October 16 | 2012

Parent Youth and Policymaker Perspectives on the Mississippi Healthy Students Act of 2007: Year 4 Findings

Submitted to:
The Center for Mississippi Health Policy

Prepared by:
Childhood Obesity Research Team*
Family & Children Research Unit
Social Science Research Center
Mississippi State University

Funded by
The Robert Wood Johnson Foundation

*Team Members
Dorris Baggett, M.S.
Troy Blanchard, Ph.D.
Anne Buffington, B.S.
Lisa Long, M.A.
John McCown, M.S.
Colleen McKee, M.S.
Kathleen Ragsdale, Ph.D.
Benjamin Walker, M.S.

Research Students/Assistants
Megan, Bullard, B.S.
Bradley Long
Sarah Rutland

Table of Contents

EXECUTIVE SUMMARY AND KEY FINDINGS

The Mississippi Healthy Students Act of 2007 was enacted by the Mississippi Legislature to address the relationship between student inactivity, student nutrition and obesity. The goal of the Act is to improve the physical activity, nutrition and health education instruction for students in kindergarten through 12th grade. Specifically, the Act mandates 45 minutes per week of health education instruction and 150 minutes per week of physical activity-based instruction in Grades K-8. All students in Grades 9-12 must have a ½ Carnegie Unit in health education and ½ Carnegie Unit in physical education in order to graduate.
The overall purpose of the 2012 report is twofold: 1) provide the fourth year of data from parents and youth, as well as local, district and state level policymakers to assess the implementation status of the Mississippi Healthy Students Act of 2007 and 2) compare findings from Year Four (2012) to Year One (2009)[i], Year Two (2010)[ii], and Year Three (2011)[iii] data.

Key Findings: Parents of Public School Students

From April through mid-August 2012, telephone surveys were completed by 3,702 parents who had at least one child attending Mississippi public schools in the 2011-2012 academic year. Overwhelming parental support for various components of the Mississippi Healthy Students Act of 2007 was evident in the following areas:
Parents (95.9%) continue to be extremely supportive of physical education requirements for all students at school, compared to 96.3% in 2011, 96% in 2010, and 96.6% in 2009

Parents (93.4%) also continued to be strongly supportive of schools offering only healthy foods to children and strongly supportive of schools *increasing* physical education, compared to 92.7% in 2011, 95.2% in 2010, and 95.6% in 2009

An alarmingly high rate of obesity among young children; based on parent-reported height and weight of their children, 40.3% of six year old children fell into the ”obese” category in 2012 and 36.1% of six year olds fell into the obese category in 2011
There was less awareness reported on other key components that promote healthy school environments, such as:
What school vending machines should offer to students; the number of parents who believed only healthy items should be offered to students in vending machines at school, declined from 2009 (50.2%) to 2012 (44.7%). The number of parents who believed both healthy and less healthy snacks and drinks should be offered to students in vending machines, *increased* from 2009 (26.8%) to 2012 (31.5%)

The presence of School Health Committees; of the 3,702 parents responding in 2012, 20.1% stated that their child’s school had a health committee, council or task force, the lowest percentage over all previous years of the report
Within their home environments, parents reported the following:
More families are cutting sodas out of their diet with 25.5% reporting their family did not drink soda on any one day in the past week compared to 20.6% in 2011

An increase in family physical activity level with 50.6% of parents reporting that the physical activity level in their family increased, reflecting a slight increase each year: 46.7% (2009), 46.8% (2010), and 48.3% (2011)

An increase in the number of parents reporting that their family sits down to an evening meal together seven nights a week; increased from 41.3% in 2009 to 45.1% in 2012
When asked about their support of *potential* new school policies, parents reported the following:
Support of schools collecting information on children's height and weight and giving the report to parents (with the majority of parents (80.6%) in 2012 continuing to be supportive)

Availability of public school facilities for individuals within the community to use for physical activity outside of school hours (with 43.7% of parents in 2012 reporting such availability)

Key Findings: Youth

During the same time frame that parents were interviewed (April through August 2012), telephone surveys were completed on 170 youth (age 14 and over) who attend public schools and whose parents gave permission to interview the youth. The sample sizes for this year remain too small to make generalizations; however, the adolescents' answers do give voice to several areas that impact child and youth obesity since data is now available for four years, with a total of 790 adolescents interviewed over the four year period. Adolescents reported:
Health education in school is strong; this finding was the highest of all previous years, with *90% of adolescents surveyed in 2012 reporting that they have learned the importance of healthy eating and physical activity in maintaining a healthy weight*, compared to 88.1% in 2011, 84.6% in 2010, and 88.7% in 2009

Decrease in percentage of youth reporting that they have limits on the amount of time they can watch television, play video games, or use the internet, with 40% reporting limits on TV or Video Games in 2012 compared to 45.7% with limits in 2011 and 42.4% reporting Internet limits in 2012 compared to 44.3% in 2011

Key Findings: State and District Policymakers

In addition to parents and youth, policymakers at the state level and district levels are clearly important to the success of the Mississippi Healthy Students Act of 2007 (MHSA). For these groups of individuals, the primary methodology was a qualitative approach, although there were some questions that resulted in respondents providing quantitative responses. As in previous years of the evaluation of the Healthy Students Act of 2007, researchers in 2012 also employed a mixed-method of interviews (i.e., telephone, face-to-face and electronic responses) with the following groups of policy and decision-makers: Mississippi State Department of Education Board Members, Mississippi State Board of Health Members, Mississippi State Department of Health District Health Officers and some Mississippi legislators. All of these

groups continued to consistently rank the prevention of childhood obesity as a very important issue in Mississippi. While the interview guides were tailored to each group of policymakers to some degree, there was also considerable overlap among many items, in order to make valid comparisons among groups interviewed.

Key Findings: Mississippi State Department of Education Board Members

Of the nine state Board of Education members, six agreed to complete an interview in 2012. Six key themes identified by the six BOE are highlighted below.

Understanding the complexities of preventing childhood obesity:
Members were evenly split between ranking "improving school nutrition" and "increasing health education" as most important, but most respondents agreed that "improving physical education" was next most important. All unanimously agreed that the prevention of childhood obesity is "most important" for the state of Mississippi.

A call for stronger MHSA oversight and evaluation:
Regulations and minimum standards are needed to ensure all school districts adhere to MHSA requirements as well as an evaluation of activities and programs that are working. This would serve to better understand what needs to be replicated or changed.

The need for engaging multiple community sectors:
These include: Local community members, child care centers, churches and civic organizations – in health education and promotion through exercise programs, educational programs, Joint Use Agreements between schools and communities, and county extension offices that serve parents of young children.

A call for strong school-family-community partnerships:
Emphasis was placed on the critical role parents and families play in their children's health and the need to educate parents about the dangers of childhood obesity. Practical actions were suggested such as supporting parents' abilities to offer healthier food at home and educating parents and children to make healthier choices at home as well as in school. Some Members spoke of childhood obesity as an issue that can be solved by a possible cultural shift in the types of food that we Mississippians traditionally value and serve

Competing priorities:
Board of Education members spoke of competing priorities related to childhood obesity at the state-level, school district-level, and among local schools. Members shared suggestions for new and creative ways to heighten awareness of the importance of childhood obesity prevention, such as launching a media blitz and prevention of childhood obesity campaign, similar to the anti-smoking campaigns of recent years. Responses in 2012 reflected a keen sense of urgency among BOE members that coordinated and sustained public health initiatives are needed to heighten awareness of the serious short-and long-term consequences of the childhood obesity epidemic in the state and the nation.

Key Findings: Mississippi State Department of Health Board Members

In 2012, seven of the 11 Board of Health (BOH) members were interviewed to collect their insights and perspectives on issues related to implementing the Mississippi Healthy Students Act of 2007. Of these seven respondents, members reported 5 key themes:

Importance of all three components of MHSA:
"Increasing health education" is the most important component of MHSA, but improving physical education and school nutrition is also integral to childhood obesity prevention efforts in the state. BOH members called for changes in school nutrition to ensure that calorie-dense foods with low nutrition value (i.e., junk foods) are removed from school cafeterias and school vending machines and replaced by more vegetables, lean meats, fresh fruit and other healthy foods.

A need for stronger leadership and clearer direction:
Stronger leadership and direction is needed to ensure that MHSA is carried out effectively. Also, understanding is needed on the part of those working for and with children (including parents), regarding their respective roles in fighting childhood obesity. Finally, the need for improved collaboration between agencies such as the Department of Health and Department of Education was highlighted.

A need for mandated time for physical education (members' recommendations ranged from 20 minutes to at least one class period, every day)

A call by all seven BOH members for local funds to be used for the purpose of providing children access to places to run and play after school hours (this was in contrast to Year Three results)

Early intervention:
BOH members suggested a strong need to start as early as possible with efforts to prevent childhood obesity. BOH members advocated for helping young children make healthy food choices and understand the importance of exercise, so that they will develop healthy habits to last a lifetime

Key Findings: Mississippi State Department of Health District Health Officers

Six District Health Officers (DHOs) oversee the public health programs in Mississippi's nine public health districts, and all six DHOs were interviewed in the Year Four evaluation of the MHSA. Although not a key finding, one noteworthy response called for a *stronger and more meaningful role for children in implementing MHSA activities* and initiatives, rather than leaving MHSA-implementation activities solely in the hands of school staff and administrators. The DHO who offered this suggestion gave the innovative example of putting menu planning in the hands of children by giving students a list of nutritious foods and the required dietary nutrients per

meal, and then guiding them in developing their own menus that meet dietary guidelines. Other highlights from the responses from the six DHOs interviewed in 2012 included:

Critical role of parents and families in fighting childhood obesity:
Recognizing parents and families as being critical participants in fighting childhood obesity and training parents on what and how to cook nutritious foods to ensure children are eating healthy outside of school settings. Also, conducting research on whether children's health education knowledge is being shared at home and if healthier menu options at school are influencing meals at home and resulting in healthier food choices outside of school settings

Mention of the ripple effect of MHSA in influencing services outside of public schools, such as WIC (Women, Infants, and Children) and the healthier food offered in WIC meal packages

Joint Use Agreements:
DHOs discussed the popularity of Joint Use Agreements between many Mississippi communities and schools that allow community members to play and exercise on school playgrounds and outdoor tracks after school hours

Energizing the public:
A call for broader public involvement and support, and a discussion of the importance of buy-in from educators, the Department of Education, and all school districts, along with the need for state wide shifts in eating norms in Mississippi (one DHO pointed out that many children eat their first two meals of the day at school—five days a week—and offering more nutritious food options to children could instill lifelong habits of healthy eating that carry over from childhood to adulthood)

"Improving school nutrition" rated as the most important MHSA component

Report of limited involvement in assisting schools with their coordinated school health programs and call for opportunities for district- and local-level health staff to support schools in their quest to effectively meet MHSA requirements

Key Findings: State Legislators

All of the 12 legislators (six senators and six representatives) contacted in 2012 agreed to complete an interview for the Year Four evaluation of the Mississippi Healthy Students Act of 2007 (MHSA). Twelve different legislators were interviewed in 2012, compared to previous years, in order to glean new perspectives and opinions on the MHSA. Some of the themes that emerged are:

Recognizing the issue of childhood obesity:
Legislators' reported that everyone generally understands that Mississippi has a serious childhood obesity issue and that MHSA is an important tool in the prevention of childhood obesity. They also reported favorable reactions to the MHSA among constituents, increased

activity in their districts related to the prevention of childhood obesity (such as healthier meals, increased physical education, and positive changes in the types of food available in schools). Also noted was confusion over MHSA (with complaints about having to make changes without corresponding additional funds for new programming, low-prioritization and non-compliance with the MHSA, or no conversations at all about the MHSA).

Disagreement about the best path to take in order to address childhood obesity:
Some respondents were wary of dictating health-related lifestyle changes that they felt should be left up to individual choice, and for which individual's should take responsibility.

The positive example *many legislators have tried to set for their constituents through participation in the "Paul Lacoste Sports Fit 4 Change Fitness Challenge"*

Are we doing everything possible?
Legislators provided mixed responses on whether Mississippi has done enough to strengthen the school policies on nutrition, health education and physical education. However, legislators gave a number of interesting ideas for policies to annually track the status of childhood obesity in Mississippi as well as lead to better outreach and more creative, out-of-the-box thinking to address Mississippi's childhood obesity issue. Legislators offered policy ideas to reach children *outside* of the school setting, such as initiatives to raise community awareness in venues where children and families gather (such as churches), more positive reinforcement of health messages learned at school carrying over to afterschool programs, detailed information for parents about nutrition and physical activity within daycares and afterschool programs, and initiatives to implement health education services targeting parents-to-be early in pregnancy.

Concern with Mississippi's status as the most obese state in the nation and recognition that childhood obesity is a difficult problem

Key Findings: District Superintendents of Education

Telephone surveys were conducted with school superintendents in June 2012 with a response rate of 72%. Key findings included the following:

Support remains strong for MHSA:
Communities were either "very supportive" or "somewhat supportive" of promoting physical education, nutrition and health education in their schools (school superintendents reported in 2012 (94.3%) that their communities were either "very supportive" or "somewhat supportive", compared to 92% in 2011, 83.7% in 2010 and 90% in 2009).

Implementation of MHSA lags behind:
A decrease in the number of superintendents reporting their districts had fully implemented the MHSA; only 14.3% of superintendents reported their districts at 100% implementation in 2012; this was a decrease from the number of superintendents reporting their districts had fully

implemented the Act in 2010 (15.4%) and 2011 (16%). The percentages for districts that had implemented at least 75% of the Act were higher, with superintendents reporting 59% in 2012, compared to 52% in 2011 and 43.3% in 2010

Policies concerning junk foods continue vary across settings:
A decrease in the percentage of superintendents who reported adopting a policy to prohibit schools from offering junk foods at student parties; after-school or extended day programs; at staff meetings; at meetings attended by families; in vending machines; and at concession stands (compared to 2009); most superintendents in 2012 reported that junk foods are prohibited in school stores, canteens or snack bars (70.5%) and in vending machines (80.0%), while most superintendents reported having "no policy" around offering junk foods at staff meetings (73.3%), at meetings attended by families (63.8%) and at concession stands (74.3%).

Continued support for the prevention of childhood obesity:
Among school superintendents in 2012, perceived importance of preventing childhood obesity for the state of Mississippi has remained relatively constant over the past 4 years. In 2012, a majority of superintendents (78.1%) ranked the prevention of childhood obesity as "most important" for the state of Mississippi. This proportion is similar to 2009 (79.1%) and 2010 (78.8%). There was a slight decrease in 2011 (68%), but rebounded in 2012, as noted above.

Support for the collection of children's height and weight for BMI has fluctuated:
A decrease in the percentage of superintendents who are in favor of collecting children's height and weight to determine children's Body Mass Index (BMI); 72.4% of superintendents said "yes" in 2012 compared to 82.0% of superintendents in 2011 who said they were in favor of collecting children's BMI. Of these superintendents who were in favor of collecting children's BMI, 100% were in favor of sending the children's BMI information to children's parents

Key Findings: Local School Board Members

Paper surveys were administered to school board members in 2012, with a 32.8% response rate. Key findings included the following:

School board members reported in 2012 (68.4%) that their communities were either "very supportive" or "somewhat supportive" of promoting physical education, nutrition and health education in their schools, compared to 67.2% in 2011, 72.9% in 2010 and 80% in 2009.

Low levels of full implementation of MSHA:
Among school board members, 22.5% reported full implementation of the Act in 2012, compared with 21.7% in 2011 and 24.1% in 2010. The percentage of school board members reporting their districts had full implementation of the Act in 2012 remained higher than the percentages recorded by the superintendents in the same years. However, again in 2012, school board members indicated lower percentages of districts reporting 75% implementation with 27.5% in 2012, 30.4% in 2011, and 28.6% in 2010.

A decrease (compared to 2009) in the percentage of school board members who reported adopting a policy to prohibit schools from offering junk foods across all school settings except for one. The one school setting which showed a slight increase in 2012 (69.2%) compared to 2009 (64.0%) in the percentage of school board members reporting a policy prohibiting junk food, was school vending machines. Similar to superintendents' results in 2012, most school board members reported that junk foods are prohibited in school stores, canteens or snack bars (58.6%) and in vending machines (69.2%), while most school board members reported having "no policy" around offering junk foods at staff meetings (55.4%), at meetings attended by families (51.1%) and at concession stands (55.0%)

Lack of knowledge about School Health Councils:
Only 37.3% of school board members said each school in their district has a school health council. Many school board members (37.7%) answered with "don't know/not sure".

Steady support for collecting and sending data on BMI:
When asked if they were in favor of collecting children's height and weight to determine children's Body Mass Index (BMI), more than 50% (66.3%) of school board members answered affirmatively. When asked if they were in favor of sending children's BMI information to children's parents, 79.4% of school board members said "yes". Compared to 2009, this reflected an increase in the percentage of school board members answering affirmatively when 73.6% of school board members answered that they were in favor of sending BMI information to children's parents.

Summary of Key Findings

As in previous years, there continues to be a strong awareness among parents, youth, and policy makers regarding the importance of childhood obesity in Mississippi. More than 95% of parents think that physical education should be required for *all* students, and more than 93% of parents support state laws which require schools to offer only healthy foods to children and to increase physical education in schools. Half (50.6%) of the parents interviewed in 2012 reported an increase in the physical activity level in their families.

Health council awareness:
Among parents, school board members and school superintendents, there continues to be a wide range of awareness of a school health council within their districts, from a low of 20.1% awareness by parents, to 37.3% awareness by school board members, and a high of 81% awareness by superintendents. Possibly in response to the sense of confusion or uncertainty around various requirements of the MHSA such as School Health Councils, Board of Education members called for stronger MHSA oversight and evaluation as well as regulations and minimum standards to ensure all school districts adhere to MHSA requirements. One District Health Officer elaborated on the physical education requirement in schools by stating that in addition to mandatory physical education, programs should also be designed to actively involve each child, not just students who are already school athletes or otherwise athletically inclined. Members also suggested evaluating activities and programs that are working in order to better

understand what needs to be replicated or changed to improve the health of Mississippi children.

Including the public:
In 2012 there was a call for a strong and meaningful role for the broader public, especially families and children, in implementing MHSA activities and initiatives, rather than leaving MHSA-implementation activities solely in the hands of school staff and administrators. The theme of starting as early as possible with efforts to prevent childhood obesity was carried over from previous years with respondents advocating to help young children make healthy food choices and better understand the importance of exercise, thereby developing healthy habits to last a lifetime.

Overall, there continues to be strong support for the ongoing implementation of the Healthy Students Act of 2007 and, as in previous years, the importance of engaging multiple community sectors was emphasized. Respondents called for including county extension offices, child care centers, churches and civic organizations in Health Education and promotion through exercise programs, educational programs, and Joint Use Agreements between schools and communities.

INTRODUCTION AND BACKGROUND

Continuing Importance of the Study: Childhood/Adult Obesity Rates

With each year of the evaluation of the Mississippi Healthy Students Act of 2007, evidence continues to mount on the dangers of childhood obesity, and the urgency with which we must support obesity prevention efforts through measures such as the MHSA. A 2012 report, *F as in Fat: How Obesity Threatens America's Future*[iv] states that Mississippi had a 44.4% obesity rate among children ages 10-17 in 2007, and in 2010, 13.7% of low-income children ages 2-5 were obese. The report states that in 2011 15.8% of high school students were obese, and 16.5% were overweight. *F as in Fat* warns that adult obesity rates could exceed 60% in 13 states by the year 2030. Unless the State of Mississippi reduces its average BMI by 5%, the report estimates we may spend $6.1 billion by 2030 on obesity-related diseases such as diabetes; coronary heart disease and strokes; hypertension; arthritis; and obesity-related cancer. If we continue on our current trajectory, by 2030 the obesity rate for Mississippi could be a high of 66.7%!
The State of Mississippi welcomed news in 2011 from the Child and Youth Prevalence of Obesity Surveys (CAYPOS)[v] which indicated that the prevalence of overweight and obesity among public school students in Mississippi no longer appears to be increasing. The 2011 survey found that the combined prevalence of overweight and obese students in grades K – 12 was 40.9%, compared to 42.4% in 2009. It also reported significant decreases in the overweight and obesity rates of white students and elementary school students.
Another positive step forward occurred on July 1, 2012 with the passage of the Mississippi Legislature's *House Bill 540*[vi]. This bill authorizes shared use agreements between schools and communities for public recreation and sports so that local school boards may allow school property or facilities to be used by the public during nonschool hours without being held liable

for claims resulting from a loss or injury arising from the use of said school property. In September 2012, the Mississippi State Department of Health and the state Office of Healthy Schools issued a letter and "Best Practices Tool Kit for Shared Use Agreements in Mississippi"[vii] to school superintendents to facilitate an increase in the number and variety of available spaces where children can play in their communities each day.

The environment and influences children encounter each day will shape their choices and actions today as well as into the future as they develop habits which may last a lifetime. The importance of educating children and families about the need for healthy living, and tracking the effect obesity prevention efforts are having on our children cannot be overstated. We may decrease the dire future of a state where more than half of our residents are obese by supporting communities to understand and follow the requirements of the MHSA, and by closely examining and learning from obesity prevention efforts that work for sharing and replicating widely throughout the state.

Overview of Evaluation: Year Four Findings, Comparison of Years 1, 2 and 3 Findings

The fourth year of the evaluation (2012) provided researchers with four distinct data points (2009, 2010, 2011, and 2012) findings, since the implementation of the Healthy Students Act of 2007 legislation. Over the last four years, a total of 14,808 parents and 790 adolescents have been interviewed as well as many local, district and state level policymakers. While differences among the four years will be reported, there will be a focus upon differences that are statistically significant, as well as changes that whether statistically significant or not, are notable changes. The Year Four report focuses on comparisons between Year Three and Year Four, but also differences between Year One and Year Four.

Social Climate Approach

As in Years 1, 2 and 3, the Social Science Research Center (SSRC) research team utilized a social climate approach in assessing parents, adolescents and policymakers' knowledge, beliefs and practices on a particular topic. A social climate approach considers one particular topic and measures how the knowledge, attitudes and beliefs of an array of individuals and institutions, separately and collectively over time, influence the norms of a society that are related to that topic. The evaluation of school-related policies of the Mississippi Healthy Students Act of 2007 and associated rules and regulations lend itself to using a social climate approach. In order to examine the social climate of childhood obesity and school-related policies, the SSRC utilized a variety of methods to gauge social norms among the following groups: 1) parents of public school children and adolescents attending public schools and 2) local and state-level decision-makers, including the following: State Legislators, State Board of Health and State Board of Education members, Superintendents, School Board members, and District Health Officers.

PARENTS AND ADOLESCENTS

Goals of the Parent Surveys

As in previous years, the 2012 parent survey was conducted to evaluate parental attitudes and changes in family environments and in children's health behaviors during the evaluation period. The overall purpose of the parent survey was to determine changes between 2010, 2011 and 2012, and to compare the 2012 results to the baseline findings of 2009. The comparisons determine changes and potential trends related to parental beliefs about school health policies, family knowledge, attitudes, practices and constraints on children's health and health behaviors, with special attention on variables influencing children and adolescents' weight. In Year Four, the research team sought to determine parental knowledge of and attitudes toward the Mississippi Healthy Students Act of 2007.

Similar to previous years, it was important to understand the attitudes, practices and constraints within family environments around healthy eating and exercise. This understanding was critical in knowing a) how receptive the parents/families may be toward school health policies, and in turn, how these families may influence the enforcement of local school policies and b) to what extent any emerging change (or lack thereof) in children's practices may be attributed, in part, to family factors. By documenting nutrition and physical activity patterns in the home environment, correlations of changes in children's health can be more easily identified (e.g., it can be determined if changes, or a lack thereof, are likely due to nutrition and/or physical activity patterns, and to what degree any alterations occurred at school versus at home environment).

In order to make comparisons across the nine (9) Mississippi public health districts, a sample of 400 respondents per district was needed. The sample for Year Four consisted of 3,702 respondents, similar in size to Year One (3,710 respondents), Year Two (3,755 respondents) and Year Three (3,641 respondents).

Goals of the Adolescent Surveys

The goals of the 2012 adolescent survey were consistent with those of previous years. Understanding the attitudes, practices and constraints within the youths' familial environments from the youths' perspective around healthy eating and exercise was critical in understanding similarities and/or differences that exist between parental reporting and youth reporting of factors influencing youth overweight and obesity, while also making comparisons among all four (4) years.

Methodology

Please note: In each of the following sections, all methodologies were approved by Mississippi State University's Institutional Review Board for Human Subjects prior to the data collection, and each member of the Research Team was trained in Human Subjects protection.

Telephone Survey of Parents and Children

Surveys were conducted by the Wolfgang Frese Survey Research Laboratory of the Social Science Research Center at Mississippi State University. The Mississippi Department of Education provided the telephone numbers of all parents in the state of Mississippi who had at least one child enrolled in public school during the 2011-2012 school year. From this database of 493,660 telephone numbers, a random sample of 50,000 numbers was drawn. The data collection period spanned from early April, 2012 to mid-August, 2012. The total number of completed interviews with parents was 3,702.

As in previous years, adolescents surveyed in Year Four were 14 years of age or older, and a parent had given permission for the survey to be conducted. In 2012, a total of 170 adolescents answered questions about nutrition standards and vending machines, physical education and physical activity, and health education and health knowledge, compared to 210 adolescents in 2011, 260 adolescents in 2010, and 150 adolescents in 2009. The sampling error for the total dataset (binomial response option with 50/50 split) is no larger than + or – 3.5% with a 95% confidence interval. Telephone numbers were dialed a maximum of eight times. There was a cooperation rate of 65.8%.

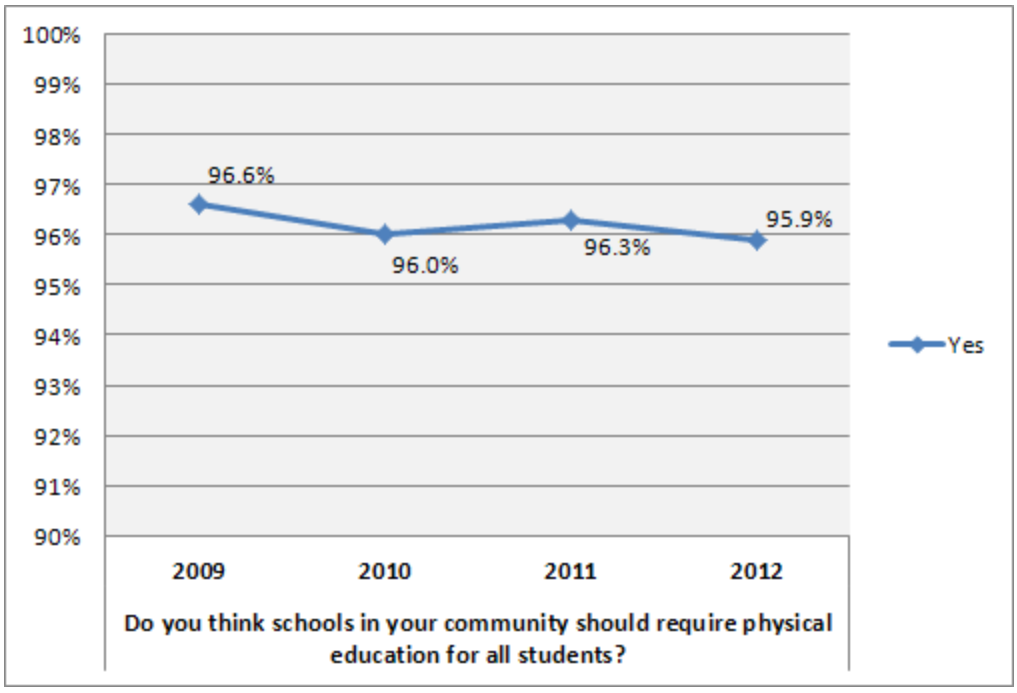
Findings

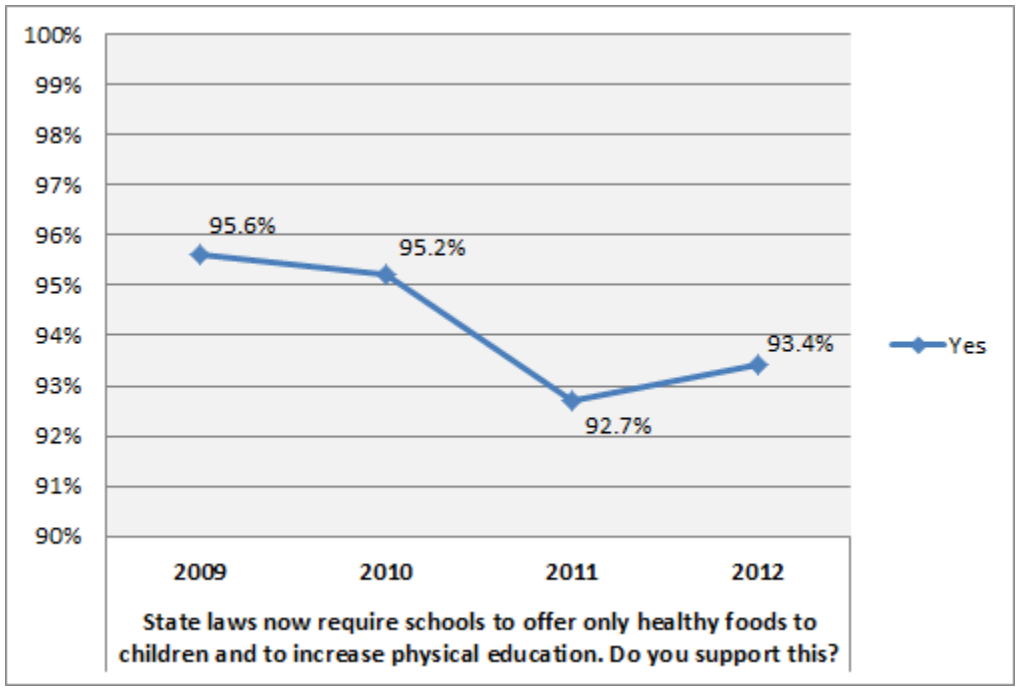
Parental Support of Healthy Students Act of 2007

Of the 3,702 adults who completed the survey in 2012, there was a general awareness and support of school polices related to decreasing childhood obesity.

Parents (95.9%) continued to be supportive of schools requiring physical education for all students, compared to 96.3% in 2011, 96% in 2010, and 96.6% in 2009. Parents (93.4%) also continued to be strongly supportive of schools offering only healthy foods to children and strongly supportive of schools *increasing* physical education, compared to 92.7% in 2011, 95.2% in 2010, and 95.6% in 2009.

Figure 1



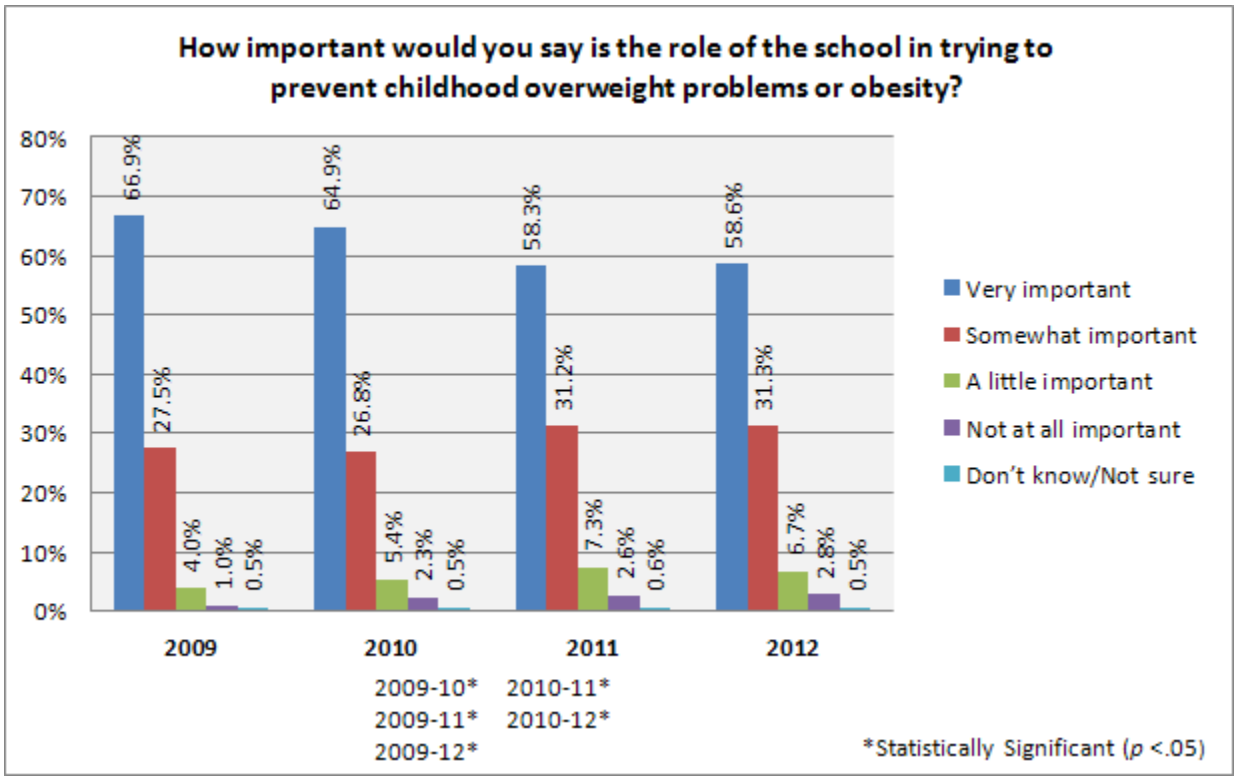


How important is the Role of the School in Preventing Childhood Obesity?

When asked how important they thought the role of the school is in trying to prevent childhood overweight problems or obesity, 58.6% of parents answered with “very important” and 31.3%

answered “somewhat important”. More parents in 2009 (66.9%) thought schools played a “very important” role in childhood obesity prevention.

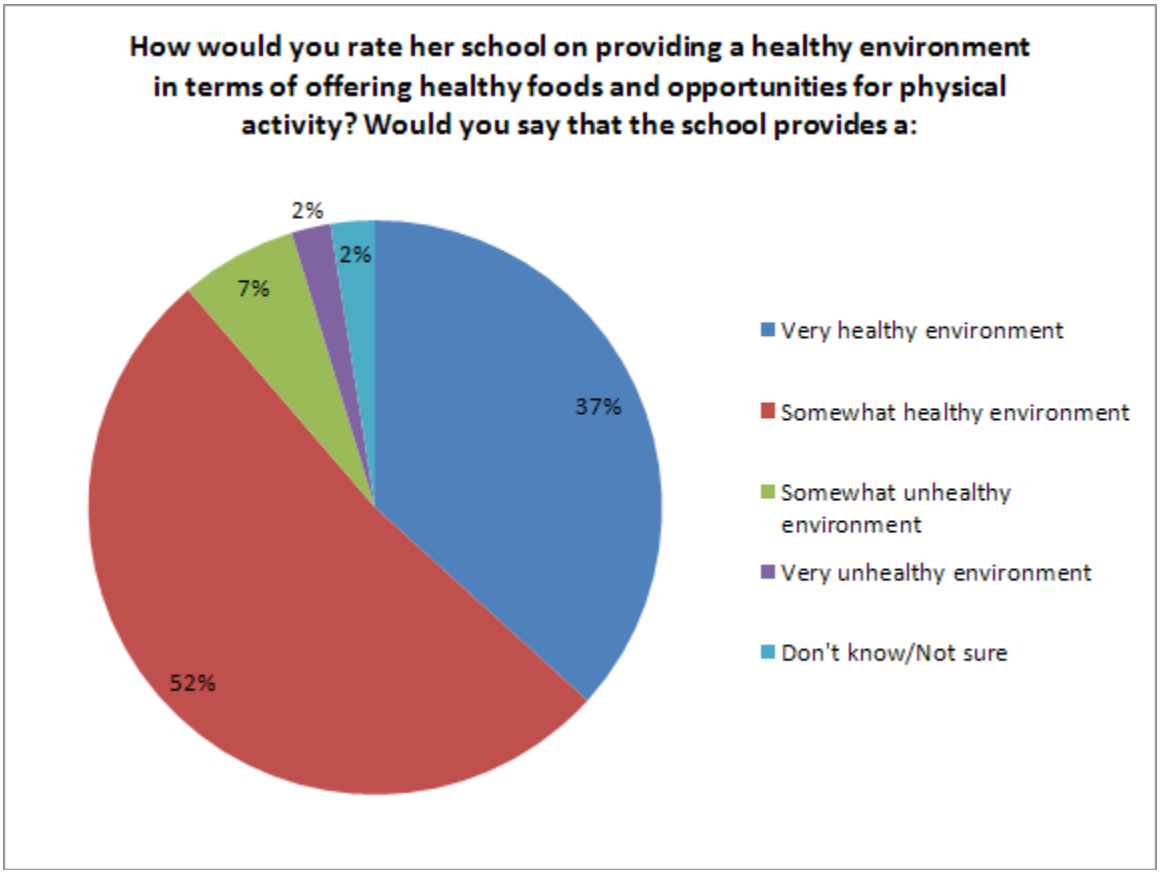
Figure 2



Schools Rated on Provision of Healthy Environment

Most parents in 2012 (52%) said their child’s school provides a “somewhat healthy environment” in terms of offering healthy foods and opportunities for physical activity. As in 2011, 37% of parents said their child’s school provides a “very healthy environment”.

Figure 3



Parental Awareness of Healthy Changes in the School Environment

Parents have been asked each year if they are aware of any changes in vending machines, school lunch choices, or physical exercise requirements at their child's school (all components of the Mississippi Healthy Students Act of 2007). Parents reported being less aware of these changes in 2012 compared to their responses in 2009. From 2009 to 2012, parents have reported the following:

Table 1

Are you aware of any changes in vending machines, school lunch choices, or physical exercise requirements at her school?

RESPONSE	2009	%	2010	%	Percent point change
Yes	1,634	44.0	1,385	36.9	-7.1
No	1,959	52.8	2,329	62.0	9.2
Not sure	114	3.1	41	1.1	-2.0
Refused	3	0.1	0	0.0	-0.1
Total	3,710	100	3,755	100	YES

Are you aware of any changes in vending machines, school lunch choices, or physical exercise requirements at her school?

RESPONSE	2010	%	2011	%	Percent point change
Yes	1,385	36.9	1,228	33.7	-3.2
No	2,329	62.0	2,339	64.2	2.2
Not sure	41	1.1	73	2.0	0.9
Refused	0	0.0	1	0.0	0.0
Total	3,755	100	3,641	100	YES

Are you aware of any changes in vending machines, school lunch choices, or physical exercise requirements at her school?

RESPONSE	2009	%	2012	%	Percent point change
Yes	1,634	44.0	1,374	37.1	-6.9
No	1,959	52.8	2,263	61.1	8.3
Not sure	114	3.1	63	1.7	-1.4
Refused	3	0.1	2	0.1	0.0
Total	3,710	100	3,702	100.0	YES

Parental Awareness of School Health Committees, Health Councils or Health Task Forces
Parents' awareness of a School Health Committee, Health Council, or Health Task Force in their child's school also appeared to decline between 2009 and 2012. When asked if their child's school has a health committee, council or task force, parents reported the following:

Does his/her school have a health committee, council or task force?

RESPONSE	2009	%	2010	%	Percent point change
Yes	951	25.6	813	21.7	-3.9
No	1,401	37.8	1,637	43.6	5.8
Not sure	1,357	36.6	1,305	34.8	-1.8
Refused	1	0.0	0	0.0	0.0
Total	3,710	100	3,755	100	YES

Does his/her school have a health committee, council or task force?

RESPONSE	2010	%	2011	%	Percent point change
Yes	813	21.7	784	21.5	-0.2
No	1,637	43.6	1,329	36.5	-7.1
Not sure	1,305	34.8	1,525	41.9	-7.1
Refused	0	0.0	3	0.1	0.1
Total	3,755	100	3,641	100	YES

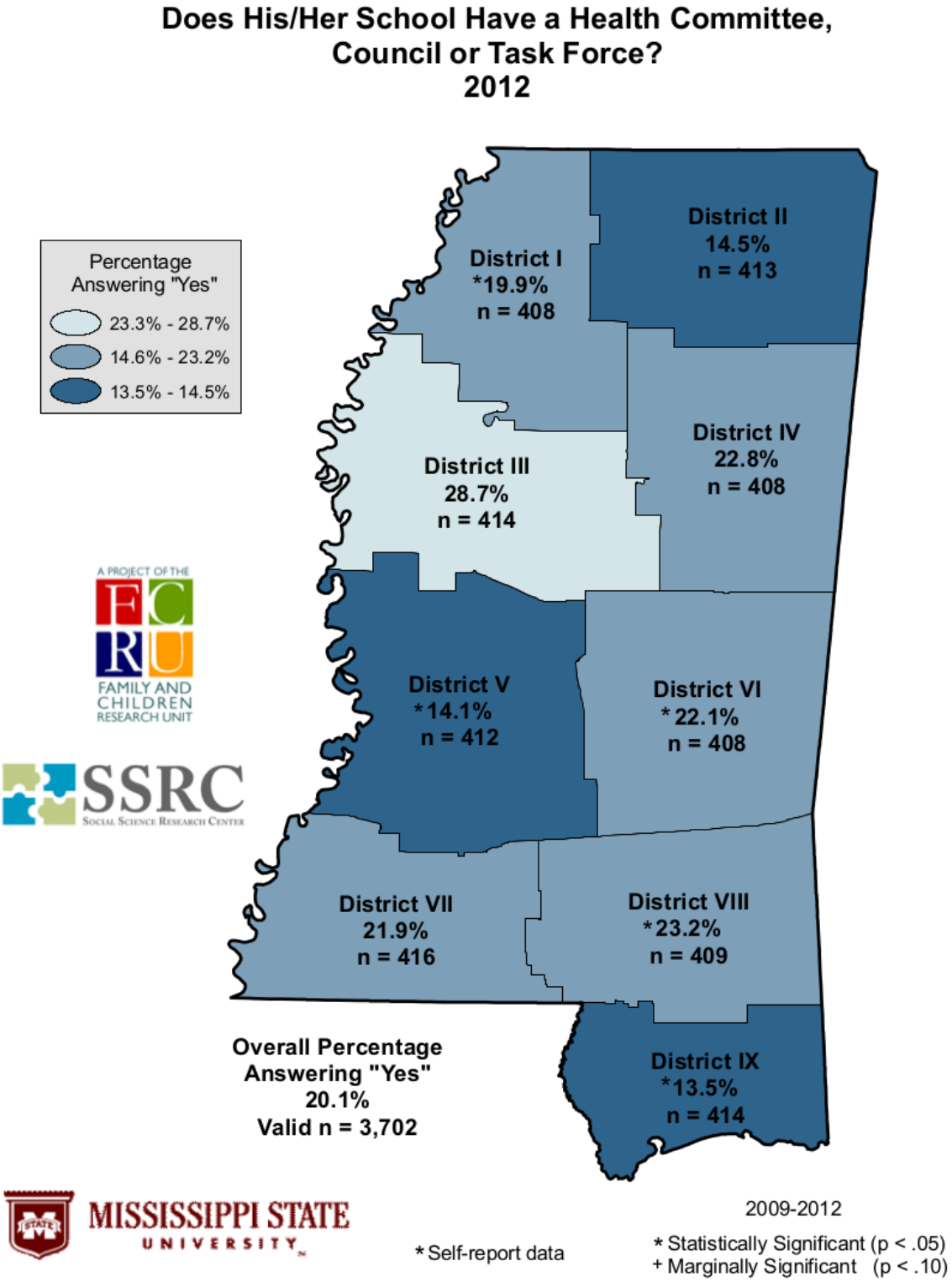
Does his/her school have a health committee, council or task force?

