical activities. However, lack of time as a resource appeared to impact both food choices and physical activity, while safety concerns were mentioned by some as an

additional impediment to the latter.

Per one mother, "my lights would be cut out before I'd go without food."

Another said, "I go here and there to get whatever I want," and still a third specifically

said she buys food for convenience, "even if it's at a premium."

One mom, who had earlier wondered about the influence of her own lack of

exercise on her daughter, offered the following:

Mine doesn't do that (referencing other mothers' comments about their children riding bikes around where they live). She doesn't do anything without me or unless she's with her father or grandmother...I don't work outside the house, but then we still don't get outside – there's no time to go outside. When she does, she has to go with me. I don't let her play with any of the kids in the neighborhood. And now that could be it too...she's overweight and she doesn't get outside....I'm just nervous.

While these families were generally from low to low-middle socioeconomic backgrounds, financial limitations were not reflected as a factor hindering involvement in extra-curricular activities. The moms were asked directly and the children were also queried about their personal situations or those of "friends" they might know. It is certainly possible that this may be an accurate reflection of the situation. However it is also plausible to suggest that the kids may not be aware of financial constraints unless very severe, and parents may have been embarrassed to disclose specifics about financial hardships in the discussion groups. <u>Theme 5:</u> The experience for heavier kids includes a lot of peer teasing, varying degrees of interference and impairment from doing activities, and health concerns, all of which can cause significant personal and family distress. (They have also typically tried to lose weight in the past but not met with much success.)

Both mothers and the children endorsed teasing as an issue for kids who are heavier. The mother of one of the heaviest boys commented, "*They get teased a lot*, '*cause my son he even gets teased in school a lot about his weight. But that doesn't stop him from eating.*" One of the girls offered, "*One of my friends…they [two other boys] crack on her about her fatness.*"

The children elaborated further about attitudes and experiences of heavier kids through their comments during a group discussion exercise. When asked to tell a hypothetical story about two different boys and their experience on a sports team (one whose photo objectively showed a large body type and the other a normal/slim body type), their comments ascribed general negative attributes for the heavier child and suggested they thought his weight would be an interference:

"It's hard for him in basketball. He might have the shot but he might not have enough because he's so big so he might not be able to stretch that much." "He was at school and people were picking on him; he went home and told his mom."

"[They were saying] that he's fat...like picking on him about things he can't do."

"Well he got too much jelly and too much donuts [to which the boys group laughs]...because when he gets the ball, he can't even handle it 'cause they'll take it from him. When he goes up, he's gonna fall...'cause he's fat." "People would say that he's ugly."

"They could pester him."

The children reaffirmed interference as a factor in general for any heavier child, including themselves, specifically for involvement in physical activities like sports or dance:

"If... you have a lot of jelly like me, you can't run fast..."

"I'd say weight gets in the way a lot...you won't be able to run; or like on a team, like basketball, you gonna try to run and you'll drop down and fall."

"'Cause every time I run I get tired."

"You can't do a push-up when you're too fat."

"Yeah, some obese children wanna be skinny so if people try to crack on them, they won't have anything to crack on."

Mothers suggested the following:

"I know this little boy [affirms that he's overweight]. He's always falling...I don't know whether he trips on his feet or exactly what happens, but he's always falling."

"Like my sister's adopted daughter...streamline, pretty and everything and she's a cheerleader. You let her gain 40 lbs and cheerleading is over" About her son who was one of the heavier boys, another mother offered:

He doesn't play sports. He doesn't participate like that. I'm surprised he's in the program...I talk to the instructor...and she says they have a time getting him to run around the court or anything...I think his biggest problem is if he thinks he can't do it, you know because he's heavy.

Regarding interference or impairment with other aspects of children's lives such as making friends or eating with other people, opinions were more neutral and quite a few reflected on the child's overall self-concept and how a heavier person can compensate. The kids suggested:

"If you pick on kids, they're going to pick on you; it doesn't matter about weight, just don't pick on other people. People come in big, small, medium, tall, short, white...I don't let it get to me."

"Yeah, like them [referring to rap stars and "rock stars"] big and stuff, and they're still making friends."

One mother's comment regarding the impact weight can have on friendships and socializing was fairly representative of the group's views: *"I think it depends on the person, the individual."*

When examination of attitudes and behavioral impact was directed toward themselves (or their children) personally, distress was evident, particularly for the heaviest children:

"My daughter actually feels upset, and she feels sensitive and gets her feelings hurt. And she wants to feel good." "Sometimes when she comes home, then she'll be upset...because sometimes the kids pick on her"

"Sometimes when I'm talking to my mom [about my weight], she makes me sad."

This latter comment interestingly came from one of the most obese boys whose mother acknowledged weight's interference but later downplayed his distress: *"mine's just a jolly fat boy (laughing). He'll only be upset if somebody makes him mad,"* she said. Yet this same boy had gone through a stage shortly after joining the school program, where he tried to eat healthier – not atypically, it only lasted a short time:

He did go through a spell where he said he wanted to lose weight...where he wasn't eating red meat. She went out and bought him everything he needed...and that lasted for a minute, but that was him trying. Yeah, he was trying – you have to give him credit for trying.

Finally health concerns were echoed prominently in the mothers' worries:

"I'm afraid that my daughter is going to get sugar diabetes...cause it's in my family. I'm really scared...she has asthma too."

[Another mom reflecting on her son's asthma], "Yeah, if he lost some weight, it may bring down some of the breathing, because he like breathes hard....and you know, that's scary with the breathing..."

"Mine causes me a lot [of distress and upset] because I'm worried, you know a lot about his heart and stuff, when he has too much weight around it, too much fat around it...so it really bothers me." The children, who from appearance were not as visibly overweight, were more neutral as were their moms. One girl said, "*I don't care what anybody else thinks*. *As long as you think you look good, girl, then you look good.*" Another girl commented, "*I'm not that unhappy – I mean I got to eat the right things…*" One of the boys reflected a healthy attitude about his desired body type and weight: "*I wanna be medium,*" and another involved with sports had a modest objective saying, "*I want to lose like 10 lbs.*"

Still, wanting to look like their friends, wishing to avoid teasing and a desire to participate in activities were key motivators in the children's desires for change (note that only the boys were probed on this question area because of lack of time in the girls' group):

"Because they want to be like their friends; they want to be skinny; they don't want anybody to call them 'fat people' – they want to be like their friends and do like flips and stuff."

"Cause nobody will pick on them or say 'oh you fatty fatty... you need to lose some weight".

"Cause they don't wanna get cracked on...some obese children wanna be skinny so if people try to crack on them, they won't have anything to crack on." "They might want to have a dream, being a football player, a basketball player...that means they probably have to lose weight to have better fitness to play one of those sports."

Moms also reflected on motivations for change: "My son, he started playing basketball, and he did start trimming down." Another mentioned "...they take more

responsibility too. When they start doing good...you know..." While the girls themselves were not probed for this question, the mother's of girls were noticeably more silent about change motivators for their daughters. Avoidance of teasing was common for all children, but desire to participate in physical activities, even dance or cheerleading for example, were not prominent as additional impetus for girls' willingness to engage in weight change interventions.

The moms appreciated that at their children's current school, exercise and the "Fit Rules" program were very inclusive and non-competitive. "One thing I do like about [this] school and I kind of worry when next year he goes to [Y] school...is that all the kids...every kid...they made them feel special." Another mom had a similar concern: "I mean my son he can't play basketball that well, so I'm not saying he wouldn't make the team, but chances are if he doesn't start exercising and practicing more..."

Theme 6: Participants accurately perceived that making changes to their current eating and fitness activities would be difficult, but their interest in interventions was high. Two key challenges toward implementing these interventions, like many behavioral changes, were effective dissemination of information (like how to cook healthier and not sacrifice food enjoyment) and identifying and trouble-shooting the barriers to change (such as time pressures for accommodating physical fitness).

Boys and moms were probed for their thoughts and interest in engaging in different interventions to lose weight and get more fit. (Again a limitation occurred when time ran out to probe this area in the girls' group). "Eating less junk food" was almost universally considered one of the "hardest" changes to implement: "*Candy, I can't stop,*" said one boy, and another offered, "*cause when you like it, it's going to be hard to give it up.*" Reducing sedentary activities such as "cutting down on TV and video games" was also considered difficult: "*I...can't stop watching TV and playing video games.*" Moms generally concurred, with the following comment being indicative: "*the junk food and the video games, the TV.*"

Conversely, getting someone to exercise with them was mentioned by several of the boys and they had particular interest in being able to go to a gym with activities for kids and involving a member of their family i.e."...to get mom and dad to go with me to the gym."

Moms were also intrigued with a "kid centered" gym/activity center and with working out together: "Us all going out walking and exercising" represented an intervention nearly all the moms valued. Several also mentioned "learning to cook healthier", not only for themselves but involving their children: "for mine, to learn how to cook... 'cause he loves cookin'," said one mom. One of the boys said, "My uncle is a chef, and he taught my aunt to cook. And I'm going to ask him if he'll maybe teach me to cook."

Yet again, the reality of the challenges for families was evident. One mom said, "Like tomorrow I'm working from 6 in the morning until 9 at night, see...so I know I won't be coming home riding [bikes]... Still another's reflection was indicative:

Yeah, there are obstacles. You know like coming home from a long day at work, then you have to prepare dinner. Then you might have to take them out to an activity...and you know after you finish the activity, before you know, it's like 8:30/9:00, so you might not have time to go walking or as a family do what you want to do because of your schedule, you know, because you're just that busy.

<u>Theme 7:</u> The kids reflected a good understanding about the objectives of the "Fit Rules" program but the mothers' involvement was more passive versus active strategizing of how to support the efforts particularly at home.

When asked what the "Fit Rules" program was about, the kids emphasized nutrition and fitness but also mentioned self-esteem:

"It helps you with your health; it helps you lose weight." "It's about exercising and having fun, know what I mean?" "Well if you want to be at a certain weight, we sweat." "Fitness, your weight, gymnastics and sports you want to play. And it shows you how you have to do what people tell you to do. And you have to be fit if you want to do sports."

"It's about being healthy and eating the proper food"

"I think what they do in ['Fit Rules'] is get people to realize that you should lose the weight but you also should be happy about yourself."

The only prominent criticism offered by a few of the children was directed toward the style of some of the adults and teachers involved with delivering the program: "some of them are mean," said one boy, and one of the girls commented, "I don't like the hollering."

The mothers knew the program was about nutrition and exercising, but most were uncertain about changes they could attribute to the program: "...*I really haven't noticed [specific changes]*," said one mom. "*Me either*," another concurred. Regarding the

impact on how their children think about food and nutrition, another seemed to summarize the parental sentiment: "*Um, need to give it a little more time*." It is suggested, however, that the mothers were happy for their children to be in the program, but they themselves were only passively involved – this might be responsible for what appeared to be little indication of change efforts being undertaken in the home environment to coincide with the school program efforts.

<u>Theme 8: Out of the group discussion process and in line with a community psychology</u> perspective, the mothers reflected on how they might work together collectively to empower their own change efforts.

I think it [this discussion] really makes you think about what is it we can to do to motivate them more... Well in the community, you could just round up a group of them and say come on just do some exercise and see how valuable it can be. You know and that might take having some prizes and things to motivate them...and a lot of times they'll just come... but you could give them [a reward] to show them that they're doing something.

Several other mothers thanked the facilitator and commented how they found it

helpful to be able to talk to others struggling with the same problem.

