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Children's Perceptions of Obesity and Health:

A Focus Group Study With Hispanic Boys

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Abstract

Objective—Hispanic boys are one of the most at-risk groups for the development of obesity, yet few effective interventions have been reported. The objective of this study was to assess Hispanic boys' perceptions of health and obesity to inform future, targeted interventions.

Methods—This is a qualitative and quantitative study of Hispanic boys aged 8 to 12 years in Forsyth County, North Carolina (n = 25). Three focus groups were conducted combined with anthropometrics and measures of body image. Interview guides were developed to elicit children's perceptions of obesity, nutrition, physical activity, and family influences over health behaviors. Focus group comments were recorded and transcribed. Transcripts were coded using a multistage inductive approach, and grounded theory was used to analyze responses.

Results—The following 6 themes emerged: boys had a limited and superficial understanding of health, nutrition, and activity; perceptions of health were based on muscular appearance, frequency of exercise, and media messages; boys had negative perceptions of overweight children and physical performance; family meals were infrequent and unstructured; boys prefer restaurants with fast food, buffets, and entertainment; and neighborhood safety influences activity participation. Boys did not mention parents as influencers of health and habits.

Conclusions—From their findings, the authors have outlined several key areas that will inform clinicians and researchers in the prevention and treatment of obesity in this highly vulnerable population.

Keywords

obesity; Hispanic; Latino; pediatric; health; qualitative; perceptions

Introduction

Pediatric obesity affects 17% of American children aged 2 to 19 years, with 32% being either overweight or obese.¹ National surveys strongly indicate that, among all gender-ethnic groups, Hispanic boys are the most at risk for obesity and obesity-related conditions,^{1–5} with 39% of 2- to 19-year-olds presently overweight or obese.^{1,3} There has also been a stark increase in the prevalence of severe obesity among Mexican American children, 5% of whom are now above the 99th body mass index (BMI) percentile for age and gender.⁶

Stovitz et al² reviewed 3 major national databases demonstrating this trend in Hispanic children, and discusses challenges to effective prevention and treatment interventions, including language barriers, low self-efficacy in perceived control over personal health, and socioeconomic issues limiting access to healthy food and activity opportunities.^{7,8}

Despite the urgent need, few interventions have addressed obesity in Hispanic boys; the review by Stovitz et al² identified no studies focused on prevention or treatment of obesity in young Hispanic males. Specifically tailoring an intervention to Hispanic boys may prove more efficacious than generic, gender- and ethnic-neutral interventions,² as has been shown with Hispanic girls.⁹

Family-based interventions are considered the primary approach to obesity treatment,^{10,11} recognizing the influence of parents, siblings, and the home environment on children's health. Interventions, however, are typically narrow in focus, primarily targeting child health behaviors rather than the family unit.¹² Increasingly, broader approaches to the family have been advocated, recognizing the complexity and interconnectedness of children and their families.^{12–15} In a report from the Task Force on the Family,¹⁶ the American Academy of Pediatrics recognized the strong influence of family function on the physical, emotional, and social health of children. This is particularly pertinent to Hispanic families, as they may have significant stressors because of greater poverty and health disparities¹⁷ that complicate delivery of family-based interventions. There is an immediate need for innovative and informative research in this population.¹⁸

Designing a family-based intervention— even adapting an existing one—is inherently more complex with Hispanic families, since investigators must consider issues such as possible undocumented family members, poverty, multiple jobs of parents, difficulties in transportation, and the need for trained bilingual intervention staff.¹⁹ Thus, it may be prudent to first gather formative data, as we lack models that would guide an intervention.² Qualitative approaches, such as focus groups, allow for comprehensive exploration in a natural setting, providing context and depth to the subject matter.^{20–24} In this population, we surmised that using qualitative methods to assess perspectives of Hispanic boys could provide valuable information with implications for treatment delivery.