RESPONSE	2009	%	2012	%	Percent point change
Yes	951	25.6	743	20.1	-5.5
No	1,401	37.8	1,420	38.4	0.6
Not sure	1,357	36.6	1,536	41.5	4.9
Refused	1	0.0	3	0.1	0.1
Total	3,710	100	3,702	100	YES

Percentage of Parents (by MS Public Health District) Answering "Yes" regarding the existence of a health committee, council or task force in their child's school

Please note for each of the maps in this report: Three group ranges were chosen to geographically illustrate the survey results for nine Mississippi health districts. These ranges represent a relative high, medium and low percentage range for respondents answering "yes" to each question. The classification method for determining the class intervals of these data is the Jenks' natural breaks method. This standard grouping method is part of ESRI's (Environmental Systems Research Institute) ArcMap® software. In general terms, the breaks in data are determines statistically by finding relatively large differences in adjacent values. Subsequently, each value is placed in one of the three categories.

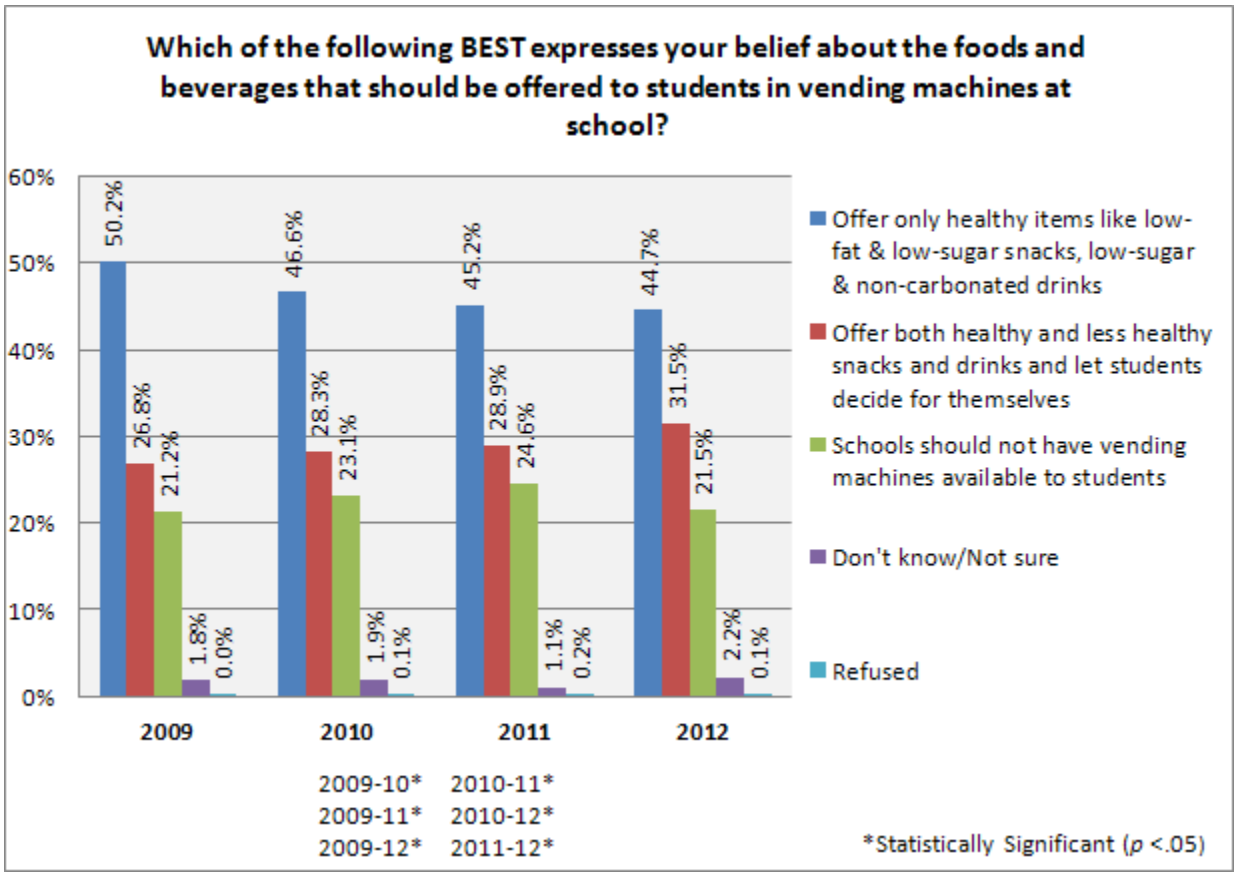
Figure 4


Does His/Her School Have a Health Committee, Council or Task Force?
2012
Percentage Answering "Yes"
23.3% - 28.7%
14.6% - 23.2%
13.5% - 14.5%
District I
*19.9%
n = 408
District II
14.5%
n = 413
District III
28.7%
n = 414
District IV
22.8%
n = 408
District V
*14.1%
n = 412
District VI
*22.1%
n = 408
District VII
21.9%
n = 416
District VIII
*23.2%
n = 409
District IX
*13.5%
n = 414
Overall Percentage Answering "Yes"
20.1%
Valid n = 3,702
A PROJECT OF THE FAMILY AND CHILDREN RESEARCH UNIT
SSRC
Social Science Research Center
MISSISSIPPI STATE UNIVERSITY
* Self-report data
2009-2012
* Statistically Significant (p < .05)
+ Marginally Significant (p < .10)

Parents' Opinions on Foods and Beverages Offered in Vending Machines at School

Parents were not in agreement on what school vending machines should offer to students. The number of parents who believed only healthy items should be offered to students in vending machines at school, declined from 2009 (50.2%) to 2012 (44.7%).

Figure 5

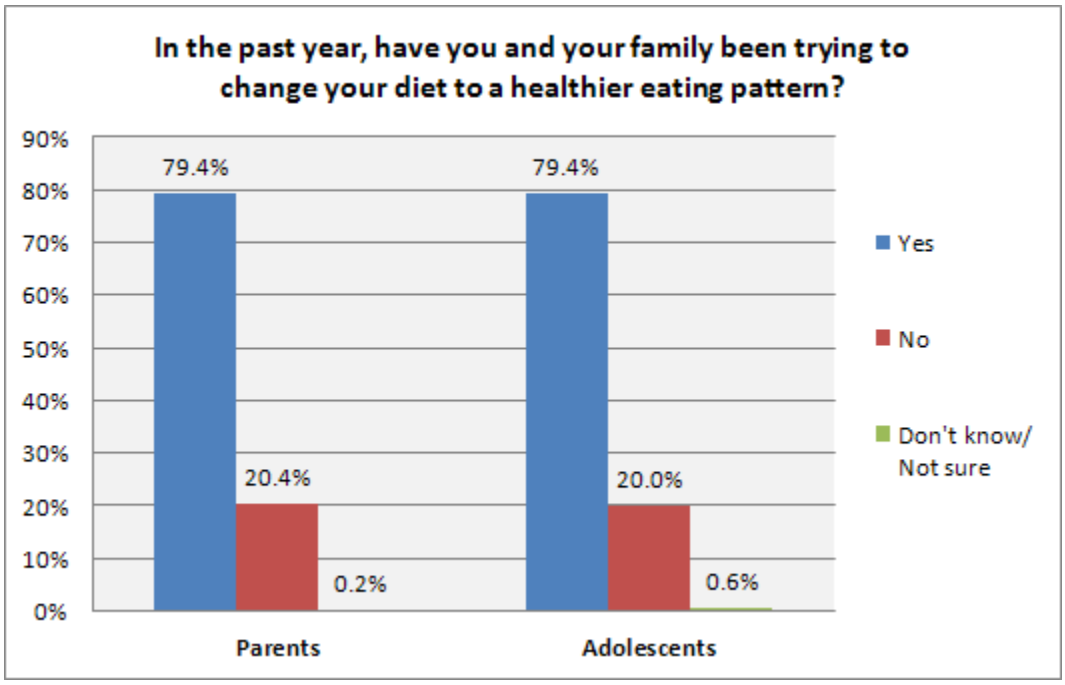


Family Nutrition Practices and Knowledge

Eating Healthier

In 2012, 79.4 percent of parents and 79.4 percent of youth reported trying to eat healthier within the past year.

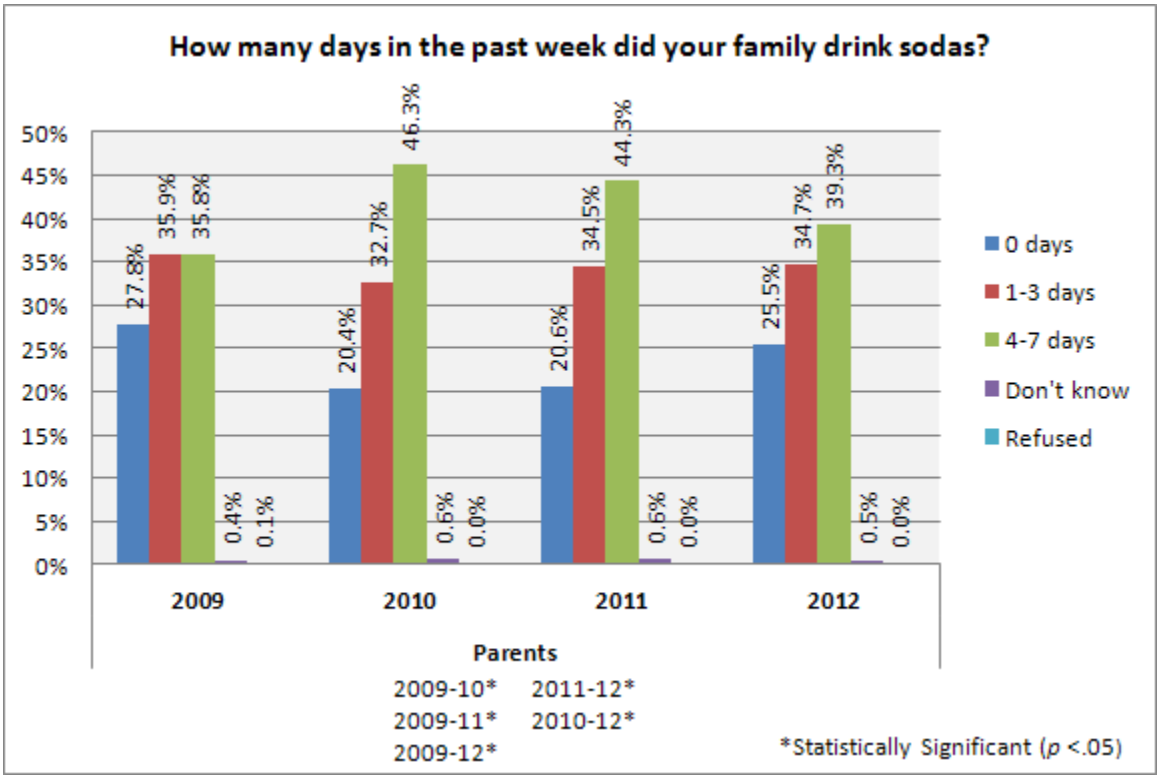
Figure 6

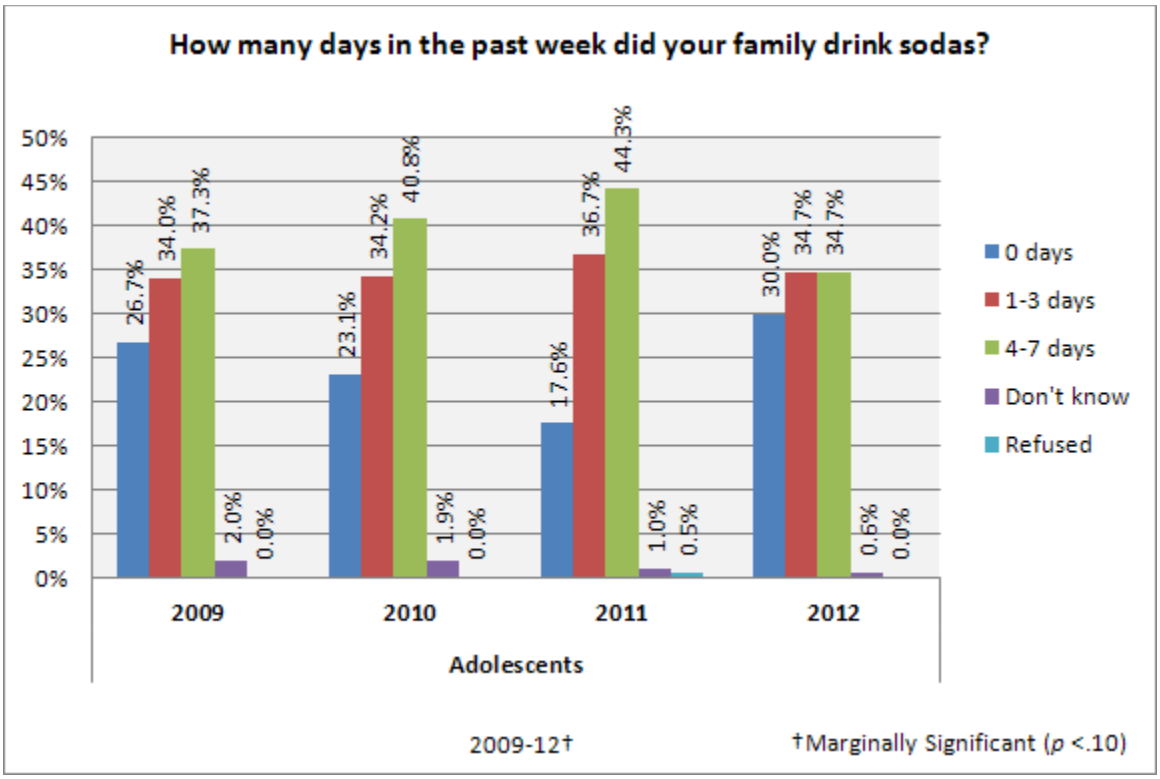


Families Drinking Less Soda

More families are cutting sodas out of their diet with 25.5% reporting their family did not drink soda on any one day in the past week compared to 20.6% in 2011.

Figure 7

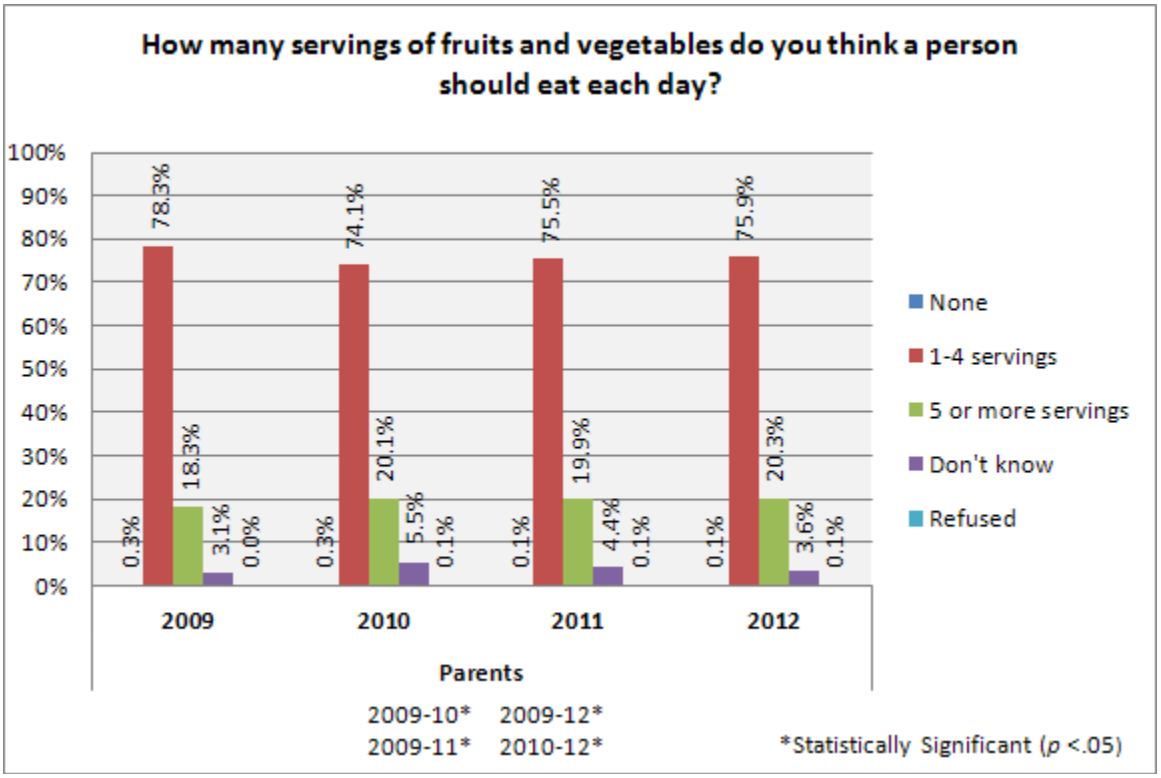


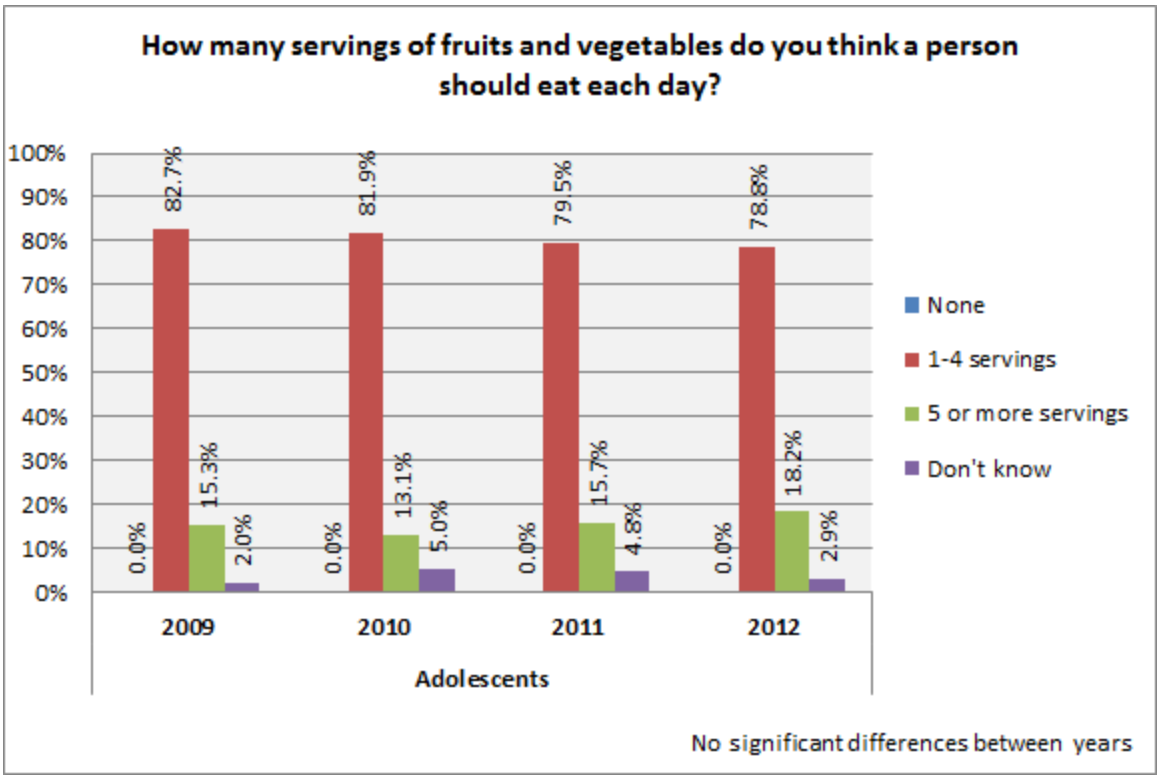


Thoughts on Recommended Daily Servings of Fruits and Vegetables

As in previous years, when asked, "How many servings of fruits and vegetables should an individual eat", the vast majority of adults (75.9%) and youth (78.8%) reported 1-4 servings.

Figure 8

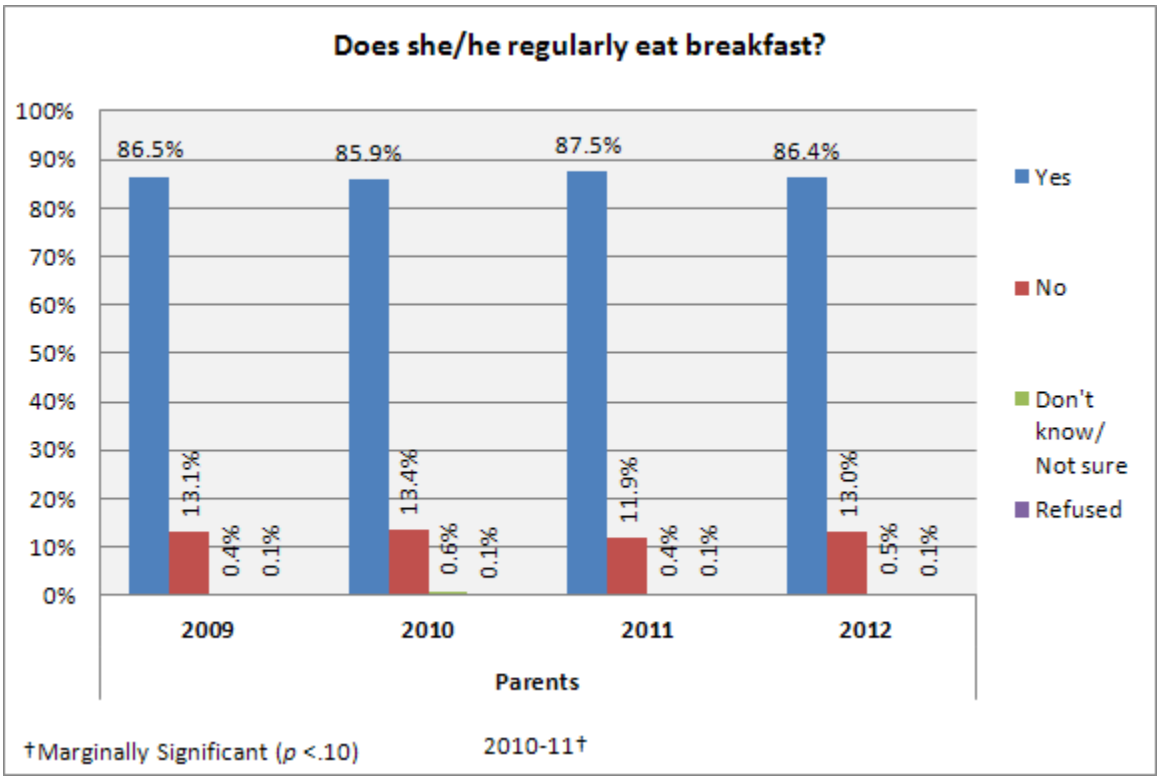

How many servings of fruits and vegetables do you think a person should eat each day?
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
78.3%
18.3%
3.1%
0.0%
0.3%
74.1%
20.1%
5.5%
0.1%
0.3%
75.5%
19.9%
4.4%
0.1%
0.1%
75.9%
20.3%
3.6%
0.1%
0.1%
2009
2010
2011
2012
Parents
None
1-4 servings
5 or more servings
Don't know
Refused
2009-10*
2009-11*
2009-12*
2010-12*
*Statistically Significant (p <.05)


How many servings of fruits and vegetables do you think a person should eat each day?
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
82.7%
15.3%
2.0%
0.0%
81.9%
13.1%
5.0%
0.0%
79.5%
15.7%
4.8%
0.0%
78.8%
18.2%
2.9%
0.0%
2009
2010
2011
2012
Adolescents
None
1-4 servings
5 or more servings
Don't know
No significant differences between years

Children Eating Breakfast Regularly

The majority of parents (86.4%) reported that their child regularly eats breakfast.

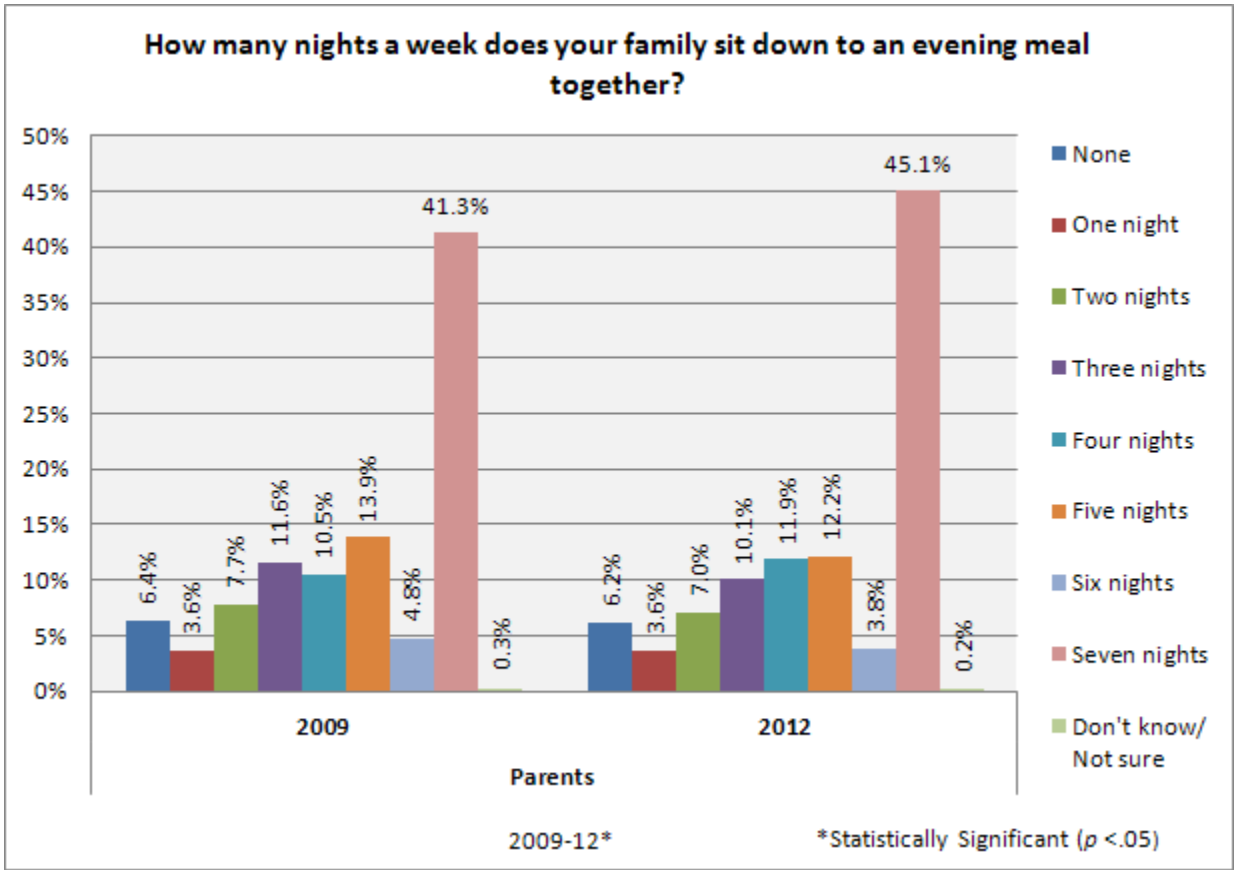
Figure 9



Families Sitting Down to Eat Evening Meals Together

The number of parents reporting that their family sits down to an evening meal together seven nights a week, increased from 41.3% in 2009 to 45.1% in 2012.

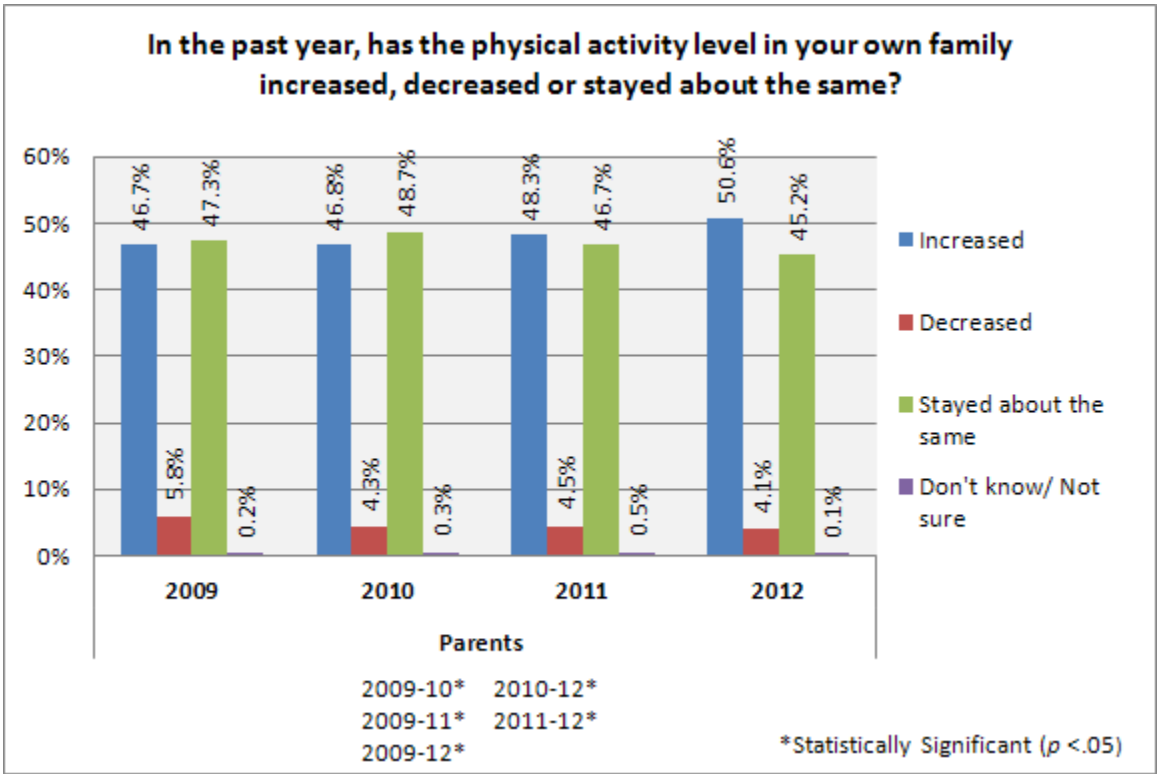
Figure 10



Family / Child Activity Levels

In 2012, 50.6% of parents reported that the physical activity level in their family increased, reflecting a slightly higher percentage from previous years: 46.7% (2009), 46.8% (2010), and 48.3% (2011).

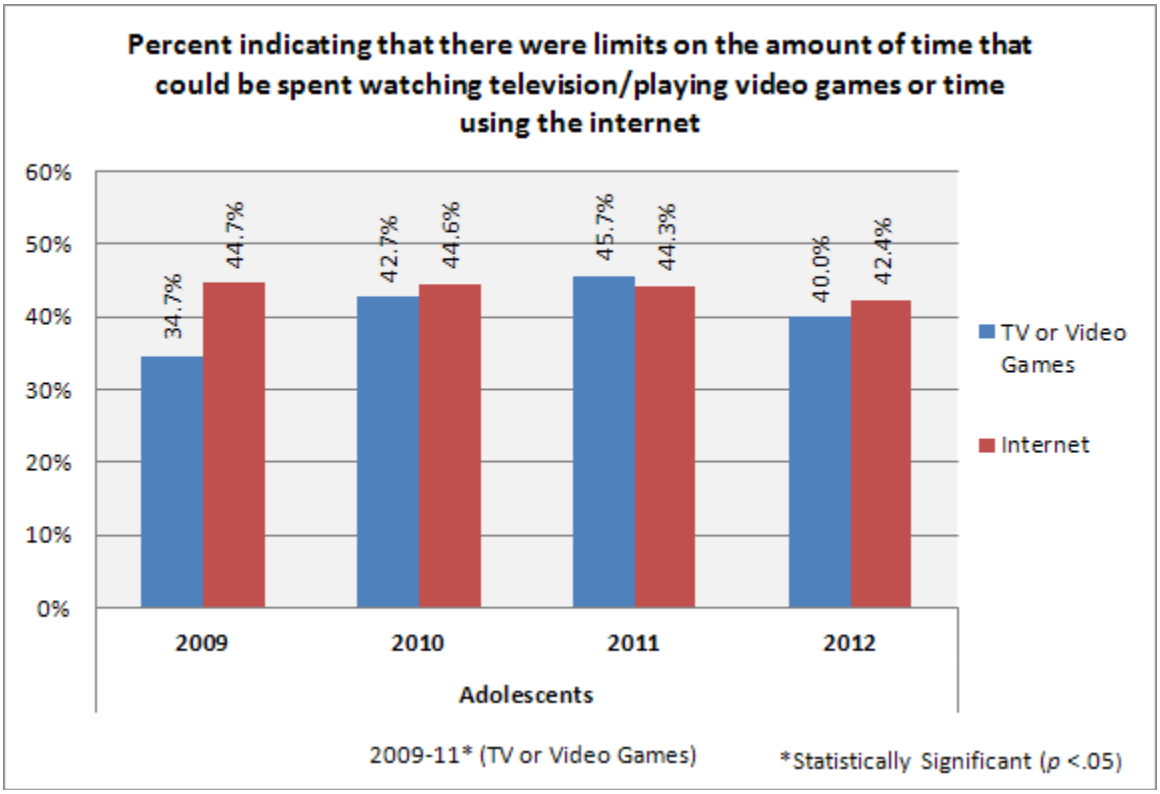
Figure 11



Limits on Time Spent with TV, Video Games or Internet

The percentage of youth reporting that they have limits on the amount of time they can watch television, play video games, or use the internet, slightly decreased in 2012.

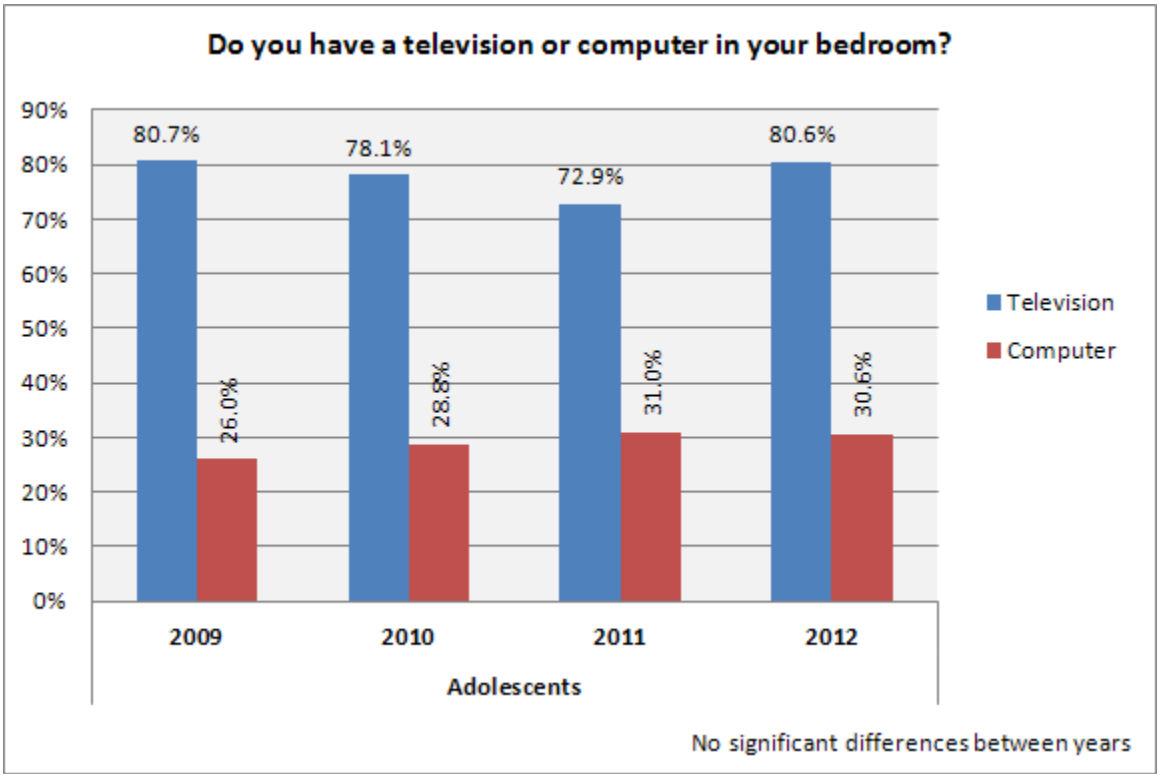
Figure 12



Adolescents with TV or Computer in Bedroom

The majority of adolescent respondents (80.6%) reported that they have a television in their bedroom. Only 30.6% of adolescents reported having a computer in their bedroom.

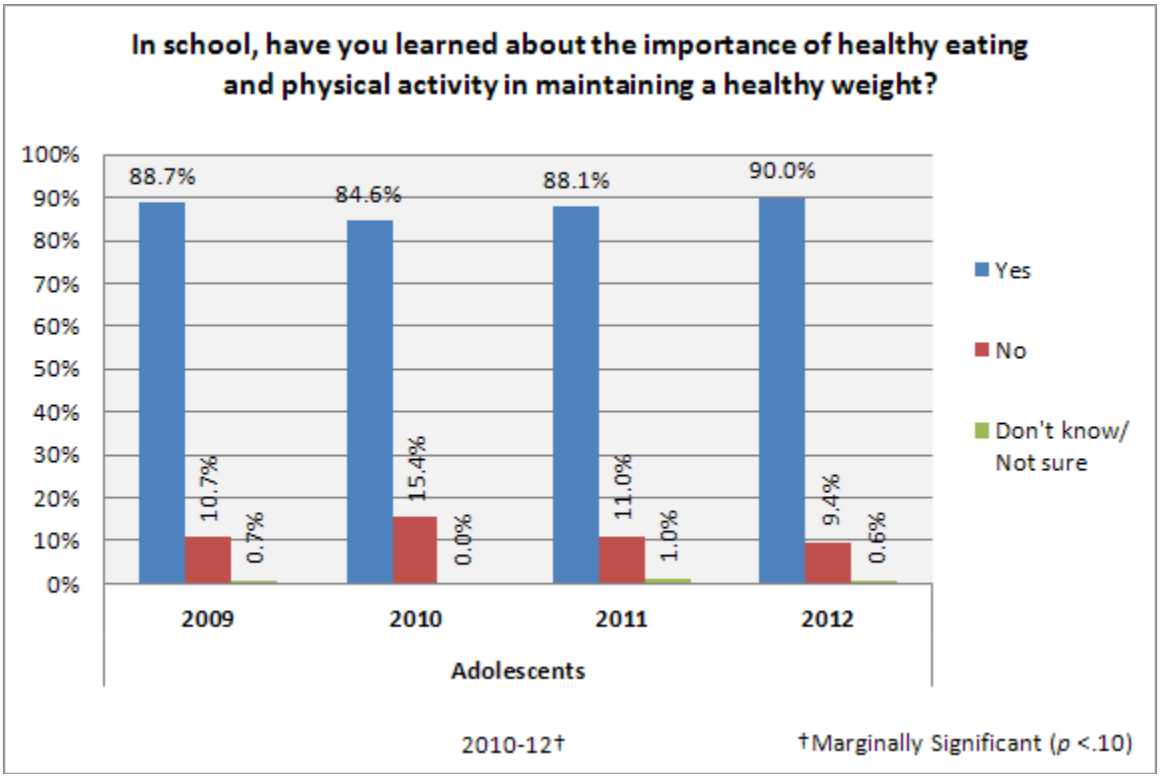
Figure 13



Learning in School about how to Maintain a Healthy Weight?

A high percentage of adolescents (90.0%) reported that they have learned in school about the importance of healthy eating and physical activity in maintaining a healthy weight. It is encouraging to note that this percentage is highest in 2012 over all four years.