Questionnaire Data

The following represents highlights of the results of the questionnaire data. As

mentioned briefly in the Methodology section, several of the questions in the survey (see

Appendix C) were answered in a heterogeneous way and different from intended or per

the written directions. For example, question #4 asked parent participants (all were mothers) to rate their likelihood of seeking treatment from six sources by choosing "very likely", "somewhat likely" or "not at all likely" for each one. Some chose only one answer i.e. "local university – very likely"; some indicated only the ones for which they were "very likely" but marked three answers, and only one participant completed this question as directed, rating all the choices.

Since the sample base is already small (N = 6) and the above problem occurred on several questions, it was decided not to present these data as statistically valid but instead to present the findings as highlights of directional feedback the mothers provided. Where multiple answers (see * indicated below) were provided instead of one answer or an appropriate rating or rank order, the answers were instead treated as an independent response. For example, whenever there was a response for "local hospital" on question #4, it was counted. This was deemed an appropriate way to handle these responses because, for example no participant used the "not at all likely" column. Therefore they all interpreted the question where they answered only those from which they were likely to seek treatment. If they were not likely to seek treatment from a place or type of provider, they simply ignored it. However, again the reader is cautioned from relying upon these highlights as a valid representation of the mother's selections but instead should see this information as directional and worthy of further exploration and confirmation.

Summary of Survey Highlights (N = 6)

- <u>Ethnicity</u>: 5 = A frican American 1 = Latino/Hispanic
- <u>Education</u>: Average mother had a "HS Diploma or GED"; as proxy for socioeconomic status, corresponds to low/middle class
- Average mother was "Very" <u>Worried</u> about her child's weight (M = 2.33; Scale: 1 = Extremely, 2 = Very, 3 = Somewhat, 4 = Not Very, 5 = Not at all)
- "Grandparent", "Pediatrician/Dr.", and "Child Him/Herself" were most likely to <u>express concern</u> about the child's weight (each = 25% of total responses)
- "Local hospital" and "Local recreation center" were the most frequent choices for <u>Where/Whom to seek treatment from</u> (each = 27% of total responses); "Church" and "University" also mentioned; race of provider was not a factor*
- "Cost" was the <u>most important factor in likelihood to seek treatment</u> (36% of responses); "location/how easy to get to" = #2; "interference for child" = #3; "child's distress" was a minor factor*
- Mother's said the <u>most influential factor in seeking services</u> for child's weight problem was "Physical Health" (60% of total responses)
- These mothers could not <u>afford to pay</u> much for weekly services with an equal number choosing "\$10" or "nothing"(33% of total responses each)
- Answers varied widely re: # weekly sessions parents thought they or their child would attend (M = 15.6 weeks; range = 3, 50; median/mode = 5); AND would be necessary to see a consistent difference in eating/exercise habits (M = 8.4 weeks; range = 4, 25; median/mode = 4)
- Answers varied widely re: perception of the % of weight loss necessary for better <u>"look/appearance"</u> (50% loss and 25% loss each represented 1/3 of total responses); <u>AND</u> for % of weight loss necessary for <u>"health improvement"</u> (25% loss represented half of responses; only one participant chose 10% loss, even though this is the figure suggested by the most recent research)

CHAPTER V

RESULTS – CASE PROFILES

Introduction

Following are two constructed case profiles developed by "hybridizing" subject data presented through the focus groups. Since several child/parent "pairs" participated in both a child and adult focus group, the data exists to construct "hybrid" cases that demonstrate some key aspects of child obesity client presentations. They are called "hybrid" cases because some of the identifying information has been changed or amalgamated across a couple of subjects in order to disguise identity and maintain participant confidentiality. However, the key clinical indications of the cases are presented as learned through the research participation of these representative "clients" and the researcher's own experience of clients within this socioeconomic and cultural context struggling with the issue of childhood obesity. This case profile format allows for the illustration of the types of issues that real people face in these circumstances.

Common headings and content areas are presented across both cases to enhance the review and comparison of the cases. The sections presented are as follows: A) *Client Characteristics and Background; B) Assessment of the Client's Difficulties, Strengths and Limitations; C) Client Response to Intervention to Date; D) Client Anticipated Prognosis;* and *E) Proposed Treatment Plan Considerations.*

The Case of Maya

Client Characteristics and Background

Maya is a 10 year old African American female. She is in the fourth grade and attends her local neighborhood elementary school. The town where she resides and attends school has a population of nearly 50,000 and is a suburb of a medium-sized city in the Northeast United States. Maya lives with her mother the majority of the time but spends most weekends with her paternal grandmother and her half-siblings. Maya's mother and father are divorced. She sees her father every couple of months and on some holidays since he lives and works out of state. Maya's half-sister, 13, and half-brother, 15, are children from her father's previous relationship and live with her grandmother full time. Maya's mother works weekends only, and she is at home with Maya after school during the week. Her mother completed her high school education, and they live in a modest 2-bedroom apartment.

Maya is 4'5" and weighs 102 lbs. She is considered obese as her BMI is in the 98th percentile for height and weight for her age. She was visibly one of the two most overweight girls in her focus group. Maya's mother reported that she was a low-birth weight baby. Her mother indicated that she worried about Maya's health since she was so small and usually fed her more often than the recommended every 3-4 hours for an infant. Her mother breastfed her along with formula supplementation for two months but switched to all formula believing that her daughter was not getting enough nourishment from both methods. Even though Maya's pediatrician and WIC counselors continued to reinforce the importance of breastfeeding, Maya's mother said she often got "grief" from Maya's paternal grandmother who would say "that baby ain't growing enough – you just need to take her off the breast and make sure she gets fed." This pressure eventually won out. Breastfeeding is also considered a protective factor against child obesity, but rates of breastfeeding have been found to be consistently lower among low socioeconomic African American women. Even though Maya was low weight at birth, she actually gained weight more rapidly than most babies during her first year. Rapid infant weight gain has been suggested as a potential risk factor for later child obesity.

Maya has some mild health problems including asthma – she currently does not use an inhaler but has had more complications with recent colds over the winter, and her doctor has suggested she may need to start using asthma medication in the near future. Maya's mother also indicated that Maya has begun to snore in the last year and that she sometimes worries about how heavy Maya breathes just from walking around. There is also a strong maternal and paternal family history of diabetes – Maya's grandmother whom she lives with part time has suffered "with sugar" for as long as Maya's mother can recall. Maya's older half-brother is also overweight, while her sister's weight is within normal limits. Maya's mother also appeared to be within normal weight limits, although she admitted to gaining 20 lbs. herself over the last year "eating a lot of sweets."

Maya's mother indicated that Maya did gymnastics and cheerleading for a couple of years, but doesn't currently participate in any formal physical activity outside of school. "That's when she started putting on the weight", Maya's mother said, referring to the time when Maya stopped doing extracurricular fitness activities. Maya is an average student and rarely exhibits behavioral problems at school except for sometimes "talking too much." Her mother and grandmother seem to be strict disciplinarians "from the old school." "She does what I tell her to do - I don't take any back-talk", said her mother. Maya was generally pleasant but acted less mature than most of the other girls, giggling a lot, seeming indecisive when asked about her opinions, and often needing re-direction back to task.

Assessment of Client Difficulties, Strengths and Limitations

Maya's eating habits seem problematic both regarding nutritional value and excess calorie intake. When asked about favorite foods during the group discussion, Maya listed the most. Many were high fat items like fried chicken and pizza "with lots of cheese", but she also mentioned corn, rice, spinach and other foods. She says she eats healthiest at home, saying at church "they have sweet tea and stuff." Her mom said Maya also frequents Chucky Cheese, McDonald's, and Burger King as favorite places to eat out. When at her grandmother's Maya eats a lot of snack foods, like pretzels and cookies, and "drinks juice that has a lot of sugar, stuff like that." While her mom says she now looks at labels for nutrition content, it appears that Maya's eating is less supervised on the weekends. Maya thought "giving up junk food" would be the hardest change for her to make, "cause when you like it, it's going to be hard to give it up." In agreeing with another mother, Maya's mom also said that Maya is very preoccupied thinking about food.

Maya and her mother both lead very sedentary lifestyles. Maya says she enjoys the "Fit Rules" program but complains about physical exercise in general. She endorsed "weight interferes a lot" with exercising "cause every time I run I get tired" and "sometimes I can't do that stuff." Her mother says Maya will sometimes say "it hurts" when talking about gym and doing sports at school. Maya likes to ride her bike after school, but her mother admits that she's not allowed to play in the neighborhood unless her mother is outside with her. "I'm just scared," her mom said, indicating that she has neighborhood safety concerns. She also admitted that although she does not work during the week "we still don't get outside – there's no time to go outside." Maya seemed to have the earliest bedtime of all the children, "7 pm." Maya's mother also is not active and thinks this probably influences her daughter's activity level. Maya's father bought a treadmill for the family at Maya's grandmother's house. Maya uses it sometimes and at one point lost 10 lbs. a year ago. However, she quickly gained it back and admits to watching a lot of TV and playing video games when with her siblings and grandmother on the weekend.

Maya and her mother both mentioned that Maya and other "fat" kids get teased a lot. "Sometimes when she comes home, she'll be upset…but not all the time," her mother said. Maya's typical defenses seemed evident when she often joked in the group about being overweight and said "when people call me fat, I say I'm proud to be fat." Her mom also further downplayed her likely distress saying she thought Maya just loved to eat and didn't really care about comparing herself to others. However, in the girl's group, Maya indicated a strong desire to lose weight and said that sometimes she gets sad when her mom, grandmother and Dad "bug" her about her weight. Maya and her mother separately attributed more positive and "successful" traits when discussing or reacting to images of thinner people. Yet, consistent with other research with African Americans, their views along with others were still less negative about the obviously overweight images discussed, and they were more apt to say things like "some people are meant to be big and some are meant to be small."

Maya's mother was very talkative and she expressed a range of non self-directed weight attitudes such as "it's in the genes" and "I tell her she might grow out of it." She also had less direct understanding of the absolute energy balance between how much her child eats and how much activity she gets. She often expressed very simplistic thinking about the issue, although she was clearly concerned. Additionally, she seemed to provide the least autonomy in her child's development and accordingly, Maya appeared the least emotionally mature of the child participants. Additionally, her mom's grammatical speech patterns, her current occupation level and her prior educational attainment are all in line with a lower socioeconomic status, which unfortunately is associated with greater health disparities. Family health history risks, mixed messages and modeling from other family members also present difficulties for dealing with Maya's weight problems.

There are a number of strength factors, however, that could be helpful to Maya. Her mother clearly communicates concern about Maya's health risks associated with being overweight. She has also begun some behavioral change by reading nutritional labels on foods. While a more positive attitude toward heavier body types might predispose toward obesity, it can also be protective against unhealthy disordered eating patterns. Maya's father has also encouraged Maya to get more exercise, including purchasing the treadmill for all of them to use at his mother's home. Finally, Maya herself indicates a strong desire to lose weight.

These factors will need to be strengthened if they are to combat what appears to be Maya's general low self-esteem, likely exacerbated by being overweight and often being teased; lack of open and genuine communication of her feelings about her weight and body image; a family history and significant role models for unhealthy eating, physical inactivity, and obesity health complications; and inconsistent and sometimes contrary parent/caregiver attitudinal and behavioral expectations regarding eating and physical activity occurring in her different household environments.

Client Response to Intervention to Date

To date, Maya has struggled with following a consistent healthy eating and adequate physical activity regimen. Her mother expresses interest in the school program, but does not indicate strong buy-in based on her inability to demonstrate specific program suggestions or changes she has tried to implement. Maya managed to lose about 10 lbs. a year ago, seeming to become more attentive to what she ate and exercising at her grandmother's. This was likely influenced by her start in the school program. These new attitudes and behaviors, however, were short-lived since there did not appear to be specific plans in place to continue support of these changes.