Our primary objective was to assess Hispanic boys' perceptions of health and obesity as a foundation for future culturally competent obesity interventions. Through a series of focus groups with Hispanic boys, we explored their unique attitudes and beliefs about obesity, nutrition, and physical activity, while identifying factors that influence their health behaviors and knowledge, with a focus on family influences.

Methods

We employed a quantitative and qualitative research approach via focus groups and limited questionnaire administration with 8- to 12-year-old Hispanic boys. This age range is typically studied in family-based research,^{25,26} as these children are not only still dependent on their families but also exhibit some autonomy over their own health behaviors. Three focus groups were conducted between July and August 2010.

Participants

Participants were recruited via study advertisements distributed to community organizations and churches providing services to Hispanic families in Forsyth County, North Carolina. Inclusion criteria were as follows: both the child and parent had to self-identify as Hispanic, Latino, or Mexican; child bilingual; child must be a male 8 to 12 years old; child willing to assent to participation; and parent willing to consent to child's participation. Parents of

prospective participants contacted the bilingual study coordinator, who provided study information, determined eligibility, and scheduled focus groups for those interested. Parental consent and child assent were obtained. Participants were recruited in conjunction with a parallel study of fathers; however, fathers did not have to participate for the child to participate. Therefore, 9 children participated without their fathers. The study protocols, interview questions, and consent procedures were approved by the Wake Forest University Institutional Review Board.

Study Sites

Consent and assent procedures, data collection, and focus groups were conducted at one time point, in settings that would be comfortable for participants. Two of the 3 focus groups were held at a Spanish-language church where many participants attended services or after-school programming; the third focus group was held at a YWCA.

Interview Guides

A semistructured interview guide was developed by the research team (JAS, MBI, BMB), comprised of 10 open-ended questions with prompts for clarification as necessary (Table 1). Questions were developed based on existing literature, developmental status of the target age group, importance of family in child's health, and the clinical and research experience of the investigators. Question development and testing were based on established guides.²⁷ Prompts were primarily used with the first 2 questions to elicit responses about the boys' parents. Interview guides were reviewed for face validity by physicians, clinicians, and researchers experienced in obesity and health-related fields, and were pilot tested in a small community sample for readability, comprehension, and age-appropriateness. To allow staff to probe for detail and enhance understanding, particularly in regard to their parents, a less structured format was used, as highly structured interviews may be too restrictive and prevent the moderator from establishing rapport with participants.²⁸ This format permits intraparticipant interaction, group discussion, and collective generation of ideas. The open-ended format also allowed new areas of inquiry to emerge.

Focus Groups

Focus groups were conducted by a moderator and co-moderator who had undergone focus group training with the senior investigator (BMB), guided by established methodology.²⁷ Focus groups consisted of 8 to 9 participants and were conducted in English. After providing informed consent, participants and their parents were asked to complete demographic, anthropometric, and survey measures. Fathers then participated in a parallel focus group study; mothers who provided consent waited for their children to complete the focus group but did not participate. Moderators provided a welcome and introduction to participants, explained the study's purpose, and set ground rules for participation. The moderator initiated an ice-breaker activity to increase participant comfort and encourage the group to speak more freely and then proceeded with interview guide questions. Participants were informed of the moderator and co-moderator's interest in learning about the "foods [they] eat, activities [they] like to do ... and how [their] parents affect all of these things." Focus group responses were captured using digital audio recording and field-note reporting forms recorded by the comoderator. Throughout the process, the moderator facilitated discussion to ensure all participants had an opportunity to speak, and made efforts to clarify understanding as necessary. Participants had a 10-minute break after half of the questions had been discussed. After completing all questions, participants were given time to further express their ideas, and the moderator provided a summary of the focus group session. Focus groups were approximately 60 minutes long.