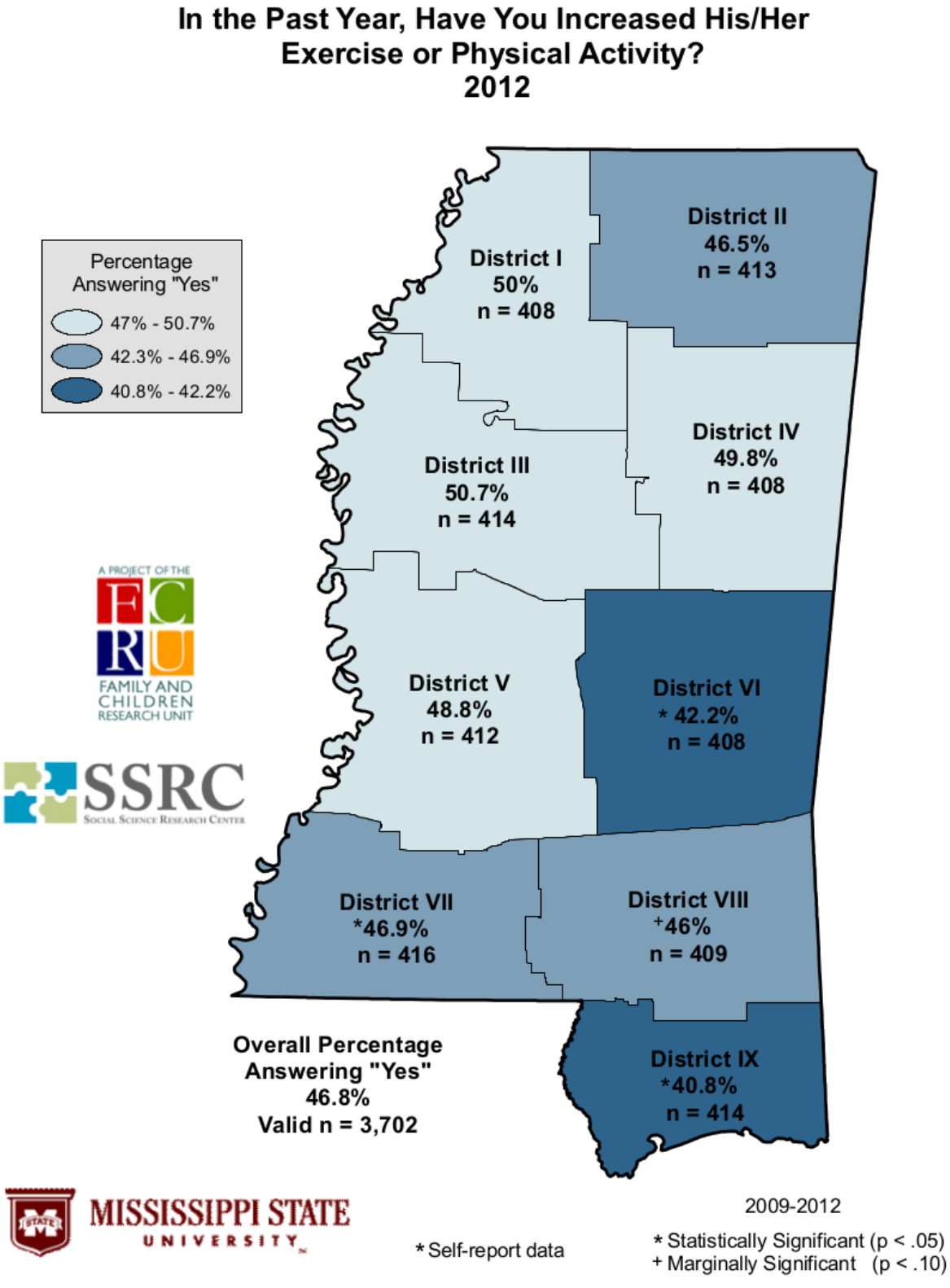
Figure 14



Parents Increasing Child's Exercise or Physical Activity

Overall in 2012, 46.8% of parents reported that they have increased their child's exercise within the past year, compared to 43.6% in 2011, 43.7% in 2010, and 52% in 2009.

Figure 15


In the Past Year, Have You Increased His/Her Exercise or Physical Activity?
2012
Percentage Answering "Yes"
47% - 50.7%
42.3% - 46.9%
40.8% - 42.2%
District I
50%
n = 408
District II
46.5%
n = 413
District III
50.7%
n = 414
District IV
49.8%
n = 408
District V
48.8%
n = 412
District VI
* 42.2%
n = 408
District VII
*46.9%
n = 416
District VIII
+46%
n = 409
District IX
*40.8%
n = 414
Overall Percentage Answering "Yes"
46.8%
Valid n = 3,702
A PROJECT OF THE FAMILY AND CHILDREN RESEARCH UNIT
SSRC
Social Science Research Center
MISSISSIPPI STATE UNIVERSITY
* Self-report data
2009-2012
* Statistically Significant (p < .05)
+ Marginally Significant (p < .10)

Body Mass Index (BMI)

Parents in the telephone survey were asked "How tall are you without your shoes on?" (in inches) and also, "How much do you weigh without shoes?" With this self-reported information, we calculated Body Mass Index. Body Mass Index (BMI) is the indicator used by the Centers for Disease Control (CDC) for determining overweight and obesity among the general public. The calculation used by the CDC to determine BMI is the following:[viii]

$$\textbf{weight (lb) / [height (in)]}^2 \textbf{ x 703}$$

After calculating the BMI, the interpretation of weight status is determined by using the following categories:

BMI Categories

BMI	Weight Status
Below 18.5	Underweight
18.5 - 24.9	Normal
25.0 - 29.9	Overweight
30.0 and Above	Obese

BMI of Adults by Public Health District

Overall, the data show that the state as a whole continues to be overweight. The 2012 survey revealed that in 8 of the 9 public health districts in Mississippi, the average BMI ranges from 27.8 to 29.8. One public health district's respondents (District III) average BMI reported was 30.6 (2012), which is in the obese category.

Table 2

Body Mass Index of Adults by Public Health District 2009					
District	n	Mean	Median	Minimum	Maximum
District I	385	28.5	27	17	58
District II*	377	28.1	27	16	67
District III*	380	30.5	29	14	62
District IV*	384	29.7	29	16	65
District V	386	28.5	27	16	59
District VI	371	28.8	28	16	56
District VII	373	29.6	28	17	56
District VIII	379	29.2	28	18	68
District IX*	372	27.6	27	17	50
Total	3,407	29.0	28	14	68

*Statistically Different from State Average ($p < .05$)

Body Mass Index of Adults by Public Health District 2010					
District	n	Mean	Median	Minimum	Maximum
District I	368	29.0	28	16	57
District II	404	29.3	27	14	59
District III*	373	30.6	30	17	54
District IV	375	29.3	28	13	57
District V	408	29.2	28	17	58
District VI	372	29.4	28	15	67
District VII*	366	30.4	29	12	71
District VIII	375	29.5	28	16	62
District IX*	402	28.3	27	16	51
Total	3,443	29.4	28	12	71

*Statistically Different from State Average ($p < .05$)

Body Mass Index of Adults by Public Health District 2011					
District	n	Mean	Median	Minimum	Maximum
District I	378	28.5	27	16	56
District II	365	28.6	27	18	53
District III*	378	30.6	29	17	60
District IV	374	29.0	27	16	61
District V	364	29.1	27	15	56
District VI	370	29.2	28	17	62
District VII	382	29.7	29	17	55
District VIII	373	28.4	27	15	71
District IX*	367	28.0	27	17	56
Total	3,351	29.0	28	15	71
*Statistically Different from State Average (p < .05)					

Body Mass Index of Adults by Public Health District 2012					
District	n	Mean	Median	Minimum	Maximum
District I	363	29.1	28	17	55
District II	378	28.7	27	16	50
District III*	384	30.6	29	18	73
District IV	372	29.4	28	16	67
District V	361	29.0	28	18	64
District VI	362	29.5	28	16	56
District VII	374	29.8	29	17	60
District VIII	374	29.0	28	15	57
District IX*	376	27.8	27	15	66
Total	3,344	29.2	28	15	73
*Statistically Different from State Average (p < .05)					

Children's Weight

An alarmingly high rate of obesity has been found among young children over the past two years of the report. Based on parent-reported height and weight of their children, 40.3% of 6 year old children fell into the "obese" category in 2012 and 36.1% of 6 year olds fell into the obese category in 2011

Table 3

Weight Category by Students' Age - 2012									
Weight Category	4	5	6	7	8	9	10	11	12
Underweight	1	13	23	22	24	27	13	19	14
	14.3%	17.1%	15.4%	13.8%	13.9%	15.6%	6.3%	7.2%	5.7%
Healthy Weight	2	15	49	59	71	63	90	141	135
	28.6%	19.7%	32.9%	36.9%	41.0%	36.4%	43.3%	53.4%	54.7%
Overweight	0	9	17	16	32	23	46	57	47
	0.0%	11.8%	11.4%	10.0%	18.5%	13.3%	22.1%	21.6%	19.0%
Obese	4	39	60	63	46	60	59	47	51
	57.1%	51.3%	40.3%	39.4%	26.6%	34.7%	28.4%	17.8%	20.6%
Totals	7	76	149	160	173	173	208	264	247
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Weight Category	13	14	15	16	17	18	19	20	Totals
Underweight	13	8	20	12	10	7	2	0	228
	4.7%	3.2%	7.8%	3.9%	3.9%	5.0%	12.5%	0.0%	7.7%
Healthy Weight	163	159	154	206	176	96	10	0	1589
	59.5%	63.6%	59.7%	67.1%	69.3%	68.6%	62.5%	0.0%	53.8%
Overweight	55	42	42	49	35	18	1	0	489
	20.1%	16.8%	16.3%	16.0%	13.8%	12.9%	6.3%	0.0%	16.5%
Obese	43	41	42	40	33	19	3	0	650
	15.7%	16.4%	16.3%	13.0%	13.0%	13.6%	18.8%	0.0%	22.0%
Totals	274	250	258	307	254	140	16	0	2956
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table Significance $p < .05$

Children's Weight and School Grades

In 2012, parents were asked to describe the average grades of their child. The children who were classified as "healthy" weight, based upon the same BMI calculations above, were 1.34 times more likely to earn mostly A's and B's in school than children who were classified as being "obese." This difference in grade achievement was statistically significant.

Table 4

Weight Category by Students' Grades - 2012								
Weight Category	Mostly A's	Mostly B's	Mostly C's	Mostly D's	Mostly F's	Don't Know/ Not Sure	Refused	Totals
Underweight	140	58	25	1	2	2	0	228
	61.4%	25.4%	11.0%	0.4%	0.9%	0.9%	0.0%	100.0%
Healthy Weight	908	448	182	24	7	16	4	1589
	57.1%	28.2%	11.5%	1.5%	0.4%	1.0%	0.3%	100.0%
Overweight	261	148	70	6	1	2	1	489
	53.4%	30.3%	14.3%	1.2%	0.2%	0.4%	0.2%	100.0%
Obese	338	184	89	15	6	17	1	650
	52.0%	28.3%	13.7%	2.3%	0.9%	2.6%	0.2%	100.0%
Totals	1647	838	366	46	16	37	6	2956
	55.7%	28.3%	12.4%	1.6%	0.5%	1.3%	0.2%	100.0%

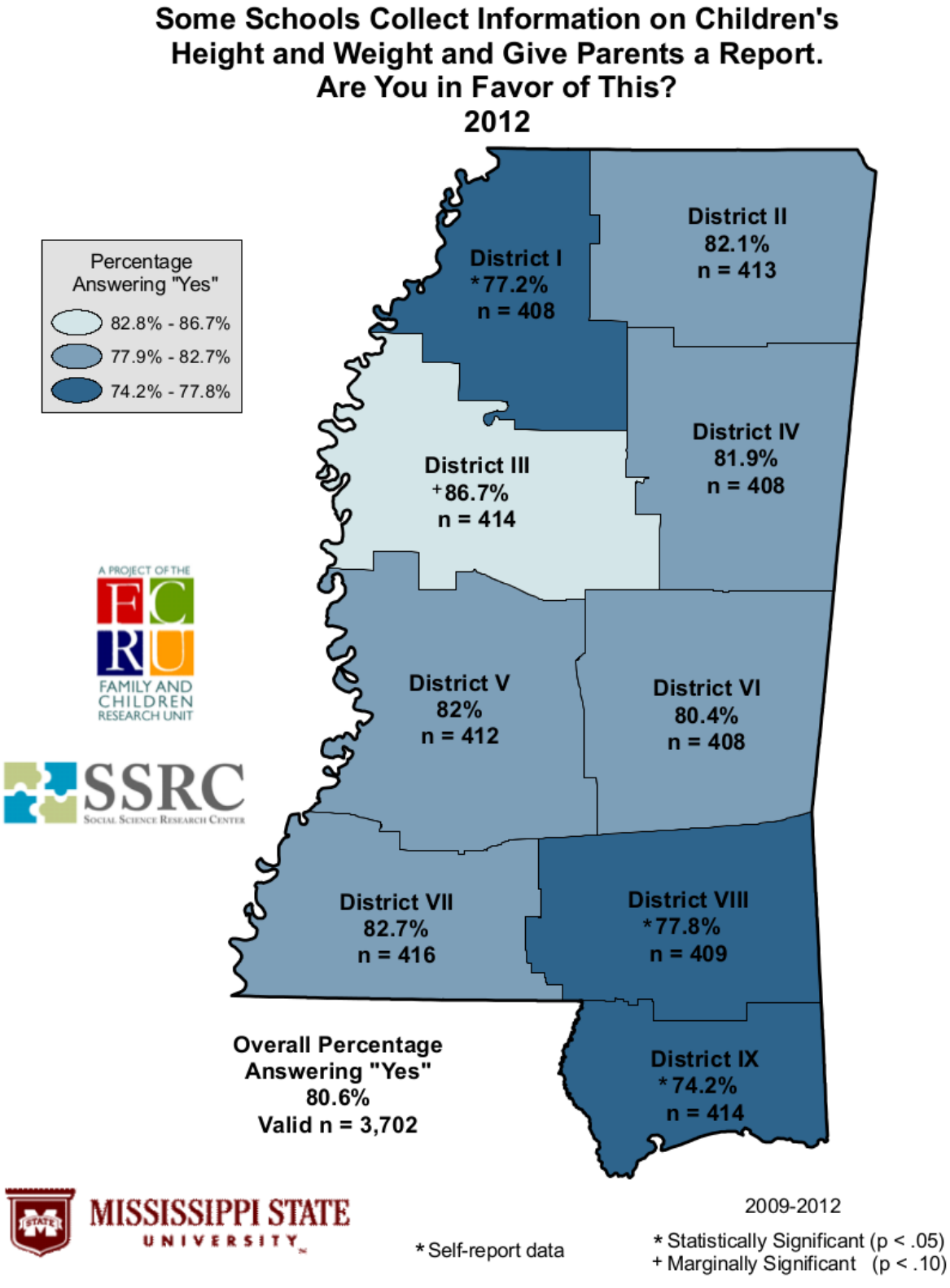
Table Significance $p < .05$

Parents' Support of Future Policies

Support for Schools Collecting Children's Heights and Weights and Reporting to Parents

Parents expressed strong support (80.6%) for schools collecting students' heights and weights and giving a report of that information to parents.

Figure 16

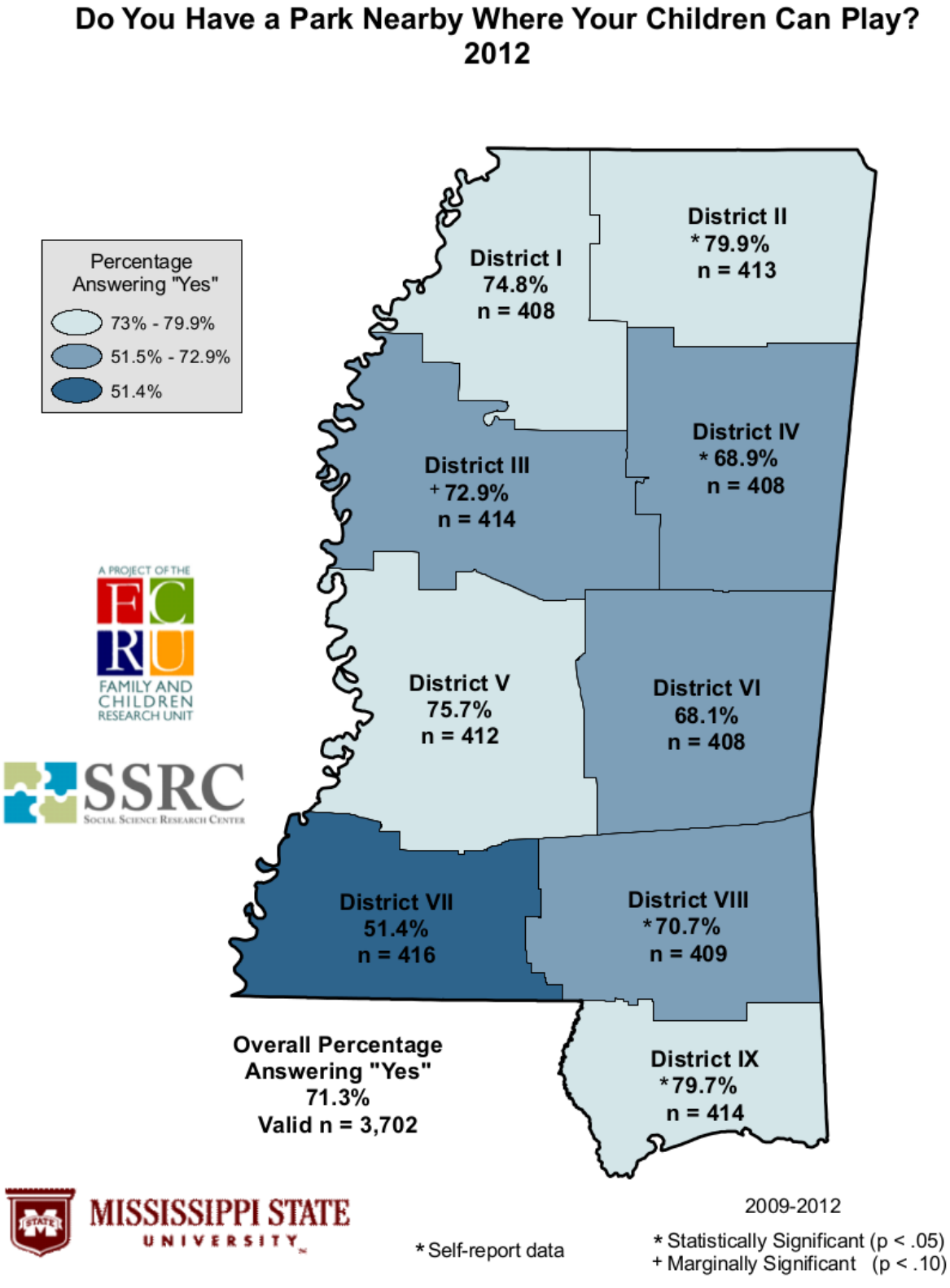

Some Schools Collect Information on Children's Height and Weight and Give Parents a Report. Are You in Favor of This?
2012
Percentage Answering "Yes"
82.8% - 86.7%
77.9% - 82.7%
74.2% - 77.8%
District I
*77.2%
n = 408
District II
82.1%
n = 413
District III
+86.7%
n = 414
District IV
81.9%
n = 408
District V
82%
n = 412
District VI
80.4%
n = 408
District VII
82.7%
n = 416
District VIII
*77.8%
n = 409
District IX
*74.2%
n = 414
Overall Percentage Answering "Yes"
80.6%
Valid n = 3,702
A PROJECT OF THE FAMILY AND CHILDREN RESEARCH UNIT
SSRC
Social Science Research Center
MISSISSIPPI STATE UNIVERSITY
* Self-report data
2009-2012
* Statistically Significant (p < .05)
+ Marginally Significant (p < .10)

Parks for Play near Children's Homes

Of parents in 2012, 43.7% reported that public school facilities are available for individuals within the community to use for physical activity outside of school hours.

The majority of parents (71.3%) reported having a park nearby where their child could play. The range among the nine public health districts was from a low of 51.4% in District VII to a high of 79.9% in District II.

Figure 17


Do You Have a Park Nearby Where Your Children Can Play?
2012
Percentage Answering "Yes"
73% - 79.9%
51.5% - 72.9%
51.4%
District I
74.8%
n = 408
District II
*79.9%
n = 413
District III
+72.9%
n = 414
District IV
*68.9%
n = 408
District V
75.7%
n = 412
District VI
68.1%
n = 408
District VII
51.4%
n = 416
District VIII
*70.7%
n = 409
District IX
*79.7%
n = 414
Overall Percentage Answering "Yes"
71.3%
Valid n = 3,702
A PROJECT OF THE FAMILY AND CHILDREN RESEARCH UNIT
SSRC
Social Science Research Center
MISSISSIPPI STATE UNIVERSITY
2009-2012
* Self-report data
* Statistically Significant (p < .05)
+ Marginally Significant (p < .10)

POLICYMAKERS: STATE BOARD OF EDUCATION, STATE BOARD OF HEALTH, MISSISSIPPI STATE DISTRICT PUBLIC HEALTH OFFICERS, AND STATE LEGISLATORS

Overall Methodology

The 2012 interview guides were consistent with interview guides used in 2011, and were developed in concert with staff from the Center for Mississippi Health Policy and the SSRC research team. State Legislators were interviewed again in 2012, after skipping a year in 2011, as planned at the outset of the five-year evaluation. The full interview guides are attached (see Appendix). A mixed-method of telephone, written interviews via email, and face-to-face interviews were conducted from February 2012 through May 2012.

All telephone and face-to-face interviews were digitally recorded and were conducted by SSRC researchers. Key Mississippi policymakers, including members of the State Board of Education, State Board of Health, District Health Officers, and State Legislators were asked about their perceptions and opinions regarding the Mississippi Healthy Students Act of 2007 (MHSA). Respondents were asked a series of open-ended questions concerning how the three major components (nutrition, health education, and physical education) should be prioritized, their views on the roles of various district offices as related to MHSA, perceptions of support by local constituents, opinions regarding how well the components of MHSA have been implemented, opinions regarding the need for additional policies to increase the health of Mississippi school children, and appropriate methods of measuring the success of MHSA. Interviews were transcribed and then analyzed by research associates affiliated with the SSRC.

Researchers analyzed each transcript qualitatively to identify patterns and their underlying meanings within each group of key stakeholder interviews. Qualitative research methods are particularly useful for obtaining information about issues that cannot be directly observed. Specifically, this method of analysis is particularly appropriate for identifying and understanding perspectives, opinions, and experiences in exploratory research. For this evaluation, researchers were interested in the ideas, feedback, and perspectives from an array of policymakers regarding the implementation of the MHSA.

The researchers noted key themes which emerged from the data. Themes were identified as a response topic that was mentioned by more than one respondent in the group, and mentioned on one or more question. Researchers also identified key quotes that reflected the themes identified in the analyses. The qualitative portions of each interview were organized by group and topic. Each respondent's ideas and opinions were then categorized by themes. Careful review of the interviews revealed areas of consistency with past reports from previous years, as well as some changes. The data was then systematically arranged accordingly which enabled the researchers to discuss the findings in this report. The research noted key themes that emerged from the data.

The qualitative analysis component of this report includes analysis of interviews comprised of six Board of Education members, seven State Board of Health members, six District Health Officers, and twelve State Legislators. Each interview guide also had quantitative questions, and these responses were tabulated and when appropriate were compared to findings from previous years.

Mississippi State Board of Education

The Mississippi State Board of Education (BOE) is made up of nine members. Five BOE members are appointed by the Mississippi Governor (one representative from each of the state's three Supreme Court Districts; one member who is employed as a school administrator; and one member who is employed as a public school teacher). The Lieutenant Governor appoints two of the remaining four BOE members (two at-large members) and the Speaker of the Mississippi House of Representatives appoints the final two BOE members (two at-large members). The BOE is responsible for appointing the State Superintendent of Education, setting the public education policy for Mississippi, and overseeing the MS Department of Education. The mission of the BOE is "To create a world-class education system that gives students the knowledge and skills that will allow them to be successful in college and the workforce and flourish as parents and citizens."[ix]

In 2012, six BOE members agreed to participate in the Year Four evaluation of the Mississippi Healthy Students Act of 2007 (MHSA). We conducted semi-structured interviews among the BOE members to explore their perspectives on the implementation and effectiveness of MHSA to reduce childhood obesity, as well as their perspectives on additional policies that could assist in the prevention of obesity among Mississippi's children. Results from the interviews suggest consensus among the Board members regarding the important role of health, nutrition and physical activity in ensuring students' school success and academic achievement in the short-term as well as future achievements in their personal and professional lives. However, consensus on decisions around how each component of the MHSA should be implemented in order to positively impact childhood health and nutrition was not readily agreed upon by BOE members.

All BOE members reported that they were "somewhat familiar" with MHSA, which is a trend continued from the Year Three evaluation, when all members interviewed also reported that they were "somewhat familiar" with MHSA.

When asked to rank the three components of the MHSA (improving school nutrition, increasing health education, and improving physical education) in order of importance, BOE members' responses varied. Improving school nutrition and increasing health education were each ranked as "most important" by three BOE members, while improving physical education was ranked as next most important by four BOE members. Interestingly, a number of BOE members expressed the opinion that it was difficult to rank the three components in order of importance given that all the components were extremely important. Illustrative of this point, a BOE member who ranked health education as most important explained his/her response this way:

I think perhaps health education is the most important one because once you start to teach the basics of health education then of course that would in fact increase the knowledge level of physical activity as well as nutrition. So, all of that would be built into... a good health education program.

Another BOE member who said it was difficult to rank order the components since all three were so important justified his/her choice of improving school nutrition as most important as follows:

I think [that in the] long term changing the nutritional habits of students and what they eat and drink, I would probably place ahead of the others because there are other places where…. they can get trained on what to eat [health education], but the school has a captive audience as far as feeding [kids during] a good portion of the year. So I'd put the nutritional aspect of it… [as] number one.

The difficulty BOE members had in ranking the three components speaks to their recognition that all three are closely linked and suggests that, ideally, they should be promoted together in a coordinated manner in order to improve their impact on children's health and well being – including childhood obesity prevention efforts.

Two BOE members reported that they were aware that the Center for Mississippi Health Policy is conducting a five year evaluation of the MHSA, and two reported that they had seen a copy of the evaluation report from previous years.

All BOE members believed the prevention of childhood obesity was extremely important for the state of Mississippi. As one BOE member put it:

I think it's [a] tremendous [problem]. I don't know if this is still the case, but at one time Mississippi was rated one of the most obese states in the nation and I would bet that we would be somewhere in the top 5% even now. It's a tremendous problem in this state. And, of course when you look at the issue of obesity, it affects long term health. Many…diseases like heart disease, cancer, and a number of others that are very prevalent in this country are directly tied to childhood obesity. So I think it's a tremendous problem for us and it's one that we need to make a top priority.

When asked to rate the state of Mississippi in terms of the effectiveness of current policies to address childhood obesity, BOE members' responses ranged from "not effective" to "moderately effective". There was consensus among BOE members that the state is "*doing some good things*" and has "*made some important improvements*," but that we are not yet as effective as we could be.

Among individuals and school districts with whom they interact, BOE members said the reaction to MHSA has been positive and that school districts want to comply with MHSA requirements, but there is still work to do to make sure that schools understand what needs to be done to ensure full compliance. To illustrate local adoption of MHSA recommendations, a BOE member noted an article in his/her local newspaper that the high school had installed a "combi" oven (combination oven/steamer) in their cafeteria. However, another BOE member expressed concern that some school districts do not yet know how to meet MHSA requirements and recommendations:

I think school districts for the most part want to address it, but they really have not gotten a handle completely on it. And I'll go back to the whole issue of physical exercise or physical activity: What I'm seeing in many of the elementary schools is [that] the emphasis is not there on physical education to the degree that it was 10 or 15 years ago. [And] although it's starting to get better now… just a few years ago I thought it [nutrition in schools] was atrocious. Some of [the] things they were serving in those cafeterias were directly attributable to the problem that we have with the issue of obesity in this state.

When asked to comment on how best to measure the success of MHSA, BOE members agreed that "*a decline in childhood obesity*" and overall "*improved health of our children*" would be clear indicators of success, although implementing *mandatory* student Body Mass Index (BMI) assessments was not supported by all respondents (discussed in detail below). Several BOE members remarked on the national increase in childhood obesity, and one respondent suggested that success in childhood obesity prevention in the state should be measured against national obesity rates:

One way to do it is to measure ourselves by national standards: What other districts are doing around the country; not necessarily just what we're doing here in Mississippi. I don't think we would serve any purpose at all to measure… school districts here in the state against each other. I think we have to look at all school districts across the country and measure ourselves against some of those districts to see how we're stacking up.

All BOE members see a role for the State Department of Education in childhood obesity prevention. Members specifically thought the BOE should use its influence to improve the health, physical education, and nutrition offerings within school districts under its jurisdiction. One BOE member explained that although s/he is not a proponent of "*over regulating*" for something as important as childhood obesity prevention, there should be minimum standards and regulations to which all school districts should be required to adhere, and that the BOE should have "*some oversight*" of the implementation process. Another BOE member suggested that the BOE should increase research on "*evaluating what works, and what's not working, what needs tweaking, and what needs changing*" in order to advance childhood obesity prevention in the state.

Board members were asked to rate target areas to be addressed by the State Department of Education by level of importance. The following areas received the most ratings as being "very important" for the BOE to address: (1) increasing consumption of fruits and vegetables; (2) decreasing consumption of high calorie, dense foods (i.e., junk foods); and (3) decreasing consumption of sugary beverages. One BOE member added a target area of importance— replacing whole milk products with reduced-fat milk products in his/her comment, "*Let me add one that I think you should have in there: [It] is eliminating more fat out of the milk… I still think that's a major issue."*

Four BOE members reported that the state of Mississippi needs to do more to strengthen the school policies on nutrition. As one BOE member stated, "*I don't know that I can say we've done enough. We've made good strides, but… the milk is one category I think needs to be further regulated.*" Another BOE member reported that state-level policymakers would know when the state had done enough to address childhood obesity by examining health gains results:

I think we're doing some good things, some great things. We need to ensure that what we're trying to do is put into effect: Test it and see. But I don't know if we're going to be able to say we're doing enough until we see results.

Although the majority of BOE members were positive about what the state has done to strengthen school policies on health education and physical education, two members felt the state had not done enough in these two areas. One member commented that, "*I think [physical education is] adequate until we have time to see what impact we've had*" while the other stated that, "*I feel like all students need to be involved and I don't know if we're doing that or not*" even as s/he cautioned that, "*I don't know about holding the school's feet to the fire to make sure that they're doing enough.*"

Rather than suggest additional policies that should be enacted, BOE members focused on the need to enforce existing policies and to leave some of the day-to-day decisions to school administrators and faculty who work directly with children. As one BOE member put it, "*I think there needs probably to be stronger oversight on existing policies, an evaluation made on how effective they are, and to… evaluate implementation of it. And then evaluate if other policies are needed.*" Another responded that:

I really cannot give you any definitive policies that I can point to right now that I think would be effective. The policy issue really needs to be something left to those people that deal with children every day that are in the classroom with them every day and school administrators. I don't see that as a role for me.

Most BOE members reported that they did not believe that students are receiving enough education in nutrition, health, and physical education with such comments as, "*I doubt they are. I don't think we're bad in that category [nutrition], but I doubt they're getting enough [nutrition education]. However, I think we all are taught a lot better than what we practice,*" and "*Actually, we can't say that they are until we see some results on this obesity question.*"

All BOE members agreed that schools should promote healthy lifestyles for both students and staff. This speaks to the importance of attention to health at school and at home—for both teachers and students—as well as to the critical need for adult role models for children to follow in their quest to lead healthier lives.

BOE members were asked to what extent they thought schools in Mississippi are implementing the minimum requirements of Coordinated School Health (CSH) programs, which are

recommended by the CDC "as a strategy for improving students' health and learning in our nation's schools."[x] CSH programs are composed of eight components: heath education; physical education; nutrition services; health services; counseling, psychological, and social services; healthy and safe school environment; healthy promotion for staff; and family and community involvement.[(ibid)] The MHSA requires local school boards to establish school health councils in every school that are reflective of this coordinated approach to school health. Three BOE members reported that schools were doing an "average" job implementing the minimum CSH program requirements.

When asked about things outside of the school setting that can have an impact on the prevention of childhood obesity, two to three respondents rated the following things as having a "very large impact": child care centers; media policy (restrictions on advertising, promoting positive messages, etc…); and fat and trans fat restrictions. Four board members felt that nutrition labeling has a "large impact" on the prevention of childhood obesity. Two board members thought that Body Mass Index (BMI) reporting (measuring children's height and weight) has a "large impact".

Five BOE members reported that local government funds should be used to build and maintain places in the community where people can exercise, and all BOE members agreed that schools should engage in Joint Use Agreements to make school facilities (e.g., gym tracks, ball fields, playgrounds) available to the community after school hours in an effort to promote physical activity/education programs within the community. As one BOE member noted:

I think these facilities can be used and there can be ways where the school would not be held [legally] accountable, responsible for what happens… Since we have these facilities they should be available to get the maximum use out of it for the community.

Such responses indicate an understanding of the important role that the entire community—including the local municipal government—can play in promoting and supporting good health for its children and adults. They also indicate support for creative solutions to providing additional community spaces for exercise when funds for building new recreational facilities may be limited.

When asked about additional persons, groups, or organizations (besides schools) that have an important role in decreasing childhood obesity, respondents spoke to the necessity of multi-level support from the individual, to the family, community, and the state. One BOE member's response summed it up in the statement, "*I think the entire community has a responsibility and it should be a school-family-community involvement.*" BOE members mentioned that churches, parks, child care centers, publicly run facilities, municipalities, and the State Department of Health could all play a role in promoting healthy environments for children and their families. While one BOE member stated that it should be "*parents first and foremost*," another responded that *"any program from any type of organization that would educate the adults—the parents of these children—to the dangers of obesity"* would be a valuable resource. S/he went on to comment that, "*I think it has to be some type of civic clubs and maybe… county*

extension offices that reach mothers and what have you. But [there] has to be more help to educate the parents."

Regarding whom board members rely upon to get information on childhood obesity in Mississippi, most members mentioned the State Department of Education, the State Department [of Health], and multiple forms of media, including television, print and radio.

All members were in favor of proposed expansion of the current MHSA to require school districts to collect information on children's height and weight in order to assess their BMI, but one member said that BMI assessments should be voluntary rather than mandated, and another suggested that parents should give their permission at the beginning of the year. All BOE members concurred that parents should receive children's fitness test results (which are currently being collected as part of MHSA) as well as BMI results (which could be collected if MHSA is expanded). This consensus again emphasizes BOE members' perception of parents as necessary partners in improving children's health and decreasing childhood obesity.

BOE members were asked whether "junk" foods (foods that provide calories primarily through fats or added sugars and have minimal nutritional value) should be prohibited across seven school-based settings: (1) school parties; (2) after-school programs; (3) school stores (e.g., canteens and snack bars); (4) school vending machines; (5) school concession stands; (6) staff meetings; and (7) meetings attended by parents. Based on their responses, the question of prohibiting junk foods in some school settings remains somewhat controversial among this group of state-level policymakers. For example, five BOE members reported that junk foods should be prohibited in after-school programs, school stores, and school vending machines. Four BOE members reported that—although not prohibited outright—junk foods should be discouraged at student parties, meetings attended by families, and in concession stands. One BOE member captured the sensitive yet critical issues around prohibiting certain foods in school settings with the following comment:

You know, it is really hard to say "no chips and dip" [at family meetings]. It is really hard to just say "no junk food at all" for any of these things, but I guess we need to get a handle on it somehow. And if we do that when we have our [family] meetings, maybe it would go out [disseminate] into the community and our kids are going to get used to good diets at schools, if nowhere else, and we need to do that. So I'm not going to say "just prohibit all [unhealthy] snacks" at this point, but yes, we are going to have to work towards it.

When asked to identify what makes it most difficult for schools in Mississippi to meet physical education and nutrition requirements, BOE members identified several challenges, including:
Cost: "…healthy foods are generally more expensive than other foods that are not as healthy" and "money to swap out cafeteria equipment" for combi ovens.
Time: "As far as physical education goes, I'd say time in the [school] day limitations. The schools' primary functions are to educate the children, and [they] spend a lot of efforts to do remedial education; extra time with students. Taking time out for physical education for

physical activity is a time problem," which is compounded because physical education is not "given [priority] by school administrators."
Education: "Education of the staff" and "I think parents, and coming from home, and people not understanding and not knowing, uneducated about it [nutrition]."
School leadership: "Having educated, confident leadership [from those] who believe in healthy students."

When asked to what extent they believed there is a positive association between implementation of CSH programs and student academic performance, three BOE members reported that there is "a fair amount" of association, and three reported that there is "a great deal" of association between the two factors. As one respondent said, "*I think there's a positive correlation between the two. Generally—in my opinion, and I don't know if I could cite you the research to back it up—I think healthier children will achieve better.*"

Four BOE members reported that it was very important to provide wellness programs to school staff with the remaining two respondents reported that it was moderately important.

When asked to rate the effectiveness of School Health Councils (with 1 being not effective at all and 5 being very effective), three BOE members rated School Health Council effectiveness as a 3, or moderately effective. Given the importance of School Health Councils in efforts to increase community-level buy-in across multiple stakeholders, this suggests that there is a need to strengthen such councils throughout the state.

At the end of the interview, BOE members were asked to share any concluding thoughts on childhood obesity legislation and state policies. One BOE member expressed satisfaction with progress the state has made over the last few years, while another emphasized the importance of adults as role models through "*setting the example… and encouraging… healthy lifestyles from the starting point of eating, diet, and exercise."* Another BOE member focused on policy implementation with the statement, *"I think it's an incredibly important piece of legislation. I just hope those of us… responsible for making policies for the state that… affect our children [will] start to value the policy itself and make sure it's adhered to."* A third BOE member's suggestion was:

I think one of the ways we could affect obesity in the state is a positive… intense blitz against it to make people aware. I'm reminded of… when everybody smoked. Everybody on the corner was smoking. And it's a lot better in our state [now], a lot better in our nation because of the media blitz. And, I think… we [need to] make it a priority to get the word out there [about] how dangerous it is, how many people are on kidney dialysis because of type 2 diabetes and overweight problems, and how it affects our health, how it affects our man power in the state: If people are not able to work, how it's going to affect us so much in the future. I think it's just so important to get the word out on how important it is to have a good diet; how important a good diet is to us.

These concluding comments highlight the urgency of addressing childhood obesity in the minds of most BOE members, and suggest an increased awareness of the seriousness of the problem at the state and national levels. These comments also reflect recognition that successful efforts to impact childhood obesity will need to be multi-sectoral initiatives that engage stakeholders at the individual-, family-, school district-, state-, and national-level.

Comparison of Themes

Board of Education members have participated in an evaluation of the MHSA for the past four years. Highlights of their perspectives are listed below under each year's evaluation.

Year One Themes

Key themes identified by the seven Board of Education members interviewed in 2009 (Year One) included obesity as a continuum of health concerns; the economic cost to society of childhood obesity; time constraints in implementing current and future legislation related to childhood obesity and MHSA; and the role of government versus personal responsibility in childhood obesity prevention. BOE members were also concerned with the importance of improving school nutrition, and ensuring school cafeteria staff knows healthy cooking techniques and that they have the right equipment to be able to prepare healthy, nutritious food for students. The importance of parental education and involvement to preventing childhood obesity was highlighted, as well as a call to increase general public knowledge of the problem of childhood obesity. BOE members discussed the impact of health on academic achievement and the importance of role models for children. Lastly, respondents expressed their concern with disconnects between childhood obesity policies and implementation, and the need for strong collaboration among state agencies and communities to prevent childhood obesity.

Year Two Themes

Key themes identified by the six BOE members interviewed in 2010 (Year Two) included an increased focus on specific components of MHSA. Health education was identified as the most important component of MHSA in Year Two, and improvement of school nutrition as next most important. BOE members also called for the reduction or elimination of junk foods in schools. Respondents saw the BOE as a key facilitator in the successful implementation of the Act, and believed there should be an increased focus on outcome measurements as an appropriate way to assess MHSA's role in addressing childhood obesity. Respondents again called for increased community involvement and noted the importance of educational outreach in improving the health of school children. Although they did not use the official term "Joint Use Agreement", BOE members mentioned the importance of collaboration between local governments and schools to work together to make school facilities available to the community for exercise, and as in Year One, the correlation between children's health and their academic achievement was

also mentioned. Cost, funding, and time constraints were listed as the key obstacles to the successful implementation of MHSA.

Year Three Themes

Key themes identified by the six BOE members interviewed in 2011 (Year Three) illustrated how respondents began to differ in their rankings of the most important components of the MHSA, with members divided between ranking health education and school nutrition as first in importance. Respondents perceived the Act as being timely and necessary and reported that state education personnel fully understood the problems associated with obesity, and endorsed the passage of MHSA. Year Three responses again highlighted the need for a collaborative effort to reduce childhood obesity among many different state agencies and stakeholder groups. Adult role models were named as a critical component of promoting healthy lifestyles with children to demonstrate the "real world" benefits of adopting healthier eating patterns and more active lifestyles The tensions around how best to use the finite number of minutes in the school day was highlighted, and members mentioned the competition between federal academic benchmarks that all schools must meet and the need for improved health education, believing a balance was necessary, recognizing that healthy students perform better academically. Regarding obstacles schools face in effectively implementing the full requirements of MHSA, BOE members placed heavy emphasis on academic achievement; time and money; and creating "buy-in" from administration, faculty, and parents.

Year Four Themes

Key themes identified by the six BOE members interviewed in 2012 (Year Four) reflect a deeper understanding of the complexities of preventing childhood obesity and acknowledgement of the "long-term health" and socio-economic consequences of obesity for individual Mississippians as well as the state. As in 2011, board members did not agree on which of the three components of the Act should be prioritized (improving school nutrition, improving physical education, or increasing health education). Members were evenly split between ranking improving school nutrition and increasing health education as most important, but most respondents agreed that improving physical education was next most important. All unanimously agreed that the prevention of childhood obesity is "most important" for the state of Mississippi. This represented a slight change from Year Three when not all respondents gave the "most important" ranking to this question (from a scale of 1 to 5).

Members' suggestions in Year Four also point to a greater sense of urgency in seeing childhood obesity rates decline in Mississippi. Members called for stronger MHSA oversight and evaluation of MHSA by the Board of Education and suggested putting stronger regulations and minimum standards into the MHSA to which all school districts would be required to adhere. Taking stock of how far we have come and what yet must be done was also suggested by evaluating what is working and what needs to be changed in order to improve the health of our

children. The importance of engaging multiple community sectors – such as local community members, child care centers, churches and civic organizations – in health education and promotion through exercise programs, educational programs, and Joint Use Agreements between schools and communities was an important theme from previous years that was expanded to include county extension offices that serve parents of young children.

Related to this theme of more fully engaging community members in health education and promotion, a theme from previous years again emerged around the critical role that parents and children's families play in their children's health. Most Board of Education members mentioned the continued need to educate parents about the dangers of childhood obesity and believed we need to do more to support parents' abilities to have healthier food offerings and choices at home as well as in school. Board members recognize childhood obesity as an issue that can only be solved by school-family-community partnerships and may even require a cultural shift in the types of food that we Mississippians traditionally value and serve. Members noted that although many of us, not only children, are "taught better than we practice," we nevertheless need to "get a handle on it somehow." Members acknowledged that collecting student BMI data is important, but felt that such assessments should be conducted with the permission of parents.

Another theme carried over from previous years was the issue of competing priorities relative to childhood obesity at the state-level, school district-level, and especially among local schools, given that "schools' primary functions are to educate the children, and [they] spend a lot of efforts to do remedial education." As one member summed it up, "we're so busy in the state. [There are] so many other issues that come up that sometimes these things fall by the wayside, or get… pushed aside for something else."
In terms of new and creative ways to heighten awareness of the importance of childhood obesity prevention, one member stated that we need to "*make it a priority to get the word out there how dangerous it [obesity] is*" through an "*intense [media] blitz*" similar to national and state anti-smoking media campaigns. Such comments reflect a keen sense of urgency among BOE members that coordinated and sustained public health initiatives are needed to heighten awareness of the serious short-and long-term consequences of the childhood obesity epidemic in the state and the nation.