Additionally, there has not been any structured and specified involvement of Maya's other significant caregivers (i.e. her father and her grandmother particularly) in her healthy eating and fitness program. Her mother reports that again at the beginning of Maya's involvement in the school program, her grandmother demonstrated enthusiasm to have healthier food options in her household, but they quickly reverted to old habits. It has also been hard to significantly engage Maya in the physical activity components of the "Fit Rules" program. All reports are that she participates in this aspect reluctantly and often half-heartedly. Maya and her family seemed to have increased some of their awareness of overweight issues, although still at a somewhat elementary level. They have yet to commit to a plan or specific goals. Both Maya and her mother seemed to lack selfefficacy in making necessary changes, evidenced by their expressed attitudes and beliefs that often reflect external attribution versus stronger belief in their ability to help themselves.

Client Anticipated Prognosis

Currently, the prognosis for Maya to make significant changes to improve her obesity status and therefore decrease the associated health risks is poor. Simply her level of overweight at the time she begins intervention puts her case in the most difficult change category. She currently lacks a healthy self-concept and positive self-efficacy in making the necessary changes. Her mother and grandmother's style of parenting does not encourage Maya's emotional development and autonomy, which if stronger, would provide her greater "backbone" for making change attempts and for weathering the inevitable set-backs. Her mother did not seem very open to other's views/understanding that their children would continue to grow more autonomous with their eating and activity choices as they got older and that it was therefore necessary to engage and support the child's level of motivation versus strictly dictating parental desires. Maya's mother expressed more rigid parental attitudes of control. This parenting style is also more likely to foster conflict and limit the type of open communication necessary for Maya to have a healthy emotional support system for making difficult changes. Additionally, Maya receives mixed messages about making changes due to inconsistent rules, attitudes and behavioral expectations in different households. Consistent family support and commitment to change is one of the strongest necessary components for reducing childhood obesity. The mother's dialogue about the relationship with Maya's father and grandmother suggested a fairly poor current communication pattern among the adults, and therefore intervention would be necessary to first put all the responsible adults "on the same page."

Maya's mother communicates real fear about her daughter's health but seems to lack the belief that she and her daughter can make the necessary changes and instead communicates a level of helplessness or fatalism that does not suggests a positive prognosis. Lower socioeconomic status may also contribute to a general inhibition to research additional measures that could be taken to support Maya, and likely also restricts resources available to engage other systems such as weight loss camps, gym memberships, etc.

Proposed Treatment Plan Considerations

The following would be suggested treatment plan considerations for addressing Maya's obesity.

 Arranging for consultation and involvement of Maya's other two primary caregivers – her father and grandmother; consider use of face-to-face, written and phone communication tools to enhance the likelihood of building a family "support team" around Maya

- Provide an opportunity for networking with other families in the same situation as a way to give additional support to Maya's caregivers and potentially reduce resistance to "expert" advice by engaging the client within their own community
- Comprehensive educational review with the caregivers regarding nutrition, physical activity and psychological aspects of weight problems and weight change programs; specifically, be prepared to engage the family in the anticipated difficulties and the change factors about which they might be ambivalent
- Development and monitoring of a specific nutritional plan for the family that incorporates their particular circumstances; incorporate cultural aspects of food preparation
- Development and monitoring of a realistic physical fitness regimen that Maya can engage in but importantly be supported and joined by different family members – perhaps moderate walks with her grandmother; biking in her neighborhood a couple of times a week; one to two treadmill workouts on the weekend and goals for inexpensive but non-sedentary family activities she can do with her siblings such as roller skating or bowling.
- Build on previous weight loss success and assist with developing new specific, measurable goals for healthy eating, increases in physical activity and modest weight changes; incorporate ongoing monitoring, feedback and plan adjustments with their treatment coach; communicate and

continuously reinforce long-term lifestyle changes, even if slow, versus quick-fix interventions the results of which are usually short-lived

- Develop periodic consultation and review with Maya's medical providers to also establish and monitor physical health improvements as benchmarks for change
- These treatment plan options would also necessitate attention to educating and assisting the family in advocating for services to support these changes. Initially plans could be developed with the current school program coordinator, and then the family could be provided with referrals likely available within their own health care system i.e. nutritionist, fitness center reimbursement and/or vouchers, etc.

The Case of De'von

Client Characteristics and Background

De'von is a 12 year old African American male. He is in the fifth grade and attends his local neighborhood elementary school. The town where he resides and attends school has a population of nearly 50,000 and is a suburb of a medium-sized city in the Northeast United States. De'von lives with his mother, father and younger sister, who is ten. His mother is a nurse, who typically works a 3-11pm shift several days per week and often one 12-hour weekend shift a couple of times per month. De'von's father has an early start for his food service delivery and catering assignments, and usually leaves the house around 5am, returning most days by 4pm. The family lives in a modest 3-bedroom town home a few miles from the school.

De'von is 5' 2" and weighs 145lbs. He is considered obese as his BMI is in the 95% for height/weight for his age. De'von's mother reported that he has probably been overweight since he was 8 or 9, but weight began to be flagged as a concern in the last couple of years. She says he's begun to "trim down" visibly in the last year or so since he started playing basketball and grew taller. However, she said he has not actually lost much weight.

De'von has asthma and allergies and his pediatrician has mentioned that his weight is likely exacerbating his breathing problems. De'von uses a nebulizer but his allergies, which often peak with the spring pollen, have curtailed some of his outdoor activities. "He'd probably like to play baseball" his mother said if it weren't for his allergies. De'von currently plays pee wee football in the fall and organized basketball in the winter. Additionally, sometimes he "shoots hoops" with his dad in the park after school or on the weekends and rides his bike around the neighborhood with his sister and a cousin who lives nearby. His mom said he plays outside more when the weather is good but plays video games and watches more TV when it's cold. De'von's younger sister is involved in cheerleading and was described by her mom as "medium build - not skinny but not big either." "You let her gain 40 lbs and cheerleading is over…they aren't going to have anybody like my size in junior high school being a cheerleader," her mother said.

De'von's mother is visibly overweight and said with her schedule she eats too much fast food and doesn't cook enough at home. There was no indication that her husband was overweight, although she did say they "could all stand to eat better and exercise." No specific family history of weight-related disease was mentioned, but De'von's mother said she has been diagnosed with "borderline" high blood pressure over the last year, and has been told that losing weight could be important to her management of this condition and possibly help her avoid medication.

De'von is an average student, and math and social studies are his favorite subjects. He speaks confidently and was an active, articulate participant in the group. He was one of the older boys who participated, and his maturity and thoughtfulness in answering questions and providing his opinions was evident. In general, he had a jovial demeanor and did not seem to take himself too seriously. Yet this did not hinder him from responding appropriately to the more serious topics and concerns regarding childhood obesity.

Assessment of Client Difficulties, Strengths and Limitations

De'von indicated that he likes to eat a variety of foods and particularly mentioned fried fish and shellfish, such as shrimp and crabs, as some of his favorites. He said his family frequents buffets and Red Lobster as favorite places to eat out. Additionally, because of his parents' work schedules, the family often eats quickly-prepared convenience foods such as frozen pizza or hot pockets. His mom said she manages to cook only once or twice in a 7-day week. She also said because her husband's job has him going to bed early, the kids are on their own in the house to eat what they want late at night before she returns from work. "How do I know he's not down in that kitchen raiding the refrigerator?" she said. De'von described a lot of snacking and late night eating after he's had dinner, and potentially he may binge-eat at times out of boredom. Sometimes it's unhealthy foods such as the hot pockets, but other times "he'll eat cereal at night, but he'll eat four bowls of cereal," his mother said. She also indicated he has a propensity for salty foods.

De'von's mother agreed with other moms that their children "have ways and means...to get what they want" even when healthier foods or cooked meals are available at home. "He'll go to the corner store and get it" she indicated regarding snack foods, or he'll go to his cousin's house. Although De'von said his mother is the primary influencer over the family's eating, his comments about his own independence were telling: "I would say she has say over what she eats, but with me, if I say I want a sub, I get that." Devon's mother also said she recognizes ways in which her contributions are problematic. "I think it has a lot to do with me. I don't cook that often, so of course he's going to eat unhealthy things because [I'm] gonna buy pizza and Stouffers and stuff like that even if it's at a premium." De'von said his father can cook but mostly just "heats stuff up, orders in Chinese or pizza, or takes us out."

De'von appears to be fairly active. "When the weather is nice, I have to coax him in to eat dinner since he likes to stay outside," his mother said. She then reiterated "it's the late things he eats," indicating eating times of 8 or 9 o'clock were not unusual. However, De'von participates in the "Fit Rules" program usually three times per week, and in talking about the program's purpose he said, "we sweat." He also plays the organized sports of football and basketball, rides his bike after school and plays pick-up basketball with his friends or with his dad. The latter activities, however, admittedly occur with high frequency during the warmer months, but drop off considerably during the cold weather. He also told his parents he was interested in baseball if his allergies got better. De'von describes watching TV, playing on the computer and with video games, and "eating a lot of candy" when he cannot get outside.

De'von and his mother both seem to have healthy concepts of appropriate body types. In referencing images of very slim girls and celebrities, De'von said "you're not supposed to be so skinny; you're supposed to be medium." However, he and his mother both were very clear that obesity levels represented by the celebrity comedienne, Mo'Nique, for example, were not acceptable. "She's big, too big," said De'von, and reacting to the same image in her group discussion, his mother offered "you look sickly when you're that big."

De'von indicated that he likes playing sports and also admires an older cousin who is "real buff, like the pros." He thinks the "Fit Rules" program "helps if you want to get to a certain weight." His mother said he's more self-motivated about exercise because "he wants to do sports...so if it's football season, he works out. My son has asked to play sports." She also said he has other motivations for weight change: "my son, you know...he likes the girls so he feels like he wants to look good and doesn't want to be overweight. You know he's 12 now, so he's to a point where things have to change for him." De'von also talked about peer influence and avoidance of teasing as motivations for kids losing weight: "you wanna be like your friends and you don't want anybody calling you fat. You wanna be able to do flips and stuff and sports like your friends." De'von plays on the school's extracurricular basketball team, and his mother credited the school for providing an encouraging environment for sports and rewarding participation "no matter their weight or athletic talent." She worries that as he moves up to middle school, competition might be emphasized. "Chances are if he doesn't start exercising and practicing more...he might not make the team and it's going to hurt his self-esteem."

De'von and his mother both exhibited an appropriate level of thoughtfulness and insight about the issues contributing to his overweight status. They were able to relate weight issues directly to the types of food and amount of exercise obtained without being defensive or making excuses. They also seem to enjoy a close and supportive family relationship. Both discussed areas of limitation such as De'von admitting that reducing TV watching and video-game playing would be difficult and saying "I can't stop eating candy." His mother thought that she and her husband may need to be more physically active to serve as good role models, and she saw her lack of home-cooking and too many high-fat/nutritionally deficient convenience foods as part of the problem. She also mentioned that her cooking heritage taught her to use a lot of butter and seasonings in her foods, and she probably needs to find healthier ways of preparing meals. While De'von and his family face significant challenges regarding his weight problems, they also enjoy a number of strengths including a cohesive family unit, insight and acceptance of responsibility, and an already good physical activity level for De'von. These areas can be enhanced and used as building blocks to combat the current nutritional intake and some anticipated activity difficulties.