Measures

Height and weight were measured to determine BMI and BMI z-score. Height and weight were measured without shoes and in lightweight clothing 3 times with values averaged. Height was measured using a Seca 213 portable stadiometer (Hamburg, Germany), and weight with a Tanita WB 0110 scale (Tokyo, Japan). Children's perceptions of body image were assessed using the visual and verbal body figure perception scale developed by Collins,²⁹ used widely in research in diverse populations. From the 7 images, children were asked to choose which body image type was most similar to their own, and what their ideal image would be. Children then indicated verbally how they would currently define themselves in terms of underweight, normal weight, or overweight, and whether or not they would ideally like to gain, lose, or stay the same weight. Brief demographic questionnaires were also administered to the child's accompanying parent.

Data Collection

Quantitative data were collected by study staff during the enrollment period and before the focus group was conducted. Following each focus group, the moderator and co-moderator completed a debriefing session to review responses and generate initial themes. The comoderator transcribed each focus group verbatim from audiotapes, using field-note reporting forms to provide references, and recorded all demographic, anthropometric, and survey data in an electronic database.

Analysis

Based on qualitative research recommendations,²⁷ focus groups were sized to include between 4 and 12 participants. Three focus groups were scheduled, with the intention of initiating further recruitment if saturation was not reached by the third focus group. Grounded theory was used as an inductive approach to analysis, which focuses on developing an understanding of a variety of experiences grounded in realistic patterns.³⁰ To minimize bias, 2 investigators (JAS, MBI) completed a multistage inductive interpretative thematic process by separately reviewing all focus group transcripts to create a common coding system. Investigators separately assigned codes to transcripts, which were modified collaboratively as necessary. Themes were developed and interpreted from the coded transcripts; ongoing comparisons and revisions were carried out throughout this iterative process and during analysis. Quantitative data were analyzed in SAS Enterprise Guide version 4 with SAS version 9.1 (Cary, NC).

Results

Three focus groups were conducted, with 8 boys in the first and third groups and 9 boys in the second group (Table 2); saturation was reached by the third focus group. All participants were bilingual and reported they were of Mexican origin. Ten boys (40%) were obese, 2 were overweight (8%), and 13 were normal weight (52%). Using the Collins figure scales,²⁹ all obese participants identified themselves with overweight or obese images and expressed a desire to look thinner. Both boys in the overweight range identified themselves with normal weight images. By verbal report, 6 of the 10 obese boys reported themselves to be thinner than their actual weight status, though 9 of the 10 wanted to lose weight. Perceptions of the normal weight showed no patterns; some perceived themselves as too thin with an interest in gaining weight, whereas others identified themselves to be normal weight and wished to maintain. The groups were too small for further analysis. As recruitment was conducted based on convenience, participants were not stratified for analysis.

Boys tended to answer focus group questions based on stories from their own personal experiences or with friends, teachers, relatives, coaches, or celebrities. Throughout all 3

groups, boys seldom mentioned their parents, despite prompts by the moderator. Most boys had televisions in their room, primarily used for video games as most homes did not have cable television. Board games and video games were repeatedly mentioned as preferred activities. Soccer was the most favorable outdoor game, although the boys typically did not recognize soccer as a form of exercise or physical activity.

Themes

Six themes strongly emerged during analysis (Table 3):

Limited and superficial understanding of health, nutrition, and activity. Children seemed to have a general knowledge that being healthy involves good nutrition but did not appear to know what good nutrition entails beyond fruit and vegetable consumption. In particular, “eat[ing] vegetables” was a standard response that was never expounded on when probed, and boys only mentioned apples and bananas to be “healthy foods.” When asked to describe how they might keep themselves healthy, boys mentioned primarily nutritional factors: eating fruits and vegetables, drinking water, avoiding “junk foods,” and one mentioned “don’t eat much.” The boys also mentioned avoiding restaurants, and limiting certain types of foods when trying to stay healthy, such as candy, pizza, ice cream, sugar, and lasagna.

Boys felt that taking care of your body and staying healthy was linked to absence of disease, fewer medical visits, and decreased need for medications. Dieting was consistently mentioned as a necessary component to good health and more generic concepts, such as “staying strong” and avoiding “getting fat.” To help a child lose weight, the boys indicated a need for exercise, gym memberships, and access to sports. There was consistent mention of more nontraditional activities that the boys had not experienced personally, but linked to wellness: golf, bowling, tennis, yoga, martial arts, kickboxing, and weight lifting. Activities they reportedly engaged in often, such as soccer, were not mentioned.