Mississippi State Board of Health (BOH)

The mission of the Mississippi State Department of Health is to "promote and protect the health of all Mississippians."[xi] The Department of Health is governed by an 11-member Board of Health (BOH) appointed for staggered terms by the Governor of Mississippi. The BOH meets four times per year and is charged with providing policy direction for the Department of Health. The board also appoints the State Health Officer to operate the agency, approves the State Health Plan, and approves all rules and regulations of the Department of Health[xii].

In 2012 (Year Four), seven of the 11 BOH members were interviewed to collect their insights and perspectives on issues related to implementing the Mississippi Healthy Students Act of 2007 (MHSA). When asked to rate their familiarity with MHSA, two BOH members reported that they were "very familiar" with MHSA, three were "somewhat familiar" with the Act, and two were "somewhat unfamiliar" and "very unfamiliar" with the Act.

When asked to rank the three components of the MSHA in order of importance, the majority of BOH members (four of seven) ranked increasing health education as most important and improving physical education as next most important. The majority of BOH members (four of seven) reported that they were aware that the Center for Mississippi Health Policy is conducting a five-year evaluation of the MHSA, and three BOH members said they had seen a copy of the evaluation report from previous years.

BOH members were unanimous in their belief that the prevention of childhood obesity is an extremely important issue in the state of Mississippi, which was reflected in comments such as, "*Since we're known as the fattest state in the nation, I think it's very important*" and "*I think that's the most important thing we could possibly work on throughout the entire state. Not only children, but adults."*

When asked to rate the state of Mississippi in terms of policies to effectively address childhood obesity, BOH members' responses ranged from "not at all effective" to "somewhat effective." It is noteworthy that although one member stated, "*I think the programs are set up effectively so that would be a five"* s/he qualified the response with, *"Now as far as has it had the effect that we want of it yet, that would be a one or a two."*

Most BOH members reported that the reaction to MHSA among key stakeholder groups such as teachers, school nurses, physicians, and local health departments with whom they interact has been positive, "*they talk about it a lot,*" and seem to be on-board with state-mandated childhood obesity prevention efforts because they understand "*the severity of the situation*" in Mississippi. Teachers were perceived as particularly "*appreciative of what's being done in the food and the exercise areas*" to combat childhood obesity. However, as one respondent commented, support for MHSA is "*not nearly vigorous enough*," which BOH members felt might be due to the fact that—although a number of key stakeholder groups are on-board with the Act, they may not know what exactly they can do to further childhood obesity prevention efforts in the state. BOH members also noted that unequal buy-in from key stakeholders such as parents was a barrier to full implementation of the Act, which is reflected in a BOH member's comment, "*I think the Health Department is trying, but there's a lack of cooperation primarily on the part of the parents*." These responses reflect a general agreement around the importance of MHSA, as well as concern that certain stakeholders may be unclear about their specific role in carrying out the requirements of MHSA.

When asked how best to measure MHSA's success in terms of childhood obesity prevention, BOH members' responses centered on collecting longitudinal data from students on height and weight to determine whether children's body mass index (BMI) was being reduced as well as

"*evaluating the weight of children compared to what their weight should be*." Another BOH member said success should be measured by the physical fitness level and health knowledge level of students. As one BOH member shared:

Well, I think probably through several evaluative measures. Some of our schools that have school nurses—that would probably be a good place to begin… Looking at some of the illnesses in terms of preventive care, we could measure certain basic types of illnesses that you absolutely won't get if you are not obese. . . [and] we can also measure it by school nutrition. I think it's very, very important that we take certain types of snacks out of the schools. I think that's a measuring stick. I think it's getting our children to change lifestyle habits. And if we can do that, I think we're going to have a stick that we can definitely measure—in terms of how they go about their lives, what they eat and how much [they eat], and how long they exercise.

All BOH members see a role for the State Department of Health in obesity prevention. One member added:

I think we need to continue what we have started, and that's an ongoing dialogue with the State Department of Education because we can provide some resources to the State Department of Education that will help in a number of ways: And that is dealing with health education, and dealing with nutrition, and really talking about exercise. I see this as a cooperative venture, and if we're going to [move] away from being. . . the fattest state in the nation, we're going to have to continue that dialogue. I see more programs coming out of this and I see some things that we can do together in partnership with the State Department of Education that will help us… as it relates to the health of our children.

Collaboration with other state-level agencies on eradicating childhood obesity in Mississippi—and in particular with the State Department of Education—is a theme from previous years which continued to resonate with BOH members in 2012. This highlights the importance of coordinated efforts by agencies concerned with children's education and general health and well-being to ensure that each agency's expertise is maximized and to reduce potential duplication of services and outreach efforts—especially in the current resource-limited environment.

BOH members were asked to rate target areas to be addressed by public health, by level of importance. The following areas received the most ratings (four or five board members, out of seven, said they were "very important" to address): "increasing physical activity"; "increasing consumption of fruits and vegetables"; "decreasing consumption of high calorie, dense foods"; and "decreasing consumption of sugary beverages".

All BOH members agreed that local and district Health Departments have an important role in promoting the MHSA given that "*They are the ones who have to institute the policies of the Board [of Health]."* and are critical in terms of implementing publicity campaigns and media blitzes focused on obesity prevention. As one BOH member elaborated:

I think there are some things that you can do in your own districts because you've got more of a situation [obesity issue] in some districts than others. Probably districts up in the Mississippi

Delta have some different concerns and issues than say a district on the Mississippi Gulf Coast or even districts in the Jackson metropolitan area...As we look at this overall problem, we need to see what's indicative of the districts… we serve. I believe those individual districts have a lot to do in their own areas, but the leadership to make all of this happen should come through. . . the State Board of Education and. . . through the State Board of Health.

Most BOH members thought the state of Mississippi has not done enough to strengthen the school policies on health education, physical education, and nutrition, which was expressed in the comment that the state "*can mandate better*." The same BOH respondent believed that it "*should be an easy correction if they [state legislators] so choose*."

When asked what other policies need to be enacted, two BOH members said that while they did not believe additional policies were necessary, efforts should be made to ensure that existing policies that have been "*carefully thought out and already instituted*" are followed and "*actively performed*." One BOH member made this point by saying:

I think we need to work on [implementing existing policies]… because we're not putting enough effort into those. I'm not just for coming up with different policies every year and we haven't done what we need to do on those very critical areas we just mentioned [health education, physical education, and nutrition]. I would like to see some things done with them that we can actually see. For instance, [in terms of] nutrition, we have done some things but we need to do more. I think that when you look at what we are [currently] doing, we need to be able to see progress on these basic lines rather than just coming up with more policies just for policy's sake.

Other BOH members suggested specific new policies to improve the school-based nutrition and to increase time for physical activity. One respondent noted, "*When I was in school… we used to get two vegetables and a meat. Now, they [children] get pizza and French fries. They need more vegetables and fruit and less prepared food*," while another expanded:

One of the most important things is the school lunch program. They need to do away with high calorie, high fat, sugary foods. And there should be an exercise program of some kind that lasts at least one period out of every day…[And] as far as getting anything to the children themselves, I think the target has to be the parents.

One BOH member emphasized that although "*stronger and more rigorous policies"* need to be implemented and enforced by the state*, "most of all, [we need to] make School Health Councils active and [we need to] present models of School Health Councils that work… [and] incentives [rewards] for the best School Health Council*." Another BOH member echoed the idea of using incentives to boost school-based obesity prevention efforts and spoke to the importance of having healthy role models who can offer "*leadership by example*" because "*educators need to have special incentives to encourage them to do the same things we're encouraging our students to do*."

When asked about things outside of the school setting that can impact childhood obesity prevention efforts, the majority of BOH members ranked child care centers, farmer's markets, BMI reporting, the built environment (e.g., sidewalks, parks, green space, bike lanes), fat/trans

fat restrictions, and proximity of supermarkets as having a "very large impact" or "large impact" on childhood obesity and prevention initiatives.

Interestingly, two BOH members commented specifically on the potentially low impact of nutrition labeling, saying they do not believe consumers, especially children, read the information on nutrition labels, and that this type of information should be included in efforts directed towards educating parents about childhood obesity and sound nutrition. Although "educating parents" was not included in the original list of factors to rank order, one BOH member noted, "*I thought you would ask me about training the parents and I was ready to put a 10 on that one!*"

In a departure from the results of the BOH Year Three interviews, BOH members interviewed in Year Four unanimously agreed that local government funds should be spent to build and maintain places in the community where people can exercise. One board member added, "*But private donation funding would be more meaningful- perhaps matching grants locally by government.*" This change from 2011 is noteworthy because only one BOH member interviewed in Year Three supported the use of government funds for building and maintaining places in local communities where people can exercise. This change in response is possibly partially due to the fact that several different board members were interviewed in Year Four who were not among the respondents in Year Three. However, at least two BOH members who answered "no" in Year Three to the question of whether local government funds should be spent to build/maintain community places for exercise did, indeed, change their response to "yes" in Year Four.

At the end of the interview, BOH members were asked to share any concluding thoughts on their experience and knowledge with MHSA and related childhood obesity prevention efforts and legislation. Responses were rich and varied and dealt with themes such as raising awareness around the dangers of childhood obesity; increasing time for physical education in school and increasing exercise or outdoor play outside of school; mandating health education curricula; and starting early to prevent childhood obesity by including very young children in efforts to improve nutrition and overall health in order to make a positive difference from the first years of life.

The importance of "*getting the word out*" about the importance of childhood obesity prevention and the potential economic and health cost of obesity-related illnesses were highlighted by one respondent:

We need to cooperate and partner more with the media to get the word out so that parents and other people in the community, and other stakeholders, as well as government officials [know]… the severity of the situation… This also has a great link to economic development because if we don't [prevent] obesity…at the earliest possible level we're going to pay for this on the other end. Which means that we're going to be paying for adult obesity and it's going to come to us in increased health costs.

Several BOH members discussed the urgent need to increase the amount of physical activity among Mississippi's children and adults:

[We must let] our children know that even though it's very convenient for mom to let a child sit at the computer and play, we've got to demand that they go outside and play, like they did years and years ago. [There] was nothing wrong with riding a bike and playing hopscotch and doing all those outdoors kinds of things because by the time… you came inside you would really burn off a lot of energy—you would have exercised every bone in your body… We've got to make information available—we have actually got to take some stands to change some things. Technology is wonderful but it's not good for our body. We've got to get outdoors and we have got to encourage our children to get outdoors. Years ago, you could just tell a child, "It's time for you to go out and play." Maybe we've got to do more than that—maybe we've got to go outside with them to make sure that they go out and play. But I can tell you, we've got to do some things different because these hand held devices [and] computers don't give the child the exercise they need. Nothing substitutes for fresh air and getting out and playing in the back yard, the front yard, or whatever kind of yard you have, or maybe on a routine basis, taking our children to the park. We've got to get them acclimated to knowing that they have to get outside. They just can't sit inside with a television and play a Wii and think everything is going to go fine because… being sedentary just doesn't work. In the long run, we're going to have hypertension, we're going to contract type 2 diabetes and other types of illnesses that really and truly we can avoid with exercise.

And

Have you gone to Europe? You don't see a lot of fat people there in Holland… If you look at Holland and Germany, on every road they've got a four foot wide bicycle/walking path. Of course, the entire country is much more compressed than [the USA], [but] everywhere I went I saw people in Holland riding bicycles, getting out walking. So, I don't know that their food consumption is better than ours, but they exercise a lot better.

And

I think the communities that are working to have the school gymnasium opened for the public [Joint Use Agreements], that's a real good program.

And

I think the most important thing is the Department of Education putting back the physical education course in the schools and mandating that kids—even if you can't afford the P.E. teachers—at least [be] allowed a minimum of 20 minutes a day… to just walk around… as a point of exercise. Just doing something [physical] on a regular basis.

One BOH member specifically concerned with health education in the schools, expressed in the response*, "Until we have coordinated, comprehensive, sequential, age-appropriate coordinated school health education funded and mandated, we will likely not have great success"* addressing the state's childhood obesity issue.

Another topic noted by a respondent was how the proximity of food sources can affect obesity:

I… watched [people] in [Europe]… since electricity was expensive, they didn't have big refrigerators and freezers like we do. And, they were in close proximity to the food source so they would go in… get some meat, some bread, some cheese, some wine, and have a little bag, and that was their food. They didn't have big pantries of food. And everything they ate was lean: the meat, cheese, a little bit of bread… They didn't have a lot of food on hand and they walked an awful lot, but it helped.

Three BOH members emphasized the importance of starting early with childhood obesity prevention efforts, noting that "*What we need to do is start as early as possible to help our children with food choices."* Building on this comment, another BOH member stated*, "I think a lot of this has to start in the schools because the parents tend to give in to whatever the child wants. So I think education and starting early, as early as the first grade—in elementary school—is one of the most important things that can be done."* Another BOH member commented:

I think what the state is doing is really good… I believe we're on the right track—we just need to really push it hard. We're the number one obese state in the nation, and it [prevention] really has to start with childhood. I've given the example before: Just like it took a large group of kids who speak two different languages and put them together, within the year they will have… an additional language that they all speak together. So, in that regard we need to teach them [children] the new language of healthy eating and more exercise—I think it's extremely important.

One BOH member believed the ability of participants in the federal Supplemental Nutrition Assistance Program (SNAP, formerly known as Food Stamps) to use SNAP cards "*at the farmer's market is an ideal thing*" to promote healthier food choices among families at heightened risk for poor nutrition. However, on a more controversial note, another BOH member shared his/her perception that many SNAP participants are overweight due to unhealthy food choices. This respondent advocated only allowing a SNAP card to be used for the purchase of nutritious foods such as meat, fresh vegetables, fruit, bread and food designated as "healthy," while foods designated as "unhealthy" (i.e., candy, potato chips, donuts, ice cream) be restricted or prohibited for purchase using a SNAP card.

Comparison of Themes

BOH members have participated in an evaluation of the MHSA from 2009 through 2012. Highlights of their perspectives are listed below under each year's evaluation.

Year One Themes

Responses from the eight BOH members interviewed in 2009 highlighted the importance of increasing physical activity and physical education for children. BOH members were concerned that in many schools physical education hours seemed to have decreased, and that television/computer "screen time" has replaced outdoor play time for children. The economic and health costs of obesity to the state were also of concern to BOH members. One respondent warned that medical expenses for all health insurance holders will increase as the state's

general health care costs continue to increase due to escalating numbers of Mississippians with obesity-related diseases, such as type 2 diabetes. BOH members interviewed in Year One also spoke of the critical role of schools in preventing childhood obesity by making healthy changes in school meals and vending machine snack options along with educating children about healthy food choices and lifestyles. Board members advocated involving and educating parents in the prevention of childhood obesity and highlighted the critical need for collaboration at all levels of government, along with local action and leadership focused on childhood obesity prevention efforts.

Year Two Themes

Responses from the five BOH members interviewed in 2010 highlighted the need to start childhood obesity prevention efforts in the earliest years of life. When asked to rank target areas by level of importance, members gave a 4.6 out of 5 rating to "encouraging breastfeeding" and also ranked child care centers as a 4.8 out of 5 for having a "very large impact" on childhood obesity in Mississippi. BOH members supported the collection of longitudinal data to measure changes in the prevalence of obesity, starting with children during pre-kindergarten or their first school entry point. As in Year One, BOH members called for increased physical activity and health education for children in school, beginning in early childhood and lasting all the way up through 12^{th} grade. As in Year One, the importance of serving healthy school-based meals to children was highlighted in Year Two with respondents calling for the elimination of sugared drinks, pizza, fries, and other unhealthy and pre-processed foods from school cafeterias and vending machines. The influence of children's role models and physical environments were other Year Two themes, and respondents' comments focused on the importance of leading by example; requiring restaurants to provide nutritional information on their menus; and ensuring communities build walking trails, sidewalks, bicycle paths, and playgrounds.

Year Three Themes

Responses from the five BOH members interviewed in 2011 highlighted their belief that "improving school nutrition" was the most important component of the MHSA. In addition to measuring BMI and conducting fitness tests to measure the success of the MHSA, responses in Year Three also focused on what we are serving our children in school, echoing concerns raised in Year One and Year Two. Interestingly, respondents were also keen to conduct evaluations to determine whether school-based meals are more nutritious since MHSA was implemented as compared to before MHSA was enacted. Another Year Three theme focused on the need for collaboration between state- and local-level agencies, especially given the state's current economic climate of budget constraints and cutbacks. It is also noteworthy that BOH members were hesitant to support the use of government funds to build, maintain, and support community exercise facilities, stating that adopting a healthy lifestyle should be an individual choice and responsibility. The tension between the importance of supplying students with sound health education and the need to achieve federally mandated academic benchmarks related to "No Child Left Behind" was emphasized, yet BOH members also felt, "*Health education should be on equal academic status with math, science, language and social studies.*

It should be comprehensive and sequential." As in Year Two, the importance of beginning childhood obesity prevention efforts with young children was emphasized in statements such as, "*getting children eating the right things early . . . will carry on… [and] as they matriculate, they [students] will work that into part of their daily habits, which will in turn, decrease some of the healthcare disparities we have in the state of Mississippi.*" BOH members also advocated starting childhood obesity prevention efforts with children because the children will then influence and educate their parents and other family members, which was reflected in statements such as "*Within one generation, children are capable of changing the (landscape) of obesity*" and "*The answer [to obesity prevention] lies with the children*."

Year Four Themes

Responses from the seven BOH members interviewed in 2012 highlighted their belief that "increasing health education" was the most important component of MHSA. Yet BOH members also touched upon the importance of improving physical education and school nutrition as integral to childhood obesity prevention efforts in the state. Such responses in Year Four reflect a deepened understanding of the relationship and relevance of all three MHSA components working together in order to be most effective. Among individuals and health department districts with whom they interact, BOH members reported a general positive reaction to MHSA, but said there is a need for stronger leadership and clearer direction to ensure it is carried out effectively, with clear understanding on the part of those working for and with children (including parents), on their respective roles in fighting childhood obesity. As in previous years, the need for improved collaboration between agencies such as the Department of Health and Department of Education was highlighted in Year Four. BOH members expressed concerns about what is being served in school cafeterias and made available to students in school vending machines. Most respondents called for changes in school nutrition to ensure that calorie-dense foods with low nutrition value (i.e., junk foods) are removed from school cafeterias and replaced by more vegetables, lean meats, fresh fruit and other healthy foods. It is also noteworthy that BOH members expressed an urgent need for mandated time for physical education (ranging in time from 20 minutes to at least one class period, every day). Perhaps the urgency BOH members felt over the need for children to be given more opportunities to be physically active also contributed to the contrast to Year Three in BOH opinions about whether or not local government funds should be spent to build and maintain community places for exercise. In contrast to Year Three results, all seven BOH members interviewed in Year Four believed that local funds should, indeed, be used for the purpose of providing children access to places to run and play after school hours. The theme of starting as early as possible with efforts to prevent childhood obesity was carried over from previous years. BOH members advocated for helping young children make healthy food choices so that they will develop healthy habits to last a lifetime, expressed in statements such as "*we need to teach them [children] the new language of healthy eating and more exercise*."

District Health Officers (DHOs)

The mission of the Mississippi State Department of Health is to "promote and protect the health of the citizens of Mississippi."[xiii] The Board of Health has created nine public health

districts in Mississippi. These districts are made up of "two or more counties for the purpose of administering health programs and supervising public health workers in the district".[xiv] The Board of Health appoints a licensed physician who is well trained in public health to work full-time for the district as their District Health Officer or District Director. Six District Health Officers (DHOs) oversee the public health programs in Mississippi's nine public health districts, and all six DHOs were interviewed in the Year Four evaluation of the Mississippi Healthy Students Act (MHSA) in 2012.

Familiarity with MHSA varied considerably across the respondents. Two DHOs reported that they were "very familiar" with MHSA, two were "somewhat familiar," and two were "very unfamiliar" with the Act. The variability in Officers' responses in Year Four is somewhat surprising given that in the Year Three evaluation (conducted in 2011), no DHOs reported being "very unfamiliar" with MHSA, and four respondents reported that they were "somewhat familiar" with the Act.

When asked to rank the three components of the MHSA in order of importance, DHOs were in close agreement. Four of six DHOs ranked improving school nutrition as most important, and five of six DHOs ranked improving physical education as next most important. Most of the DHOs (four of six) were aware that the Center for Mississippi Health Policy is conducting a 5-year evaluation of MHSA, and half of the respondents had seen a copy of the evaluation report from previous years. All six DHOs believed the prevention of childhood obesity was an extremely important issue for the state of Mississippi. As one DHO noted*, "Oh it's a five. It's critical. If we don't start it then, it's not going to become a habit."*

When asked to rate where the state of Mississippi is on addressing childhood obesity policies, Officers' responses ranged from "not at all effective" to "somewhat effective." Although the ratings were low, one DHO explained that s/he is hopeful the state will be more effective in the future, especially when it comes to possible legislation around Joint Use Agreements between schools and communities to allow community member access to school tracks, playgrounds, etc, after school hours:

This Joint Use Agreement will get a major boost with this legislation that hopefully gets passed, so we remove liability from the schools [and] open up the school grounds for public use. . . The access to the buildings and school grounds should be facilitated, [and] that's [school liability] been one of our hold ups. . . It's expensive to build exercise stuff and why not use the resource we have? We have a push for Joint Use, but without this legislation we're not going very far. . . The schools would be held harmless from liability for allowing the public to use these facilities—their walking trails and more—after hours.

Four of six DHOs said the reaction to MHSA among individuals and health department districts with whom they interact has been positive and favorable. One DHO said people are encouraged that some efforts are taking place, but that they also realize that MHSA must be part of a broader movement to have a sustained effect on childhood obesity. Another DHO explained that MHSA is one of various initiatives in place to improve children's health:

Our nutritionists, our social workers, and our nurses have been involved in various aspects of the program, and so, they've been very supportive. . . And the Health Department has taken on a major program and initiative itself trying to promote the legislation. . . [F]or our WIC clients, [we're] mirroring what we're trying to do with the school's legislation so [that] we've got plenty of fruits and veggies in the [WIC] meal package. And we've also added whole bread and eggs in addition to the fruits and veggies in the meal package. These are the WIC packages for the women, infants and children. We're starting early in getting them used to fruits and veggies, and portion size, food education. And so, the two have helped [support] each other. The WIC people wanted the legislation, and the legislation helped the WIC people move to fresh fruits and veggies.

Another DHO spoke of the excitement around the passage of MHSA within the public health field:

Well, they all seem to be really positive about it. When it first came out and the idea about changing—you know, getting away from fried foods in the cafeterias and trying to [get] them to go to more healthy foods and all was really [exciting]. The nutritionists really jumped on that, and they thought it was really great. They've been pushing for things like that for years. So this [legislation] really fit the bill. Of course, the whole premise is increasing exercise [and] also assuring that the kids actually had something good to eat.

The remaining two DHOs were concerned that most people in the public health field had limited knowledge of MHSA. This wide variance in responses suggests highly varying levels of awareness and knowledge about MHSA among health staff across the nine public health districts, as well as the need for information sharing and buy-in from health personnel at all levels within and across each health district. Periodic meetings for state health officials could be one forum for sharing information between health district personnel with less informed districts, and health districts that have learned from their successes and challenges with MHSA and have stories and suggestions to share from their experience.

The DHOs offered rich and varied responses and ideas around measuring the success of MHSA, including collecting data on BMI, children's "*weight and activity levels*" and an end result such as "*reducing obesity and having better, stronger kids – healthier kids.*" Another DHO suggested "*intermediate measures such as increased activity or…changes in the schools' nutrition plan that are more consistent with healthy diets*." While recognizing the importance of BMI assessments, one DHO spoke of the importance of looking beyond BMI results and the school environment—which are the primary focus of MHSA—and called for a more holistic and multi-sectoral approach to obesity prevention that fully engages the home and community. As s/he stated, "*if you're just changing it [health behavior] at school and it's not going home, and you're not getting the community involved*" obesity prevention is "*going to be a real tough sell*." The respondent believed it is vital to obtain feedback from the family to fully evaluate the success of MHSA and answer questions such as "*Is it [MHSA] changing Mississippi's view on obesity? Are we addressing it [obesity prevention] in the family or is it simply something that's just happening at school and [is] not going home?"* The respondent noted this was critical *"because, ultimately, the goal of this whole thing is to increase lifelong decreases in obesity with the result of a decrease in chronic illnesses that are related [to obesity]"* among the state's entire population.

Another DHO agreed that "*it would be great for us to, if we really pushed it, to do BMIs, or that sort of thing in the schools,*" but emphasized that BMI assessments and reporting would have to be accomplished in such a way that "*the numbers were not known to the kids. . . The kids didn't even see each other's weight or anything."* The respondent spoke of the importance of sensitivity around how the information is collected and shared, and stressed that, *"it would be real important not to have kids be humiliated*" during the process of conducting BMI assessments.

All DHOs see a role for district and county health offices in childhood obesity prevention. As one DHO put it, "*all the District Health Officers agree that it's a real problem and all of them would like to do whatever they can to help*" curb the state's obesity epidemic. Illustrating the important leadership role of district and county health office personnel in obesity prevention efforts, one respondent elaborated that health office personnel "*have had quite a bit of professional training. In fact, we're having a conference—a training program—in May and one of the themes will be physical fitness and exercise and how to promote it and also do it yourself."* Expanding on their leadership role, this same DHO mentioned the importance of obtaining buy-in from multiple sectors—including health care providers—with the comment, *"We've sort of taken a leadership position and… all the physicians and all the nurse practitioners in the state come to these meetings. So we're 'infiltrating the ranks' [of health care providers] in that way."* Another DHO pointed out that leadership in obesity prevention is also very personal given that *"it's hard to promote what somebody else ought to do [when] you're not doing [it yourself]. I've got some overweight nutritionists educating patients [on] how they need to be careful of what they eat, and [patients may be thinking] 'Have you looked in the mirror?!'*

When asked to rank target areas to be addressed by public health initiatives by level of importance, the majority of DHOs (i.e., four or more respondents) ranked as being "very important" to address: increasing physical activity, decreasing consumption of high calorie dense foods, encouraging breastfeeding, and decreasing consumption of sugary beverages.

DHOs were encouraged by the progress being made around increasing public awareness of the health benefits of decreasing consumption of sugary beverages and, in particular, of increasing consumption of water. As s/he stated, "*You know, that [behavior] is taking off.* The respondent elaborated, *"I used to complain about all these people with bottles of water in their hands, except [that] they don't have cans of soda pop in their hands anymore"* which suggests that *"there may be acceptance in the general public that water is the best versus the sugary drinks."* The DHO also noted that MHSA has played a part in promoting healthier beverages because *"that's an option that they have in the schools' vending machines—they put fruit juice and water [instead of] soft drinks."*

DHOs unanimously agreed that district and county health offices have a role in promoting MHSA. One DHO noted that, to be effective, MHSA promotion would have to come from more than just the Department of Education. Specific activities within the district and county health offices' roles were mentioned such as going to each school to support, advocate, and influence their health councils; providing public relations services through health nutritionists; displaying posters which encourage good eating habits; and joining school boards and promoting MHSA within these school boards.

When asked how involved personnel in their health districts are in assisting schools in implementing Coordinated School Health (CSH) programs, officers' answers revealed several challenges and weak links. DHOs reported that their personnel were, in general, minimally involved in CSH program promotion. As one DHO mentioned, "*other than just taking on individual initiatives, we don't have a direct connect there between the school districts and [the] State Health Department*." Another DHO added*, "We are on a few school [health] councils, health councils with the school nurses, but they seldom meet and don't get anything accomplished."* A third DHO reported, "*We do have a health educator…, but otherwise the other folks [district personnel] pretty much are busy in the clinics. . .Our health educator does all of our school involvement, so that's one person for nine counties."* This statement highlighted the fact that the resources of District and County Health Offices are stretched very thin. Another DHO explained the relationship between District and County Health Offices and local schools as follows:

We don't have a defined role, and certainly we don't have any sort of oversight of the schools. Other than just normal relationships, we do have an educator that does health promotion and so we probably do more health promotion, but we don't oversee the nutritional component of their [programs].At least at the county district level, we don't have much oversight. . ."

As another DHO explained, *"We're involved as they let us. We have one guy who does that and I think he's very effective, but it's not the world's most popular program, and the schools—schools themselves don't care about it."*

A DHO spoke of the ideal CSH program by describing an initiative in one County in Mississippi:

*The Coordinated School [Health] program that's best in the state, as far as I can tell, is the one that's going on in [*name deleted for confidentiality*] County. They have one school district for the whole county to have [number deleted for confidentiality] students in the school system. They have state-of-the-art exercise equipment, outside and inside. They have collaboration with the community—big time support. Their bond issues for new buildings pass at like 85% and they build the buildings within two years of getting the [bond] money. They're like putting mortar on a mushroom machine – it pops up out of the ground. So, it can be done and what they're doing up there—they have a collaboration with the community for community gardens, exercise programs. They do field days on the school grounds [that] bring the parents and siblings and everyone together. It's just a different world. The church is involved and the civic leaders. I've never been to a meeting [there] when [the school district superintendent] doesn't have the media there and the mayors of the towns—so it is a coordinated kind of effort—and the County Board of Supervisors is represented as well. They're all on one page... There are other schools and school districts that have similar accomplishments, but none that are system-wide like [*name deleted for confidentiality*] County. They have their own TV studio where I can go answer [health-related] questions and parents can view my. . . video and get the questions that they need answered. It's just another world.*

The majority of DHOs reported that Mississippi has not done enough to strengthen school policies on nutrition, health education and physical education. One DHO mentioned that "*Adequate funding for the target. . . goals would certainly be worthwhile"* as well as *"making sure that all schools have healthier apparatus for cooking foods such as those quick bake ovens [combination oven/steamers] instead of deep fryers—making sure we get rid of deep fryers."*

This respondent also mentioned, *"Making sure that the foods that are available are really healthy"* as a priority. As the DHO added, "*You know, defining vegetables [correctly, because] ketchup [is] not a vegetable, tomato sauce on a pizza is not a vegetable. Making sure that [school] nutritional standards are really rigorous standards."*
Another DHO suggested enacting a policy around child participation in school nutrition/menu planning, which would allow children themselves to be directly involved in decision making to improve school-based nutrition:

There's still a good deal of hassle [pushback from school personnel] of having the students make some choice in the fruits and veggies that they're going to consume. It's like, "I know best and these are the veggies that you're going to eat because they're in season." And I can understand that [attitude], but there are other veggies that are in season that the kids may eat [that are] just as nutritious and so, you know, give some autonomy to the school districts to have a choice among the fruits and veggies that are served. The population on the [Mississippi] coast has different tastes than the population around [our county], versus the Delta, versus the Hills, and so the [school] menu ought to say "You need a fruit that gives you this: so much calcium, etc., and these are the choices that would give you that." Rather than "Spinach is what you're going to serve" [school personnel could tell students] "We want to make the menu for December, kids. Here's the choices. This is what we have. What do you mean you don't like the beans? Ninety percent of us want beans. Next month you'll get your lobby to lobby for potatoes!" . . . [School menu planning could] become participatory. You can do it now, but a policy would sure help.
Regarding Mississippi's school policies around health education, one DHO touched upon the controversy around sex education, and how it relates to health education by saying:
This is stormy water. We're having this big to-do right now with [state-mandated] abstinence and abstinence plus [sex education curriculum], and the community gets all bent out of shape when you start to talk about health? "You're not going to talk about reproductive health, are you? You know, if you want to talk about apples and oranges, that's fine, but no bees…!" So it sounds good and I'm all for a health curriculum, but [if] you learn your body and how it functions and, well, all of it [then] you can relate it. You can't take one out and leave it on the shelf when you go out.
When asked if Mississippi has done enough to strengthen school policies on physical education, one DHO said: "*We need to start requiring [physical education]. I hated it when I was young, but it was a good thing*." Another Officer's perspective addressed the first respondent's memory of "*hating*" physical education when young with a suggestion for how to improve standard physical education activities in school:

The physical education piece. . .is ok as long as they have physical activity and [it is] not [only] preparing the sports athletes. . . You know, all the jocks get out there and play and everybody else just watches. [We need] to have some more game opportunities that you don't need to be a quarterback type, but that you can get physical activity from and have small groups of people playing [together]. There was a game that I was introduced to at a meeting on health education and promotion. It's the "dirty ball game." You come out with a clean ball and you tell the kids to take this ball out in that field and they can't come back until it's dirty and they can't dip it in the ditch, and muddy it. . . And that's the game. . . There's no watchers, no spectators. Everybody's

got to participate in the game that [the kids] come up with—turning these kids loose to do their thing.

One respondent said additional polices were not necessary for the MHSA, just more action on the existing policies: "*I don't think they need any other policies, they just need somebody to do something, that's all. I don't think we need more policies because we need more people to do something*." Other DHOs suggested specific policies, such as "*They need to have PE every single day they're in school, we need to have the colas gone [from school vending machines], and educate [students] that they need. . . better nutrition and exercise daily."* Another DHO expanded on the issue of whether MHSA-mandated physical education requirements were actually being implemented within schools because "*we need to put some more requirements in for physical education that are real [because] I think what has been instituted is not really being instituted."* As the DHO explained, *"If we enforced what's out there"* in terms of MHSA-mandated physical education requirement*s "that would probably be enough for a start, but I think it's not really happening like it was intended."* Another DHO discussed the importance of school programs *"where kids can actually incorporate some activities into their normal daily activities outside of what they would normally do. I think [that] would be a good thing"* as well as *"making sure that the curriculum for health education is evidence-based and effective."*

When asked about things outside of the school setting that can have an impact on childhood obesity prevention efforts, two or more DHOs rated the following as having a "very large impact": media policy (restrictions on advertising, promoting positive messages, etc); farmers' markets; Body Mass Index (BMI) reporting (measuring student's height and weight); built environment (sidewalks, parks, green space, bike lanes, etc.); and fat and trans fat restrictions. Three DHOs felt that media policy and reporting student BMI results to parents have a "large impact" on childhood obesity prevention efforts.

Although Officers' responses varied on the impact of nutrition labeling on childhood obesity prevention efforts, one DHO related*, "[M]y grandchild refuses to eat certain foods. . . He's gotten to where he reads the [food] labels. "Look at the calories in here! I can't afford those calories. I've worked hard to get down to my fighting weight and this is too many calories. A 16-year-old interested in his image!"* The DHO pointed out that the young man is now making healthier food choices because he is paying close attention to the nutritional information on food labels.

Most DHOs agreed that media policy has a "large impact" to "very large impact" on childhood obesity prevention efforts, which is reflected in such statements as, "*Kids don't read the newspaper much, so it's what they hear on the TV. . . I think the media—you know, things on Saturday mornings, and the cartoon shows, and who advertises—needs to be pushed even further. They've done better, but. . .*" and "*It's hard to fight advertising. If advertising is not on your side, then you're down one point already."*

The majority of DHOs said BMI reporting has a "large impact" to "very large impact" on childhood obesity prevention. One respondent noted the sensitivity with which reporting of such numbers should be made, and the need to be cautious and wary of how such numbers could be used to discriminate against and label schools composed primarily of African American students:

The reporting needs not to be made public in the sense of, "Oh you know this school over here has got the worst BMI in the district." It should be a BMI taken, recorded, and monitored over time to see how the classes are doing and a personal letter going to each home saying, "Your child was measured and here are their measurements, and he's in the yellow zone, and we'd be happy to have the school nurse meet with you and your child, or your doctor and your child and you, to talk about what you need to do to get in the green zone." But don't label them.

One of three DHOs who reported that the built environment has a "very large impact" on childhood obesity prevention efforts gave the following illustration:

We've got to create the opportunities so that—you may not like to walk in the park; you want to walk in the city. Well, you can map out a walking trail on the pavement with feet [images]. The green feet—follow the green feet, that's a quarter mile; follow the red feet, that's a half a mile; follow the blue feet, that's a mile. And it [the trail] would be lighted. There would be people downtown while they walk going, "Gee, I didn't know this store was here. I've got to come back this afternoon and buy something." It could also be economic development.

Four DHOs reported that fat and trans fat restrictions have a "very large impact" on childhood obesity prevention efforts. One respondent added that fat and trans fat in food "*needs to go, and New York did it, and the restaurant business is doing well. We should do it too*."

Although the location of supermarkets in proximity to where residents live received varied responses from DHOs that ranged from "little impact" to "very large impact," on childhood obesity prevention efforts, one DHO gave the following example from California of purposeful city planning around building supermarkets and shopping establishments close to where residents live:

Well, the ideal is Davis, California. Davis, California, by fiat of the city fathers years ago: "No major malls!" We need shopping with these kinds of stores within a 15 minute walk. And so, you have shopping and then you draw a circle for 15 minutes, and then the next one should be located over there where the two circles are 15 minutes apart, where the two circles meet. You could go to that store or to that store, but it's no more than 15 minutes and they have plotted out the distribution of the stores, disseminated to where anybody could walk within 15 minutes… They also have the street divided into three parts: the sidewalk, the bicycle trails, and the cars. I went there to visit this community, [and] a bicycler child was going to school and his books fell off [his bike], and then he fell off the bike cause he looked back, and a motorist stopped, got out of the car, got the kid back on his bike, wrapped up his books, and secured them on the kid's bike. . . You know, the mindset of that community was to support the community members in every way. And the schools—this is California—they have pools and guess what?: While the kids are in the academic part of their day, in the morning, old people are taken out there to learn how to swim in the pool—It's a multi-use [pool]. The [city's] mantra is [that] the life enrichment council looks at ways to make the community better.

Five DHOs believe local government funds should be used to build and maintain places in the community where people can exercise. One DHO shared the success of a specific town in Mississippi, in building parks for recreation:

*[*Town name deleted for confidentiality*] is a good example of that. [The town] has 13 parks and 12 have walking trails because the 13th one is too small to even put a little track in. [The town]*

had some concrete put in by the city, maintained by the city, and in year two they came in and put in some benches and you can watch the people walk around. They planted some trees so that in the future you'll be walking in the shade. But they start out with concrete and they use [an] in-house crew" to reduce building costs instead of *"getting a contractor to come and spend a fortune. So they're able to put those [walking trails] in place and maintain them as part of their parks. And [the town] is no economic heaven. The commitment was made to provide opportunities for people to walk and exercise. It [walking trails] didn't cost that much, but it did pay off.*
As another DHO responded:

I really do. I think that that's money well spent. There may be some maintenance things involved, obviously, and there's some liability questions involved with that. [N]evertheless, that's long term infrastructure that people can get into the habit of using, and it's not only for the children, but it's also for all ages.
One DHO agreed that local funds should be spent, but cautioned:
Only a small amount. Not a great deal because I'm afraid that—I don't have a bicycle. I don't go to the exercise thing, and I can afford it. So, I don't know that putting money in that part of things would pay off. But, it sure wouldn't hurt to have them if we can get people to start changing their habits.
Another DHO cautioned that the building of places to exercise should be a local city decision rather than money spent at the federal level because the community and local government know best where these spaces for physical activity should be located within their community.
DHOs listed a variety of national, state, and county-level sources they rely on for information on childhood obesity and prevention efforts in Mississippi including the Centers for Disease Control and Prevention, American Association of Public Health Physicians, State Department of Health, State Genealogy Office, State Medical Association, Mississippi Association of Public Health Physicians, Mississippi Kids Count, Center for Mississippi Health Policy, Partnership for a Healthy Mississippi, County-level health rankings and other reports, and statistics gathered by DHOs.
DHOs also mentioned their own leadership role in gathering statistics, evaluation, dissemination of information, promotion, and advocacy around childhood obesity.

At the end of the interview, DHOs were asked to share any concluding thoughts on their experience and knowledge regarding childhood obesity legislation and how it is a public health concern. Some DHOs had specific policy action steps to suggest such as eliminating trans fats from school-based settings, supermarkets, and restaurants, as well as reducing salt intake by giving perks to restaurants for reducing the amount of salt in their menu items. One DHO said parents need to receive training in nutrition and healthier food preparation techniques while communities across the state need to develop more community gardens given that, *"There's a lot of space that would eliminate all this business of "can't get fresh fruits and veggies". There are lots and lots of places [available if] people would get out and do the work [of creating community gardens]…There are no food deserts except those great majorities created by people not getting organized and motivated to have a community garden."*

One DHO was concerned with the common perception that healthy foods cost more than unhealthy foods, and frustrated that some consumers may use this as an excuse for not eating healthy:

You know, it takes more work. And, for a single mom who's got three kids screaming in the backseat, it's a lot easier to stop at McDonald's and get a Happy Meal. But, if she felt that she had the time to go home and…make some taco soup with several cans of beans, and corn, and ground turkey, it would be cheaper to feed herself and all of her kids. So…when people keep saying [healthy food costs more than unhealthy food], then it makes people throw up their hands and say, "Oh, well it costs more, so I can't eat healthy anyway. It's cheaper to eat unhealthy so I'll just keep it up" I think it's a self fulfilling prophecy and I think it's not true….There are a lot of good frozen and canned vegetables that we can prepare healthy meals with. It just takes more work and more time.

Several DHOs noted the need for better organization, leadership and state wide buy-in to tackle the challenge of childhood obesity in Mississippi:

There are so many things involved with this, but it's definitely a first step. It's a step in the right direction and if we can just get more public involvement, more proactive involvement, through everybody in the state, then we'll be able to really see a difference and that's what it's going to take. It's going to take everybody: the old, young, everybody is going to have to be on board for this to be able to see a real change in childhood obesity and the prospect…of having [fewer] problems later on in life. We know obesity has been noted to be increasing now so you see an increase in disease, chronic diseases in… young people, particularly due to the fact that it's related to obesity…

And

The legislation… a lot of times is written without really the buy in of the educators and the department of education and the school districts. And so, I do worry that the spirit of the law is not met as much as the letter of the law. Sometimes flexibility is important. I think… the critical point in nutrition is that you can always eat more calories than you burn no matter how much you exercise. So, the nutritional component is enormous, and also the norms of eating. You know, a lot of people eat their first two meals at school and making normative behavior with the foods that people consume could set lifelong goals. So, I think making sure the nutritional standards are really spot on, I think is an important component as well.

And

Well, it's the number one public health concern right after education on family planning….. But, if we don't address this now, the chronic disease burden in the future is going to be overwhelming, particularly with…. osteoporosis, and the girls not getting the calcium they need; boys as well.

The importance of influencing each setting in a child's life was touched upon by each respondent. From home, school, and after-school programs to restaurants and groceries that parents buy for food preparation at home, each context must be addressed and supported by policies and community action, at all levels, in order to reduce childhood obesity.

Comparison of Themes

DHOs have participated in an evaluation of the MHSA from 2009 through 2012. Highlights of their perspectives are listed below under each year's evaluation.