Client Response to Intervention to Date

De'von has been responsive to the physical fitness side of the equation regarding his weight problems. He has engaged enthusiastically in extracurricular sports and seems to enjoy PE, the Fitness Rules sessions, and leisure activity such as bike riding and casually playing basketball. He sees the "sweat" part of the Fit Rules program as helping him to achieve a healthier weight and fitness level. He has indicated a desire to participate in other sports as well, and he wants to be more "buff" while having a realistic concept of a healthy body type. He is not looking to be "skinny."

However, De'von and his family seem to still struggle significantly regarding his eating habits and improved nutritional intake. He has not indicated a real grasp on how/what to eat differently, even though he seems intelligent and insightful. The types of nutritional changes and healthier food options he is being exposed to at school and through the program are not translating to improvements at home. Because De'von seems to have "trimmed down" with his increased activity in sports, his parents may have been lulled into thinking he's "growing out of it." However, beginning with the mom's active participation in the discussion group, more red flags and urgency appear to have been sparked. His mother admitted that De'von has not had any appreciable weight loss, and therefore the lack of control over the nutritional intake is somewhat countering the positive effects of his physical activity involvement.

It also appears that De'von's mother has had the primary involvement in his weight change efforts, although there was no indication that his dad was unsupportive. However, even his mother's involvement has been fairly passive – she has left the majority of the change interventions up to the school program. Through her insightful discussion comments, she indicated a beginning realization that she and the family need to take a more active role in supporting the school efforts and implementing additional interventions on their own.

Client Anticipated Prognosis

The likelihood of De'von making appreciable changes to reduce his obesity level and improve his overall health appears to be fair to good. On the more positive side, he and his mom are insightful and accept personal responsibility. They appear to have a strong family unit that is already involved on a minimal level, i.e., De'von is physically active with both his dad and his sister in leisure activities, and his mom and dad support his formal sports participation as well. While parental work schedules present a challenge, with some help in shaping small interventions, their resources to "cover" and monitor their children's eating and activities are fairly good. Additionally, De'von and his mother both indicated that De'von likes to cook himself; during the explorations of the types of changes he could undertake, this is one of the interventions De'von was interested in. They also both said his father *can* cook but currently does not. This would appear to be another area of increased family engagement, since De'von and his father might be taught to cook simple meals together.

His mother suggested that De'von would like to do other sports and she also chose "going to a gym or activity center" as one of the interventions she thought De'von would respond to. "He's a kid-centered person, so if you tell him he's going to be working out with other kids, he'll go," his mother said. While by no means is the family well off, the mom indicated the family had adequate financial resources to engage some other modest interventions – this might be especially so if they can be shown ways to reduce their food expenditures by cutting out some of the convenience food purchases.

Another factor in De'von's favor toward making changes is a personal motivation to change. He also has a good maturity level, where he can be more cognitively engaged to understand and address his challenging areas – i.e. bingeing or eating out of convenience versus hunger. De'von would like to continue being able to do the things his friends can do, and he also counts enhanced physical attractiveness as a benefit to losing weight. He does not however have an unrealistic expectation or desire for thinness.

Finally, De'von's mother indicated that she also could lose weight and believed that she and her son might be able to do some physical activities together such as taking walks a couple of times a week. She thought this might provide additional impetus for him and that it could also help to improve her health status. Concern about health, including improving De'von's breathing problems can provide a much stronger change incentive than simply cosmetic and imagery desires.

Proposed Treatment Plan Considerations

The following would be suggested treatment plan considerations to address De'von's obesity:

- Arrange consultation with De'von's mother *and* father to provide psychoeducation regarding the necessary change components for weight loss and health improvement, and to impart the importance and clinical evidence for the necessity of family support.
- Be prepared to engage the family in the anticipated difficulties and the change factors about which they might be ambivalent. Discuss ways to allow for occasional special treats such as candy, while finding healthier food options for more everyday snacking i.e. popcorn

- Assess the degree to which De'von might be engaging in significant binge-eating behavior and determine if this is a behavior that he sees modeled by any other family members. It may be necessary to engage De'von specifically in short-term treatment for binge-eating, which could entail self-help guidance with a check-in and trouble-shooting provided by a health professional.
- Develop a realistic nutrition and meal-preparation plan with the family that accounts for their cultural tastes, their schedules and expressed desire by De'von to learn to cook. One of the goals should be to involve De'von's father in preparing one meal a week as well. This also might include developing 4-5 healthy "in-the-can" meals and recipes that the family could enjoy.
- Develop a plan to address the maintenance of De'von's enthusiasm and participation in physical activity. This might include investigation of recreational sports league should future school teams turn competitive and become less of a viable participatory opportunity. Additionally, the family can be assisted to locate some inexpensive gym options, particularly given the strength of the local YMCA organizations in their area and the development of "junior" gym programs that are catered to adolescents. Family physical activities such as roller skating or bowling a couple of times a month should also be encouraged.
- Develop specific, measurable goals for healthy eating, physical activity and modest weight changes; incorporate ongoing monitoring, feedback

and plan adjustments with a treatment coach. Provided that both of De'von's parents can be engaged as more active supports per some of the recommendations above, this could be reasonably accommodated by the Fit Rules coordinator or a nutrition/nurse consultant in a pediatric office.

CHAPTER VI

RESULTS – CASE COMPARISONS

Overall Comparison Framework

As stated previously, the common headings and content areas used to review both of the cases allows for a systematic framework to compare the cases. Summary highlights of each case presentation within the specific section will be presented as well as noteworthy similarities or differences which are relevant in considering potential case outcome.

Client Characteristics and Background

Maya is one of the younger study participants, and this was evident in the developmental level characteristics she portrayed. Maya was less mature than most of the other girls, often seeming uncertain of her opinions and frequently needing redirection to tasks. She was also very self-conscious and seemed to lack self-confidence. It is suggested that the frequent teasing she receives and a controlling parental/caregiver style contribute to some of the more stable personality characteristics as well as to an inhibited interpersonal style of interacting.

Maya was a low birth weight baby, which research has shown, puts some at higher risk for later overweight problems. She has a significant family history of diabetes, a serious health risk associated with obesity. Within her family, her paternal grandmother and half-brother are also overweight. Her mother did not visibly present as overweight, although she did self-disclose a 20 lb weight gain over the last year, which she attributed to overindulgence in "sweets." Maya lives with her mother during the week and typically spends weekends with her paternal grandmother and her two halfsiblings. She sees her father periodically as he works and lives out-of-town. Her mother has a HS degree, works part-time, and indicated some financial constraints, suggestive of a lower socio-economic status.

Maya's weight classifies her as seriously obese since she is in the 97th percentile for BMI. Like the second case of De'von, Maya has asthma, snores and her mother reports heavy, labored breathing, all of which are associated with or exacerbated by obesity.

De'von is a 12 year old male, who is also obese, as he is in the 95th percentile for BMI. In addition to the health problems he shares with Maya, De'von also suffers from allergies, which curtail some of his outdoor activities.

De'von, however, was a thoughtful and mature study participant. He demonstrated a good deal of self-confidence and leadership in the group, and it was evident from his and his mother's discussions that De'von has been allowed to develop a fair degree of autonomy as he gets older.

De'von lives with his mother, father and younger sister in a modest 3 bedroom town-home. His mother is visibly overweight and has been recently diagnosed with borderline high blood pressure, a health risks associated with obesity. No other significant family health risks were disclosed, and De'von's father and younger sister were reported to be of "normal" weight. De'von is active in organized sports as well as leisure physical activities such as bike riding and "shooting hoops" with his dad or neighborhood friends. Both his parents work full time; his mother has professional training as a nurse and indicated greater financial flexibility for her family, which also could accommodate additional formal activities for De'von.

Both children are classified as obese, and already have some related health problems, although Maya is slightly more overweight statistically and considerably so, visually. Maya's medical history and family health history appear to put her at increased risk for obesity and its related health consequences. Additionally, Maya's described living situation, where she spends significant time in two different households, which sometimes have conflicting contexts and expectations around food and physical activity, also could present a greater barrier to change. Maya was more immature and quite selfconscious. Her mother indicated that she exhibits a more authoritarian parenting style and that her physical neighborhood safety concerns also contribute to less autonomy for her daughter. Maya was last involved in organized physical activities several years ago. Finally, her family economic resources appear to be more limited.

De'von has some family history risks with his mother's early high blood pressure and her overweight status. He lives within an "intact" family environment, and his family appears to be close and involved with each other. De'von presented as quite mature and self-confident, and exhibited significantly less "dependency" traits regarding self-care and decision-making. The latter developmental trajectory is actively supported by his mother who indicated that at his age, De'von will need to become more personally invested in changes he would like to make. De'von is quite involved in physical activities both organized and leisure, which has included his father and sister as well. His family economic resources seem adequate to support his activities, and there appeared to be less financial constraint than with Maya's family.

Assessment of the Clients' Difficulties, Strengths and Limitations

Maya and De'von share considerable deficits in healthy food choices and behaviors and overall nutritional intake. Both do a lot of snacking outside of meal times, often with unhealthy choices such as candy, hot pockets and sugary high-calorie juice drinks. They indicated they eat less healthy at food outlets outside the home. Maya seems to frequent fast-food venues but also indicated that even at church, sweet beverages and fried foods are typical. De'von named other types of restaurant outlets where he seems to indulge in high calorie, high sodium and high cholesterol seafood favorites or buffets, where he likely overeats since portions are unlimited.

Maya's food intake difficulties appear to be exacerbated by less oversight and generally less healthy food choices on the weekends when she stays at her grandmother's house. De'von's greater autonomy has a downside when it comes to food choices – he frequents the "corner store" to buy snack foods and is often on his own in the evenings to snack after meals. It also appears that he may occasionally binge eat due to some of the quantities of foods his mother described i.e. four bowls of cereal at a time. Finally, neither child seems to have good nutritional role models. Maya's mom admitted to gaining significant weight indulging in sweets over the last year, and De'von's mother is overweight. She admits to eating too much fast food herself due to her work schedule, and she cooks infrequently, also relying on the convenience foods she buys for the rest of her family.

When it comes to physical activity levels, Maya and De'von have very different profiles. Maya has not been involved in any extracurricular fitness activities in several years – her mother believes this is when considerable weight gain began. Maya also complains about and participates half-heartedly in school gym and the Fitness Rules fitness activities – she is unable to do some of the physical activities the other kids can do and indicated that some activities even cause her physical discomfort. Perhaps due to both a more controlling parental style and more anxiety about neighborhood safety, Maya is not allowed to play outside without her mother. Her mother indicated that they don't get outside very much, and that she herself is not an active person.

De'von on the other hand is quite active in extracurricular sports, playing football and basketball for at least half of the year. Additionally, he is active with leisure fitness such as riding his bike or playing pick-up basketball when the weather is good. De'von likes sports and generally enjoys playing outside, which he does with his sister, a cousin who lives nearby, and oftentimes with his father. His mother is currently the only inactive family member, and her weight and developing health concerns also may provide additional impetus for her to become physically active. De'von's allergies have currently interfered with him playing a spring outdoor sport, but it appears this would be pursued if the medical condition could be managed better. De'von's current formal sports participation has been more participatory and inclusive, and as he gets older and prepares to move to middle school, there is a concern about keeping him involved if school sports teams become more competitive.

There are other resources and barriers for each client in addressing their weight problems. Their views on healthy and admirable body types might suggest how realistic they are in change expectations and desires. Maya and her mother were both more polarized in their views, both showing likeability for thinner body types as well as *less* criticism for the heaviest body types. It could be suggested that there was a longing for a skinny body, but a conditioning to accept bigger body types based on what they were exposed to in their own community and extended family, as well as a potential defensive mechanism against the body type with which Maya was struggling. De'von and his mother notably were both more admiring of "medium" body types, neither thin nor large, but were specifically critical of the largest body types representing the greatest obesity. In this area as in discussions about making changes, these two clients diverged. Maya and her mother seemed to demonstrate less of an understanding in what lead to Maya's obesity and were much less likely to take personal responsibility or demonstrate a sense of efficacy in making changes. De'von and his mother, on the other hand, were nondefensive and frequently made insightful comments about the causes of obesity, where they were falling short in addressing it and what they might be able to do to improve De'von's situation.