Perceptions of health are based on muscular appearance, frequency of exercise, and messages obtained through the media. Boys generally identified someone as overweight based on their physical attributes, such as “his stomach,” or their body shape. Most felt that athleticism and physical fitness were important, and having “six-pack abs” was indicative of health. When asked to provide examples of healthy individuals, they primarily listed celebrities or people who they knew with muscular physiques. None mentioned a parent as a role model for health; ideas about physical health were usually based on advertising or on the activity behaviors of a coach, peer, or a relative (uncle, brother). Boys frequently mentioned that individuals who lifted weights, engaged in “exercise every day,” and had “lots of muscles” were role models for their health. One child stated that his teacher was the healthiest person he knew because “she goes to the [gym] a lot,” which exemplifies many comments made about the relationship between good health and gym memberships. There was repeated mention of using advertized commercial weight loss methods as possible outlets to help a child lose weight, such as consuming “protein shakes the commercial says to drink” or using diet pills.

Negative perceptions of overweight individuals and their physical performance. Boys talked about overweight in terms of performance, typically around normal activities: difficulty breathing during activity, fatigue during walking, inability to participate in recess, and indicated that you could tell a boy was overweight based on “how he runs.” Several shared stories from personal experience about overeating behaviors in people they knew, and they did so with negative connotations. Medical risks and consequences of excess weight, such as heart attack, were mentioned. They neither mentioned teasing,

appearance, or social stigmatization nor were they explicitly derogatory about overweight children.

Family meals are infrequent and unstructured. Boys consistently mentioned a lack of meals eaten with their family (family meals). Several said they did not eat an evening meal, but many more noted not eating with their family. Most said they ate by themselves or in a room without their parents, and often while viewing television. For those who did have family meals or ate with a parent, dinner time rules involved eating with their mouth closed, eating what was served, and not eating so much that others would not get any. Restrictive practices were mentioned as well, such as “eat what you are given or don’t eat at all.”

Boys prefer restaurants with fast food, buffets, and entertainment. When asked about places to eat nearby their homes, boys consistently reported fast food, pizza, and Chinese food restaurants. Boys preferred restaurants where they could eat from a buffet, “because they have a lot of food,” as well as restaurants that offered “free” items such as chips and bread before the meal. Boys were particularly fond of restaurants where they could also play arcade games, and where they could reserve a room to have parties with friends. Several, however, mentioned that they may only eat at a restaurant once or twice a year because of family finances.

Neighborhood safety influences participation in physical activity. Overwhelmingly, boys mentioned “the streets” as a place to play, as many did not have yards because they lived in apartments. Several stated that they did not have a safe place to play near their residence and went to a park or friend’s home to play soccer. Most boys felt unsafe in their neighborhoods but did not feel that parents should accompany them when they played, as it would embarrass them. Neighborhood crime, frequent gang activity, and off-leash dogs were common reasons the boys felt unsafe in their neighborhood, which influenced their desire to participate in outdoor physical activities. One boy stated, “I feel not safe [in my neighborhood], because drug dealers, gang bangers, and loose dogs.”

Discussion

From the 6 emergent themes, we identified several areas on which to focus greater attention when developing obesity interventions for Hispanic boys, as well as areas of further inquiry. The boys we interviewed expressed limited understanding and experience with healthy foods. Although they noted playing soccer and other games, they associated gyms, protein drinks, and other media-driven activities as healthy. Limited access to physical activity was noted because of unsafe neighborhoods, and boys primarily mentioned eating fast food or at buffets in their neighborhoods. They did not mention their parents but frequently referenced individuals with muscular bodies and action-oriented celebrities. The role of family, lack of family meals, and the influence of media were unexpected findings and may need further investigation.