Year One Themes

Responses from the five DHOs interviewed in 2009 highlighted the importance of addressing Mississippi's childhood obesity epidemic, and many expressed alarm at the growing number of children with type II diabetes. One DHO called children's obesity a "*time bomb waiting to go off*" if not addressed early in life. Another theme was around time issues and the tension between knowing legislation like the MHSA must be addressed, and the limited number of minutes in the school day. This tension is especially high due to pressure to improve test scores by increasing in-class time for drills to improve children's knowledge and ability to test well, leaving even less time for activities such as health education and physical education. However, DHOs in Year One believed this tension must somehow be resolved since they recognized the link between better health and better performance in school. DHOs touched upon the relationship between physical activity and academic performance and how academic success requires good physical health, with successful students eventually leading to a stronger workforce in Mississippi. Respondents noted that physically fit children and well-educated children should become equally important goals for Mississippi; they go "hand in hand." To this end, all DHOs in 2009 said local government funds should be used to build and maintain places in the community where people can exercise, and many felt that fat and trans fat restrictions should be enforced for foods consumed by children when at school.

Year Two Themes

Responses from the six DHOs interviewed in 2010 highlighted a disturbing gap in awareness and knowledge of the MHSA and limited involvement of their staff in implementing school health programs. Empirical data was suggested as the method for measuring the success of the MHSA by collecting height, weight, and body mass index measurements. Most DHOs believed "improving school nutrition" was the most important component of MHSA and, as in 2009, all DHOs agreed that local government funds should be used to build and maintain places in local communities for exercise activities. When asked to rank public health target areas by level of importance, "decreasing consumption of sugary beverages" and "increasing physical activity" were the variables with the highest average rankings. Other suggested key actions for fighting childhood obesity included offering multiple health education classes in the lower grades and beyond that teach children what they should eat and why; healthier food options for students in their cafeterias; physical education in every grade with actual physical activity for all children, not just sports for the athletically inclined; addressing existing food deserts in Mississippi and accessibility to healthy food options; and outreach to parents about how to choose and prepare healthy foods since most food decisions are made at home by parents. Throughout interviews

with DHOs in Year Two, an emphasis emerged on the importance of adopting an integrated approach to addressing childhood obesity.

Year Three Themes

Responses from the six DHOs interviewed in 2011 highlighted the fact that familiarity with MHSA among district health personnel had improved and that Officers reported positive responses from their professional colleagues to the MHSA. DHOs also reported positive support and interest from staff involved with coordinating health education programs in schools, which was a positive shift from Year Two. To measure the success of the MHSA, respondents in 2011 identified the importance of collecting longitudinal data to provide a deeper understanding of changes in student health over time, as well as collecting qualitative data to provide detailed, in-depth assessments of changes resulting from MHSA. Along with BMI information, DHOs suggested other methods of understanding the effectiveness of the Act, such as conducting random visits to school cafeterias to assess what types of foods were being served as well as what types of foods were actually being consumed by students. Spot-checking vending machines was suggested as a method of determining whether healthier snacks were available and being purchased by students. Collecting data about playground improvements, questioning parents to see if children's health education is influencing their families, hiring of additional physical education teachers, and replacement of deep fat fryers with convection ovens were all additional methods suggested for tracking success. To address the knowledge gap around MHSA, one DHO said a summary version of the Act should be written and widely distributed to the public to increase awareness and support at every level, from children to state agencies.

Year Four Themes

Although not necessarily a theme, one noteworthy response in 2012 called for *a stronger and more meaningful role for children in implementing MHSA activities* and initiatives, rather than leaving MHSA-implementation activities solely in the hands of school staff and administrators. The DHO who offered this suggestion gave the innovative example of putting menu planning in the hands of children by giving students a list of nutritious foods and the required dietary nutrients per meal, and then guiding them in developing their own menus that meet dietary guidelines. Such an innovative approach could result in an increase in children's knowledge around healthy eating as well as more buy-in from students in what they are served in their school cafeterias. Related to this, several respondents said daily physical education should be required for every child in school, and one respondent added that physical education should also be designed to actively involve each child, not just those who are already school athletes or otherwise athletically inclined. The DHO illustrated this point by describing a game—designed to engage children who are not athletically skilled—in which every player must participate in a collaborative, fun, and non-intimidating way in order to win.

As in previous years' reports, parents and families were recognized in Year Four as being critical participants in fighting childhood obesity. Training parents on what and how to cook nutritious foods was highlighted as an important step towards ensuring children are eating healthy

outside of school settings. One respondent also suggested evaluating families to see if children's health education knowledge was being shared at home and if healthier menu options at school were influencing meals at home and resulting in healthier food choices outside of school settings.

Also mentioned again in Year Four was the need for broader public involvement, which was expressed in the comment, "*It's going to take everybody: the old, young, everybody is going to have to be on board for this to be able to see a real change in childhood obesity and the prospect…of having [fewer] problems later on in life.*" Examples were given of how the MHSA is already having a ripple effect and influencing services such as WIC (Women, Infants, and Children) and the healthier food offered in WIC meal packages. Also mentioned was the popularity of Joint Use Agreements between many Mississippi communities and schools that allow community members to play and exercise on school playgrounds and outdoor tracks after school hours. Respondents spoke to the need for broad support and participation by highlighting the importance of buy-in from educators, the Department of Education, and all school districts, along with the need for state wide shifts in eating norms in Mississippi. One DHO pointed out that many children eat their first two meals of the day at school—five days a week—and offering more nutritious food options to children could instill lifelong habits of healthy eating that carry over from childhood to adulthood.

Several themes highlighted in previous years emerged again in Year Four, such as the rating of "improving school nutrition" as the most important MHSA component. DHOs again reported limited involvement in assisting schools with their coordinated school health programs and called for opportunities for district- and local-level health staff to support schools in their quest to effectively meet MHSA requirements.

Mississippi State Legislators

All of the twelve legislators (six senators and six representatives) contacted in 2012 agreed to complete an interview for the Year Four evaluation of the Mississippi Healthy Students Act of 2007 (MHSA). Legislators were not interviewed for the Year Three evaluation. Twelve different legislators were interviewed in 2012, compared to previous years, in order to glean new perspectives and opinions on the MHSA. The interview began by asking legislators to rank the three components of MHSA in order of importance. Half of the Legislators felt that "improving physical education" was the most important MHSA component. Opinions were divided on which component was next most important, with all three components receiving votes for second in importance by Senators and Representatives. This speaks to legislators' understanding of the importance of each component towards improving the health of Mississippi's children, and legislators shared many thoughts on each component of the MHSA, detailed below.

Regarding the importance of improving physical education in Mississippi schools, one legislator said, "*What has happened down through the years is that children have become so sedentary"* due to technology-driven lifestyle changes that are adversely affecting children's physical activity. S/he went on to comment, "*In school when I was a kid, play period, recess period. . .you*

were worn out. Then the system pushed away from that. . .I'm not in favor of all this dictating what can be served at the school…the cost is very prohibitive. We do not need food police." Another legislator elaborated on the importance of physical education as a lifelong benefit that begins in childhood: *I'm a runner—I ran two miles this morning. I always start with [the idea] that the body is a very efficient calorie counter, [so] if you're burning more than you take in, you are going to lose weight. So it was very important at the time [MHSA was created] that we establish a stronger physical education program in our schools. Somewhere we got away from that [physical education]. I grew up in the 60s and remember PE—. We had to run around gyms—run up and down—whether you were playing sports or not. . .], no one sat around. They [school staff] were trying to pull us off the playground. Times have changed; computers and goofing around, and too much TV and all that. . . [P]hysical education needs to be established as a part of a kid's life [so] that you play ball, you run, you do everything for your whole life.*

Three legislators ranked "Improving School Nutrition" as the "most important" MHSA component and three legislators ranked "Improving School Nutrition" as the "next most important" component. This variation was echoed in one legislator's comment, *"That's kind of a tough one. I would say that probably nutrition, then exercise, and then health education would be my guess, although it's a three-pronged [issue].* As s/he went on to observe, "*I think the fact that we worked on getting the sugary drinks and the snacks [out of schools] and doing away with the fryers*" in schools are positive steps that will motivate children to *"go home and talk to mom and dad about it, and hopefully it [will] impact the family."* Another legislator expounded on this issue, "*All three are very important, but probably if we can get our children. . . as well as parents into nutrition. . . then it would be long term and it will have a great impact."* Another legislator also voiced support for improving nutritional knowledge among school children to ensure that "*kids learn how to have a healthy eating lifestyle" and giving them knowledge about healthy eating that "would last a lifetime."*

"Increasing Health Education" was ranked as the "most important" MHSA component by three legislators and ranked by four legislators as the "next most important" component. One legislator believed that most school nutrition benchmarks have now been met, and therefore, "*equal weight should be put on health education and physical education, and PE should become more like high intensity training than what it is currently."* As the legislator pointed out*, "The nutrition law is pretty well worked out, and everybody seems to be on board with it right now. They're still having candy sales in some schools, but I understand the need for it…. I know all about fundraising."* Another legislator discussed the need for *"lifelong learning"* around issues of nutrition and healthy eating. As s/he explained, "*I remember taking health classes back when I was in grammar school and junior high, and you learned the proper food groups, and that was just part of your education. Have we gotten away from that now?... [T]here is not enough stress on what is the correct thing to eat; I mean the correct diet and the consequences of a bad diet."* The legislator also noted that the proliferation of "*a convenience store on every corner, which we didn't have when we grew up*"—which are noted for selling low-nutrient, calorie dense foods (i.e., junk foods)—can make it more difficult to make healthy food choices *"human temptation being what it is."* As the legislator stated, *"even in the small town where I live there's one right across the street and there's another one two blocks down and another two more blocks down and another one four. And then there's a grocery store. And with the potato chip sacks and the honey bun wrappers that are blowing up and down the street. I mean, it's*

just so convenient, when you're hungry, grab the quickest thing. . . instant gratification." S/he went on to discuss how, "somewhere our health education is not teaching our students the difference" between healthy and unhealthy food choices, because "a small child doesn't understand that. . . green beans are better for them than that honey bun [when] a honey bun tastes a lot better to them. They don't have a clue what the difference is" between nutritious and junk foods and that "*you've got to have correct fuel for your body. . . they're not born knowing that."* As this legislator pointed out, *"To me that is what health education is"* while also acknowledging that *"other healthy practices, not just the food they put in [their bodies]"* are important to promoting good health and preventing disease, including regular dental and medical checkups. S/he stressed that preventative care is important for the individual and society, "*When you feel bad, get it tended to, don't let things go or they will be worse. And you hear in all the primary health care discussions that preventive medicine can save us millions and billions of dollars."* Another legislator stated, "*You need all three, but I would think that health education would have to come first and then the other two would be taught in health education. In other words, I think health education would teach students how important physical education is, as well as nutrition."*

Six of the twelve legislators said they were aware that the Center for Mississippi Health Policy is conducting a 5-year evaluation of MHSA. Six legislators had also seen a copy of the evaluation report from previous years. The twelve legislators were nearly unanimous in their belief that the prevention of childhood obesity is an extremely important issue for the state of Mississippi. Only one legislator gave a rating just below "most important". As one legislator noted, obesity is *"creating all sorts of issues—from diabetes to all kinds of health issues—not only for the kids, but for the adults too."*

As another legislator added, " *If we don't take care of it [obesity], then it's just going to escalate, and so what we spend"* on obesity-related health issues currently is not *"anything compared to what we're going to spend, 10 or 15 years, 20 years out."* The long-term consequences of obesity were echoed by other legislators, many of whom felt that obesity prevention must be prioritized. As one legislator put it, "*Obviously it [obesity prevention] has to [be] number one. It's one of the most important things we can do because obesity has led to so many other diseases, such as diabetes."* Another discussed the fact that obesity "*is detrimental to the state—and to the country for that matter—when we fail to [prevent obesity] because we're going to have overweight children and overweight adults. And as a result, our emergency rooms are going to be filled with illnesses and problems that could've been prevented if we had had good practices."*

When asked to rate where the state of Mississippi is on addressing childhood obesity policies, responses ranged from "effective' to "not at all effective." As one legislator put it, "*I think it's ineffective. But to what degree can the state government be effective with dealing with a problem like this?"* In an interesting commentary, another legislator discussed the comparison of obesity prevention efforts to smoking prevention efforts of years past. As s/he commented, obesity "*really brings in as many or more health problems as smoking did. In fact, I read a report about three years ago that said the cost of health problems related to obesity has exceeded all of those related to tobacco: Your heart, diabetes, your joints/ You get older—you're carrying an extra 50 pounds [and] your knees wear out, your knees and hips wear out. A loss in productivity at work. The list just goes on and on.*

Legislators were asked to comment on the general consensus among members of the House and Senate on maintaining improvements made by MHSA. Overall, legislators believed the consensus towards MHSA was positive and that fellow House and Senate members understand that Mississippi has a problem with childhood obesity. However, legislators reported that many leaders are still not in agreement about the best way to address obesity, whether action on their part is necessary, and whether obesity prevention legislation should be a priority among House and Senate members. These beliefs were reflected in comments such as, "*There are some legislators who believe that it is the government's role to make sure our children are being healthy, eating healthy, and choosing healthy lifestyles, and there are [other] legislators who believe that individuals have to make decisions for themselves"* and *"I would say that the [*branch deleted to protect confidentiality*] is very aware that there is a serious problem. I don't know if we have the commitment to pass legislation to address the issue. I really think that too many of the [*branch deleted to protect confidentiality*] members feel like it does not affect them personally and that it's somebody else's problem."*

Some legislators expressed frustration over differences of opinion on whether more funding is needed to maintain MHSA, and how best to influence healthy food choices with comments such as, "C*oming at it from the appropriations process. . . we just don't have any money to throw at anything right now,"* and "*I would say the [*branch deleted to protect confidentiality*] is very aware and very concerned and wants to maintain as well as do more. One of the challenges that we have is resources and how to get the information out. I'm hoping that as a result of the evaluations being done that we will come to understand that we can do a lot in this area without spending a lot of money. It doesn't take a ton of dollars to put programs out to educate and try and change… attitude. I think it's a collaborative effort and one where we have to move it from the policy makers and move it from the bureaucrats, whether it be the Health Department or the Department of Human Services, but get into the community—the faith based community and other areas of the community—where they're beginning to become aware of it and are encouraging our parents and our children to participate in good nutrition programs as well as physical programs.*

And

Well, I don't know that there have been any improvements, so my concern is that it's not targeted enough to those three areas. For instance—[a group] I listened to… they were talking about food deserts and wanting more supermarkets. My concern is this: I think we need to do it not with putting up more supermarkets because we can't tell people what to buy, but maybe having more roadside stands of people selling their vegetables and fruits in these rural areas, because that's more cost effective, number one, and it would be the only thing available there. One… of the bills I tried to introduce this year was that there would be boundaries on people that use food stamps. It would be something that could help children of people that were on food stamps and it could be something that could help their parents become healthier…."We can't have Ding Dongs and Cheetos." But it was shot down because they said you can't tell people what to buy. Well, this is the state's money and I beg to differ with that. I just don't think we're being consistent federally and [across the] state with nutrition. We're allowing our federal money to go for anything and everything and yet we say we're going to give them a nutritious lunch at school? If they go home and they're on food stamps, what is the chance that they're

going to get a nutritious meal at night? So many times foods that aren't any good for you taste better… We're not being consistent across the board. If we're just only going to do it in the schools, it may help a little bit, but [using an example from speech therapy]… if you have articulation problems with a child, and you work with them for an hour or two a day, and then they go home and the parents are articulating things wrongly, it's just like anything else. What you're most exposed to is what's going to make the difference. So we may need a whole change in our whole state, a broader, consistent pattern.

Legislators gave broadly ranging responses when asked about their impression of the reaction to MHSA among individual constituents and school districts whom the legislators represent. Some reported favorable reactions and increased activity in their districts related to the prevention of childhood obesity, such as healthier meals, increased physical education, and positive changes in the types of food available in schools with comments such as, "*It's being talked about. . .there's something about [MHSA] in the paper almost every day*" and "*The only complaint I heard was about the candy sales [and] soft drink sales"* fundraisers that used to be allowed before MHSA, and are now prohibited. S/he noted that, at first, people who were used to raising school funds through such sales *"were a little frustrated about that, but they're trying to adjust"* to the MHSA requirements. As one legislator discussed at-length, particular emphasis on different types of core curricula and activities that can impact childhood obesity (such as physical education) have changed over time:

When I was in school there was an emphasis on physical education. And while we may have resented it initially, we all looked forward to getting out, especially during the spring of the year... As we went through the growing pains, and local districts didn't have monies often times, one of the first programs they would cut would be nutrition programs and physical education. We used to have Home Economics; we had courses called "Family" and other kinds of programs. Those programs kind of shifted [over time], and as a result the school system often times probably helped contribute towards obesity in that [although] they were. . . providing lunches and all, but they also got into providing vending machines. I don't think [that] was healthy because when you give children a choice [as to] where they can go to the vending machine and get a snack as opposed to going in and eating a nutritious meal in the cafeteria—which they don't necessarily like because they haven't been trained to like some of the foods that are on the menu in the cafeteria, whether it be celery, or whether it be carrots, or other kinds of vegetables—they're going to shy away from them [vegetables]. They're going to go get a snack [from the vending machine]. So, I think the leadership in our school systems now recognizes their mistake in that regard. It's not to point the finger because they were just moving with society, moving with the changes, and the shortage of funding and everything. But, they are beginning to recognize that an unhealthy child is one who is probably not going to get a quality and adequate education because of the illnesses caused by it.

Other legislators reported confusion over MHSA, complaints about having to make changes without corresponding additional funds for new programming, low-prioritization and non-compliance with MHSA, or no conversations at all about MHSA. As one legislator pointed out, "*employees and administrative staff were concerned that mandates would be put on them from the government to the employee and to the school districts. Since then I think that they may have gotten used to that [MHSA], but I think we have to be very careful when we start*

appropriating less money to our agencies and school districts and continue to support mandates and rules…" One legislator felt that although most people "*understand that there's a problem"* and that *"the state has identified a need to address it"* there may be lack of buy-in because some *"people just don't look at it as a priority. I don't see any action being taken on behalf of anybody in my district's school system or otherwise. Let's say, 'Look, we've got a real problem; we've got to do something about it'."*

Another legislator stated: *School teachers have told me they're not doing Physical Education in school. When I was on a committee on obesity, I asked that question if [PE] was being done and one of the committee members said teachers do not have time and he was from the Department of Education. Then I went to the Department of Education and asked for more information about that. They sent me what they had written up to enforce [PE in schools] which had so many allowances [that] I can't remember them all. If you did this, you didn't have to have PE, or this could be used instead of PE. But, when teachers tell me "Kids aren't doing PE", I don't think it's being enforced correctly. And then I was told by the Department of Education person that was on this Obesity committee that teachers did not have time. And then I said, "Then principals should be held accountable... If a law is passed, we need to make sure that it's being done and certainly if it's for our children".* When asked how they thought we should measure the success of the Healthy Students Act legislation, legislators responded with a variety of answers:

Tracking reductions in obesity, high blood pressure, and diabetes
Estimating what the obesity rate *would have been* in 2012 if the MHSA had never been enacted
Monitoring fitness testing over a period of time
Providing nutritional lunches
Assessing students' knowledge of health education
Tracking physical activity of students to see if they are actually participating in PE and sports; and gearing up PE in the lower grades to include some intense training to pass the Presidential Physical Fitness Test
Longitudinally tracking student BMI assessments over several years
Longitudinally tracking childhood obesity and childhood diabetes rates over several years
Tracking changes in the public's knowledge and understanding of the importance of making healthy lifestyle choices related to eating habits as well as alcohol use and tobacco use

One legislator suggested measuring the success of MHSA by closely following and enforcing requirements of the Act:

You could go to each school board and say, "We would like to know if these things are being done and we want to know class by class if they're being done and how". And, leave it up to the school boards to do it. I'm hoping they would take that very seriously [because] we need to hold leaders accountable if we pass laws. If there was a group that is responsible for the school being run right, and I would think it should be the principal, but for sure it should be the school board, [then] the school board should know . . . So it may be that every school board would have to be asked.

Echoing other legislators' responses, one participant called for both an outcome and effort measure, with illustrations of the type of long-term changes at the community level that must take place in order to affect changes to improve the future health of children:

I think we should measure it in two ways; one by outcome. Whether we actually reduce obesity in the state, and hopefully we will because that's the ultimate goal. By doing that, it's going to save us money. We're going to also need to measure by efforts. And what I mean by efforts is how well we are putting forth activities to get into our bigger communities. To educate our ministers who will stand up in the pulpit in front of their congregation and say, you know, "We need to have some. . .concern about this and when we do the fellowship dinners, we need to be conscious of it. When we go to restaurants after [the] service, we need to be conscious of it." At that particular point, I think you begin to get. . . appreciation for it [obesity prevention efforts] throughout the community, and then with the school system working with our children and students, those students going home and saying to mom and dad, "Is this a healthy meal?" Now you begin to have that kind of awareness and discussion with students and the community as a whole that I think will truly make a big difference. So, I don't [want] us to look at this at the end of four years and say, "We're still labeled as being number one [in obesity] in the country" so it's a failure. Because many of the things you're doing are going to take a while…. because what you're trying to do is change attitudes, behavior, and choices, what I consider to be the ABC's of health. And if we can change that, then we're going to have a healthy community. But your attitudes, your behavior, and your choices of things you have come to accept… that's you, and it's very difficult to change those things, so it takes time. So, if we simply measure it on what has happened after four years, we could flag it a failure and throw it away, but let's look at what's been put in place long-term, what the outcome is going to be [long-term].

Legislators unanimously agreed that it is important for schools to promote healthy lifestyles for students and school staff. But one legislator made the qualifying statement, "*I don't mind promote, but demand is a different thing. Educate but not demand."*Most legislators said promoting healthy lifestyles for students was very important because "*Students who are healthy are more energetic in school. I think students are no different than I am. If I'm in good shape, then I have a longer attention span. I don't get tired as quickly, so I'm able to work harder and better. I think the same is true for students."*

And

Absolutely, absolutely… I go back to the tobacco model… You don't smoke; there are signs up. You go to schools now, "This is a tobacco free campus" what if you had a "This is a fried food free campus" you know they just need to remind [students]; put signs in the library "This is what you are supposed to eat", if you want the best fuel in your body so that you will be stronger, you will be bigger…., you will last longer. Talk to the kids, the young kids, especially…say a basketball player…. say "you want to be like Lebron James, how do you think he got like that?" He has to eat right. And these pro athletes that you worship, these pro athletes that are so good they have to take such care of their bodies. And I don't think that message is out there, I don't think people realize that.

Legislators felt it is important to promote healthy lifestyles for school staff (and parents) so that the adults can be good role models for children because "*Adults have figured it out and I see—around our local schools every afternoon—I see some teacher walking, got their walking shoes on, and around town [adults are] lead[ing] by example"* to promote healthy lifestyle choices.

All twelve legislators see a role for the Mississippi legislature in promoting healthy lifestyles through state policy. Several respondents pointed to the positive example many legislators have tried to set for their constituents through participation in the "Paul Lacoste Sports Fit 4 Change Fitness Challenge." whereby legislators committed to losing weight and getting healthy through physical workouts and nutritional counseling.[xv] One legislator emphasized the importance of this by saying, "*We need to be out there setting an example on how we eat and how we take care of ourselves. Children mimic what adults are doing."* Another legislator related that the *"legislature is actually participating in a Lacoste [Sports Fit 4 Change Challenge] for the last three or four years, which has been kind of unique in that we have a lot of guys on the floor here who have kind of put their actions where their words are and lost a lot of weight and there has [been action] on both ends of the building to have a healthier lifestyle.*

And
I think we have a role to play… for instance, this Paul Lacoste Fit for Change…. the idea that you're putting emphasis on what you do down here. If [legislators] can get up at 4:45 in the morning, other folks ought to be able to do it…. It helps when you have a group doing it. I think that's one example of the legislature or the House, trying to put an emphasis on the fact that it really makes a difference what you put in your body and it makes a difference whether you exercise, because it all affects the way the brain works. I would argue that, yes, the state has the responsibility, if nothing else, because if they're not getting the information, if the child's not getting the information at home, which many of my constituents possibly are not, then it affects the amount of services that will need to be offered [to] this child later in life. So why wait? Just do it at the beginning. It's cost-effective; you save somebody's life…
Although one legislator stated, "*It starts here. It ends here... It should be our primary responsibility. If there is a problem out there that can be addressed by state government, then we should be addressing it"* others were wary of dictating lifestyle changes that they felt should be left to individual choice and responsibility. As one legislator put it:

I think anywhere that we can implement it without trampling upon the personal liberties of individuals, we should do that—and it should mostly be from an encouragement and behavioral side incentive instead of a punitive type thing— because. . . the amount of money we save if we reduce the obesity in one generation, it's just huge. I think obesity is what smoking was to earlier generations since the 1960s. . . The Surgeon General came out and said it [smoking] was dangerous for your health and then we went through a 40 year period—almost two generations there—of where that was just the number one health issue in the nation. And I think the next one is going to be obesity, I think it's going to take its [smoking's] place. I don't want to see us pass laws that tax Coca Colas and beer or whatever other things that are high in carbs and high in fat. I think it needs to be done more in a sense of making people aware. I'm not going to tax for the sake of changing people's habits. There's got to be some personal responsibility involved in it, and I think through education, what we're doing in the schools, and just public awareness with adults, and what the medical community's doing in their counseling on it that [prevention efforts]will begin to have an effect. I just don't want to see us go down that road of just trying to tax and raise the tax so high it changes people's lifestyles. I think that's a personal decision, made individually.

And
I'm not a person who is in favor of passing a lot of laws and making people do things, but I think there should be incentives in the law [regarding prevention efforts]. There ought to be something—whether there be grants or eligibility for certain programs or something—that encourages people to be a part of something that makes them healthier. You just have to offer incentives to make people want to do better.
Others felt creating policy, sending a clear message, educating the public, and setting guidelines were important for legislators because "*Our role is to set guidelines to give to the school boards and for the school boards to carry out the laws that we pass."* This sentiment regarding guidelines was echoed by another legislator who stated that, "*I think that is one of the ways that we protect our citizens. As a legislature, we need to say, "This is what we need to do". But I don't… necessarily [think] that it needs to be a law passed. Having a healthy lifestyle does not have to be expensive if we just make right choices."* However, another legislator proposed a two-step plan to bolster obesity prevention efforts that includes, "*One: create policy. Two: do something—[like] what we've done over the past three years [to] serve as an example. We participate in the physical fitness program where many of the legislators were actually getting up at 5:00 and 6:00 in the morning and working out in the physical fitness program and actually losing weight. And, we were able to stand in front of cameras and send the message out that we thought it was important and we were serving as role models, so to speak, and encouraging other elected officials at the local level: supervisors and mayors to do the same kinds of things. In addition to passing good public policy…, participating in those kinds of programs will send a message to the state as a whole.*
When asked to discuss the role of other groups in promoting healthy lifestyles for children, the majority of legislators believed other groups had strong roles to play and that collaboration is critical to achieving positive results in reducing childhood obesity. According to one legislator, "*it's a team effort. I think whether it's the church, or…the school system, whether it's fraternal organizations, sororities, all of those groups should have that commitment to try and do something to basically improve the health and well-being of Mississippians."* Another echoed this sentiment of multi-level engagement because *"whether it is you; the person doing the assessment; the president of the university; the superintendent of the school board; school board member; principal; or teacher—whoever we are in the community—we recognize that we're doing it for the good of our students, and our future, and in [an] attempt to have a healthy community."*
Some legislators said the role would depend on the group or organization, their specific mission, and whether or not they were involved with health related issues. However, most respondents offered very specific suggestions for a wide range of important roles various groups could play in promoting healthy lifestyles for children. As one legislator stated, "*I think a lot of our youth organizations—4H, Boy Scouts, Girl Scouts, Boys and Girls Clubs—the whole gamut needs to adopt that [childhood obesity prevention] as an awareness kind of thing."* One legislator commented on the continued need for health education because, "*People say people understand what healthy eating is [but] I say, no they don't. We have a culture that has dumbed our population down in terms of what's healthy and what's not. We have to come back and say, "Look, you know, it looks good on television, but that's not what's good for you" and "This is what's good for you."* Another legislator discussed the success of the state-wide *"Let's Go*

Walkin' Mississippi" health initiative, citing how "*A lot of schools actually took up that program", which was beneficial because "It all boils down to exercise."* Another legislator pointed out that "*Blue Cross BlueShield and the Mississippi Arts Commission do some sort of ballroom dancing program"* to get children involved in fun ways to exercise because "*our kids need to move more."* S/he pointed out that *"a lot of community organizing can go on. . .through the normal mechanisms"* such as Girl Scouts, Boy Scouts, PTAS, and school athletics.
Several legislators emphasized the value of raising awareness of the importance of healthy lifestyle choices by delivering consistent health promotion messages across all state agencies because "*We should all speak with one voice, especially the Health Department and School Nurses. And if there are other groups out there like Robert Wood Johnson. . .I think they should do an intensive ad campaign"* to promote healthy lifestyles. In an innovative suggestion, this same legislator stated, *"I think we need to work smarter and go and say to Weight Watchers, "Weight Watchers, would you give us a deal on any child that wants to come to Weight Watchers free?" And we will say Weight Watchers is helping promote a healthy lifestyle in Mississippi. Or say, "Weight Watchers, would you get some of your celebrities that come on TV to promote [Weight Watchers], how about letting them come and talk to the schools about that?" It's a win-win. It's a win for them and it's a win for us.*
Another legislator agreed that "*there has to be a consistent message out there"* and added that *"it needs to be a part of everyday messages because . . .you eat every day."*
Legislators had mixed responses on whether the state of Mississippi has done enough to strengthen school policies on nutrition, health education and physical education. Four legislators thought not enough had been done on nutrition policies, while only three thought not enough had been done on health education policies. Two legislators said not enough had been done on physical education policies:

I can tell you the obesity committee that I was on, I think it would be one of the best things that we could do, would be to encourage every family to have a garden. Have our agriculture department to come and say, "We'll show you how, or here's a class." I think they do that on a limited basis, but if that was really broadcast—If everybody on this street that wants to do a garden come to the community center at such and such time, and everybody in this neighborhood--- we may have to go to the people a little bit more then let the people come to us, so that shouldn't take more money.
And

I think health education could be combined with PE. In other words, you're doing [physical exercise] because you're being taught right now, but this is really good for your bones. You're doing pushups, sit ups, or whatever because this is really good. This is elementary school; they've got to see a connection. I think it needs to go hand in hand in the same class.
And
We're laying the foundation, but we're not there.
And
I think we've moved in the right direction compared to where we were 10 years ago.
Only two legislators from the other legislative body felt that not enough had been done to strengthen school policies on nutrition and health education. However, four out of six [branch

deleted for confidentiality] thought not enough had been done to strengthen policies on physical education:

On nutrition:
I think we've done more than what a lot of states [have]… A lot of other states have followed our lead. I don't know how much more you could do right now, I think we… got the high fat food, the fried food and all that [out of the schools]. We're getting that all under control and everything…. We got…a lot of the unhealthy snacks out of the schools….What else is there left to do?.... Other than put more money into the school lunch program to where they could offer healthier choices than what they [have now] on a day to day basis. But that's about it.
And
I think so… They have to have a certain amount of fresh fruits and vegetables… heavy on the vegetables, and they emphasize…. things like carrots, leafy greens, that sort of thing. I think it's working now, if we call ketchup a vegetable or not, I'm not sure, but, you know, we're heading in the right direction.
On health education:
How much class time do you want to take out of kids' lives to teach them something that you can teach them in 30 minutes?
And
*I am less aware of how that is being implemented. [*I know of an organization that*] go[es] into every 7th and 8th grade class in xxx County [and] talk[s] about STDs, and… health [to] make them aware. And then I know that you have to have 45 minutes, I think, of health a week. Now I don't know if that's really enough or not, but I'm less aware of how that's working.*
On physical education:
That needs to be a regimented time every day.
And
In my opinion it's very important for a child to get up and move… Brain-based research will tell you that it is. It allows the child the process… How do we keep the brain healthy...? It is through exercise, eating right.
When asked what other policies need to be enacted, two legislators said they did not believe additional policies were necessary until we see the effectiveness of current MHSA policies. Other legislators suggested new policies be put in place that focus on physical education, health education, and stronger enforcement and better integration of current MHSA policies into the school curriculum. For example, a legislator recommended that grade-school children receive a "*minimal time of a scheduled workout that's based on calories burned within that period of time."* While acknowledging that *"Whether you get there through aerobics or just playing games or through more structured workout, I don't know, that's for the experts to figure out"* s/he stated that *"it ought to be built on burning an amount of calories in an hour's time and getting the most out of it… high intensity training."* Another legislator discussed how *"we have to have some enforcement. Just like we stress mathematics and science and reading, or the three "Rs", we also have to stress and recognize that [there is] a lack of education about what's healthy. And, we just have to make it part of the curriculum."* As this legislator pointed out, *"We've taught kids that smoking is bad. We have to teach kids that sugar is bad, and fat is bad, and exercise is good. And that there are [health] consequences for not following those rules."*

Legislators called for policies going forward that annually track the status of childhood obesity in Mississippi as well as lead to better outreach and more creative, out-of-the-box thinking to solve Mississippi's challenges with childhood obesity:

It should be an ongoing effort. Each and every year we need to see where we are. We didn't get in this situation. . .by accident and I think had the Mississippi Legislature been more proactive many years ago, then we would not see such major problems [today]. There's an attitude in the Mississippi Legislature that it's the family, it's the parents that should be more concerned about this [childhood obesity]. Yes, I think the family and the parents should be concerned about this major issue, but at the same time I think we can take more [of a] leadership role in this.
And
Those policies will give us a healthier community. . .We need an outreach program and that outreach program should go across the board with all of our state agencies to reach out into the community. . .What we need to do is focus on the whole. Mississippi has a serious problem in that arena [obesity] and there's no reason for it. But we have got to encourage individuals to get out from in front of the televisions, and get off the couch, get out of the bed, and in addition to eating healthy, also do the physical kinds of things that will help you maintain [a healthy weight].
And
I think our state is one of the most creative states in the Union. We have so many authors. . . and it's the birthplace of so much music, and we have artists that abound. So we are so creative as a state and yet we won't use our creativity with our children in this area. We need to begin to think outside the box a lot more, especially because we're poor [as a state]. We don't have money to solve all our problems, so we need to be using our creativity.

Several legislators expressed concern when asked about policies outside of the school setting that can be used to prevent childhood obesity, with comments such as *"No dictation to other programs"* and *"That's really out of the government's control. At some point people leave government control and they are kind of on their own. That's not our job to follow them home."* One legislator explained that in order to achieve lasting health promotion—such as was achieved through anti-smoking campaigns over the past decades—children should be the primary target population and school settings are an efficient venue to achieve this aim. As s/he stated:
"The antismoking campaign wasn't so much about" educating adults as it was about educating children on the dangers of smoking because once the children *"were educated, they encouraged their parents"* to quit smoking.
Other legislators offered policy ideas to reach children outside of the school setting, such as by raising community awareness about health promotion and obesity prevention in venues where children and families gather (such as churches); more positive reinforcement of health messages learned at school carrying over to afterschool programs; and detailed information for parents about nutrition and physical activity within daycares and afterschool programs. These comments included:
I think there are so many things we can do to encourage physical activity. At my church each and every Sunday we have some type of presentation on healthy eating habits [and] exercise.

So, there can be more groups and organizations who are committed to it [obesity prevention]. . . Certainly the state government can't do it all… it's just that state government can be more involved in this effort.

And

We may need to have an overall message that says—I mean this would be a great Robert Wood Johnson ad—"Parents, what are your children eating at preschool? Are they eating nutritious things? Are they sitting in front of the TV?" We need to have a lot of encouragement—for young parents especially—to be more watchful [of what their children are eating]. And probably some [parents] are tired [and] don't want to think about it, but even the worst parent—if they've got to choose and those things were posted [by all schools that] "this is what we do". . . then parents are going to say [to other schools] "Well where is your poster? How do you compare with this one?"

And

That's one of the problems… the kids don't have anything to do. You've got Big Brothers, Big Sisters; Boys and Girls Clubs, that sort of thing. . .[and] organizations like that do a good job. In [my] county, we organize softball tournaments, we have all these different little clubs that play each other. . .but it doesn't reach all the kids because not every kid's going to want to play baseball. I think right now we're probably doing the best we can do. We all want change to happen overnight, yesterday, but it moves slowly, incrementally. . . I don't see what could be done differently, not that I couldn't be convinced of something. . . I wish we put more money into prevention [and] afterschool programming so that kids didn't get into trouble in general.

And

Anything—as far as mandating stuff—I'm totally against it. But, of course, I think that a lot of your day care centers do a lot better job with their outside and exercise activities than the school systems do.

One legislator shared a story to illustrate his/her belief that health education should start with parents, rather than when a child reaches school-age:

I think childcare is important. I think it should start even before, at conception. That momma—When she… walks into the health department, or the… department of human services, when the radar picks up that person has conceived, we need to not just provide them the food items, but put them into a program where we actually train them and show them the importance [of healthy eating]. I'm sitting there [restaurant] talking to [someone] who is 20 years of age. She has four children. And, we were talking about her children and what they eat. And she was telling me they eat spaghetti and hamburgers, and that kind of food. And I say, "Well is that everything?" She says, "Everything. That's what I prepare for them. And my mother, that's what she prepares." And I said, "Why don't you bring them over to the restaurant one day and eat. Let them eat a meal." She said, "They won't eat it." Well, they have been programmed to eat spaghetti every day and—[I'm] not saying spaghetti is all unhealthy—but you need something in addition to that. Ok, but that's what they've been programmed for, and when you start talking to her about giving them vegetables—in her mind, they're not going to eat it. So. . .when she goes to the grocery store shopping, she's not going to buy produce. If she was in a farmers' market and they were giving produce to her, she's not going to receive it because in her mind her children are not going to eat it. So we need to [reach] those young ladies, and [the children's

fathers] at conception and begin to explain and train them on the importance of good, nutritional meals. And if she had gone through that program and gone through that process four times and still was of that opinion, then who do you blame? Do you blame it all on her, or do you blame it partially on our system for not moving her to thinking at another level?... She has four children that she's feeding and that's the nutritional program she's providing for them. Maybe because it's quick, maybe because it's cheap and inexpensive, but for whatever reason we have a nutritional program coming out of the federal government, through USDA and through the state. And if we're providing services to her, then perhaps we should be also providing more information to help work with her and give her kids and her family [better nutritional information].

Legislators rely upon a number of different sources to get information on childhood obesity in Mississippi, such as:

State Department of Health
State Department of Education
American Legislative Exchange Council (ALEC)
National Conference of State Legislatures (NCSL)
The Council of State Governments (CSG)
Center for MS Health Policy Reports on "Assessing the Impact of the MSHA"
Teachers
Personal observations
Government issued documents
Healthcare providers and organizations
Hospital organizations
Non-Profits, such as the American Heart Association
Medicaid
Newspaper articles
Internet
Television

While a few legislators said they do not hear from anyone else about the MHSA policies, most respondents said they hear from a wide variety of groups and constituents such as government sources, lobbyists, schools, superintendents, health care policy groups, legislative groups, Head Start Program Nutritionists, The Partnership for a Healthy Mississippi, the American Heart Association, The American Lung Association, National Public Radio in Mississippi and around the country, and Education Groups. One legislator also shared the following:

I talk to doctors. I have a lot of friends who are doctors who recognize [that obesity is an issue] not so much just [for] children, but they're treating all of these diseases. . .If there's a problem with medicine, or a problem with health, when you look at alternative causes, obesity always pops up.

At the end of the interview, legislators were asked to share any concluding thoughts on their experience and knowledge regarding childhood obesity legislation. Senators said they were pleased with the positive direction in which Mississippi is moving:

I think the three prongs that we put in place in '07—the eating healthy, the learning about your health, and the physical activity—is just going to have to work. And it's [obesity] not going to be cured in this generation. On top of it, what the White House is doing—Mrs. Obama's "Let's Move" [program] —is a great initiative for [the First Lady] to be out there setting the example. Because it's one thing for me to say it—it's a whole 'nother ballgame for her [the First Lady] to say it.

Other legislators said they were glad Mississippi is talking about childhood obesity and working towards changing the rank of Mississippi as being the most obese state in the nation. As a legislator commented, *"I don't think it's just a Mississippi problem"* because numerous other states are struggling with the health consequences of an increasingly obese population. S/he also observed that, *"We, as a state, might be the most obese at this time, but I see that changing and what I've heard is that the state of Mississippi is 4% healthier this year than we were a year ago. So, I think we're headed in the right direction."* Another legislator made the point that *"We need to continue focusing on [the childhood obesity] issue"* and recognize that "i*t would be beneficial to the state in the long-term to educate kids about nutrition and physical education. . . If we do reduce the obesity rate with children, then in the long-term, that'll save us in healthcare costs and the individual's longevity.*

Legislators recognize that childhood obesity is a difficult problem and believe additional work is needed to make a difference, especially by educating parents and promoting the need for making healthy lifestyle changes, such as consistently choosing healthy foods and being more physically active:

As a matter of fact we have a real problem out there in Mississippi, how you address it is a little bit of information, public information. . .trying to impress on people to exercise. . . .Campaigns that encourage people to get out and play with the kids, get out and go walk in Mississippi, or go take the children to the park, or anything like that encourages people to pull their children out from the front of the one eyed monster and take them outside [is important].

And

We need to start early because once those [obesity-related health] conditions develop, it's hard to reverse them. . .So I'm committed to trying to do as much as I can. . .because obesity kills people. I've seen it, I think many people don't understand [that] you can be what they call morbidly obese [which is obese] to the extent [that] it can cause your death.

One legislator candidly expressed his/her shift in perspective since 2007 when the MHSA was enacted:

I was against the 2007 Act, and I was wrong for being against it. I thought kids would throw the food away instead of eating it—I just thought they would totally turn their nose up on it—[and] I didn't like that… it could limit what they brought from home to school with them, but now that I've seen it [MHSA] working, I've got a little more tolerable attitude towards it.

Comparison of Themes

Mississippi legislators have participated in an evaluation of the MHSA for three of the past four years (2009, 2010 and 2012). Highlights of their perspectives are listed below under each year's evaluation.