Finally, family support systems represent another divergence in the two cases. Maya has a more fractured family system between three significant caregivers. Her mother, father and grandmother are not all in accord with Maya's obesity problem or how to handle it. They also have less financial resources to potentially seek other interventions. De'von appears to have a closer family unit, which is already involved at least on the physical fitness side. Additionally, his mom suggested that improvements in nutrition would be helpful for the entire family - making it more likely that De'von would feel supported and have a family cohort engaged in change versus having him singled out. Their family resources are also apparently sufficient to engage additional interventions such as other fitness activities for De'von.

Both De'von and Maya face challenges in dealing with their obesity problems. As with many children, they both appear to engage in more sedentary activities such as TV watching and video game playing than is recommended. Yet they bring different backgrounds and intrinsic personality characteristics which suggest better resources or more barriers to change. Maya strongly desires change, but exhibits less self-confidence and self-efficacy for change. Her great dependency on her mom, even for a child of her age, also has not fostered a good sense of self that might be important in tackling a difficult challenge and having open communication with her caregivers for the necessary support she will need. De'von has more personal, intrinsic motivation for change based on activities he would like to continue and a modest desire for improvements/ maintenance of physical attractiveness. He also might have stronger ego strength for making changes and weathering the inevitable difficulties and set-backs to be faced with losing weight and becoming more fit.

Client Response to Intervention to Date

Maya has not had success with either making consistent changes in her eating habits and losing weight or getting more physically fit. Her mother reported that she lost 10 lbs. a year ago, seemingly due to an enthusiastic start in the school program and working out on the treadmill her father had bought for her grandmother's house. However change efforts at home were short-lived. There has been no structured involvement by Maya's grandmother and father with the Fitness Rules program, and they

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represent significant family support systems that will need to be part of Maya's treatment program. Maya's mother indicated that she'd begun to read nutrition labels on foods, but in her discussions she still seemed perplexed about the food contribution side of Maya's weight problems. Regarding physical fitness, the response has been negative, both with Maya not participating in any extracurricular activities, only allowed limited leisure time outside and enjoying only cursory involvement in school fitness activities. The seriousness of Maya's overweight status and her mother's health concerns given significant family history risks have not appeared to present sufficient impetus for increased change efforts and a necessary sense of urgency.

De'von and his family have responded positively to produce a fairly good physical fitness regimen for him, with a mixture of formal and informal activities. De'von also exhibited a good understanding of the two areas which contribute to a healthy weight – he knew the "sweating" was necessary for weight loss, and he was able to identify his weakness or triggers with food. However, making significant changes to improve his nutritional intake have been slower in coming. Since De'von has been active in sports and has reportedly "slimmed down" visually, his parents may not have appreciated the continued risks to his health. His mother seemed to demonstrate a heightened concern for De'von's weight issues and consideration of personal and family interventions as the group discussion brought this topic and concern more to her conscious attention.

For both children, their mothers indicated only peripheral knowledge and involvement in the school program's efforts and have not made significant out-of-school interventions to support the school initiatives. In both cases, there is a need for consistent change efforts to be reinforced in all environments, and this has not happened to date.

Client Anticipated Prognosis

Both children are classified in the obese category, placing them at the most difficult starting point for changes – they have the most weight to lose to get them into a healthier state. However, other factors about their cases suggest one might have more barriers to change and the other more positive resources for change.

Maya appears to have a greater uphill battle for making changes to decrease her obesity status and improve her health. While both are in the obese category, Maya's level of obesity is the greater of the two at the 97th% for BMI. She spends significant time with three different caregivers, and none have consistently set good standards for proper nutritional intake or exercise. The caregivers also seem to have at best mediocre communication between them, making it an even greater challenge to bring them together as a support system for the changes Maya will need to make. Additionally, Maya has not made significant progress on either the energy intake or energy expenditure sides of the equation, so she has both of those areas to work on. Since family financial resources seem to be more limited, engaging in additional interventions such as gym memberships and a consistent extracurricular activity may be more difficult. Finally, Maya and her mom currently exhibit less understanding of the factors that created and maintain Maya's obesity and importantly portray more fatalistic attitudes versus grasping their own sense of efficacy to make changes. It would be important to assist in empowering them but empowerment must also occur within the other family sub-system of which Maya is a part.

De'von's weight gain also puts him in the obese category. A number of resources are available to help him become healthier. First, he is already engaged on the energy expenditure side of the equation by fairly regularly engaging in exercise. The support for him to maintain and increase his gains in this area are his strong interests in sports, his leisure enjoyment of spending time outside, and his family's financial resources to keep him engaged in activities. The potential challenge the family must meet is aggressively planning to keep De'von active in the face of potential competitive team pressure. Since research shows that the number of hours of physical activity reduces as children get older, this is a trend they will be fighting against. Two other factors are in De'von's favor for making necessary changes: the personal insight and acceptance of responsibility that both he and his mother exhibited in their discussions; and what appears to be a strong family support system which might be engaged more easily to make family-wide changes. This would be a good resource for keeping De'von on track and making changes more part of a lifestyle versus seeming like a drastic intervention.

Proposed Treatment Plan Considerations

There are many common aspects of the treatment plan considerations for both clients. Consultation and involvement of all of the significant caregivers versus only the mothers is essential. More specific, comprehensive and personalized education about nutrition, exercise and the psychological aspects of weight problems and weight change programs would be a key starting point in engaging the client and their caregivers.

Misconceptions, anticipated difficulties, and areas of ambivalence toward change would be important areas to address. Both will need the development of realistic nutritional and meal preparation plans, that incorporate cultural and lifestyle factors. The same is true for specific fitness regimens that factor in the resources with which they have to work. It is also essential that specific, measurable goals are part of the treatment plans and that a monitoring, feedback and corrective system and resources are put in place.

But their cases also differ in terms of treatment considerations. Maya's case necessitates a potentially tough communication and coordination challenge with engaging the three different caregivers. More limited financial resources also might mean soliciting involvement of other medical and health resources and teaching the family how to advocate for assistance with Maya's obesity as they might with any other health problem. Accordingly, it appears that Maya's case will need more intensive treatment oversight.

In De'von's case, the assessment of the degree and nature of his binge eating will have implications for his treatment plan. If it is not severe, it may be addressed through psychoeducation and other principles of healthy eating. However, if it appears more problematic, then addressing the binge eating behavior might necessitate a different level of trained professional familiar with the additional aspects of this disorder for overweight individuals. Additionally, with greater financial and family support resources as well as the acceptance of more personal responsibility for change, De'von's family might respond to more guided assistance on the additional interventions they can make i.e. cooking more often, teaching De'von to cook, proactively planning for continued recreational sports involvement, etc. versus more prolonged treatment assistance. A treatment "coach" who guides, advises, troubleshoots and provides positive reinforcement to De'von's family may be all that is needed. Yet for Maya and her family, the need for intense treatment appears to be greater. Finally, for both, the obesity problem did not develop overnight and will not likely change quickly – it is important to help the families have a long-term plan so that they can look to evaluate how their changes are becoming part of their lifestyle versus relying on "quick fixes."

CHAPTER VII

DISCUSSION

Even from this small study, it was evident that parents of obese children wanted to engage on the topic of their children's well-being. Appropriately so, those whose children were most obese expressed the greatest health concerns such as diabetes, heart disease and respiratory problems. This somewhat counteracts the prevailing research which suggest that African American and low socioeconomic parents do not express the same concern over the negative implications of obesity. However, since this is a group whose children are already involved in a program, their awareness and attitudes might be at a more heightened level than typical parents whose children are not yet involved in any type of intervention. Having said that, for an intervention group, the parents still displayed a lack of knowledge about key aspects of the "Fit Rules" program and obesity in general. Yet the communal nature of the African American community was everpresent as a strength in the discussions of both the child and mothers' group (i.e. feeding off each other's stories and suggestions, coming up with ways to potentially collaborate with each other, and discussing the role of family and community as support systems). One of the proposed benefits of engendering a "sense of community" behind a population problem is to also foster empowerment of those needing to undertake the change. While it would take much more than one focus group session to develop empowerment in this community, the seedlings of such a movement could be heard as one mother closed the

discussion saying "I think it [this discussion] really makes you think about what is it we can to do to motivate them more...in the community, you could just round up a group of them and say 'come on just do some exercise and see how valuable it can be'." The notion was simplistic yet offered by one of the more engaged mothers, whose thoughts and understanding about her role and efficacy in making changes for her and her child unfolded positively as the 2-hour discussion progressed.

One of the more important experiences in this study proved to be navigating the collaboration with the school from which the participant sample was drawn. The knowledge, respect and trust with the sample pool engendered by the primary stakeholder, a community coordinator from the school, were invaluable. It was truly indicative of the learning from much research about this entry strategy into minority communities. Being an African American researcher seemed valued by the participants, but in and of itself would not likely have garnered a *hearty* response to involvement in the research. This seemed to be further suggested when none of the parent participants via the questionnaire selected the *race of a provider* as an influencer in their seeking services. It indeed seemed more likely from the participants' feedback that basing an intervention in the community (i.e. its location and ease of accessing) would be very important.

Mothers did not mention financial barriers to treatment in the group discussions. However, via the questionnaire, two-thirds of the moms indicated they could only afford to pay "\$10" or "nothing" for weekly treatment if it were necessary, and "cost" was chosen as the most important factor in their likelihood to seek treatment for their child. It was in fact postulated by the researcher after the focus group process that rather than cost and income being inconsequential, instead it appeared that the participants were not as comfortable discussing their personal financial situations. This was anticipated and is one of the reasons why the questionnaire was proposed as an adjunct tool – its purpose was to gather some definitive information that was not likely to be discerned as precisely from group discussion. While the survey had its limitations reviewed previously and in more depth later in the discussion, it suggested some factors involved particularly with treatment seeking and services that are worth confirming through a more validated process.

Additionally, there are many communities across the country with similar ethnic make-ups of both predominantly African American and Latino residents. While having Latinos in the focus groups was generally seamless, language barriers particularly for parents is still evident. It is certainly part of the reason for such an increased need for Spanish-speaking human service professionals. All of these mothers wanted to *understand* better how to help their children. Therefore, anything that might inhibit communication with the target group must be attended to.

Communication style also seemed important. It was evident that the African American mothers wanted engagement. What appeared to be their natural affinity to look to each other as much as to the "expert" needs to be considered. The communal and gregarious style of these African American women, I would suggest, is not at all atypical. In fact, Foreyt (2002) suggests that "current counseling methods with members of minority groups that typically rely on didactic approaches may be less effective than more indirect strategies, such as emphases on storytelling...sharing experiences, and more active learner participation" (pp. 585-586). Appreciating this potential communication style difference and using it within treatment for this population might prove more engaging and ultimately effective.

Fathers were mentioned spontaneously by several of the girls in their group when asked about who influences their eating habits and who expresses concern about the same. This raises the question and opportunity of how to engage fathers around the obesity treatment of their children. In nearly all reported child studies that include parents, fathers as participants are nearly non-existent. Certainly there are a sizeable number of female-headed households within low SES African American communities. Yet where a father is present and/or highly involved in the caregiving of a child, it would be helpful to consider ways to engage this family member in the supportive treatment process.