The limited and superficial understanding of nutrition evinced in this study speaks to the need for increased education. In addition, health seemed to be linked to rather unrealistic notions about frequent exercise at a gym, having a “six pack,” or being athletic “like Jackie Chan.” Alternatively, the concept of overweight was linked with an inability to run fast, having to sit on the bench during recess, or severe health problems. These perceptions may be related to the concept of machismo and traditional Hispanic values that define the male identity with masculinity, strength, and virility.³¹

Another interesting finding was the link drawn between weight and physical performance rather than long-term health, which is similar to studies in other populations³² where non-health-related concerns, such as teasing, were of more importance. This concept may have implications for motivational interviewing³³ and patient-centered care,³⁴ as the patient's own values and goals must be recognized and leveraged in addressing behavior change. Intuitively, discussing heart disease or diabetes prevention may mean less to an obese boy compared with providing techniques to help him run faster. Also important in designing future interventions is the role of neighborhood safety and its impact on the boys' physical activity. This theme emerged strongly during analysis and should be included in activity-based interventions, as many younger children are encouraged to play outdoors or in local parks. This is not feasible in unsafe neighborhoods; possible interventions should highlight indoor physical activities (exercise videos, dance, weight lifting) or provide safe outlets (gyms, sports leagues, schools).

The most surprising finding from the study involved the intended focus of research: family. In questions pertaining to family, boys appeared to interpret "family" to mean siblings and cousins. Moderators used probes and the freedom of a semistructured interview guide to explore issues of parents, yet the boys did not expound on the subject. With the exception of one boy's comments about his mother's restrictive meal-time rules, there was no discussion about parent-child activities, and parents were never mentioned by the boys even when direct questions about them were posed. Given the influence of media on the boys' perceptions of health, and the cultural concept of *familismo* emphasizing the importance of connectedness in Hispanic families,³⁵ this finding identifies a potential avenue for further study.

Although this small sample of boys did not mention their parents in discussions of healthy and weight, it is likely that their parents play a large role in their health.¹⁶ Not only could parents influence their health in positive ways, such as altering fast food consumption, decreasing use of sedentary activities, and increasing health knowledge, they could also mediate the influence of media on their children and dispel myths portrayed on television. As with any family, increased focus on health within the family could positively influence the child's perceptions of healthy habits. Although family-based interventions have not been extensively studied in Hispanic populations, we have found the approach to be valuable.³⁶ The results of this study could be viewed as an opportunity to study and encourage parents to take a more active role in their child's health habits or identifying a lack of parental influence and a need to focus on alternative means to influence a child's health.

A second area in need of further investigation is the influence of media on the child's perceptions of health. This was not extensively explored, and we could find no significant discussion in the literature regarding Hispanic boys and the influence of media in the United States. We are unsure of its significance or its relation to the lack of family discussion in these focus groups. This is an area where more in-depth study is needed to illicit any potential significance.

There are several limitations of this study. Participants were not recruited as a representative sample of the larger Hispanic population. Responses pertaining to lack of family meals and not mentioning their parents in regards to health, nutrition, and activity may not be representative of other Hispanic children. The overall sample size was small, though it was apparent in the focus groups that we had reached saturation of responses, with many similar answers to questions. The age of the children may also have been a limitation of the study, as they may not have fully understood questions, and responses may have been influenced by others in the group. The semistructured nature of the interview guide and focus group allowed new areas to emerge and provided opportunity to explore topics further, explain

questions in alternative ways, and foster vigorous discussion.²⁸ The focus group setting may have led to a child's response being influenced by others in the room, influencing the final findings. Finally, though all children were fluent in English and spoke it among themselves, the boys reported that Spanish was the primary language spoken in their homes, which may have influenced their responses to focus group questions.