Year One Themes

The twelve legislators interviewed in 2009 (Year One) expressed concern that Mississippi was ranked as number one in the nation in terms of childhood obesity, and were wary of what the long term impact of childhood obesity would be for the health of Mississippians. One legislator called childhood obesity "one of the greatest public health problems we have now in our state." The majority of respondents felt that schools should promote healthy lifestyles for students and staff and that more should be done to strengthen school policies in the areas of nutrition, health education, and physical education. In Year One, legislators were very concerned that—due to too much computer and television screen time—many children tend to lead extremely sedentary lives rather than physically active lives, and many children lack nutritional knowledge to help them make good food choices (e.g., choosing healthy snacks over unhealthy snacks). Respondents also noted the difference in physical education and health education today compared to years past, when specific times were allotted for exercise and children were taught about their muscular and skeletal systems beginning in elementary school. In Year One, the economic cost of obesity to society was highlighted, with legislators noting the drain on tax dollars in the future that will be caused by high healthcare costs for treating obesity-related diseases. Legislators shared challenges to implementing MHSA such as personnel issues, funding constraints, over-burdened teachers' reluctance to take on additional job responsibilities, and tensions over how to achieve MHSA-related health and physical education requirements and balance them against other academic requirements in a time-constrained school day. In Year One, legislators were positive about the improvements made in school nutrition since MHSA had been enacted, and supported healthier food options being available to children, as well as removal of all deep fat fryers from schools and their replacement with 'combi' ovens (combination steamer and convection ovens). In Year One, legislators emphasized the importance of collaboration between parents, teachers, communities and state agencies in the fight against childhood obesity given the fact that "all of us, no matter our role, are stakeholders in this."

Year Two Themes

The twelve legislators interviewed in 2010 (Year Two) felt that the school districts they represented were responding positively to MHSA-based policy implementation, although additional improvements were needed to strengthen school policies related to physical education. Similar to Year One, legislators interviewed in Year Two expressed concern about budget constraints as they relate to the future of MHSA. In Year Two, respondents reported that they saw their role in promoting healthy lifestyles as one where they could pass legislation to fund health education and physical education programs. One legislator advocated for creating incentives for those who choose healthy lifestyles. Legislators also called for investment by individuals and communities in the funding of city parks and recreational facilities, as well as safety improvements to existing programs and facilities. In Year Two, many respondents noted that the focus should now be directed toward educating communities on MHSA and the importance of healthy lifestyles. Legislators agreed that it is important for schools to promote healthy lifestyles for students, and many also agreed that schools should

promote healthy lifestyles for staff. In Year Two, legislators expressed commitment to communicating information regarding the MHSA and the importance of health education to all Mississippians. In Year Two, legislators also expressed a sense of pride about MHSA-related accomplishments and voiced the opinion that time would be a powerful indicator of the Act's success in addressing childhood obesity in Mississippi.

Year Four Themes

Half of the twelve legislators interviewed in 2012 (Year Four) felt that "improving physical education" was MHSA's most important component. In Year Four, respondents unanimously agreed that it is important for schools to promote healthy lifestyles for students and school staff. They also believe everyone generally understands that Mississippi has a serious childhood obesity issue and that MHSA is an important tool in the prevention of childhood obesity. Interestingly, in Year Four, legislators tend to disagree on the best path to take in order to address childhood obesity—especially in terms of whether action on their part is necessary, and whether it should be a priority for state legislation. Indeed, respondents were wary of dictating health-related lifestyle changes that they felt should be left up to individual choice and for which individual's should take responsibility. In Year Four, some legislators reported favorable reactions to the MHSA among their constituents, along with increased activity in their districts related to the prevention of childhood obesity (such as healthier meals, increased physical education, and positive changes in the types of food available in schools). While other legislators reported confusion over MHSA, complaints about having to make changes without corresponding additional funds for new programming, low-prioritization and non-compliance with the MHSA, or no conversations at all about the MHSA.

In Year Four, all twelve legislators stated that they see a role for the Mississippi legislature in promoting healthy lifestyles through state policy, and several legislators pointed to the positive example many legislators have tried to set for their constituents through participation in the "Paul Lacoste Sports Fit 4 Change Challenge." Although legislators in Year Four reported mixed responses on whether Mississippi has done enough to strengthen the school policies on nutrition, health education and physical education, they expressed numerous interesting ideas for policies to annually track the status of childhood obesity in Mississippi as well as lead to better outreach and more creative, out-of-the-box thinking to address Mississippi's childhood obesity issue. Some legislators also offered policy ideas to reach children outside of the school setting, such as initiatives to raise community awareness in venues where children and families gather (such as churches), more positive reinforcement of health messages learned at school carrying over to afterschool programs, detailed information for parents about nutrition and physical activity within daycares and afterschool programs, and initiatives to implement health education services targeting parents-to-be early in pregnancy.

As in previous years, legislators surveyed in Year Four were concerned with Mississippi's status as the most obese state in the nation, and said they were glad Mississippi is working diligently to reverse this negative ranking by implementing initiatives such as MHSA aimed at lowering the state's childhood obesity rate. In Year Four, legislators recognize that childhood obesity is a

difficult problem and believe additional work is needed across multi-sectors in order to enhance childhood obesity prevention efforts in the Mississippi, especially by educating parents on nutrition and supporting initiatives to promote consistency in healthy lifestyles choices in terms of healthy foods and physical activity.

PUBLIC SCHOOL DISTRICT SUPERINTENDENTS AND SCHOOL BOARD MEMBERS

The data in each year of the reports underscores the importance of the implementation of systemic policies at the local school level in order to have the maximum success of the Healthy Students Act of 2007 for children throughout Mississippi. This section of the report provides findings from school superintendents and school board members at the local level in Year Four (2012) and compares previous years' findings by which local policymakers are implementing the Mississippi Healthy Students Act of 2007.

Methodology

Telephone Survey of Public School Superintendents

The survey was conducted by the Wolfgang Frese Survey Research Laboratory at the Social Science Research Center, Mississippi State University. Contact of 145 Mississippi public school superintendents of Education was made via telephone. Forty of the School Superintendents were unable to schedule an interview during the data collection period in June, 2012.There were 105 superintendents who completed the survey for a response rate of 72%. Since this was not a random sample, margin of error should not be considered. The data from this survey represent a census of the entire population of Mississippi school superintendents.

Survey of School Board Members

Researchers sent surveys to school board members in packets containing multiple copies of the survey (enough for each school board member), along with a self-addressed, stamped envelope to return the completed surveys to the SSRC research team. The survey packets for school board members were mailed to the attention of the superintendent of each Mississippi public school district, with a cover letter requesting that the superintendent encourage each school board member to individually complete the survey during one of their regularly scheduled school board meetings, and then return the completed surveys in the enclosed self-addressed and stamped envelope. In an attempt to generate higher participation from school board members, researchers also offered an incentive. For school districts who achieved a 100% response rate from their school board members, the school district name was placed in a drawing for a chance to win an "interactive white board / Smart Board" for their school district. Because the response rate was lower than expected, researchers called school districts in April 2012 to remind them to complete and send the forms, and encouraged them to seek 100% participation in order to be eligible for the interactive white board. School boards were asked to

complete and return the surveys prior to their July 2012 meetings. Names of all school districts with a 100% completion and return rate were then placed in a random drawing and one school district won the random drawing for the interactive white board. The response rate in 2012 was 32.8%; this was the next to lowest rate of all four years of the evaluation. Response rates for other years of the evaluation were 20.8% in 2009, 33.94% in 2010, and 37.1% in 2011.

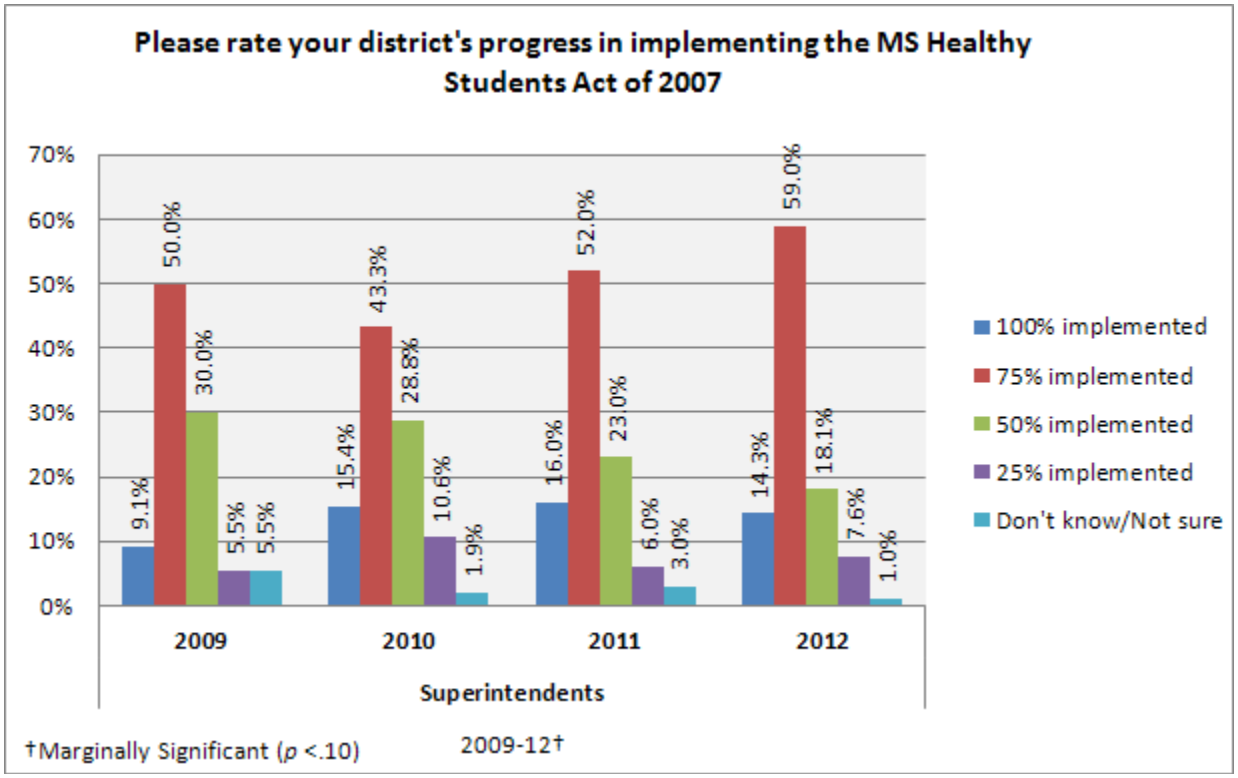
Findings

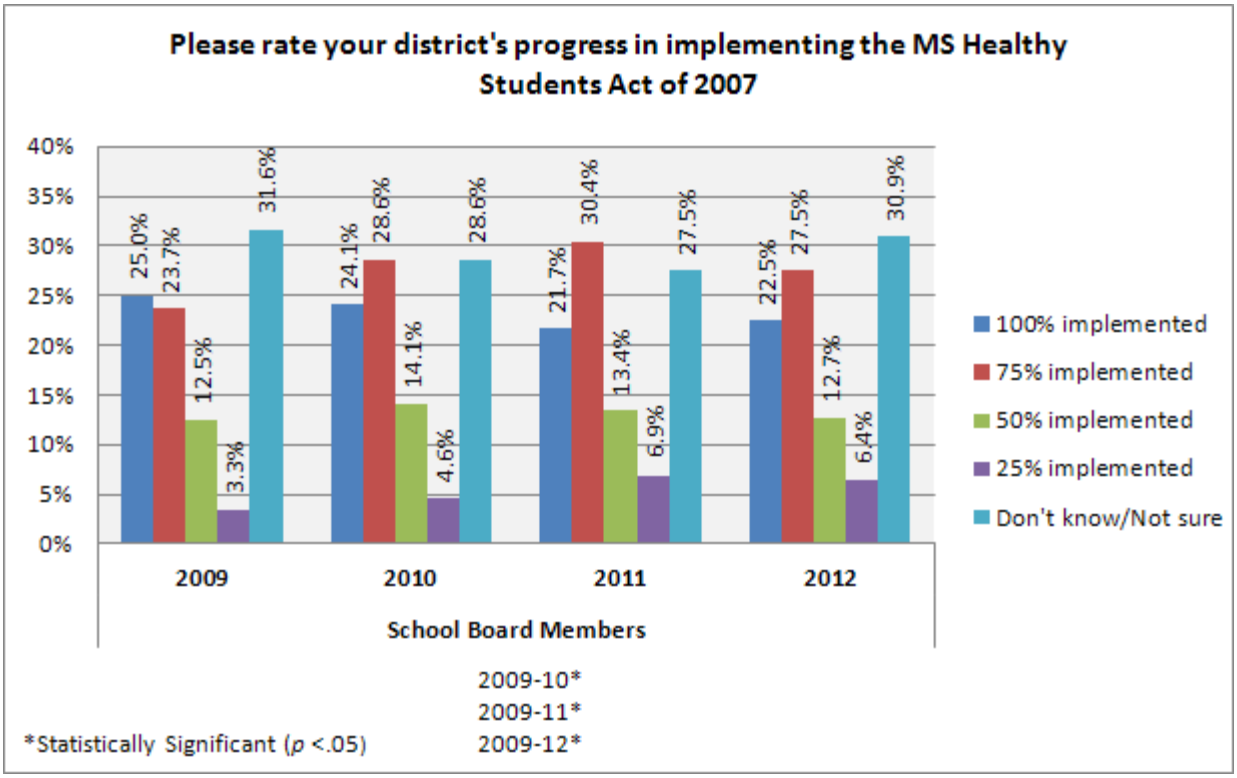
Progress towards Full Implementation of the Mississippi Healthy Students Act

When asked about their district's progress towards full implementation of the Mississippi Healthy Students Act of 2007 (MHSA), school superintendent responses were less than optimal. In 2012, only 14.3% of superintendents reported their districts at 100% implementation. This was a decrease from the number of superintendents reporting their districts had fully implemented the Act in 2010 (15.4%) and 2011 (16%). The percentages for districts that had implemented at least 75% of the Act were more encouraging, with superintendents reporting 59% in 2012, compared to 52% in 2011 and 43.3% in 2010. Among school board members, 22.5% reported full implementation of the Act in 2012, compared with 21.7% in 2011 and 24.1% in 2010. The percentage of school board members reporting their districts had full implementation of the Act in 2012 remained higher than the percentages recorded by the superintendents in the same years. However, again in 2012, school board members indicated lower percentages of districts reporting 75% implementation with 27.5% in 2012, 30.4% in 2011, and 28.6% in 2010.

Of note is the difference between superintendents and school board members in the number of responses who "did not know or were not sure" of their district's progress in implementation of the Act. In 2012, only 1.0% of superintendents did not know or were not sure, compared to 30.9% of school board members. Similarly, in 2011 only 3.0% of superintendents did not know or were not sure of their district's progress in implementing the Act, compared to 27.5% of school board members in the same year.

Figure 18

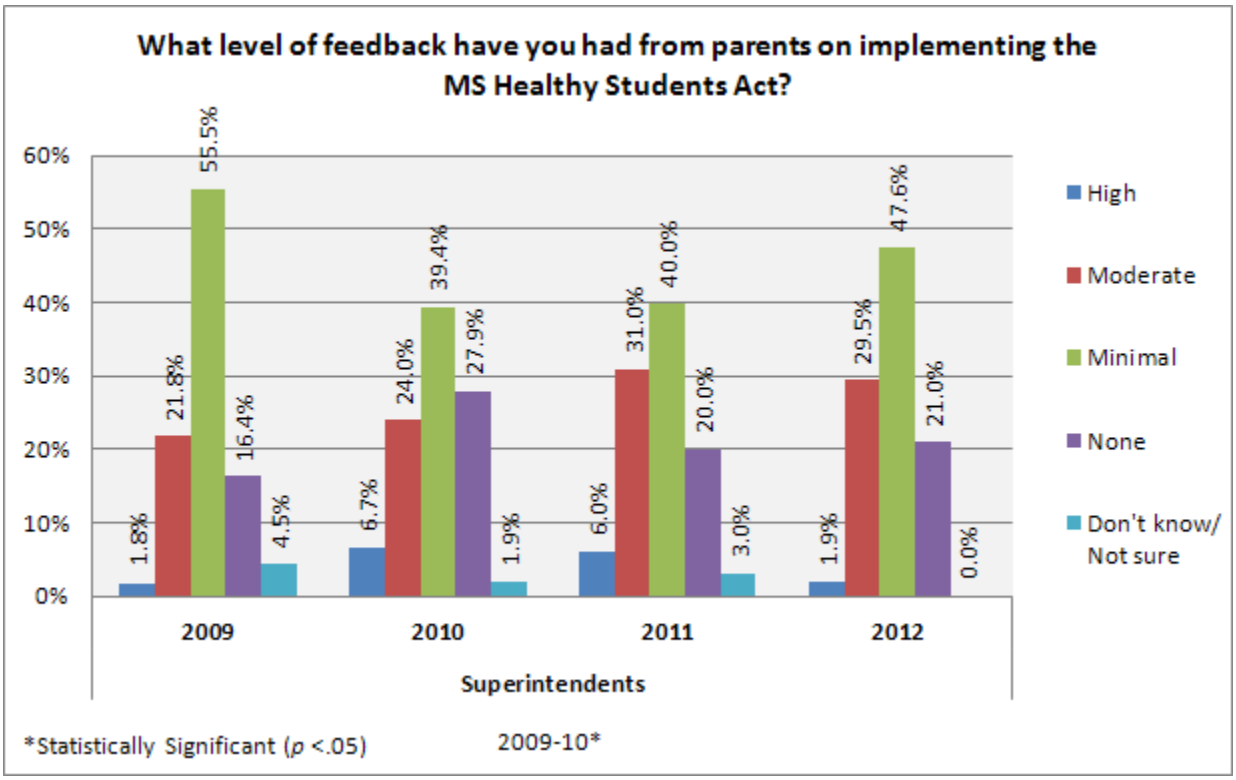

Please rate your district's progress in implementing the MS Healthy Students Act of 2007
70%
60%
50%
40%
30%
20%
10%
0%
9.1%
50.0%
30.0%
5.5%
5.5%
15.4%
43.3%
28.8%
10.6%
1.9%
16.0%
52.0%
23.0%
6.0%
3.0%
14.3%
59.0%
18.1%
7.6%
1.0%
2009
2010
2011
2012
Superintendents
100% implemented
75% implemented
50% implemented
25% implemented
Don't know/Not sure
†Marginally Significant (p <.10)
2009-12†

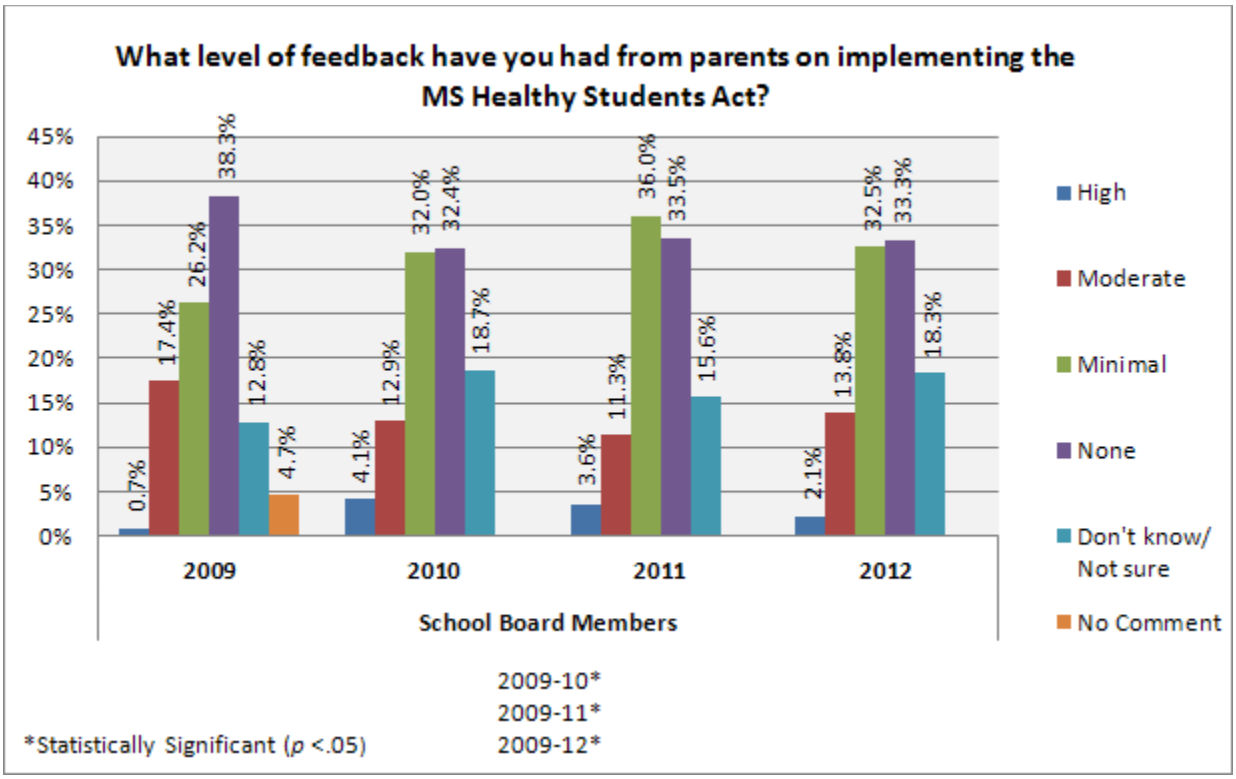

Please rate your district's progress in implementing the MS Healthy Students Act of 2007
40%
35%
30%
25%
20%
15%
10%
5%
0%
25.0%
23.7%
12.5%
3.3%
31.6%
24.1%
28.6%
14.1%
4.6%
28.6%
21.7%
30.4%
13.4%
6.9%
27.5%
22.5%
27.5%
12.7%
6.4%
30.9%
2009
2010
2011
2012
School Board Members
100% implemented
75% implemented
50% implemented
25% implemented
Don't know/Not sure
2009-10*
2009-11*
2009-12*
*Statistically Significant (p <.05)

Feedback from Parents on Implementation of Mississippi Healthy Students Act

When asked about the level of feedback received from parents in Year Four of the on-going implementation of the MHSA, most superintendents reported they had received "minimal" (47.6%) to "moderate" (29.5%) levels of feedback. Most school board members in 2012 reported they had received "no" feedback (33.3%) and "minimal" feedback (32.5%).

Figure 19





School Policies: School Nutrition and School Activity

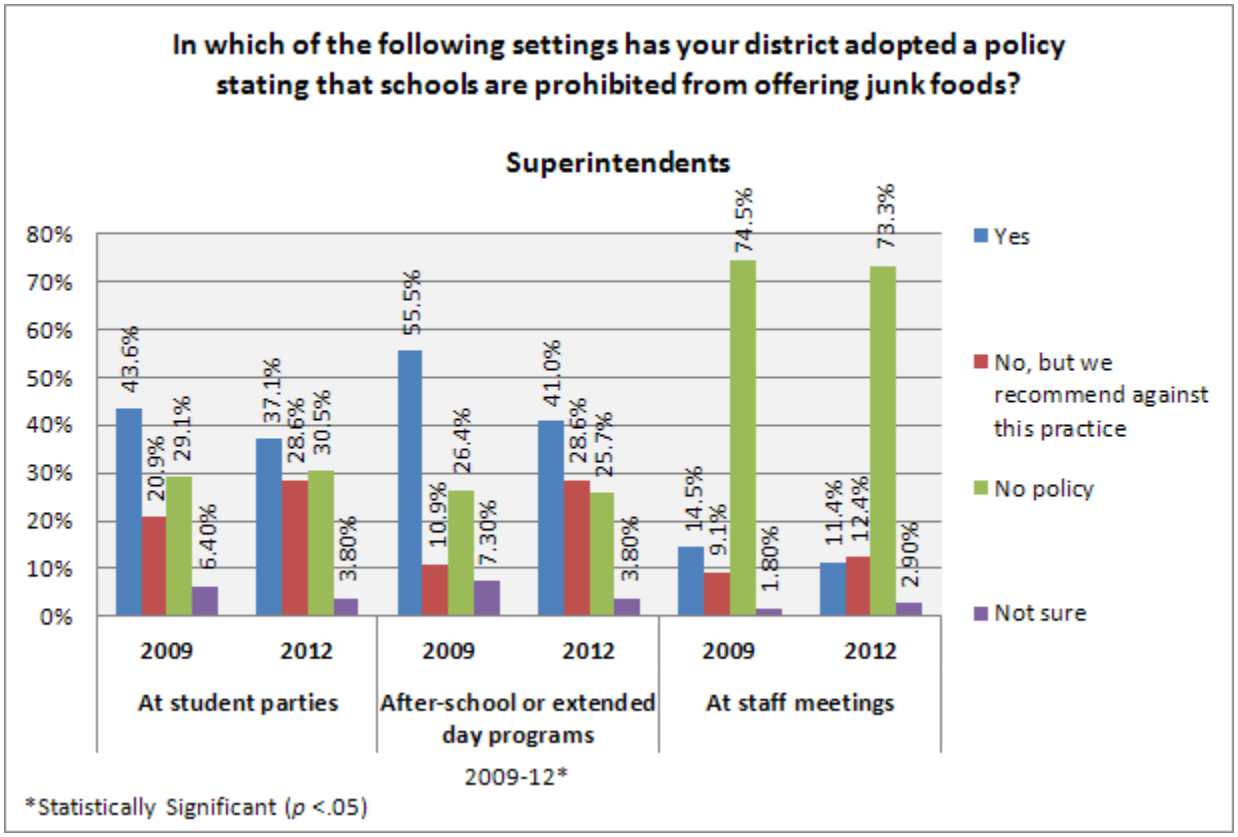
Policies Prohibiting Junk Foods at School

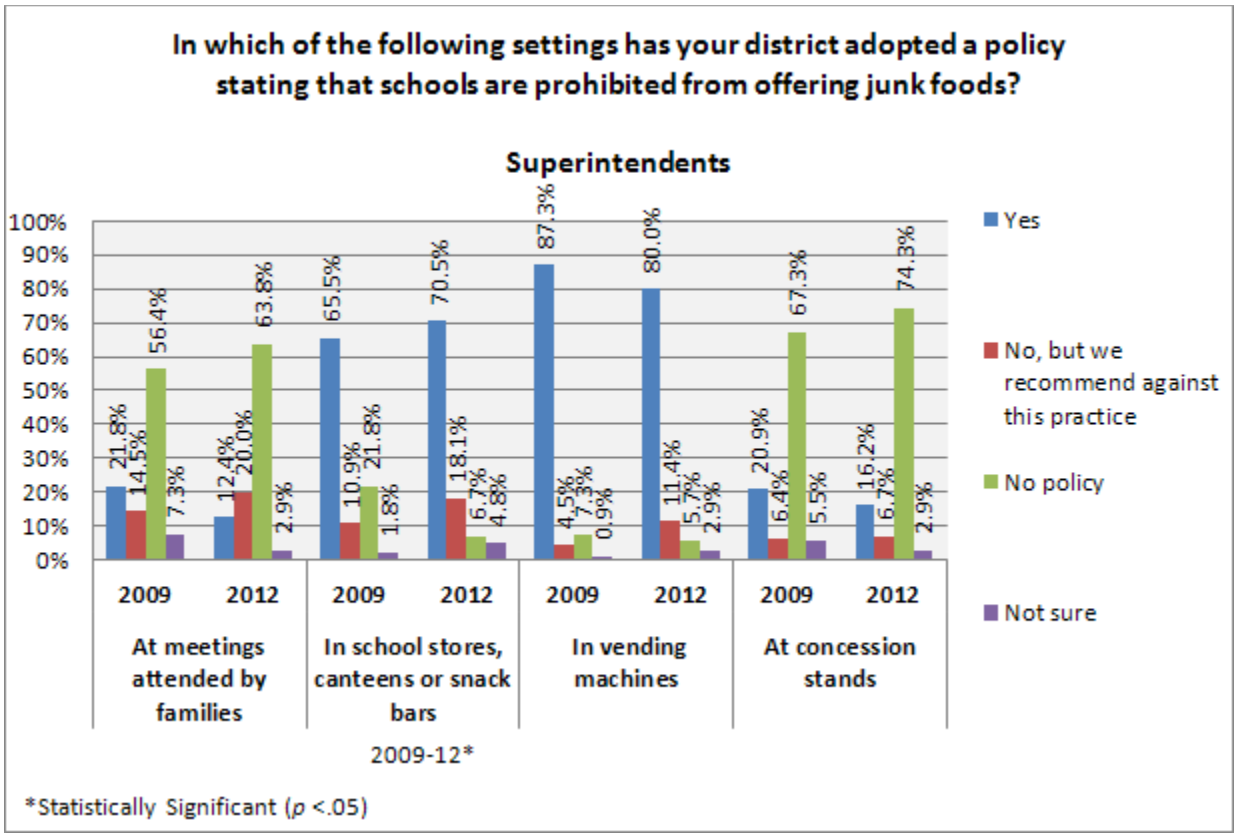
Compared to 2009, there was a decrease in the percentage of superintendents in 2012 who reported adopting a policy to prohibit schools from offering junk foods at student parties; after-school or extended day programs; at staff meetings; at meetings attended by families; in vending machines; and at concession stands. However, there was an increase in 2012 (70.5%) in the percentage of superintendents who reported adopting a policy to prohibit schools from offering junk foods in school stores, canteens or snack bars, compared to 2009 (65.5%).

Between 2009 and 2012, there was an increase in the percentage of superintendents who reported "No, but we recommend against this practice" when asked if junk food is prohibited across all school settings (at student parties; after-school or extended day programs; at staff meetings; at meetings attended by families; in school stores, canteens or snack bars; in vending machines; and at concession stands).

Most superintendents in 2012 reported that junk foods are prohibited in school stores, canteens or snack bars (70.5%) and in vending machines (80.0%), while most superintendents reported having "no policy" around offering junk foods at staff meetings (73.3%), at meetings attended by families (63.8%) and at concession stands (74.3%).

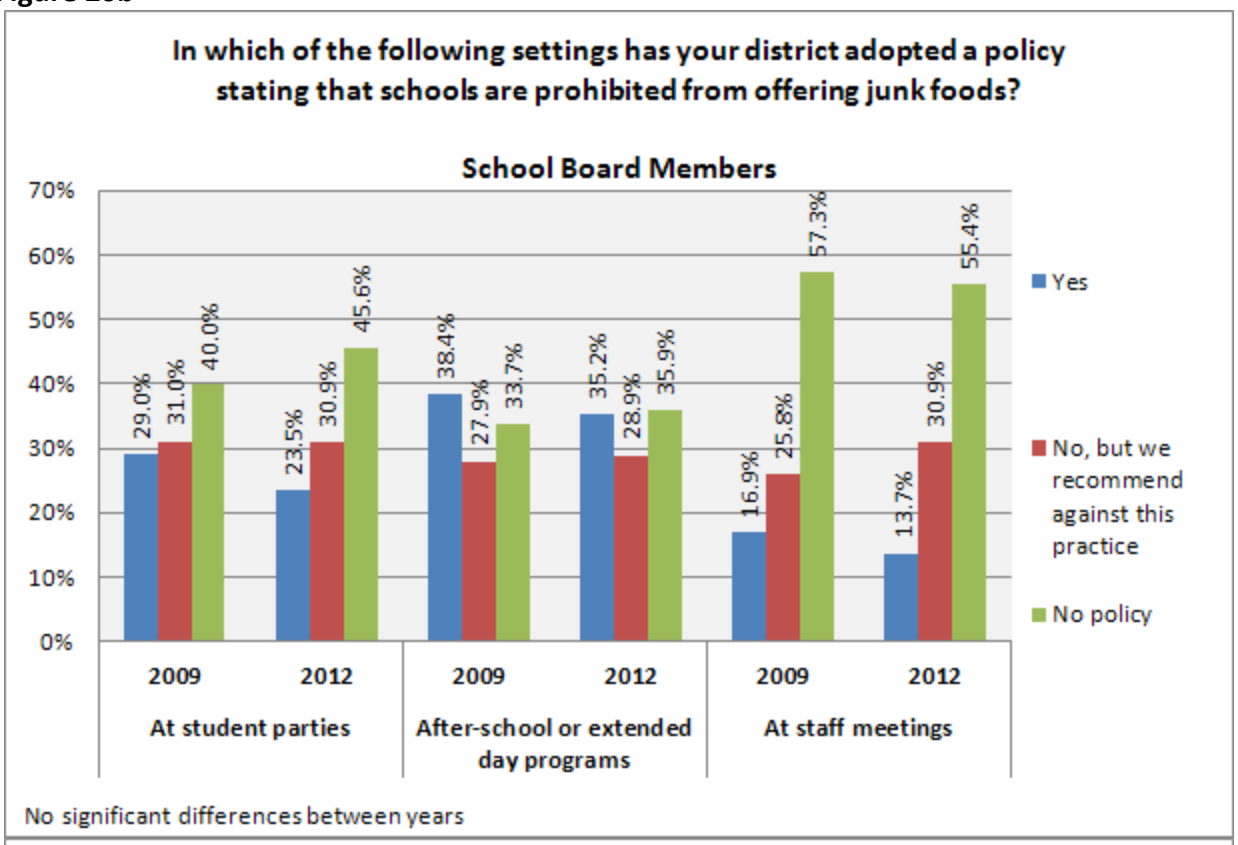
Figure 20a


In which of the following settings has your district adopted a policy stating that schools are prohibited from offering junk foods?
Superintendents
80%
70%
60%
50%
40%
30%
20%
10%
0%
43.6%
20.9%
29.1%
6.40%
37.1%
28.6%
30.5%
3.80%
55.5%
10.9%
26.4%
7.30%
41.0%
28.6%
25.7%
3.80%
14.5%
9.1%
74.5%
1.80%
11.4%
12.4%
73.3%
2.90%
Yes
No, but we recommend against this practice
No policy
Not sure
2009
2012
2009
2012
2009
2012
At student parties
After-school or extended day programs
At staff meetings
2009-12*
*Statistically Significant (p <.05)

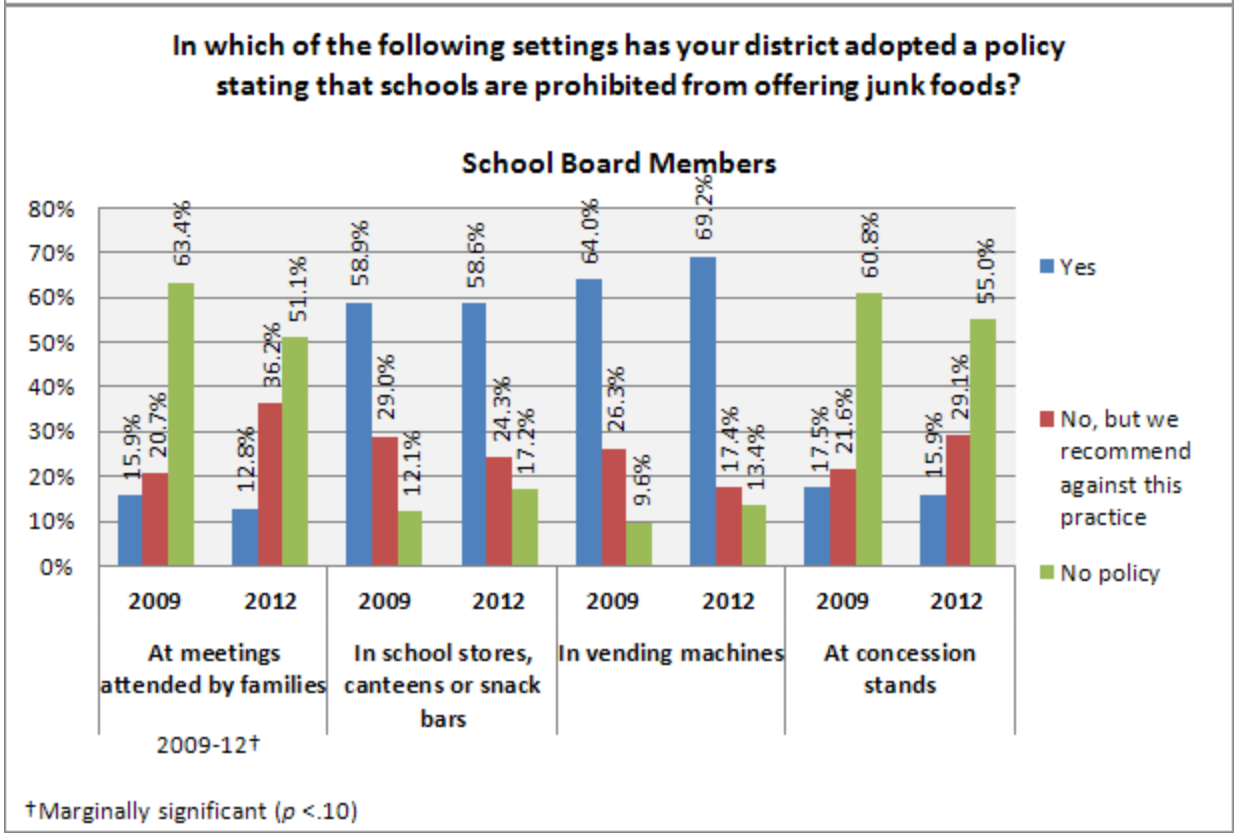


Reports from school board members were similar to superintendents. Compared to 2009, there was a decrease in the percentage of school board members in 2012 who reported adopting a policy to prohibit schools from offering junk foods across all school settings except for one. The one school setting which showed a slight increase in 2012 (69.2%) compared to 2009 (64.0%) in the percentage of school board members reporting a policy prohibiting junk food, was school vending machines. This category was different from the school setting with a reported prohibition increase by superintendents (school stores, canteens or snack bars).
Also similar to superintendents' results in 2012, most school board members reported that junk foods are prohibited in school stores, canteens or snack bars (58.6%) and in vending machines (69.2%), while most school board members reported having "no policy" around offering junk foods at staff meetings (55.4%), at meetings attended by families (51.1%) and at concession stands (55.0%).

Figure 20b



No significant differences between years



†Marginally significant ($p < .10$)

Policies Prohibiting Use of Food or Food Coupons as a Reward for Good Behavior or Good Academic Performance

Superintendents and school board members were asked if their districts prohibited schools from using food or food coupons as a reward for good behavior or good academic performance. As in 2011, there was a difference in the response between superintendents and school board members on whether or not their district has such a policy. In 2012, 35.2% of superintendents said they prohibit the use of food or food coupons as a reward for good behavior or good academic performance, compared to 17.8% of school board members.

Respondents' answers also differed between 2009 and 2012. Superintendents in 2009 had a percentage of 23.6% answering with "yes, we prohibit" the use of food or food coupons as a reward for good behavior or good academic performance, compared to 35.2% in 2012. However, in 2009 more school board members (21.7%) answered with "yes, we prohibit" compared to only 17.8% in 2012.

Table 5

Superintendents

Has your school board adopted a policy stating that schools are prohibited from using food or food coupons as a reward for good behavior or good academic performance?

RESPONSE	2009	%	2012	%	Percent point change
Yes, we prohibit	26	23.6	37	35.2	11.6
We recommend against	30	27.3	18	17.1	-10.2
We do not have a policy	48	43.6	45	42.9	-0.7
Don't know/ Not sure	6	5.5	5	4.8	-0.7
No comment	0	0.0	0	0.0	0.0
Total	110	100	105	100	NO

School Board Members

Has your school board adopted a policy stating that schools are prohibited from using food or food coupons as a reward for good behavior or good academic performance?

RESPONSE	2009	%	2012	%	Percent point change
Yes, we prohibit	34	21.7	43	17.8	-3.9
We recommend against	27	17.2	50	20.7	3.5
We do not have a policy	56	35.7	74	30.7	-5.0
Don't know/ Not sure	34	21.7	74	30.7	1.7
No comment	6	3.8	0	0.0	N/A
Total	157	100	241	100	NO

Has the State of Mississippi Done Enough to Strengthen School Policies on Nutrition?
Superintendents and school board members were asked if they thought the State of Mississippi has done enough to strengthen school policies on nutrition. In 2012, 68.6% of superintendents responded with "yes", compared to 70.9% of superintendents in 2009. When school board members were asked if they thought the State of Mississippi had done enough to strengthen school policies on nutrition, 23.9% answered with "yes" in 2012, compared to 33.3% of school board members in 2009. It is interesting to note the difference in responses between superintendents and school board members. While 25.7% of superintendents in 2012 thought *not* enough had been done to strengthen school policies on nutrition, 38.7% of school board members in 2012 thought *not* enough had been done. Many school board members in 2012 were undecided on the issue (24.7%) in contrast to superintendents who only had 4.8% of respondents who were undecided.

Table 6

Superintendents

Do you think the STATE OF MISSISSIPPI has done enough to strengthen school policies on nutrition?