One prominent aspect of American fatherhood "culture" is the notion of "daddy's little girl." If this aspect of protective nurturance can be tapped, it might provide a communication message entrée to engaging fathers in the treatment of their daughters. Another entrée for both genders of children is to consider the increasing role-sharing and expansion for many fathers in the preparation of household meals. For example, a number of Black professional organizations sponsor male cooking events and challenges in the community (see examples from Real Men Cook home page, http://www.realmencook.com/index.html; 100 Black Men of Chicago mentoring program, http://100bmcmentoring.blogspot.com/2009/05/cooking-class.html; and Charleston Alumnae Chapter of Delta Sigma Theta, http://www.dstcharlestonalumnae .org/2008jan/menwhocook08.htm). While the literature suggests that adding content on parenting skills has not proved additive in family studies (Epstein et al., 2000), the extra burdens that low SES African American families face may warrant attention to this area. Boosting self-efficacy to handle all types of problems with pre- and adolescent children might well be helpful to mothers who consistently felt inadequate at structuring their children's eating habits and activities. The one mom's comment, "they have means and ways to get what they want" was not uttered as a complacent reflection but more as collective exasperation.

It might surprise some that being a part of an obesity intervention did not seem to alter the children's favorite foods. However, it might instead be suggested and helpful to parents to understand that food *preferences* may not change dramatically, particularly in the face of prominent environmental influences like corporate advertising and fast-food outlet placement. Yet choices and actual food repertoires can be broadened sufficiently such that the "bad" foods become less prominent in the diet and are had on a more occasional basis. This is the concept used by Epstein and colleagues (1994) in their *Traffic Light Diet* where foods like French fries, cakes and cookies are categorized as "red foods" – one is meant to *stop* and contemplate how much of these are in the diet, seriously limiting them. But it has been found that severe restriction of certain food types can backfire on parents and instead lead to food craving and over-indulgence vs. teaching moderation (Faith, Scanlon, Birch, Francis & Sherry, 2004; Fisher & Birch, 1999; Fisher & Birch, 2000).

Even though research demonstrates more acceptability of larger body types by African Americans (Kumanyika, 2002), the most overweight children confirmed that teasing is prominent and distressing. "Interference" was also readily evident for the heaviest of kids. Additionally the reports of both children and their parents about school physical activity involvement did not suggest that ways had been found to engage the heaviest of children: "he doesn't play sports...I talk to the instructor...and she says they have a time getting him to run around the court or anything" said one mom. It is worth noting that the body type ideal expressed most often by the children and moms was to be "medium." Several echoed that "being skinny" was not desirable. This is very unlike what a researcher would expect to hear from a European American sample. Yet from the mom's survey responses, there was still a trend towards unrealistic expectations for weight loss and the amount of time necessary to see appreciable and sustainable changes. Therefore any intervention would need to reinforce the positive aspect of the Black cultural appreciation for multiple body types and stress the benefits of moderate change and the role of self-acceptance.

Interest in intervention was high, particularly for a "kid's fitness program" as well as "learning to cook healthier", and kids wanted their parent(s) to be involved with them in any program they undertook to get more fit. This has important implications given the research findings of a high level of inactivity for Black women (King et al., 2000). Social Learning Theory (Bandura,1986) places a premium on the impact of "modeling" as a mechanism of learning and reinforcing new behaviors. Therefore designing interventions that can include healthy changes for the entire family may be effective; however it is likely that parents' desires for health benefits for their children and hopefully avoidance of their own difficulties with weight management (given the high degree of overweight/obesity among Black women) can still be engaged even if change is difficult for the parent. One program's inclusion of an orientation session suggests a positive way forward. It can facilitate the joining process with families around their difficulties, communicate and manage treatment expectations, share evidence of how instrumental parental support can be, and decrease attrition (Germann, Kirschenbaum, & Rich, 2006; Kirschenbaum, Germann, & Rich, 2005).

The diverse presentation of the two client types is helpful in understanding the importance of a thorough clinical and socio-cultural assessment so that the treatment appropriately acknowledges individual strengths and challenges (Sampson, 1993). Yet what is shared are several aspects of African American culture that can be employed in treatment: the orality tradition (Stevenson & Renard, 1993), emphasizing speaking and hearing in communication styles; family values and historical strengths in the role of the Black woman; and the role of social support at the familial, kinship, and spiritual levels (Davis, Clance, & Gailis, 1999).

Finally, this study was not meant to be a program evaluation of the "Fit Rules" initiative. However, there was some directional learning that might be used to enhance the program's effectiveness as well as be explored further in a systematic evaluation. The program seemed to garner positive regard from the children and their mothers. Organizers might want to institute more "fun" into the program with additional interactive elements such as contests for kids who improve their performance on personal benchmarks; use of more guest experts to demonstrate activities; and offering physical activities that might better engage girls (e.g., dance). Additionally it would be important to have a few focused activities to outreach to parents and engage them more (e.g. healthy "soul food" cooking lesson and/or demonstration; and a brief parent newsletter or periodical email "tips").

Limitations of the Study

There are several limitations to this study, which should be considered when reviewing the results, implications and recommendations. The sample size was small, and the focus group participants were self-selected. While this sample did represent an "indicated" treatment group, they were already exposed to a childhood obesity intervention. Additionally, some items of the self-administered questionnaire were completed in a heterogeneous way, and reliability of the instrument had not been established. The survey also used only one individual reported measure to extrapolate socioeconomic status, and height, weight, and age data of the parents was not collected. The qualitative findings were also interpreted primarily by the study author, and researcher bias cannot be ruled out. Therefore, results from this study may not generalize beyond this population of lower SES overweight/obese African American children and their parents.

Implications for Treatment and Future Research

Strengths and challenges to addressing childhood obesity among African American children and their parents were identified. Parents are concerned, particularly when health implications are recognized and illuminated. Yet knowledge and education about how to address the problem and what interventions work is still necessary to impart to parents and children. The notions that young children will just "grow out of it" or that their overweight status represents "baby fat" are still perceptual barriers that cannot be ignored. Programs targeted at elementary age youth such as the "Fit Rules" initiative are very appropriate as are interventions begun earlier through large-scale population-based groups such as Head Start (pre-school children) and WIC, which help to address some of the earliest risk factors associated with pre-natal, gestational, and early infancy time periods. Additionally, social support for making changes has to be addressed or lack of it can be a key barrier if not assessed correctly and made a target of treatment where necessary. For example, with a client like "Maya", a treatment plan must tackle bringing her support system on board. Yet, the communal nature of the African American community can be a considerable asset in the treatment approach and has implications for intervention aspects such as choice of locations and collaborative partners.

Cultural compatibility is key, and an intervention must speak in the language of its audience – the African American community as a whole does not share the European American standard of body image. Yet as Davis and colleagues (1999) suggest,

...approach the client as an important, irreplaceable conveyer of her cultural and community experience and the ways these cultural dimensions may or may not impact her attitudes toward eating, food, and her body and physical self. Respect and utilize her cultural strengths and self-knowledge in guiding treatment goals (p. 33; see also Draguns, 1981 as cited in Davis et al., 1999).

Future interventions and those which I would propose to undertake should use the understanding of best practices as well as what did not work from other programs that have been implemented in the community. While we have much work to do to combat childhood obesity, there is a wealth of knowledge through both large-scale community trials as well as small pilot programs that have documented their successes and their most difficult challenges. Increasingly quite a bit of this work is done with minority communities because they are disproportionately affected by this public health problem.

Yet one of the more important considerations is funding to bring programs and infrastructure to this population. Grants need to be sought for community-based youth health and fitness club initiatives, and health insurance and government funding must be made available for low-income minorities to seek treatment for childhood obesity. Also, harnessing the existing professional resources of a community (e.g. personal trainers, university graduate students and academicians in exercise science, physical education, psychology, physical therapy, nutrition science, etc.) may represent not only true community collaboration but also a more sustainable and cost-effective way to implement programs. Future community-based research could advance this proposition by bringing together multi-disciplinary community groups for a multi-pronged approach – not so much on policy, although important – but on a trial of implementation. Research is also needed to determine the effectiveness of self-help and guided professional help initiatives, training and sustainability in minority communities, particularly targeted at children.

Finally, in both an acknowledgement for the role of community psychology and a professional challenge for me, are the words of one of the founders of community psychology, James G. Kelly (2006, p.59):

[having]...a fondness, a commitment, a love, if you will, of the very community where you live and work; an involvement that engulfs your attention and draws your curiosity to make an adventure out of knowing all there is to know of its heritage, its conflicts, its people, its political forces, and its efforts to launch campaigns for social goods, as well as its failures when the status is quo.

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APPENDIX A

(Identifiable information that appeared in the original forms has been disguised)

PARENT/GUARDIAN CONSENT

Dear Parent:

Summary of Consent

Your child is being asked to take part in a discussion group with 3-5 other children, who are also involved with Fit Rules. As an important lifestyle health initiative, Fit Rules is excited to work on this project with a graduate student researcher, Karla Bailey, from Rutgers University. In the near future, we will also be asking you to participate in parent groups and/or individual interviews.

Program Details

The purpose of the discussion group is to gain a better understanding, from the children's point of view, of child overweight concerns, and how this feedback can help us to assess some aspects of our current school pediatric obesity program. In addition, discussion groups like this are expected to be helpful to the students themselves as they share similar experiences or concerns with a supportive adult and professional discussion leader. The children are expected to by a caring school professional and/or the discussion leader.

The groups will last about 1 ½ hours and take place in the school during the Fit Rules. The groups will be tape recorded so that Ms. Bailey can understand the children's discussion in depth. Your child's participation will also include the school providing height and weight data to the research team. However, the group discussions and all other information collected will be kept strictly confidential. No individual information such as students' names or school names will be identified in any reports. The tapes will be erased after the study has been completed.

Your child will be provided with light refreshments during the group discussion and be given a small token gift for his/her participation.

Participation is voluntary. Your child has the right not to answer a question during the discussion. He/she may also leave the group at any time without any penalty.

If you have any questions or concerns about this discussion group, you may contact Karla Bailey at 732-445-6111, ext. 816 (or her advisor Dr. Daniel B. Fishman at 732-445-2000, ext. 134). For any questions about your child's rights as a research subject, you may contact the Rutgers Office of Research and Sponsored Programs, 3 Rutgers Plaza, New Brunswick, NJ 08901, Tel: 732-932-0150, ext. 2104 or via email at humansubjects@orsp.rutgers.edu.

Sincerely,

Name Community Coordinator

If you agree to have your child participate in this study, please complete and sign the next page and return that form to Name, RN at The Healthy Clinic by <u>Thurs. April 13!</u>

This is your COPY to keep.

PARENT/GUARDIAN CONSENT

Dear Parent:

Summary of Consent

Your child is being asked to take part in a discussion group with 3-5 other children, who are also involved with Fit Rules. As an important lifestyle health initiative, Fit Rules is excited to work on this project with a graduate student researcher, Karla Bailey, from Rutgers University. In the near future, we will also be asking you to participate in parent groups and/or individual interviews.

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Participation is voluntary. Your child has the right not to answer a question during the discussion. He/she may also leave the group at any time without any penalty.

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Sincerely,

Name Community Coordinator

If you agree to have your child participate in this study, please complete and sign below and return this entire form to Name, RN at The Healthy Clinic by <u>Thurs. April 13!</u>

Child's Name:	Age:	Male	Female (circle one)
Parent/Guardian Name:			

Home Phone: Cell (or other) Phone:

Check ($\sqrt{}$) here, indicating you understand the group discussions will be audiotaped

Signature of Parent/Guardian: Date: Date:	
---	--

Signature of Researcher: _____ Date: _____

PARENT INVITATION TO PARTICIPATE!