Given how little is known about Hispanic boys' perceptions of obesity and health, our findings could provide greater insight for planning obesity prevention and treatment interventions with Hispanic boys. There are obvious areas for nutrition and activity education, and there appear to be opportunities to engage parents in this process as both mediators of media influence on their children, and as role models and educators about healthy lifestyles. Intervening on neighborhood safety and infrastructure may also be an avenue for increasing participation in activity with positive impacts on quality of life, as environmental barriers are known to influence the health and activity behaviors of the Hispanic population more so than others.³⁷ There are also several areas for further formative investigation, including a broader approach to the boys' perceptions of health, nutrition, and activity to identify leverage points for intervention, as well investigating the influence of media on Hispanic boys. Findings from this study will be combined with similar work in Hispanic adults to better guide family-based interventions in Hispanic families.

Conclusion

Given that obesity is especially problematic in Hispanic populations, this study identified several important areas to consider in designing interventions and for further inquiry. Hispanic boys demonstrated little substantial health knowledge, providing an opportunity for education. Perceptions of health focused on physical performance and not long-term health, which may be useful in goal setting and determining a focus of motivation. Boys recognized their neighborhoods as being unsafe, limiting their access to play and outdoor physical activity. Mothers and fathers were not discussed in regards to health, with their perceptions of health being driven by media, highlighting areas for future study and intervention. Cumulatively, this study has outlined several key areas that will inform clinicians and researchers' work in this highly vulnerable population.

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References

1. Ogden CL, Carroll MD, Kit BK, Flegal KM. Prevalence of obesity and trends in body mass index among US children and adolescents, 1999–2010. *JAMA*. 2012; 307:483–490. [PubMed: 22253364]
2. Stovitz SD, Schwimmer JB, Martinez H, Story MT. Pediatric obesity: the unique issues in Latino-American male youth. *Am J Prev Med*. 2008; 34:153–160. [PubMed: 18201646]
3. Ogden CL, Carroll MD, Curtin LR, Lamb MM, Flegal KM. Prevalence of high body mass index in US children and adolescents, 2007–2008. *JAMA*. 2010; 303:242–249. [PubMed: 20071470]
4. Gordon-Larsen P, Adair LS, Popkin BM. The relationship of ethnicity, socioeconomic factors, and overweight in US adolescents. *Obes Res*. 2003; 11:121–129. [PubMed: 12529494]