RESPONSE	2009	%	2012	%	Percent point change
Yes	78	70.9	72	68.6	-2.3
No	25	22.7	27	25.7	3.0
Undecided	4	3.6	5	4.8	1.2
Don't know / Not sure	3	2.7	1	1.0	-1.7
Total	110	100	105	100	NO

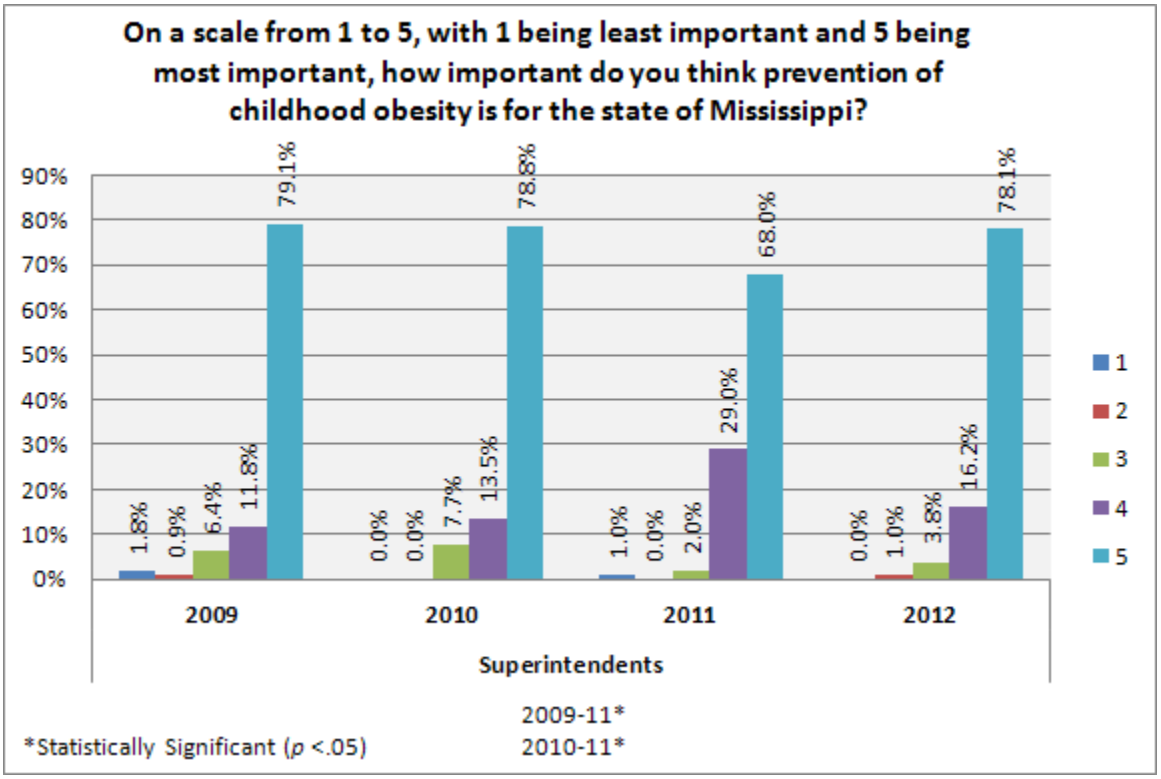
School Board Members

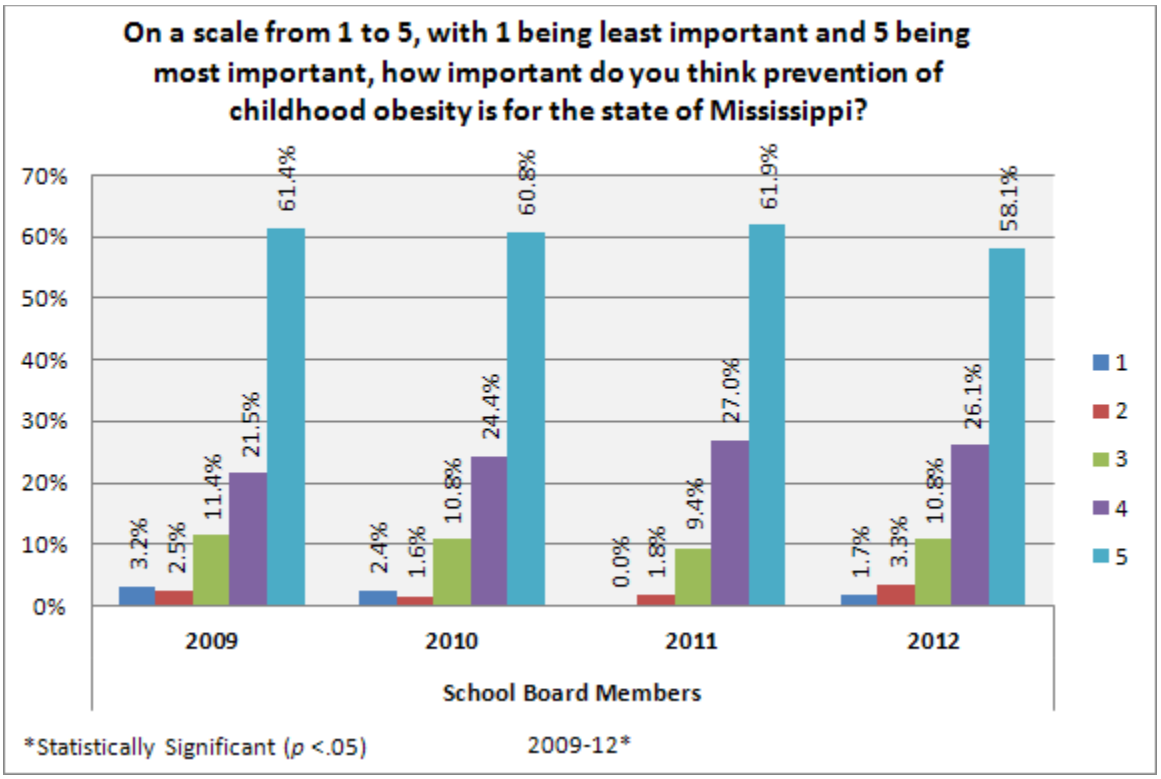
Do you think the STATE OF MISSISSIPPI has done enough to strengthen school policies on nutrition?					
RESPONSE	2009	%	2012	%	Percent point change
Yes	53	33.3	58	23.9	-9.4
No	67	42.1	94	38.7	-3.4
No comment	2	1.3	0	0.0	-1.3
Undecided	26	16.4	60	24.7	8.3
Don't know / Not sure	11	6.9	31	12.8	5.9
Total	159	100	243	100	YES

Importance of Preventing Childhood Obesity in Mississippi

Among school superintendents in 2012, 78.1% ranked the prevention of childhood obesity as being "most important", when asked to rank on a scale of 1-5, compared to 58.1% of school board members ranking it as "most important". This was the lowest percentage of school board members to rank the prevention of childhood obesity as "most important", compared to previous years, and the next to lowest percentage of superintendents to rank the prevention of childhood obesity as "most important" (the lowest percentage for superintendents was in 2011 with 68.0%).

Figure 21





School Health Councils

In 2012, superintendents and school board members were asked if each school in their district has a school health council. Most superintendents (81%) reported "yes", while only 37.3% of school board members said each school in their district has a school health council. Many school board members (37.7%) answered with "don't know/not sure", while only 5.7% of superintendents "didn't know/ were not sure" if each school in their district has a school health council.

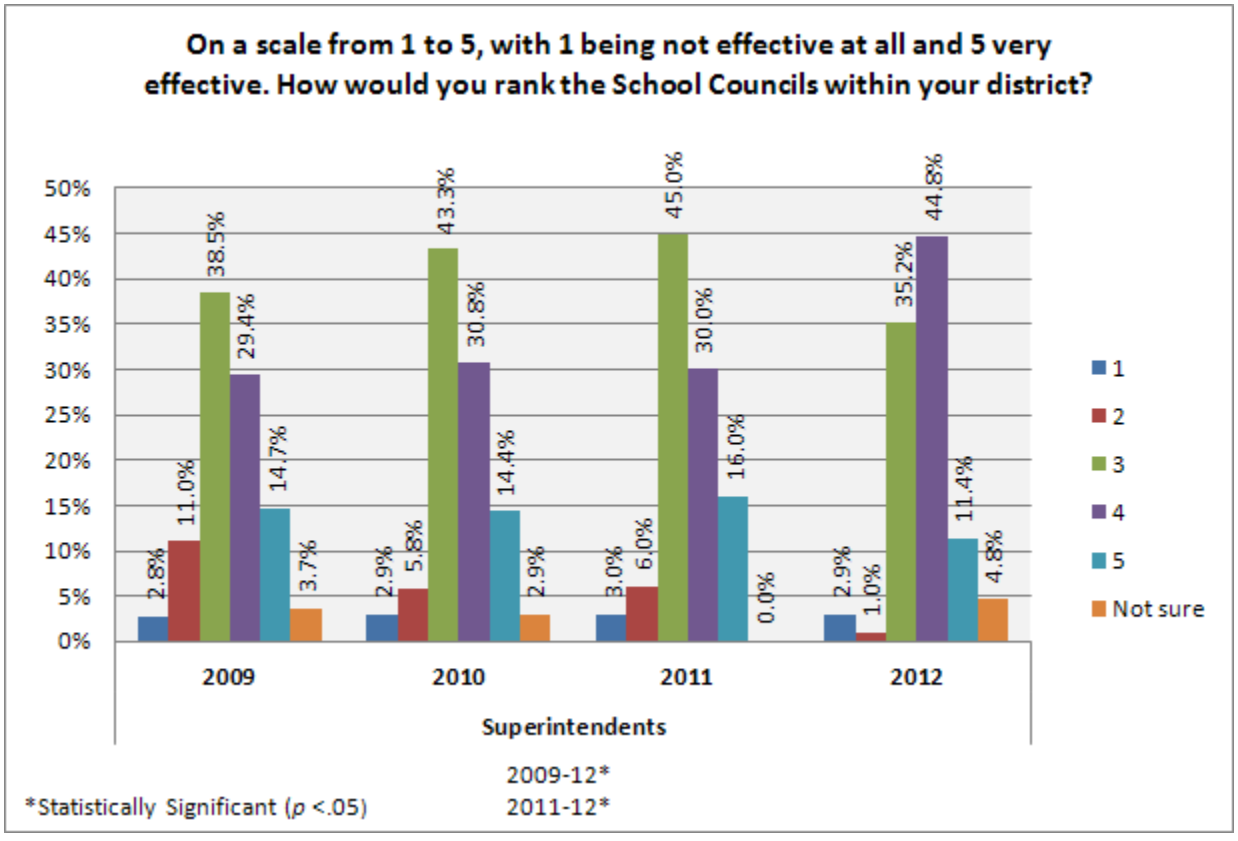
Table 7

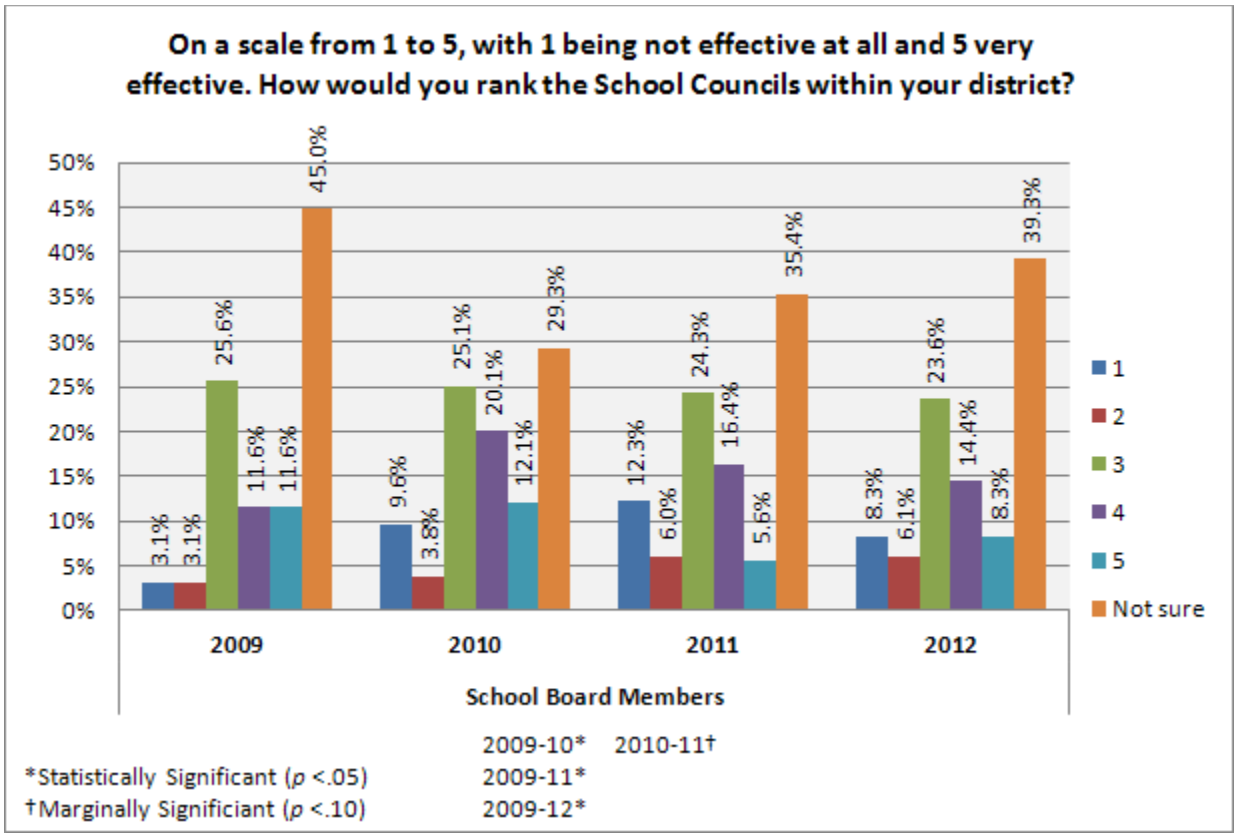
Superintendents (Q30)					
Does each school in your district have a health council?					
RESPONSE	2009	%	2012	%	Percent point change
Yes	87	79.1	85	81.0	1.9
No	18	16.4	14	13.3	-3.1
Don't know/ Not sure	5	4.5	6	5.7	1.2
Total	110	100	105	100	**NO**

School Board Members (Q27)					
Does each school within your district have a school health council?					
RESPONSE	2009	%	2012	%	Percent point change
Yes	53	35.3	91	37.3	2.0
No	36	24.0	61	25.0	1.0
No comment	4	2.7	0	0.0	N/A
Don't know/ Not sure	57	38.0	92	37.7	-0.3
Total	150	100	244	100	NO

There is also a contrast between superintendents and school board members' ranking of the effectiveness of the school health councils within their district. When asked to use a scale from 1 to 5, with 1 being "not effective at all" and 5 being "very effective", the largest percentage of superintendents (44.8%) gave their School Councils a ranking of "4". When asked the same question in 2012, the largest percentage of school board members (39.3%) said they were "not sure". The second largest percentage of school board members (23.6%) gave their School Councils a ranking of "3". Only 14.4% of school board members ranked their School Councils with a "4".

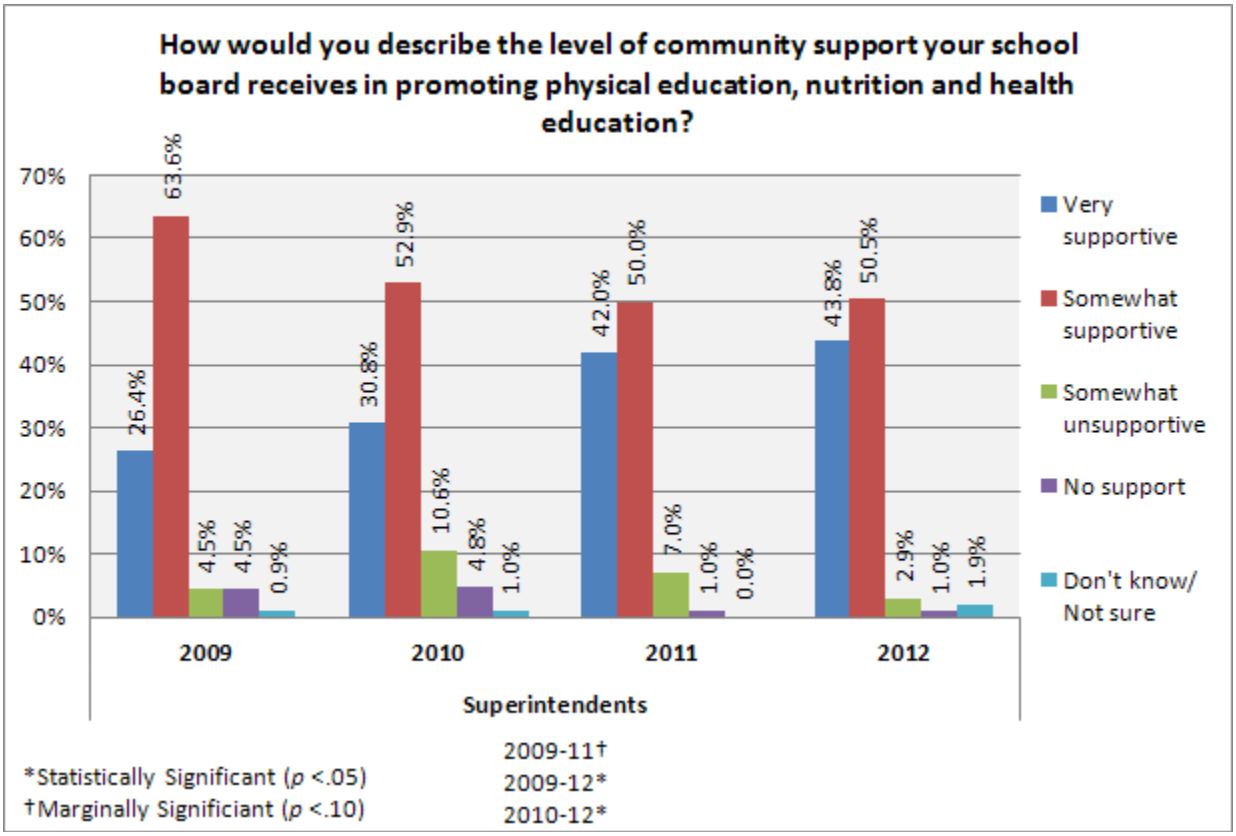
Figure 22

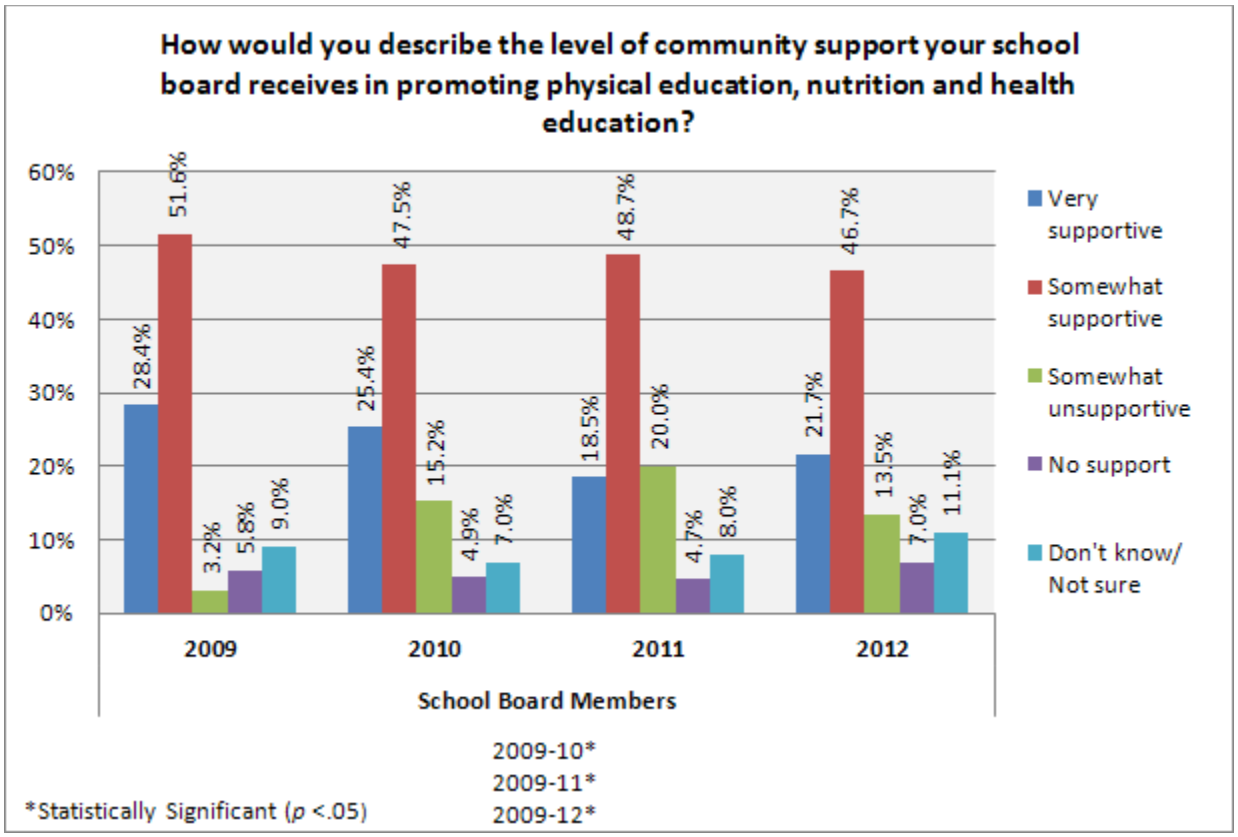




Community Support for Promotion of Physical Education, Nutrition & Health Education
When asked about the level of community support that the school board receives in promoting physical education, nutrition and health education, there were differences in 2012 between school superintendents' and school board members' responses. School superintendents (43.8%) note that the community is "very supportive", contrasted to 21.7% of school board members. Most superintendents (50.5%) and school board members (46.7%) said their communities were "somewhat supportive".

Figure 23


How would you describe the level of community support your school board receives in promoting physical education, nutrition and health education?
70%
60%
50%
40%
30%
20%
10%
0%
26.4%
63.6%
4.5%
4.5%
0.9%
30.8%
52.9%
10.6%
4.8%
1.0%
42.0%
50.0%
7.0%
1.0%
0.0%
43.8%
50.5%
2.9%
1.0%
1.9%
2009
2010
2011
2012
Superintendents
Very supportive
Somewhat supportive
Somewhat unsupportive
No support
Don't know/ Not sure
*Statistically Significant (p <.05)
†Marginally Significiant (p <.10)
2009-11†
2009-12*
2010-12*



Fitness Testing

When asked whether or not their school districts conduct fitness testing, 65.7% of superintendents reported "yes", compared to only 29.3% of school board members in 2012. In 2009 and 2012 more than 40% of school board members reported they "didn't know/not sure" if fitness testing was conducted by schools in their district, compared to only 8.2% in 2009 and 7.6% in 2012 of school superintendents who "didn't know/not sure". Compared to 2009, these percentages reflected a decrease in respondents answering affirmatively that their district conducts fitness testing among both superintendents (72.7% in 2009 compared with 65.7% in 2012) and school board members (35.0% in 2009 compared with 29.3% in 2012).

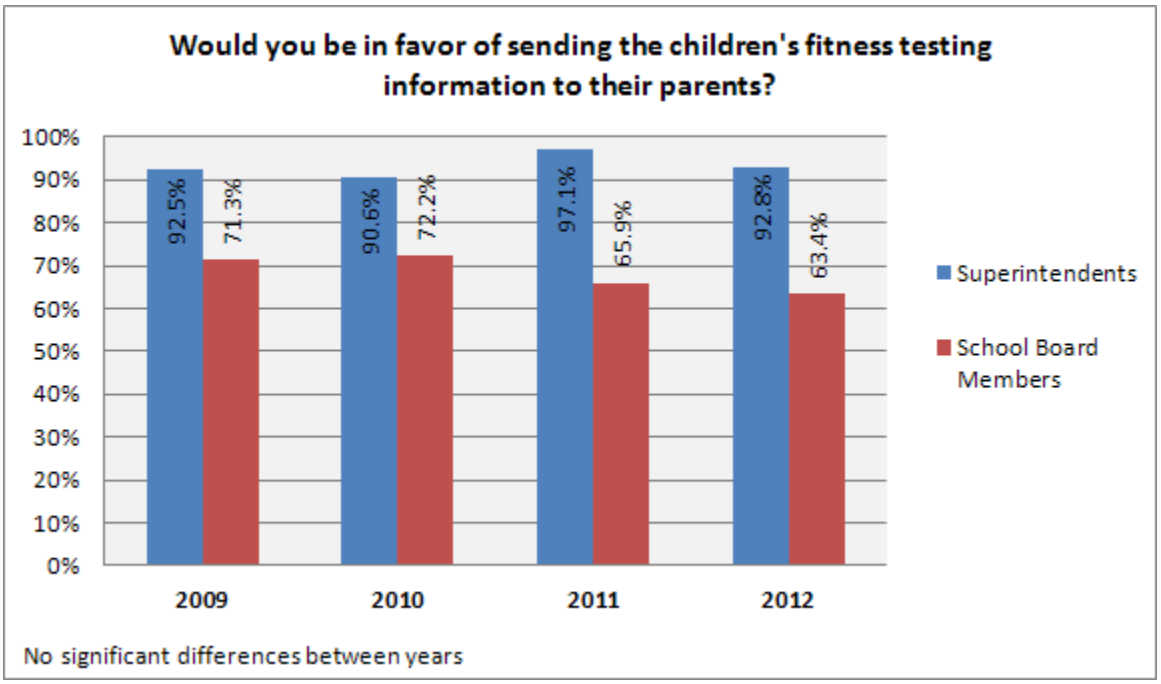
Table 8

Do schools in your district conduct fitness testing?					
Superintendents	**2009**		**2012**		
Response	n	%	n	%	Percent point change
Yes	80	72.7	69	65.7	-7.0
No	21	19.1	28	26.7	7.6
Don't know/Not sure	9	8.2	8	7.6	-0.6
No comment	0	0.0	0	0.0	0.0
Total	110	100	105	100	**NO**

Do schools in your district conduct fitness testing?					
School Board Members	2009		2012		
Response	n	%	n	%	Percent point change
Yes	55	35.0	70	29.3	-5.7
No	32	20.4	64	26.8	6.4
Don't know/Not sure	68	43.3	105	43.9	0.6
No comment	2	1.3	0	0.0	-1.3
Total	157	100	239	100	NO

When asked "Would you be in favor of sending the children's fitness testing information to their parents?", again there were differences between the superintendents and school board members. Among superintendents, 92.8% answered "yes", while 63.4% of school board members answered affirmatively. Compared to 2011, these numbers reflected a decrease among both superintendents (97.1% in 2011) and school board members (65.9% in 2011).

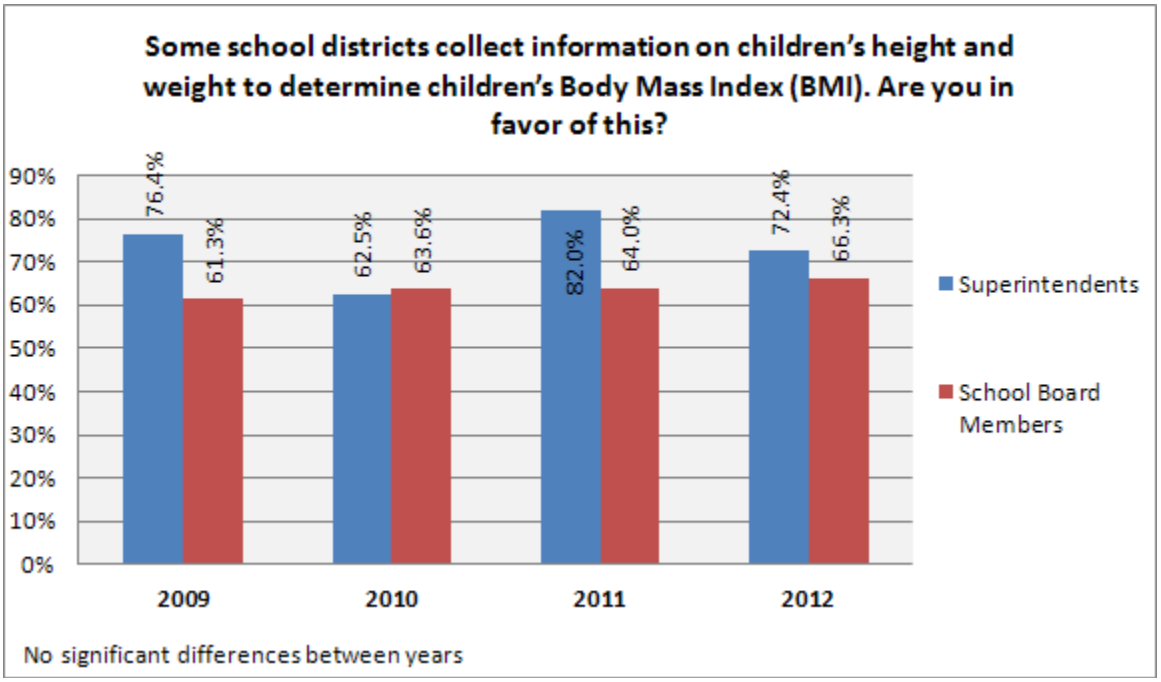
Figure 25



Body Mass Index Collection at School

When asked if they were in favor of collecting children's height and weight to determine children's Body Mass Index (BMI), 72.4% of superintendents said "yes" and 66.3% of school board members answered affirmatively. This reflected a decrease in the percentage of superintendents who answered "yes" in 2012 compared with 2011 when 82.0% of superintendents said they were in favor of collecting children's BMI.

Figure 24



Superintendents and school board members were also asked if they were in favor of sending the children's BMI information to children's parents. In 2012, of the superintendents who said they were in favor of collecting children's BMI information, 100% said they would also be in favor of sending the children's BMI information to their parents.

When school board members were asked if they were in favor of sending children's BMI information to children's parents, 79.4% said "yes". Compared to 2009, this reflected an increase in the percentage of school board members answering affirmatively when 73.6% of school board members answered that they were in favor of sending BMI information to children's parents.

Table 9

Superintendents (Q8)					
Would you be in favor of sending the children's Body Mass Index (BMI) information to their parents?					
RESPONSE	2009	%	2012	%	Percent point change
Yes	80	95.2	76	100	4.8
No	1	1.2	0	0	-1.2
Don't Know/ Not Sure	3	3.6	0	0	-3.6
Total	84	100	76	100	**NO**

School Board Members (Q10)					
If you are in favor of collecting children's Body Mass Index (BMI) information, are you in favor of sending this information to children's parents?					
RESPONSE	2009	%	2012	%	Percent point change
Yes	106	73.6	166	79.4	5.8
No	13	9.0	17	8.1	-0.9
No comment	11	7.6	0	0.0	N/A
Don't know/ Not sure	14	9.7	26	12.4	2.7
Total	144	100	209	100.0	YES

School Staff Wellness Programs

Superintendents and school board members were asked to give their opinions on the importance of providing staff wellness program in their schools. Most superintendents in 2012 (62.9%) ranked staff wellness programs as "very important" and 33.3% ranked staff wellness programs as "moderately important". These results were similar to the rankings of school board members in 2012, with 61.7% ranking staff wellness programs as "very important" and 28.3% of school board members ranking staff wellness programs as "moderately important".

Table 10

Superintendents (Q38)					
In your opinion, how important is it to provide staff wellness program(s)?					
RESPONSE	2009	%	2012	%	Percent point change
Very important	71	64.5	66	62.9	-1.6
Moderately important	35	31.8	35	33.3	1.5
Not important at all	4	3.6	4	3.8	0.2
Don't know	0	0	0	0	0
Total	110	100	105	100	NO

School Board Members (Q36)					
In your opinion, how important is it to provide staff wellness program(s)?					
RESPONSE	2009	%	2012	%	Percent point change
Very important	88	58.7	148	61.7	3.0
Moderately important	46	30.7	68	28.3	-2.4
Not important at all	2	1.3	7	2.9	1.6
No comment	6	4.0	0	0.0	N/A
Don't know/Not sure	8	5.3	17	7.1	1.8
Total	150	100	240	100	YES

References

[i] Southward, L., Cross, G., Baggett, D., Hanna, H., Edwards, J., Carmack, R., Parrish, D., Buffington, A., Mathews, R., & Thompson, C. (2009, October). Parents', youth and policymakers' perspectives on the Mississippi Healthy Students act of 2007: Baseline findings. The Center for Mississippi Health Policy, funded by the Robert Wood Johnson Foundation.

[ii] Southward, L., Baggett, D., Buffington, A., Cross, G.W., Edwards, J., Gallman, S., Husain, J., McKee, C., & Parrish, D., Dunaway, M., Fay, B., Gullett, H., Meeks, C., & Thompson, T. (2010, October). Parent, youth, and policy maker perspectives on the Mississippi Healthy Students Act of 2007: Year two findings. The Center for Mississippi Health Policy, funded by the Robert Wood Johnson Foundation.

[iii] Southward, L., Baggett, D., Blanchard, T., Buffington, A., Husain, J., McKee, C., & Parrish, D., Dunaway, M., Fay, B., Thompson, T., & Walker, B. (2011, September). Parent, Youth, and Policymaker Perspectives on the Mississippi Healthy Students Act of 2007: Year 3 Findings. The Center for Mississippi Health Policy, funded by the Robert Wood Johnson Foundation.

[iv] Trust for America's Health, Robert Wood Johnson Foundation: *F as in Fat: How Obesity Threatens America's Future 2012.* Retrieved October 10, 2012 from:http://healthyamericans.org/assets/files/TFAH2012FasInFatFnlRv.pdf

[v] Childhood obesity rates in Mississippi (*Prevalence and Trends in Overweight and Obesity among Mississippi Public School Students, 2005 – 2011*) *J Miss State Med Assoc.* 2012 May; 53(5):140-146. Reprinted with permission of the JOURNAL OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION. Retrieved on October 10, 2012 from: http://www.mshealthpolicy.com/wp-content/uploads/2012/08/CAYPOSArticleJMSMAMay12.pdf

[vi] Mississippi Legislature, 2012 Regular Session: *House Bill 540*. Retrieved October 10, 2012 from: http://billstatus.ls.state.ms.us/2012/pdf/history/HB/HB0540.xml

[vii] Mississippi State Department of Health, Mississippi Department of Education's Office of Healthy Schools: *Best Practices Tool Kit for Shared Use Agreements in Mississippi*. Retrieved October 10, 2012 from: http://msdh.ms.gov/msdhsite/_static/resources/5066.pdf

[viii] Centers for Disease Control and Prevention: *Healthy Weight: It's Not a Diet, It's a Lifestyle!* Retrieved September 24, 2012 from: http://www.cdc.gov/healthyweight/assessing/bmi/adult_bmi/index.html

[ix] Mississippi Department of Education: *Vision, Mission, and Set of Goals*. Retrieved May 29, 2012 from http://www.mde.k12.ms.us/docs/mississippi-board-of-education-library/mission-vision-goals-for-web-11-10-09_1.pdf?sfvrsn=1

[x] Centers for Disease Control and Prevention: *Components of Coordinated School Health*. Retrieved May 31, 2012 from http://www.cdc.gov/healthyyouth/cshp/components.htm

[xi] Mississippi State Department of Health webpage. Retrieved June 19, 2012 from http://msdh.ms.gov/index.htm

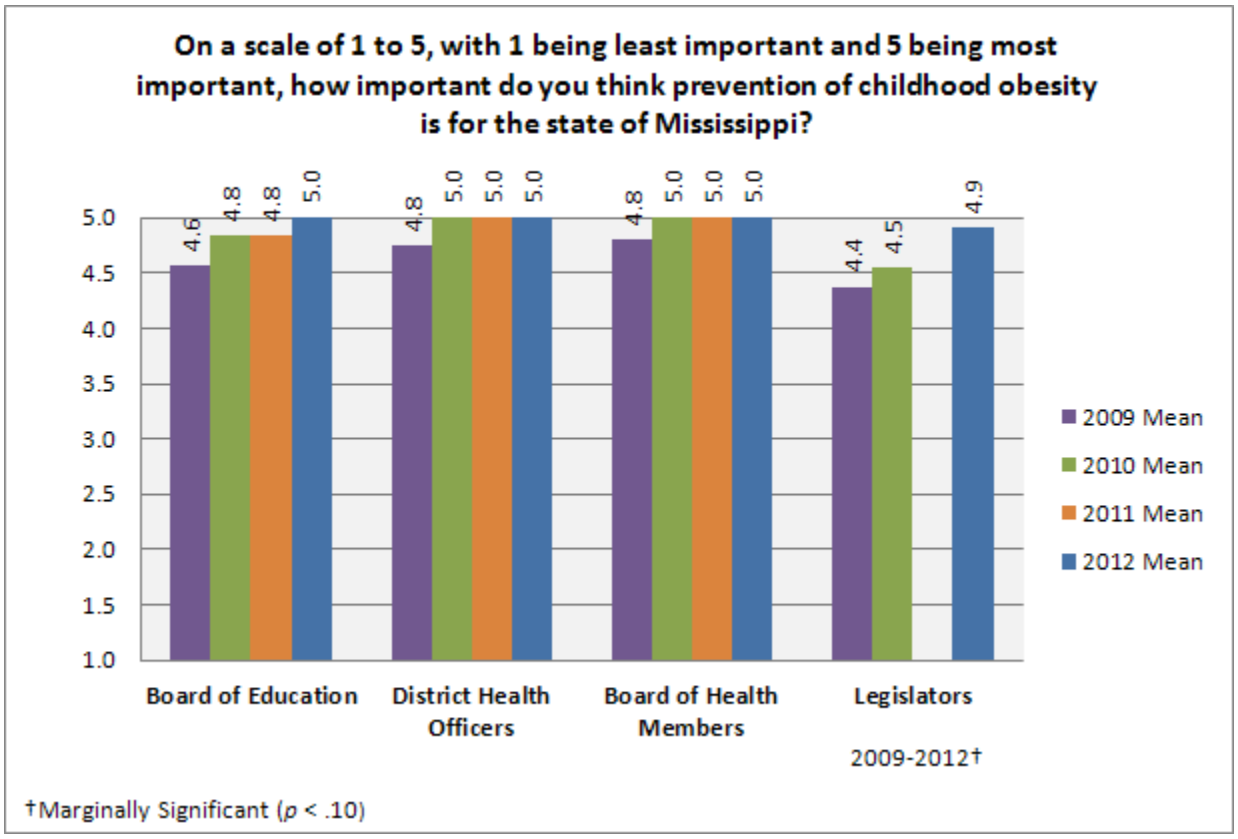
[xii] Mississippi State Board of Health webpage. Retrieved June 19, 2012 from http://msdh.ms.gov/msdhsite/_static/19,0,124.html

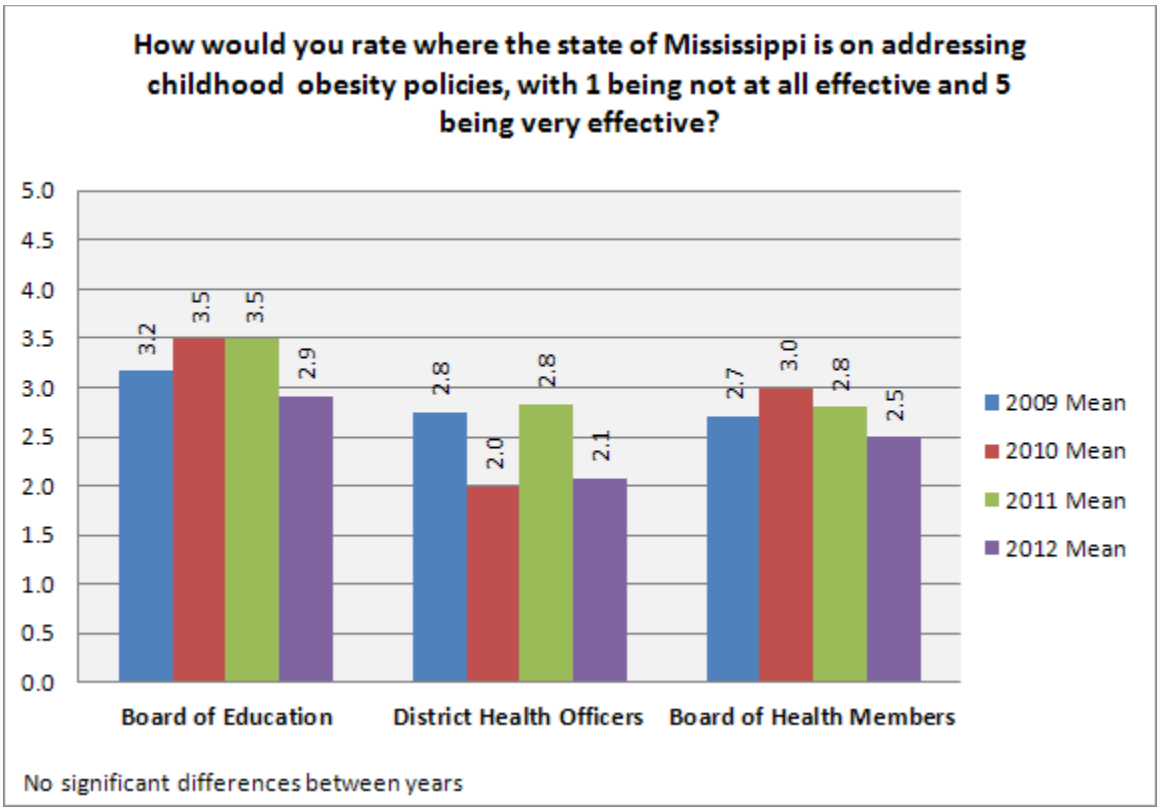
[xiii] Mississippi State Department of Health: *Strategic Plan 2012*. Retrieved June 11, 2012 from http://msdh.ms.gov/msdhsite/_static/resources/4443.pdf

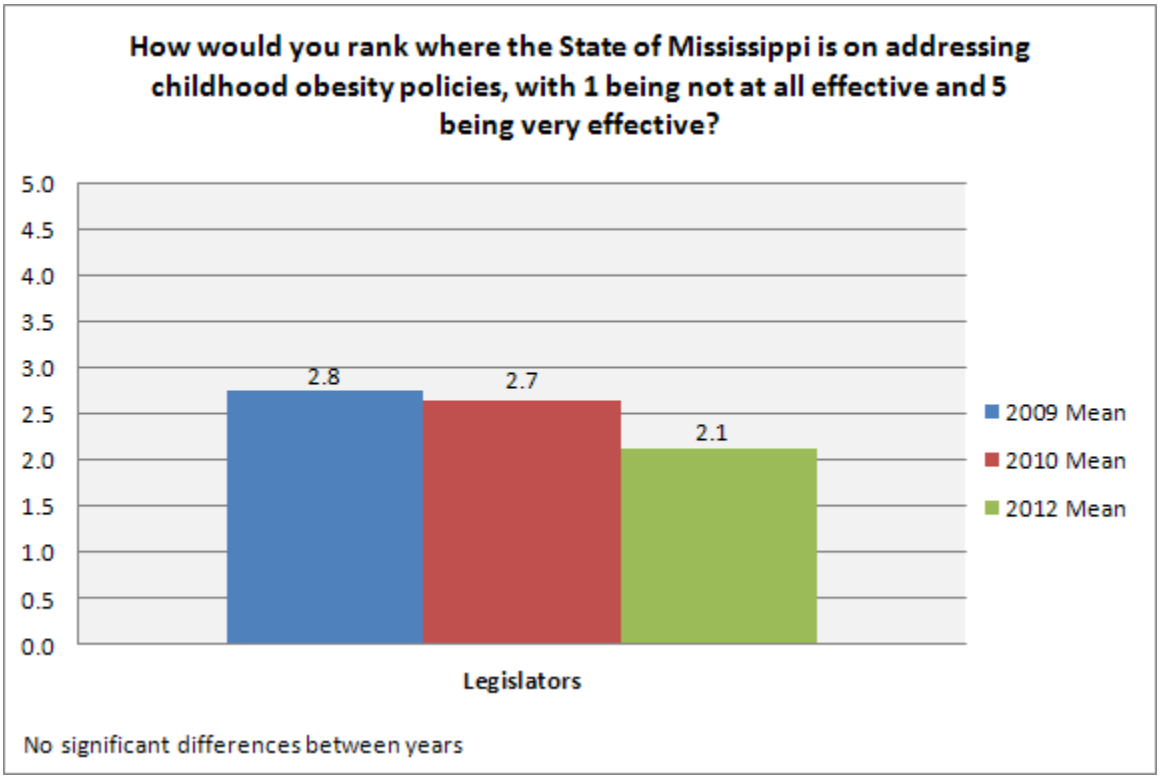
[xiv] Joint Legislative Committee on Performance Evaluation and Expenditure Review (PEER) – Report to the Mississippi Legislature: *A Limited Management Review of the Department of Health (2005)*. Retrieved June 12, 2012 from http://www.peer.state.ms.us/reports/rpt481.pdf