You are being asked to take part in a discussion group with other parents whose children are also involved with Fit Rules. As an important lifestyle health initiative, Fit Rules is excited to work on this project with a graduate student researcher, Karla Bailey, from Rutgers University.

These groups will provide a better understanding of child overweight concerns and with this feedback, help us to assess some aspects of our current school pediatric obesity program.

You should also find it helpful as parents to share similar experiences or concerns, guided by a professional discussion leader.

The confidential groups will be conducted in English and last about 2 hours.

Light dinner refreshments will be served during the group discussion and you will receive a small token gift for your participation. Babysitting services may also be provided to those who indicate this need in advance.

Participation is voluntary but we really would appreciate your input.

Some of you may also be asked to participate in an individual interview.

Sincerely,

Name Community Coordinator

Your	Feedback	is Rec	uested

Please return this form by	to RN Name at The Healthy Clinic.
Name of child in Fit Rules:	
Parent/Guardian Name:	
Home Phone:	Cell Phone:
Yes, I would be interested in pa	articipating in a group discussion

_____ Yes, I would be willing to do an individual interview, to be scheduled at my convenience

_____ Check here if you think you will need babysitting service during an evening discussion group

(We will contact you to schedule the date/time of your participation)

PARENT PARTICIPATION

CONSENT FORM

Summary of Consent

You are being asked to take part in a discussion group with other parents whose children are also involved with Fit Rules. As an important lifestyle health initiative, Fit Rules is excited to work on this project with a graduate student researcher, Karla Bailey, from Rutgers University.

Program Details

The purpose of the discussion group is to gain a better understanding of child overweight concerns, and how this feedback can help us to assess some aspects of our current school pediatric obesity program. In addition, discussion groups like this are expected to be helpful to you as parents as you share similar experiences or concerns, guided by a professional discussion leader. In the unlikely event you experience any discomfort from the group discussion, you can talk about it with the discussion leader, an advanced trainee in clinical psychology.

The groups will be conducted in English and last about 2 hours. The groups will be tape recorded so that Ms. Bailey can understand the group discussions in depth. You will also be asked to complete a short questionnaire at the end of the group discussion. However, the group discussions and all other information collected will be kept strictly confidential. No individual information such as participant names or school names will be identified in any reports. The tapes will be erased after the study has been completed.

Light dinner refreshments will be served during the group discussion and you will receive a small token gift for your participation. Babysitting services may also be provided to those who indicate this need in advance.

Participation is voluntary. You have the right not to answer a question during the discussion. You may also choose to leave the group at any time without penalty.

If you have any questions or concerns about this discussion group, you may contact Karla Bailey at 732-445-6111, ext. 816 (or her advisor Dr. Daniel B. Fishman at 732-445-2000, ext. 134). For any questions about your child's rights as a research subject, you may contact the Rutgers Office of Research and Sponsored Programs, 3 Rutgers Plaza, New Brunswick, NJ 08901, Tel: 732-932-0150, ext. 2104 or via email at humansubjects@orsp.rutgers.edu.

Sign below if you agree to participate in this research study. You will be given a copy of this consent form to keep.

Check (\checkmark) here, indicating you understand the group discussions will be audiotaped

	Date	_
Signature of Participant		
	Date	
		_

Signature of Researcher

APPENDIX B

Dissertation Working Title – <u>Childhood Obesity: An exploratory study of perceptions</u> and behaviors of African American children and caregivers

Focus (Small) Group Discussion Guide – Children

Key topic areas:

- ✓ Problem recognition of overweight
- ✓ Attitudes toward weight, body types
- ✓ Knowledge of and ability to make corrective changes
- ✓ Accessibility of treatment
- ✓ Applicability of current treatment paradigms
- ✓ Systemic issues such as availability of healthy food choices (neighborhood food stores and outlets; school, etc.) and access to safe/affordable physical activity

Detailed Guide:

Opening script with assent will have been delivered verbally to each child individually prior to entering the focus group room

Re-set the stage as a group by asking the kids if they remember what kinds of things we'll be talking about; provide reminders

Explain process of the group: Well, again I think you'll find it okay to share your thoughts and experiences with other people and hear about them and their opinions too. Remind again about importance that everybody gets to share their side even if it's totally different from what other people think. But it's also okay if it's similar to what others think.

Does anyone have any questions, or anything they don't understand? Is everybody ready to get started?

We will probably take a bathroom break, but if you need one before then, let us know.

You can also get refreshments now, if you haven't done so already, and then again at the break.

Warm-up exercise: (also illustrates we have similarities and we have differences); one of two activities such as "*Favorites*" where kids write on an index card their name in the middle; their favorite TV program; favorite Toy or Hobby; favorite food; favorite color and share with the group; OR "*Vote with your feet*" where kids go to 1 of 2 corners in the room depending on which "choice" describes them best (i.e. Baseball or Football; Orange Juice or Apple Juice; Cereal or Pancakes; Get up early or Like to sleep in)

1) Photos Exercise to explore attitudes and perceptions; media/celebrity influence

(1 or 2 photo exercises from the options below)

I – Everyday people (2 each of (L)arge body type; (M)edium body type; and (S)mall body type and of mixed races

II - Celebrities: (Six will be included in the final selection from ethnic minority personalities such as these listed below)

- (L) Cedric the Entertainer or Anthony Anderson (comedians)
- (L) Raven Symone (teen actress)
- (L) Mo'Nique (comedienne)
- (L) Queen Latifah (entertainer)
- (M) Serena Williams (tennis player)
- (M) Jennifer Lopez (entertainer)
- (M) Jay Z (rapper)
- (S) Amerie, Ciara (singers) or another Latina celebrity
- (S) Alicia Keys (singer)
- (S) Usher (singer)

III - Real Kids/Teens

- Two representing each body type and of mixed races: Large, Medium and Small
- (For all) We're going to use some "feelings" stickers and you can only use one sticker for each person; 2 "smile stickers"; 2 "neutral stickers"; and 2 "sad stickers". Use your stickers based on whether you like the way this person looks?
- (For celebrities only) Some of these people you may know and some you may not. Again use your stickers to tell me what you think about how the person looks to you?
- ➤ Who eats right and exercises?
- > Who are the happiest people here? OR Who has the most fun?
- > Who do you most want to look like (and why?

2) Assess influence of parents, other caregivers, siblings, friends/peers, doctors, teachers/school nurse/counselor on attitudes and behaviors re: weight, body image, eating and physical fitness habits

- Use labeled pictures (potentially) only representing MOM, DAD, GRANDMA (Nana or Ma Ma), SISTER/BROTHER, FRIEND, DOCTOR, TEACHER to serve as prompts for kids to think of these kind of people
- Who buys food/fixes most meals at home or to take to school? (OR "Who has the most say over what you eat?")
- > In your life, who eats right? How about exercise?
- In your life, who weighs the most?
- Does anyone bug you about what you eat? What do they bug you about?
- What about getting exercise does anyone bug you about that? What do they say?
- > Tell me about your favorite foods or the foods you eat the most at home?

3) Assess influence of systems (places): school, neighborhood, church & family gatherings or social events, organizations child involved with i.e. Jack & Jill, Girl Scouts, etc. on attitudes and behaviors re: weight, body image, eating and physical fitness habits

- Are there other places you go or spend a lot of time where you eat food or meals? Which places and what kind of foods? (prompt with list of places above if difficult for participants to come up with responses)
- What kinds of foods do you eat there? Do you think you eat more good foods or bad foods at X (probe top 1 or 2 places mentioned) than at home? What are your favorite places to eat outside of home?
- > Do you get exercise or do a lot of physical activities at any of those places?

4) Assess influence of things: competing activities on attitudes and behaviors re: weight, body image, eating and physical fitness habits

- > What do you do after you get home from school?
- > What do you do most often on the weekends?
- > (If necessary, probe for sedentary and non-sedentary activities)
- Do you have siblings involved in sports or other physical activities? What about most of your friends?
- Some kids in some families would love to do an activity or sport after school or on the weekends, but their parents don't have enough money – has anyone heard of problems like that?
- In some families, they don't have a car or their Mom or Dad works 2 jobs and so the kids can't get to places for after-school or weekend activities or sports – has that happened to anyone you know?

5) The experience of being bigger or heavier than other kids:

- Activity for kids to talk about scenarios i.e. "in gym class"; "in ballet class"; "at the doctor's office getting on the scale"
 - Use two puppets, dolls or pictures of a normal weight child and overweight child
 - Example scenario: Sierra and Jill are both going to ballet class today. Tell me a story about what it will be like for each them (if necessary, prompt with exploratory questions like "what are they thinking about before they go? What's it like when they're in the class? Is it hard or easy for them to learn the steps? Do they have other friends in the class? Are they having a good or bad time in the class? Why?)

6) Assess interference/impairment from being overweight

- Some kids have said that being overweight gets in the way of doing certain activities or how much they enjoy them; do you know anyone who feels this way?
 - OK, this time you can use any sticker you want based on whether you think weight makes a difference when you or other kids do these different things
 - Give instructions for sticker choice; stickers indicate degree of interference i.e. Smile face sticker means WEIGHT DOESN'T MATTER AT ALL; Neutral face sticker means WEIGHT GETS IN THE WAY SOMETIMES; Sad face sticker means WEIGHT GETS IN THE WAY A LOT (choices below on stimulus cards/posters)
 - ✓ Playing with friends
 - ✓ Making new friends
 - \checkmark Eating lunch with other people at school
 - \checkmark Doing gym activities
 - ✓ Playing sports or doing dance lessons

7) Assess attitudes, perceptions toward weight change and distress about being overweight

Distress about being overweight

- So now you can tell me a little about you. Pick a sticker that most represents how you feel about your weight most of the time
- HAPPY (Smile face sticker); JUST OK-NOT HAPPY OR SAD (Neutral face sticker) or SAD/KIND OF DOWN (Sad face sticker)
- > What kinds of things make you feel like this most of the time?

Desire for change

- Some kids I know are okay with their weight or shape staying the way it is, and some really want to lose weight or have a smaller shape
- What do you think are some of the reasons why kids want to lose weight or be smaller? (If necessary, probe for social/peer relations, teasing, health, other)
- What about the kids who don't want to lose weight or get smaller? What are their reasons?
- OK, now tell me about you: who would like to change your weight/shape; and who would be ok with it staying the way it is?

8) Interest, beliefs about, and likelihood of engaging in different types of interventions

> (PRIORITY TOPIC!) "Fit Rules" evaluation exploration

(Other Item #8 topics only if time permitting)

- > If your friends or you wanted to lose weight, what kinds of things might help?
- What do you think about these different things you could do to lose weight and get fit? What would be the HARDEST? The EASIEST? Now, if you could only pick one thing for YOU AND YOUR FAMILY TO DO, what would it be? (Have choices on stimulus cards); on final choice, probe for reasons why
 - o Watch less TV and play on my computer/video games less
 - Go to a kids' activity center/gym in my neighborhood after school or on the weekends
 - Eat healthier food at school like a salad bar, frozen yogurt machine, fruits like bananas, apples, etc.
 - o Get my mom (dad, grandma) to buy and cook healthier food at home
 - o Get my mom (Dad or grandma) to exercise with me
 - Learn how to cook by myself simple foods that are healthier
 - Eat less junk food like cookies, potato chips, candy and soda
- If you wanted to lose weight/get more fit, who would you most want to be involved with you or helping you? Why? (Use stimulus cards/posters for choices below)
 - o Mom
 - o Dad
 - o Grandparent
 - Sister or Brother
 - o Friend
 - o Teacher, counselor, school nurse
 - o Organization leader
 - o Other _____

Dissertation Working Title – <u>Childhood Obesity: An exploratory study of perceptions</u> and behaviors of African American children and caregivers

Focus Group Discussion Guide – Adults

Key topic areas:

- ✓ Problem recognition of overweight
- ✓ Attitudes toward weight, body types
- ✓ Knowledge of and ability to make corrective changes
- ✓ Accessibility of treatment
- ✓ Applicability of current treatment paradigms
- ✓ Systemic issues such as availability of healthy food choices (neighborhood food stores and outlets; school, etc.) and access to safe/affordable physical activity

Detailed Guide:

Setting the stage: We're going to talk today about all kinds of things that have to do with your children's health, weight, nutrition/eating, physical fitness or exercise, and how kids feel about themselves and their bodies. I'm doing research to learn about your kids' experiences, to evaluate aspects of Fit Rules as well as help put together programs where people can get help about issues like those I just mentioned.