5. Gordon-Larsen P, Harris KM, Ward DS, Popkin BM. Acculturation and overweight-related behaviors among Hispanic immigrants to the US: the National Longitudinal Study of Adolescent Health. *Soc Sci Med*. 2003; 57:2023–2034. [PubMed: 14512234]
6. Skelton JA, Cook SR, Auinger P, Klein JD, Barlow SE. Prevalence and trends of severe obesity among US children and adolescents. *Acad Pediatr*. 2009; 9:322–329. [PubMed: 19560993]
7. Flores G, Rabke-Verani J, Pine W, Sabharwal A. The importance of cultural and linguistic issues in the emergency care of children. *Pediatr Emerg Care*. 2002; 18:271–284. [PubMed: 12187133]
8. Hulme PA, Walker SN, Effle KJ, et al. Health-promoting lifestyle behaviors of Spanish-speaking Hispanic adults. *J Transcult Nurs*. 2003; 14:244–254. [PubMed: 12861927]
9. Davis JN, Ventura EE, Alexander KE, et al. Feasibility of a home-based versus classroom-based nutrition intervention to reduce obesity and type 2 diabetes in Latino youth. *Int J Pediatr Obes*. 2007; 2:22–30. [PubMed: 17763007]
10. Barlow SE. Expert committee recommendations regarding the prevention, assessment, and treatment of child and adolescent overweight and obesity: summary report. *Pediatrics*. 2007; 120(suppl 4):S164–S192. [PubMed: 18055651]
11. Spear BA, Barlow SE, Ervin C, et al. Recommendations for treatment of child and adolescent overweight and obesity. *Pediatrics*. 2007; 120(suppl 4):S254–S288. [PubMed: 18055654]
12. Kitzmann KM, Beech BM. Family-based interventions for pediatric obesity: methodological and conceptual challenges from family psychology. *J Fam Psychol*. 2006; 20:175–189. [PubMed: 16756393]
13. Berge JM. A review of familial correlates of child and adolescent obesity: what has the 21st century taught us so far? *Int J Adolesc Med Health*. 2009; 21:457–483. [PubMed: 20306760]
14. Berge JM, Everts JC. Family-based interventions targeting childhood obesity: a meta-analysis. *Child Obes*. 2011; 7:110–121.
15. Kitzman-Ulrich H, Wilson DK, St George SM, Lawman H, Segal M, Fairchild A. The integration of a family systems approach for understanding youth obesity, physical activity, and dietary programs. *Clin Child Fam Psychol Rev*. 2010; 13:231–253. [PubMed: 20689989]
16. American Academy of Pediatrics. Family pediatrics: report of the Task Force on the Family. *Pediatrics*. 2003; 111:1541–1571. [PubMed: 12777595]
17. Narayan KM, Boyle JP, Thompson TJ, Sorensen SW, Williamson DF. Lifetime risk for diabetes mellitus in the United States. *JAMA*. 2003; 290:1884–1890. [PubMed: 14532317]
18. Flores G, Fuentes-Afflick E, Barbot O, et al. The health of Latino children: urgent priorities, unanswered questions, and a research agenda. *JAMA*. 2002; 288:82–90. [PubMed: 12090866]
19. Guzman A, Richardson IM, Gesell S, Barkin SL. Recruitment and retention of Latino children in a lifestyle intervention. *Am J Health Behav*. 2009; 33:581–586. [PubMed: 19296748]
20. Mays N, Pope C. Qualitative research: observational methods in health care settings. *BMJ*. 1995; 311:182–184. [PubMed: 7613435]
21. Mays N, Pope C. Rigour and qualitative research. *BMJ*. 1995; 311:109–112. [PubMed: 7613363]
22. Pope C, Mays N. Reaching the parts other methods cannot reach: an introduction to qualitative methods in health and health services research. *BMJ*. 1995; 311:42–45. [PubMed: 7613329]
23. Berkwits M. In defense of qualitative research: responses to the Poses and Isen perspectives article. *J Gen Intern Med*. 1998; 13:66–67. [PubMed: 9462503]
24. Berkwits M, Inui TS. Making use of qualitative research techniques. *J Gen Intern Med*. 1998; 13:195–199. [PubMed: 9541377]
25. Epstein LH, Paluch RA, Roemmich JN, Beecher MD. Family-based obesity treatment, then and now: twenty-five years of pediatric obesity treatment. *Health Psychol*. 2007; 26:381–391. [PubMed: 17605557]
26. Janicke DM, Sallinen BJ, Perri MG, et al. Comparison of parent-only vs family-based interventions for overweight children in underserved rural settings: outcomes from project STORY. *Arch Pediatr Adolesc Med*. 2008; 162:1119–1125. [PubMed: 19047538]
27. Alasuutari, P. *An Invitation to Social Research*. Sage; London, England: 1998.
28. Morgan, DL.; Krueger, RA. *The Focus Group Kit*. Sage; Thousand Oaks, CA: 1998.