Explain process of the group: we want to hear from everybody, and everyone's opinion counts; sometimes there'll be lots of agreement about things; but even if you're the only one who feels a certain way, it's important to know/hear why you might feel different from someone else

Consent/Taping: Each of you has signed a consent form to participate and what you have to say is very important; again, while these sessions are being taped to assist us in the accuracy of writing reports about your collective opinions, no names or other identifying information will be transcribed or used in any documents.

Please help yourself to refreshments if you haven't done so already

Does anyone have any questions, or anything they don't understand? Is everybody ready to get started?

Warm-up exercise: One of two activities such as "*Favorites*" where participants write their favorites on a card without their name on it; cards are mixed up and each participant has to go find have to go find the person who wrote those things by asking people different questions; they'll introduce the person they found out about; OR "*Vote with your feet*" where participants go to 1 of 2 corners in the room depending on which "choice" describes them best (i.e. Baseball or Football; Orange Juice or Apple Juice; Cereal or Pancakes; Get up early or Like to sleep in)

1) Photos Exercise to explore attitudes and perceptions; media/celebrity influence (1 or 2 photo exercise from the options below)

I – Everyday people (2 each of (L)arge body type; (M)edium body type; and (S)mall body type (mix of races)

II - Celebrities: (Six will be included in the final selection from ethnic minority personalities such as these listed below)

- (L) Cedric the Entertainer or Anthony Anderson (comedians)
- (L) Raven Symone (teen actress)
- (L) Monique (comedienne)
- (L) Queen Latifah (entertainer)
- (M) Serena Williams (tennis player)
- (M) Jennifer Lopez (entertainer)
- (M) Jay Z or other (rapper)
- (S) Amerie, Ciara (singers) or another Latina celebrity
- (S) Alicia Keys (singer)
- (S) Usher (singer)
- III Real Kids/Teens
- Two representing each body type and of mixed races: Large, Medium and Small
- (For all) We're going to use some "feelings" stickers and you can only use one sticker for each person; 2 "smile stickers"; 2 "neutral stickers"; and 2 "sad stickers". Use your stickers based on how attractive these people are to you. (*For celebrities only*) Some of these people you may know and some you may not. Again use your stickers to tell me what you think about how the person looks to you?
- Discuss group's choices in each set
- Who are the healthiest people here? Meaning they eat right and exercise. Probe for reasons.
- Who are the happiest people here? OR Who gets the most enjoyment out of life? Probe for reasons.
- > Who would you most want your kids to look like and why?

2) Assess influence of parents, other caregivers, siblings, friends/peers, doctors, teachers/school nurse/counselor on attitudes and behaviors re: weight, body image, eating and physical fitness habits

- Use labeled pictures (potentially) representing MOM, DAD, GRANDMA (Nana or Ma Ma), SISTER/BROTHER, FRIEND, DOCTOR, TEACHER
- Probe for how these different people might influence what your child eats? If necessary, probe for how "influence" is manifested i.e. talking about, demonstrating, controlling activity, etc.
- > Do your children overeat? If so, why? What are the factors?
- ➤ What are your family's favorite foods?
- > Who buys food/fixes most meals at home or to take to school?
- Probe for who influences their child's physical fitness or exercise habits?
- Of these people who might be in your child's life, does anyone have a weight problem?
- From whom do you think your child gets most of his/her opinions and selfconcept of body image? (Mention it can include any of those shown here or any other person(s). How do you know this?

3) Assess influence of systems (places): school, neighborhood, church & family gatherings or social events, organizations child involved with i.e. Jack & Jill, Girl Scouts, etc. on attitudes and behaviors re: weight, body image, eating and physical fitness habits

- Besides the home, where are other places your child spends a lot of time eating food or meals? Which places and what kind of foods? (Ask about the different places/systems above if not mentioned by participants)
- > Of the places you discussed, how healthy is the food they eat there?
- At any of those places you mentioned, do your children get exercise or do a lot of physical activities? (prompt to elaborate if necessary)

4) Assess influence of things: money/income, transportation, competing activities on attitudes and behaviors re: weight, body image, eating and physical fitness habits

- > What do your kids do after they get home from school?
- > What do they do most often on the weekends?
- Are your children involved in organized sports or other physical activities? What about most of their friends or your neighbor's children? Why or why not?
- What factors other than what we've been talking about impact the foods bought/cooked at home? (If not mentioned, probe for competing activities, money, transportation i.e. how does time factor into what gets bought/cooked?; what about money? Does transportation/getting there impact anyone? Selection/quality of food outlets?)

What about other things impacting your child getting exercise/physical activity (if not mentioned, same probes as in previous question as well as "concerns about safety")

5) The experience of being bigger or heavier than other kids:

In your community, what's the experience of being bigger or heavier than other kids like for your child?

6) Assess interference/impairment from being overweight

- For some kids being overweight gets in the way of doing certain activities or how much they enjoy them; what's been your experience?
 - How does it impact these various activities (show stimulus poster)?
 - ✓ Playing with friends
 - ✓ Making new friends
 - ✓ Eating lunch with other people at school
 - \checkmark Doing gym activities
 - ✓ Playing sports or doing dance lessons
 - Now I want you to vote with our smiley faces again; this time you can use any sticker you want based on whether you think weight makes a difference for your child with these various activities
- Give instructions for sticker choice; stickers indicate degree of interference i.e. Smile face sticker means WEIGHT DOESN'T MATTER AT ALL; Neutral face sticker means WEIGHT GETS IN THE WAY SOMETIMES; Sad face sticker means WEIGHT GETS IN THE WAY A LOT

7) Assess distress about being overweight and attitudes/perceptions toward weight change

- Most of the time, does being overweight cause any distress or upset for your child or are they generally ok about being overweight? (If necessary, would you say they're happy, neutral, somewhat sad or very sad about it). Probe for reasons why or why not distress.
- Similarly, how much distress does your child's weight cause you or others you know? For the same reasons, or different reasons?
- How many of you feel your child wants to change his/her weight or shape? What are the main reasons they want to do so? How do you feel about it?
- > What about those of you who feel differently about weight change?

8) Interest, beliefs about, and likelihood of engaging in different types of interventions

> (PRIORITY TOPIC!) Fit Rules evaluation exploration

(Additional #8 topics only if time permitting)

- (If not already covered) What kinds of things would most help you to start buying different foods or cooking differently?
- What about getting more exercise for your kids?
 - In terms of your child losing weight or getting more fit, which of these do you think would be the HARDEST? EASIEST things for your child to do or have occur? (have choices on stimulus cards)
 - Watch less TV and play on my computer/video games less
 - Go to a kids' activity center/gym in my neighborhood after school or on the weekends
 - Eat healthier food at school like a salad bar, frozen yogurt machine, fruits like bananas, apples, etc.
 - Get my mom (dad, grandma) to buy and cook healthier food at home
 - Get my mom (Dad or grandma) to exercise with me
 - o Learn how to cook by myself simple foods that are healthier
 - Eat less junk food like cookies, potato chips, candy and soda
- Now, of those choices if you could only pick one thing for YOU AND YOUR FAMILY TO DO, what would it be? Why?
- Who in the family would be MOST LIKELY to help your child lose weight/get more fit? LEAST LIKELY? (show list on stimulus card)
 - o Mom
 - o Dad
 - o Grandparent
 - Sister or Brother
 - o Friend
 - Teacher, counselor, or school nurse
 - Organization leader
 - Other
- In an ideal world, if you could design a treatment program for helping your kids to lose weight/get more fit, what would it look like? What would be involved? (What would getting help look like?)

9) How empowered do you personally feel to make a difference in your child's weight problem? What else besides what you can do as one person, do you feel could make a big impact on the problem of child overweight in your community?

APPENDIX C

Post Questionnaire - Child Weight Concerns Focus Groups/Interview

1. How worried are you about your child's weight?

Extremely Very Somewhat Not Very Not at all

- 2. Has anyone else expressed concern about your child's weight? Check all that apply:
- _____ Spouse
- _____ Child's Grandparent(s)
- ____ Other Relative(s)
- Pediatrician or other Doctor
- _____ School Nurse/Teacher/Other
- _____ Your child him/herself

3. Please indicate your highest level of education:

- Less than high school
- _____ Some high school, but did not graduate
- High school diploma or GED
- _____ Some college or an associate's (2-year) degree
- _____ College degree (Bachelor's)
- _____ Some graduate degree study or completed graduate degree
- 4. Indicate the likelihood to seek treatment or a program for my child's weight problem if offered by:

	Very Likely	Somewhat Likely	Not at all Likely
Local Hospital	1	2	3
Local University	1	2	3
Local Church	1	2	3
Local Recreation Center	1	2	3
African American or Latino Pr	ovider		
	1	2	3
Other Race Provider	1	2	3

5. List the #1 preferred place/organization to seek weight treatment services for my child/family:

(Please write in)

- 6. How important are the following factors in my likelihood to seek treatment for my child's weight problem? (Rank order 1 to 5 with #1 being "most important" and #5 being "least important")
- How much it cost
- _____ Where it's located/how easy to get to
- _____ Who/What organization offers the services
- _____ How distressing it is to my child
- _____ How much it interferes with my child's life

7. How many weekly sessions do I realistically believe I or another caregiver would attend or bring my child to? List a # of weekly sessions 8. How many weekly sessions do I think it would take before realizing a consistently maintained difference in my child's weight, eating habits or exercise habits? List a # of weekly sessions 9. Which of these factors would be most likely to influence my seeking services for my child's weight problem? (CHECK ONE ONLY) Weight is effecting my child's looks/appearance Weight is effecting my child's physical health Weight is effecting my child's happiness or emotional/psychological health 10. What could I realistically afford to pay per week for treatment of my child's weight problem (assume out-of-pocket cost i.e. if no insurance reimbursement or if there would be a co-pay) \$50 \$25 \$10 Nothing 11. How much weight do I think a person needs to lose to "look better"? 50% of their current weight (i.e. 200 lbs to 100 lbs) 33% of their current weight (i.e. 200 lbs to 134 lbs) 25% of their current weight (i.e. 200 lbs to 150 lbs) 10% of their current weight (i.e. 200 lbs to 180 lbs) 12. How much weight do I think a person needs to lose for a positive effect on his/her physical health? 50% of their current weight (i.e. 200 lbs to 100 lbs) 33% of their current weight (i.e. 200 lbs to 134 lbs) 25% of their current weight (i.e. 200 lbs to 150 lbs) 10% of their current weight (i.e. 200 lbs to 180 lbs) 13. Indicate your ethnicity: Black or African American Latino or Hispanic White or European-American Other (please indicate) 14. How can my community empower itself to make a difference on overweight issues among our children?

(Feel free to use the back of the paper to continue)