29. Collins M. Body figure perceptions and preferences among preadolescent children. *Int J Eat Disord.* 1991; 10:199–208.
30. Charmaz, K. *Constructing Grounded Theory: A Practical Guide Through Qualitative Analysis.* Sage; Thousand Oaks, CA: 2009.
31. Villarruel AM. Mexican-American cultural meanings, expressions, self-care and dependent-care actions associated with experiences of pain. *Res Nurs Health.* 1995; 18:427–436. [PubMed: 7676076]
32. Halgunseth LC, Ispa JM, Rudy D. Parental control in Latino families: an integrated review of the literature. *Child Dev.* 2006; 77:1282–1297. [PubMed: 16999798]
33. Jain A, Sherman SN, Chamberlin LA, Carter Y, Powers SW, Whitaker RC. Why don't low-income mothers worry about their preschoolers being overweight? *Pediatrics.* 2001; 107:1138–1146. [PubMed: 11331699]
34. Miller, WR.; Rollnick, S. *Motivational Interviewing: Preparing People for Change.* Guilford Press; New York, NY: 2002.
35. Institute of Medicine Committee of Quality of Health Care in America. *Crossing the Quality Chasm: A New Health System for the 21st Century.* National Academies Press; Washington, DC: 2001.
36. Guzman MA, Irby MB, Pulgar C, Skelton JA. Adapting a tertiary-care pediatric weight management clinic to better reach Spanish-speaking families [published online ahead of print September 11, 2011]. *J Immigr Minor Health.* doi:10.1007/s10903-011-9526-x.
37. Duke J, Huhman M, Heitzler C. Physical activity levels among children aged 9–13 years: United States, 2002. *MMWR Morbid Mortal Wkly Rep.* 2003; 52:785–788.

Table 1**Interview Guide**

What does it mean to be healthy? When you hear the word healthy, what comes to mind?
What things do you do to stay healthy?
How do you know when a boy your age is overweight?
What things might boys your age do to lose weight?
If you were asked to help develop a program for boys your age to get healthy, what activities would you suggest?
What kinds of physical activities do you and your family do together?
Many parents have rules about eating. What rules about eating do your parents have?
How would you describe your neighborhood regarding places to eat?
How would you describe your neighborhood regarding places to play?
Describe a person who you think is healthy and physically fit.

Table 2

Boys' Demographics, N = 25

Characteristic	Mean $\pm$ SD (Range)
Age in years	9.52 $\pm$ 1.5 (8–12)
Grade in school	4.16 $\pm$ 1.67 (2–7)
Family/home structure	
Number of adults in home	2.5 $\pm$ 0.66 (1–4)
Number of children in home	3.2 $\pm$ 1.63 (1–8)
Body mass index (BMI)	
BMI in kg/m ²	21.4 $\pm$ 6.2 (15.5–35.3)
BMI z-score	1.02 $\pm$ 1.15 (–0.69 to 2.53)
BMI percentile	72.7 $\pm$ 25.6 (25 to >99)

Table 3

Themes

Theme	Representative Quote(s)
Limited and superficial understanding of health, nutrition, and activity	<p>“[Being healthy means] that you are well and that you don't have to get medicine because you are already healthy. And if you are healthy, you don't have to go to the doctor.”</p> <p>“My brother [is healthy]; he is a model. [To be physically fit] he plays X-Box 360, and he likes to exercise, and uses acne cream and he eats vegetables.”</p> <p>“Don't eat junk food.”</p>
Boy's perceptions of health are based on muscular appearance, frequency of exercise, and messages obtained through the media	<p>“[A healthy person is] someone that I went to the pool with had a six pack.”</p> <p>“My cousin [is healthy]; he has a six pack, and a lot of muscles; he goes to the gym every other day.”</p> <p>“Arnold Schwarzenegger [is healthy] ... he is good, and like buff, and he exercises everyday.”</p> <p>“Jackie Chan [is healthy]; he jumps a lot, he runs around, he exercises.”</p>
Boys have negative perceptions of children who are overweight and their physical performance	<p>“I know this one kid ... he eats a lot and he gets dizzy when he runs.”</p> <p>“When he goes outside for recess, he doesn't play, he just sits on the bench.”</p>
Family meals are infrequent and unstructured	<p>“I don't eat with my parents. I eat in the living room, the dining room, or my Mom's room.”</p>
Boys prefer restaurants with fast food, buffets, and entertainment	<p>“I like CiCi's® pizza because they have a lot of food; and Denny's®, they have a type of bread, too, but more games, and you can also reserve a party and get special stuff.”</p>
Neighborhood safety influences participation in physical activity	<p>“You can get shot.”</p> <p>“At night, robbers go and steal cars; the big dogs are loose during the day.”</p>