[xv] Mississippi Public Broadcasting: *Paul Lacoste Sports Fit 4 Change*. Retrieved June 27, 2012 from http://mpbonline.org/fit4change/

APPENDIX A


On a scale of 1 to 5, with 1 being least important and 5 being most important, how important do you think prevention of childhood obesity is for the state of Mississippi?
5.0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
4.6
4.8
4.8
5.0
4.8
5.0
5.0
5.0
4.8
5.0
5.0
5.0
4.4
4.5
4.9
Board of Education
District Health Officers
Board of Health Members
Legislators
2009-2012†
2009 Mean
2010 Mean
2011 Mean
2012 Mean
†Marginally Significant (p < .10)


How would you rate where the state of Mississippi is on addressing childhood obesity policies, with 1 being not at all effective and 5 being very effective?
5.0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
3.2
3.5
3.5
2.9
2.8
2.0
2.8
2.1
2.7
3.0
2.8
2.5
Board of Education
District Health Officers
Board of Health Members
2009 Mean
2010 Mean
2011 Mean
2012 Mean
No significant differences between years


How would you rank where the State of Mississippi is on addressing childhood obesity policies, with 1 being not at all effective and 5 being very effective?
5.0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
2.8
2.7
2.1
Legislators
2009 Mean
2010 Mean
2012 Mean
No significant differences between years

State Board of Health Members	2009		2010		2011		2012	
Question	*n*	Mean	*n*	Mean	*n*	Mean	*n*	Mean
On a scale of 1 to 5, with 1 being least important and 5 being most important, how important do you think prevention of childhood obesity is for the state of Mississippi?	8	4.8	5	5.0	5	5.0	7	5.0
Please rate the following target areas that can be addressed by public health, by level of importance, with 1 being not at all important and 5 being very important:								
Increasing physical activity	8	4.4	5	4.7	5	5.0	7	4.4
Increasing consumption of fruits & vegetables	8	4.4	5	4.8	5	4.8	7	4.4
Decreasing consumption of high calorie, dense foods			5	4.4	5	4.6	7	4.1
Encouraging breast feeding	7	4.1	5	4.6	5	4.4	7	3.9
Decreasing consumption of sugary beverages	7	4.4	5	5.0	5	5.0	7	4.3
Many things can have an impact on the prevention of childhood obesity. Please rate the following things that exist outside of the school setting, with a rating of 1 meaning that it has no impact and a rating of 5 meaning that it has a very large impact.								
Child care centers	7	3.7	5	4.8†	5	4.8	7	3.9
Nutrition labeling	8	3.2	5	4.0	5	3.4	7	2.9
Media policy (restrictions on advertising, promoting positive messages)	8	4.2	5	4.4	5	4.0	7	3.4
Farmers' markets	8	3.6	5	4.4	5	3.4	7	3.6
Body Mass Index (BMI) (measuring children's height and weight) reporting	8	3.9	5	4.4	5	4.2	7	4.0
Built environment (sidewalks, parks, green space, bike lanes)	8	4.0	5	4.8	5	3.8	7	4.1
Fat and trans fat restrictions	8	3.6	5	4.4	5	4.2	7	4.4
Location of Supermarkets (proximity to where residents live)	7	3.1	5	4.0	5	3.2	7	3.6

n = Total number of responses

†Marginally Significant ($p < .10$) †2009-2010 †2009-2011

State Board of Education Members	2009		2010		2011		2012	
Question	*n*	Mean	*n*	Mean	*n*	Mean	*n*	Mean
On a scale of 1 to 5, with 1 being least important and 5 being most important, how important do you think prevention of childhood obesity is for the state of Mississippi?	7	4.6	6	4.8	6	4.8	6	5.0
On a scale of 1 to 5, with 5 being very EFFECTIVE and 1 being very INEFFECTIVE, how would you rank Mississippi's current policies on childhood obesity?	6	3.2	6	3.5	6	3.5	6	2.9
Please rate the following target areas that can be addressed by the Department of Education, by level of importance, with 1 being not at all important and 5 being very important:								
Increasing physical activity	7	4.7	6	4.3	6	4.0	6	4.3
Increasing consumption of fruits & vegetables	7	4.6	6	4.5	6	4.2	6	4.7
Decreasing consumption of high calorie, dense foods	7	4.4	6	4.5	6	4.5	6	4.7
Decreasing children's screen time	7	3.6	5	3.4	6	3.0	6	3.8
Decreasing consumption of sugary beverages	7	4.6	6	4.5	6	4.0	6	4.7
To what extent do you think the schools in the state are implementing the minimum requirements of Coordinated school Health Programs?	5	3.8	5	3.8	5	3.6	5	3.4
Many things can have an impact on the prevention of childhood obesity. Please rate the following things that exist outside of the school setting, with a rating of 1 meaning that it has no impact and a rating of 5 meaning that it has a very large impact.								
Child care centers	7	3.9	6	4.2	6	4.0	6	3.8
Nutrition labeling	7	3.7	6	3.2	6	3.3	6	4.0
Media policy (restrictions on advertising, promoting positive messages)	7	3.4	5	3.8	6	3.8	6	4.2
Farmers' markets	7	3.1	6	2.8	6	2.7	6	3.0
Body Mass Index (BMI) (measuring children's height and weight) reporting	6	3.0	5	3.2	6	3.3	6	3.7
Built environment (sidewalks, parks, green space, bike lanes)	7	3.7	6	3.5	6	3.2	6	3.3
Fat and trans fat restrictions	7	3.6	6	4.3	6	3.3	6	3.8
Location of Supermarkets (proximity to where residents live)	7	2.6	5	2.8	6	2.3	6	3.3
Generally speaking, how would you rank the effectiveness of School Councils, with 5 being very EFFECTIVE and 1 being very INEFFECTIVE?	5	3.6	5	3.1	5	3.6	5	3.3

n = Total number of responses

State Board of Health Members	2009			2010		
Question	*n*	Yes	% Yes	*n*	Yes	% Yes
Do you think local government funds should be spent to build and maintain places in your community where people can exercise?	8	7	87.5	4	4	100.0
Do you see a role for the State Department of Health in obesity prevention?	8	8	100.0	5	5	100.0
Do you see a role for the local and/or district Health Departments to promote the MS Healthy Students Act of 2007?	8	8	100.0	5	5	100.0
Do you think that the state of Mississippi has done enough to strengthen the school policies:						
on nutrition?	8	1	12.5	5	0	0.0
on health education?	8	1	12.5	5	0	0.0
on physical education?	7	0	0.0	5	1	20.0
n = Total number of responses						
†Marginally Significant (p < .10)						

State Board of Health Members	2011			2012		
Question	*n*	Yes	% Yes	*n*	Yes	% Yes
Do you think local government funds should be spent to build and maintain places in your community where people can exercise?	5	1†	20.0	7	7	100.0
Do you see a role for the State Department of Health in obesity prevention?	5	5	100.0	7	7	100.0
Do you see a role for the local and/or district Health Departments to promote the MS Healthy Students Act of 2007?	4	4	100.0	7	7	100.0
Do you think that the state of Mississippi has done enough to strengthen the school policies:						
on nutrition?	4	1	25.0	7	1	14.3
on health education?	4	0	0.0	7	1	14.3
on physical education?	4	1	25.0	7	0	0.0
n = Total number of responses						
†Marginally Significant (p < .10)		†YES				

District Health Officers	2009		2010	
Question	*n*	Mean	*n*	Mean
Please rate the following target areas that can be addressed by public health, by level of importance, with 1 being not at all important and 5 being very important:				
Increasing physical activity	4	4.5	5	4.8
Increasing consumption of fruits & vegetables	4	4.8	5	4.2
Decreasing consumption of high calorie, dense foods			4	5.0
Decreasing children's screen time	4	4.0	5	3.8
Encouraging breast feeding	4	4.3	5	4.0
Decreasing consumption of sugary beverages	4	5.0	5	5.0
n = Total Number of Responses				

District Health Officers	2011		2012	
Question	*n*	Mean	*n*	Mean
Please rate the following target areas that can be addressed by public health, by level of importance, with 1 being not at all important and 5 being very important:				
Increasing physical activity	6	5.0	6	4.7
Increasing consumption of fruits & vegetables	6	5.0	6	4.5
Decreasing consumption of high calorie, dense foods	6	4.8	6	4.5
Decreasing children's screen time	6	4.7	6	4.0
Encouraging breast feeding	6	4.7	6	4.5
Decreasing consumption of sugary beverages	6	5.0	6	4.8
n = Total Number of Responses				

Legislators	2009		2010		2012	
Question	*n*	Mean	*n*	Mean	*n*	Mean
On a scale of 1 to 5, with 1 being least important and 5 being most important, how important do you think prevention of childhood obesity is for the state of Mississippi?	12	4.4	12	4.5	12	4.9†
How would you rank where the State of Mississippi is on addressing childhood obesity policies, with 1 being Mississippi's policies are not at all effective in addressing childhood obesity and 5 being Mississippi's policies are very effective in addressing childhood obesity?	11	2.8	12	2.6	12	2.1
n = Total Number of Responses						
†Marginally Significant (p < .10)					2009-2012†	

Legislators	2009		2010		2012	
Question	*n*	Mean	*n*	Mean	*n*	Mean
On a scale of 1 to 5, with 1 being least important and 5 being most important, how important do you think prevention of childhood obesity is for the state of Mississippi?	12	4.4	12	4.5	12	4.9†
How would you rank where the State of Mississippi is on addressing childhood obesity policies, with 1 being Mississippi's policies are not at all effective in addressing childhood obesity and 5 being Mississippi's policies are very effective in addressing childhood obesity?	11	2.8	12	2.6	12	2.1
n = Total Number of Responses						
†Marginally Significant (p < .10)					2009-2012†	

Legislators	Senators (n=6)			Representatives (n=6)	
Question	No	Unsure	Yes	No	Unsure
Are you aware that the Center for Mississippi Health Policy is conducting a 5-year evaluation of the Healthy Students' Act of 2007?	3	0	3	2	0
Have you seen a copy of the evaluation report for year 1?	2	0	3	2	0

APPENDIX B

Notes:

1. Percent change columns may reflect mathematical rounding

2. The lower right hand cell in each table indicates whether the response pattern between compared years is significantly different (Chi-Squared Test)

School Board Members (Q6)

Please rate your district's progress in implementing the MS Healthy Students Act of 2007.

RESPONSE	2009	%	2012	%	Percent point change
25% or less progress	5	3.3	15	6.4	3.1
50% progress	19	12.5	30	12.7	0.2
75% progress	36	23.7	65	27.5	3.8
100% progress	38	25.0	53	22.5	-2.5
Don't know/Not sure	48	31.6	73	30.9	-0.7
Total	152	100	236	100	YES

School Board Members (Q8)

How would you describe the level of community support your school board receives on promoting physical education, nutrition and health education?

RESPONSE	2009	%	2012	%	Percent point change
Don't know/Not sure	14	9.0	27	11.1	2.1
No comment	3	1.9	0	0.0	N/A
No support	9	5.8	17	7.0	1.2
Somewhat supportive	80	51.6	114	46.7	-4.9
Somewhat unsupportive	5	3.2	33	13.5	10.3
Very supportive	44	28.4	53	21.7	-6.7
Total	155	100	244	100	YES

School Board Members (Q9)

Some school districts collect information on children's height and weight to determine children's Body Mass Index (BMI). Are you in favor of this?

RESPONSE	2009	%	2012	%	Percent point change
Yes	95	61.3	161	66.3	5.0
No	25	16.1	36	14.8	-1.3
No comment	6	3.9	0	0.0	N/A
Don't know/Not sure	29	18.7	46	18.9	0.2
Total	155	100	243	100	YES

School Board Members (Q10)					
If you are in favor of collecting children's Body Mass Index (BMI) information, are you in favor of sending this information to children's parents?					
RESPONSE	2009	%	2012	%	Percent point change
Yes	106	73.6	166	79.4	5.8
No	13	9.0	17	8.1	-0.9
No comment	11	7.6	0	0.0	N/A
Don't know/ Not sure	14	9.7	26	12.4	2.7
Total	144	100	209	100.0	**YES**

School Board Members (Q11)					
Do schools in your district conduct fitness testing?					
RESPONSE	2009	%	2012	%	Percent point change
Yes	55	35.0	70	29.3	-5.7
No	32	20.4	64	26.8	6.4
Don't know/ Not sure	68	43.3	105	43.9	0.6
No comment	2	1.3	0	0.0	N/A
Total	157	100	239	100	**NO**

School Board Members (Q12)					
If yes, are you in favor of sending this information to children's parents?					
RESPONSE	2009	%	2012	%	Percent point change
Yes	92	71.3	109	63.4	-7.9
No	6	4.7	22	12.8	8.1
No comment	18	14.0	0	0.0	N/A
Don't know/ Not sure	13	10.1	41	23.8	13.7
Total	129	100	172	100	**YES**

School Board Members (Q20)					
Has your school board adopted a policy stating that schools are prohibited from using food or food coupons as a reward for good behavior or good academic performance?					
RESPONSE	2009	%	2012	%	Percent point change
Yes, we prohibit	34	21.7	43	17.8	-3.9
We recommend against	27	17.2	50	20.7	3.5
We do not have a policy	56	35.7	74	30.7	-5.0
Don't know/ Not sure	34	21.7	74	30.7	9.0
No comment	6	3.8	0	0.0	N/A
Total	157	100	241	100	**YES**

School Board Members (Q27)					
Does each school within your district have a school health council?					
RESPONSE	2009	%	2012	%	Percent point change
Yes	53	35.3	91	37.3	2.0
No	36	24.0	61	25.0	1.0
No comment	4	2.7	0	0.0	N/A
Don't know/ Not sure	57	38.0	92	37.7	-0.3
Total	150	100	244	100	**NO**

School Board Members (Q33)					
What level of feedback have you had from parents on implementing the MS Healthy Students Act?					
RESPONSE	2009	%	2012	%	Percent point change
None	57	38.3	80	33.3	-5.0
Minimal	39	26.2	78	32.5	6.3
Moderate	26	17.4	33	13.8	-3.6
High	1	0.7	5	2.1	1.4
No comment	7	4.7	0	0.0	N/A
Don't know/Not sure	19	12.8	44	18.3	5.5
Total	149	100	240	100	**YES**

School Board Members (Q36)					
In your opinion, how important is it to provide staff wellness program(s)?					
RESPONSE	2009	%	2012	%	Percent point change
Very important	88	58.7	148	61.7	3.0
Moderately important	46	30.7	68	28.3	-2.4
Not important at all	2	1.3	7	2.9	1.6
No comment	6	4.0	0	0.0	N/A
Don't know/Not sure	8	5.3	17	7.1	1.8
Total	150	100	240	100	**YES**

Superintendents (Q6)					
How would you describe the level of community support your school board receives in promoting physical education, nutrition and health education?					
RESPONSE	2009	%	2012	%	Percent point change
Very supportive	29	26.4	46	43.8	17.4
Somewhat supportive	70	63.6	53	50.5	-13.1
Somewhat unsupportive	5	4.5	3	2.9	-1.6
No support	5	4.5	1	1.0	-3.5
Don't know/Not sure	1	0.9	2	1.9	1
Total	110	100	105	100	**YES**

Superintendents (Q7)					
Some school districts collect information on children's height and weight to determine children's Body Mass Index (BMI). Are you in favor of this?					
RESPONSE	2009	%	2012	%	Percent point change
Yes	84	76.4	76	72.4	-4
No	23	20.9	18	17.1	-3.8
Don't know/ Not sure	3	2.7	11	10.5	7.8
Refused	0	0	0	0	0
Total	110	100	105	100	**NO**

Superintendents (Q8)

Would you be in favor of sending the children's Body Mass Index (BMI) information to their parents?

RESPONSE	2009	%	2012	%	Percent point change
Yes	80	95.2	76	100	4.8
No	1	1.2	0	0	-1.2
Don't Know/ Not Sure	3	3.6	0	0	-3.6
Total	84	100	76	100	NO

Superintendents (Q9)

Do schools in your district conduct fitness testing?

RESPONSE	2009	%	2012	%	Percent point change
Yes	80	72.7	69	65.7	-7
No	21	19.1	28	26.7	7.6
Don't know/ Not sure	9	8.2	8	7.6	-0.6
Total	110	100	105	100	NO

Superintendents (Q10)

Would you be in favor of sending the children's fitness testing information to their parents?

RESPONSE	2009	%	2012	%	Percent point change
Yes	74	92.5	64	92.8	0.3
No	1	1.3	3	4.3	3
Don't know/ Not sure	5	6.3	2	2.9	-3.4
Total	80	100	69	100	NO

Superintendents (Q22)

Does your school district have a policy that prohibits the use of food or food coupons as a reward for good behavior or good academic performance?

RESPONSE	2009	%	2012	%	Percent point change
Yes, we prohibit	26	23.6	37	35.2	11.6
We recommend against	30	27.3	18	17.1	-10.2
We do not have a policy	48	43.6	45	42.9	-0.7
Don't know/ Not sure	6	5.5	5	4.8	-0.7
Total	110	100	105	100	NO

Superintendents (Q30)					
Does each school in your district have a health council?					
RESPONSE	2009	%	2012	%	Percent point change
Yes	87	79.1	85	81.0	1.9
No	18	16.4	14	13.3	-3.1
Don't know/ Not sure	5	4.5	6	5.7	1.2
Total	110	100	105	100	**NO**

Superintendents (Q35)					
What level of feedback have you had from parents on implementing the Mississippi Healthy Students Act?					
RESPONSE	2009	%	2012	%	Percent point change
None	18	16.4	22	21.0	4.6
Minimal	61	55.5	50	47.6	-7.9
Moderate	24	21.8	31	29.5	7.7
High	2	1.8	2	1.9	0.1
Don't know	5	4.5	0	0	-4.5
Total	110	100	105	100	**NO**

Superintendents (Q38)					
In your opinion, how important is it to provide staff wellness program(s)?					
RESPONSE	2009	%	2012	%	Percent point change
Very important	71	64.5	66	62.9	-1.6
Moderately important	35	31.8	35	33.3	1.5
Not important at all	4	3.6	4	3.8	0.2
Don't know	0	0	0	0	0
Total	110	100	105	100	**NO**

Superintendents (Q40)					
Which of the following would best describe your school district's progress in implementing the Mississippi Healthy Students Act?					
RESPONSE	2009	%	2012	%	Percent point change
25% or less progress	6	5.5	8	7.6	2.1
50% progress	33	30	19	18.1	-11.9
75% progress	55	50	62	59.0	9
100% progress	10	9.1	15	14.3	5.2
Don't know/Not sure	6	5.5	1	1.0	-4.5
Total	110	100	105	100	**NO**

APPENDIX C

What would you say best describes your own weight?					
Parent responses	2009		2010		
	Parents		Parents		Percent point change
	n	%	*n*	%	
Underweight	108	2.9	83	2.2	-0.7
Healthy weight	1,307	35.2	1,302	34.7	-0.5
Overweight	2,092	56.4	2,107	56.1	-0.3
Obese	157	4.2	226	6.0	1.8
Don't know/Not sure	29	0.8	15	0.4	-0.4
Refused	17	0.5	22	0.6	0.1
Total	3,710	100	3,755	100	**YES**

What would you say best describes your own weight?					
Parent responses	2010		2011		
	Parents		Parents		Percent point change
	n	%	*n*	%	
Underweight	83	2.2	74	2.0	-0.2
Healthy weight	1,302	34.7	1,344	36.9	2.2
Overweight	2,107	56.1	1,896	52.1	-4.0
Obese	226	6.0	271	7.4	1.4
Don't know/Not sure	15	0.4	14	0.4	0.0
Refused	22	0.6	42	1.2	0.6
Total	3,755	100	3,641	100	**YES**

What would you say best describes your own weight?					
Parent responses	2009		2011		
	Parents		Parents		Percent point change
	n	%	*n*	%	
Underweight	108	2.9	74	2.0	-0.9
Healthy weight	1,307	35.2	1,344	36.9	1.7
Overweight	2,092	56.4	1,896	52.1	-4.3
Obese	157	4.2	271	7.4	3.2
Don't know/Not sure	29	0.8	14	0.4	-0.4
Refused	17	0.5	42	1.2	0.7
Total	3,710	100	3,641	100	**YES**

What would you say best describes your own weight?					
Parent responses	2009		2012		
	Parents		Parents		Percent point change
	n	%	*n*	%	
Underweight	108	2.9	72	1.9	-1.0
Healthy weight	1,307	35.2	1,382	37.3	2.1
Overweight	2,092	56.4	1,967	53.1	-3.3
Obese	157	4.2	235	6.3	2.1
Don't know/Not sure	29	0.8	13	0.4	-0.4
Refused	17	0.5	33	0.9	0.4
Total	3,710	100	3,702	100	**YES**

What would you say best describes your own weight?					
Parent responses	2010		2012		
	Parents		Parents		Percent point change
	n	%	*n*	%	
Underweight	83	2.2	72	1.9	-0.3
Healthy weight	1,302	34.7	1,382	37.3	2.6
Overweight	2,107	56.1	1,967	53.1	-3.0
Obese	226	6.0	235	6.3	0.3
Don't know/Not sure	15	0.4	13	0.4	0.0
Refused	22	0.6	33	0.9	0.3
Total	3,755	100	3,702	100	**NO**

What would you say best describes your own weight?					
Parent responses	2011		2012		
	Parents		Parents		Percent point change
	n	%	*n*	%	
Underweight	74	2.0	72	1.9	-0.1
Healthy weight	1,344	36.9	1,382	37.3	0.4
Overweight	1,896	52.1	1,967	53.1	1
Obese	271	7.4	235	6.3	-1.1
Don't know/Not sure	14	0.4	13	0.4	0
Refused	42	1.2	33	0.9	-0.3
Total	3,641	100	3,702	100	**NO**

What would you say best describes his/her weight?					
Parent responses	2009		2010		
	Children		Children		Percent point change
	n	%	*n*	%	
Underweight	260	7.0	252	6.7	-0.3
Healthy weight	2,783	75.0	2,902	77.3	2.3
Overweight	304	8.2	540	14.4	6.2
Obese	344	9.3	47	1.3	-8.0
Don't know/Not sure	19	0.5	11	0.3	-0.2
Refused	0	0.0	3	0.1	0.1
Total	3,710	100	3,755	100	**YES**

What would you say best describes his/her weight?					
Parent responses	2010		2011		
	Children		Children		Percent point change
	n	%	*n*	%	
Underweight	252	6.7	255	7.0	0.3
Healthy weight	2,902	77.3	2,815	77.3	0.0
Overweight	540	14.4	495	13.6	-0.8
Obese	47	1.3	52	1.4	0.1
Don't know/Not sure	11	0.3	18	0.5	0.2
Refused	3	0.1	6	0.2	0.1
Total	3,755	100	3,641	100	**NO**

What would you say best describes his/her weight?					
Parent responses	2009		2011		
	Children		Children		Percent point change
	n	%	*n*	%	
Underweight	260	7.0	255	7.0	0.0
Healthy weight	2,783	75.0	2,815	77.3	2.3
Overweight	304	8.2	495	13.6	5.4
Obese	344	9.3	52	1.4	-7.9
Don't know/Not sure	19	0.5	18	0.5	0.0
Refused	0	0.0	6	0.2	0.2
Total	3,710	100	3,641	100	**YES**

What would you say best describes his/her weight?					
Parent responses	2009		2012		
	Children		Children		Percent point change
	n	%	*n*	%	
Underweight	260	7.0	252	6.8	-0.2
Healthy weight	2,783	75.0	2,922	78.9	3.9
Overweight	304	8.2	480	13.0	4.8
Obese	344	9.3	37	1.0	-8.3
Don't know/Not sure	19	0.5	9	0.2	-0.3
Refused	0	0.0	2	0.1	0.1
Total	3,710	100	3,702	100	**YES**

What would you say best describes his/her weight?					
Parent responses	2010		2012		
	Children		Children		Percent point change
	n	%	*n*	%	
Underweight	252	6.7	252	6.8	0.1
Healthy weight	2,902	77.3	2,922	78.9	1.6
Overweight	540	14.4	480	13.0	-1.4
Obese	47	1.3	37	1.0	-0.3
Don't know/Not sure	11	0.3	9	0.2	-0.1
Refused	3	0.1	2	0.1	0.0
Total	3,755	100	3,702	100	**NO**

What would you say best describes his/her weight?					
Parent responses	2011		2012		
	Children		Children		Percent point change
	n	%	*n*	%	
Underweight	255	7.0	252	6.8	-0.2
Healthy weight	2,815	77.3	2,922	78.9	1.6
Overweight	495	13.6	480	13.0	-0.6
Obese	52	1.4	37	1.0	-0.4
Don't know/Not sure	18	0.5	9	0.2	-0.3
Refused	6	0.2	2	0.1	-0.1
Total	3,641	100	3,702	100	**NO**

Race and Ethnicity (Adolescent) - 2012

Weight Category	White	Black/ African American	Asian	Native Hawaiian/Pacific Islander	American Indian/ Alaska Native	Other	Don't Know/ Not Sure	Refused	Totals
Underweight	135	89	2	0	1	1	0	0	228
	8.3%	7.2%	13.3%	0.0%	6.3%	2.5%	0.0%	0.0%	7.7%
Healthy Weight	920	607	11	2	10	26	4	9	1589
	56.4%	49.1%	73.3%	100.0%	62.5%	65.0%	80.0%	81.8%	53.8%
Overweight	268	209	0	0	4	7	0	1	489
	16.4%	16.9%	0.0%	0.0%	25.0%	17.5%	0.0%	9.1%	16.5%
Obese	307	332	2	0	1	6	1	1	650
	18.8%	26.8%	13.3%	0.0%	6.3%	15.0%	20.0%	9.1%	22.0%
Totals	1630	1237	15	2	16	40	5	11	2956
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table Significance p < .05

2011 Household Income (Adolescent) - 2012

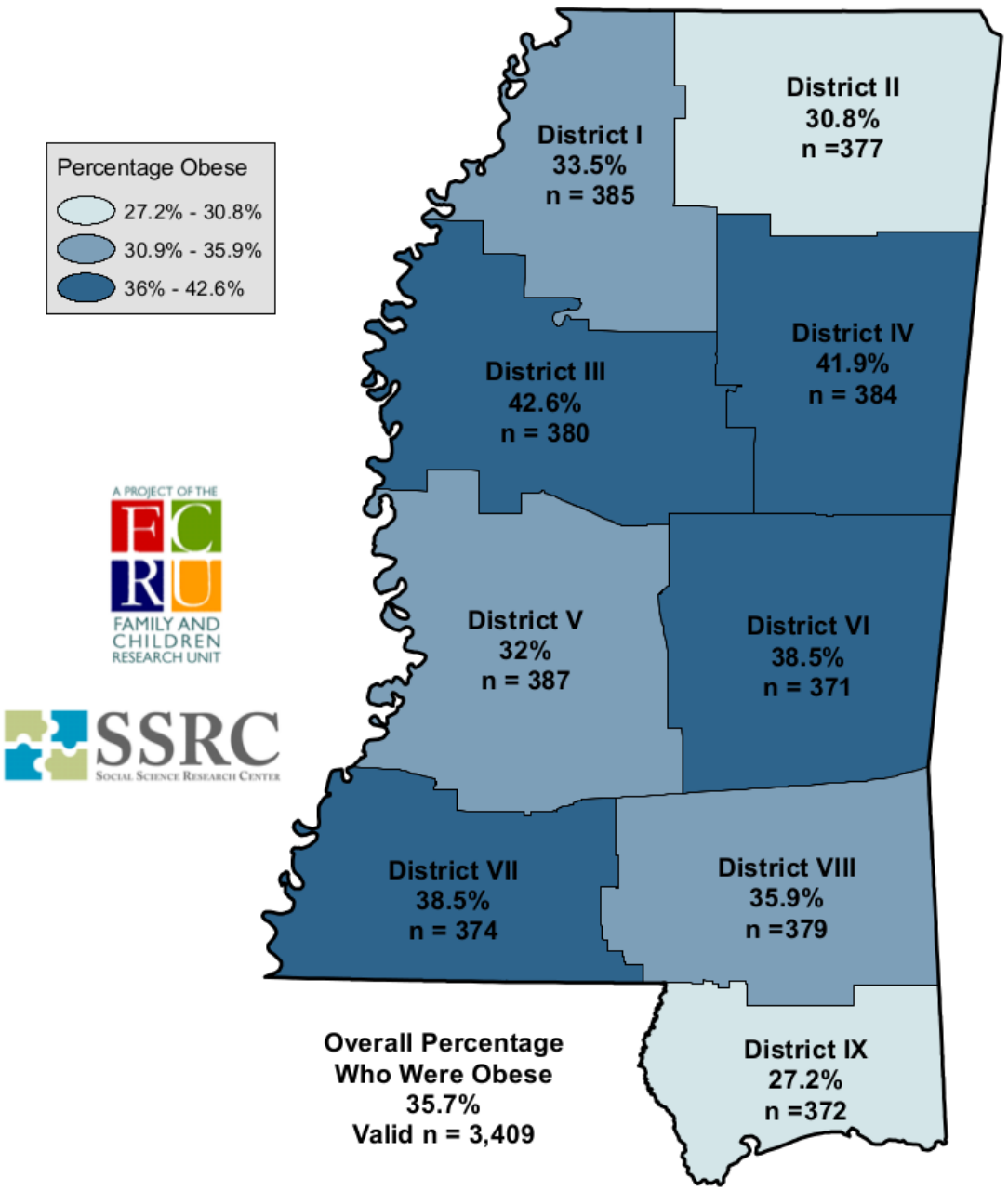
Weight Category	Below $20,000	$20,000 to $40,000	$40,000 to $60,000	$60,000 to $80,000	$80,000 to $100,000	$100,000 and Above	Don't Know/ Not Sure	Refused	Totals
Underweight	50	57	35	26	24	16	8	12	228
	7.8%	8.3%	7.4%	7.0%	9.8%	6.1%	11.8%	5.7%	7.7%
Healthy Weight	282	342	280	212	155	168	32	118	1589
	44.2%	49.9%	59.4%	56.7%	63.0%	64.1%	47.1%	55.9%	53.8%
Overweight	113	107	72	68	30	44	15	40	489
	17.7%	15.6%	15.3%	18.2%	12.2%	16.8%	22.1%	19.0%	16.5%
Obese	193	180	84	68	37	34	13	41	650
	30.3%	26.2%	17.8%	18.2%	15.0%	13.0%	19.1%	19.4%	22.0%
Totals	638	686	471	374	246	262	68	211	2956
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table Significance p < .05

Gender (Adolescent) - 2012			
Weight Category	Male	Female	Totals
Underweight	121	107	228
	7.7%	7.7%	7.7%
Healthy Weight	793	796	1589
	50.7%	57.2%	53.8%
Overweight	275	214	489
	17.6%	15.4%	16.5%
Obese	375	275	650
	24.0%	19.8%	22.0%
Totals	1564	1392	2956
	100.0%	100.0%	100.0%

Table Significance $p < .05$

Percentage of Parents Who Were Obese
2009



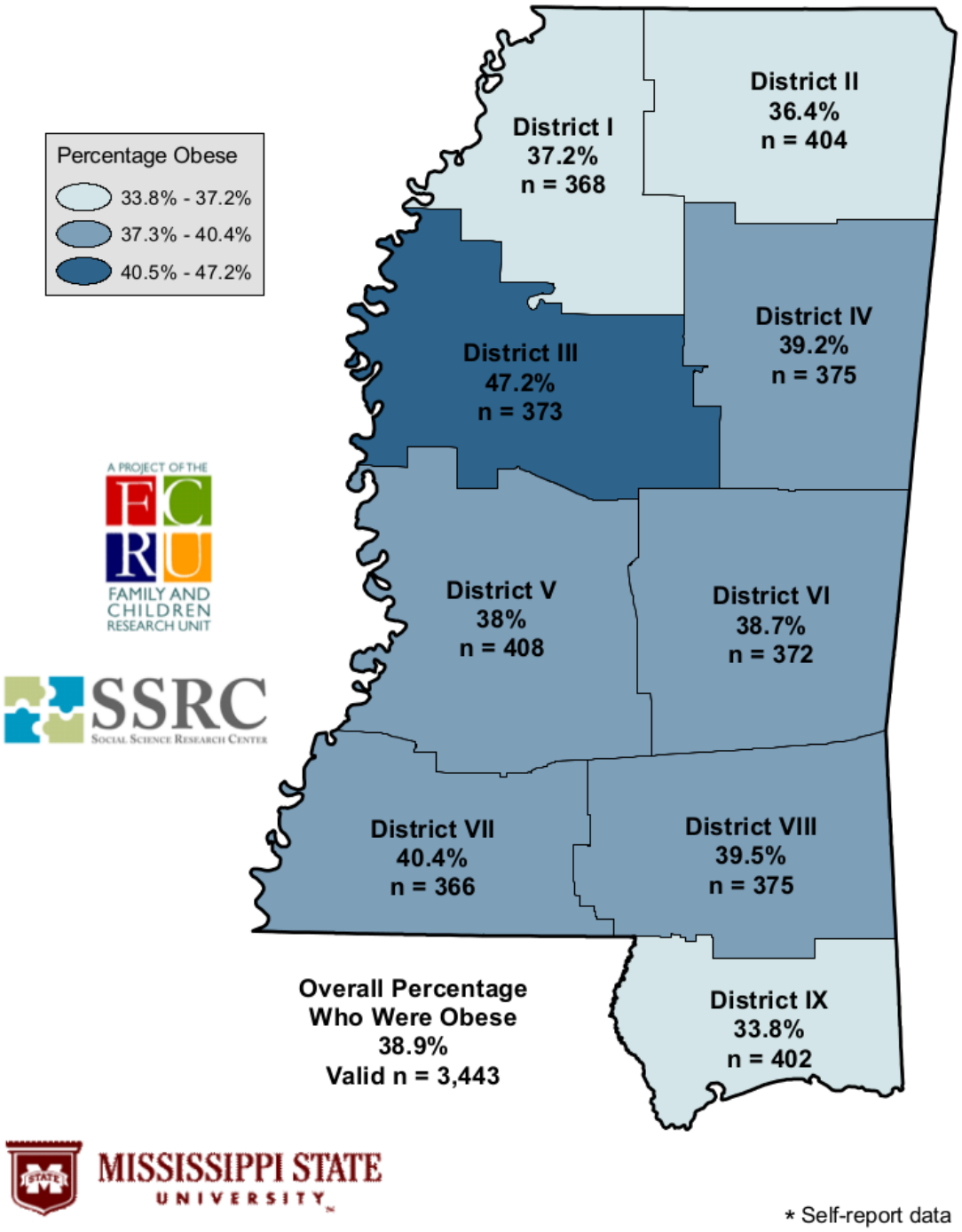
A PROJECT OF THE FAMILY AND CHILDREN RESEARCH UNIT

SSRC Social Science Research Center

MISSISSIPPI STATE UNIVERSITY

* Self-report data

Percentage of Parents Who Were Obese
2010



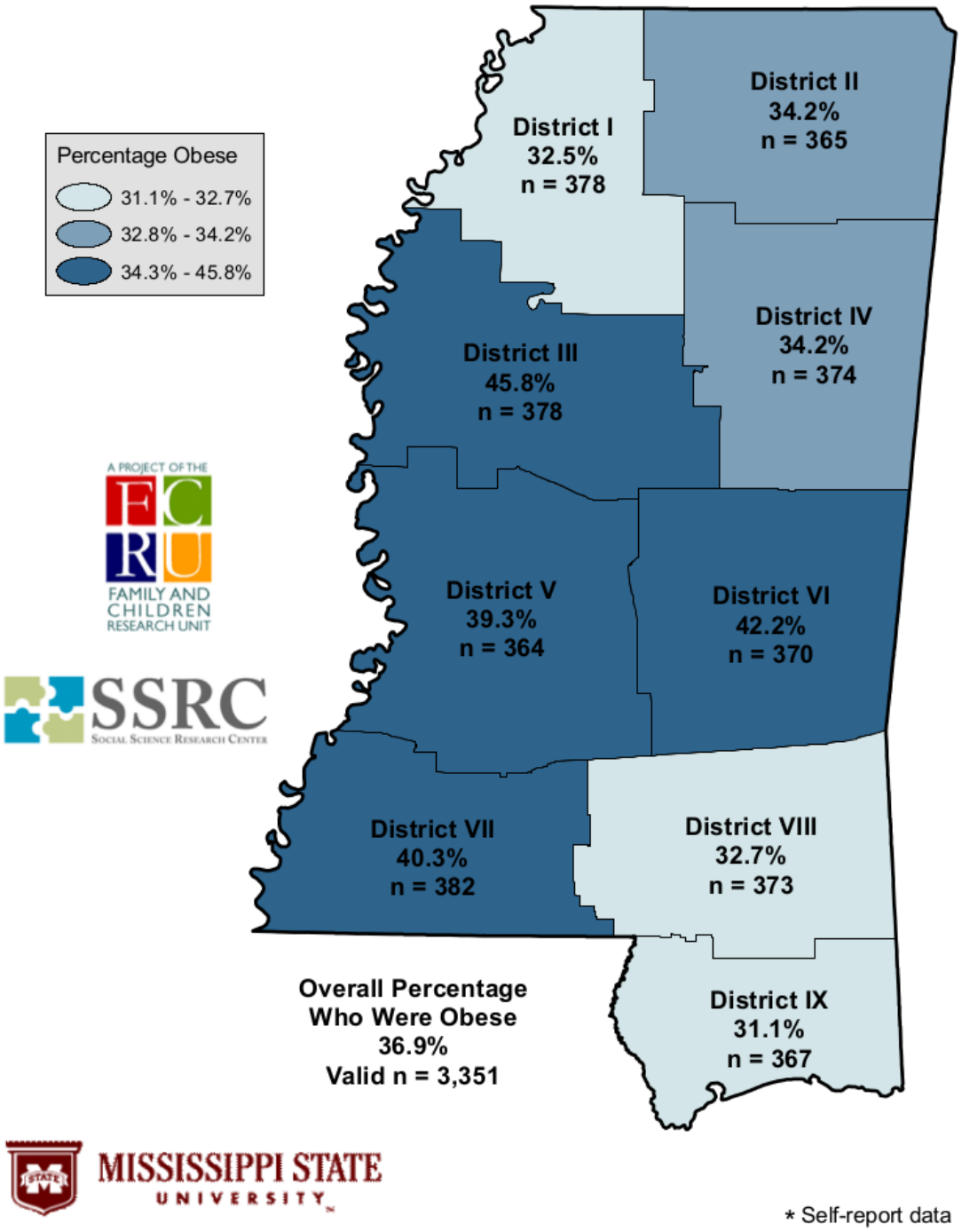
A PROJECT OF THE FAMILY AND CHILDREN RESEARCH UNIT

SSRC Social Science Research Center

MISSISSIPPI STATE UNIVERSITY

* Self-report data

Percentage of Parents Who Were Obese
2011



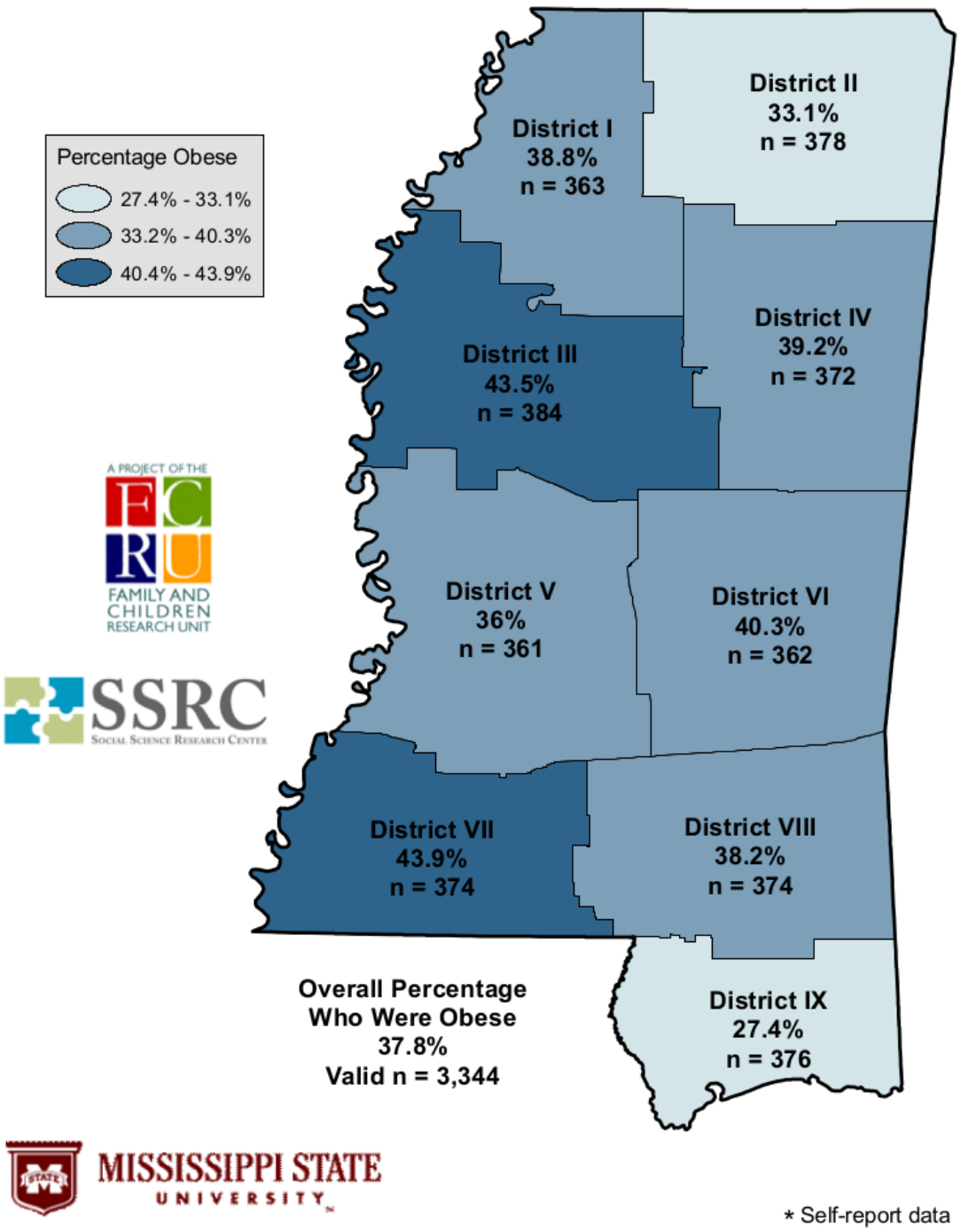
A PROJECT OF THE FAMILY AND CHILDREN RESEARCH UNIT

SSRC Social Science Research Center

MISSISSIPPI STATE UNIVERSITY

* Self-report data

Percentage of Parents Who Were Obese
2012



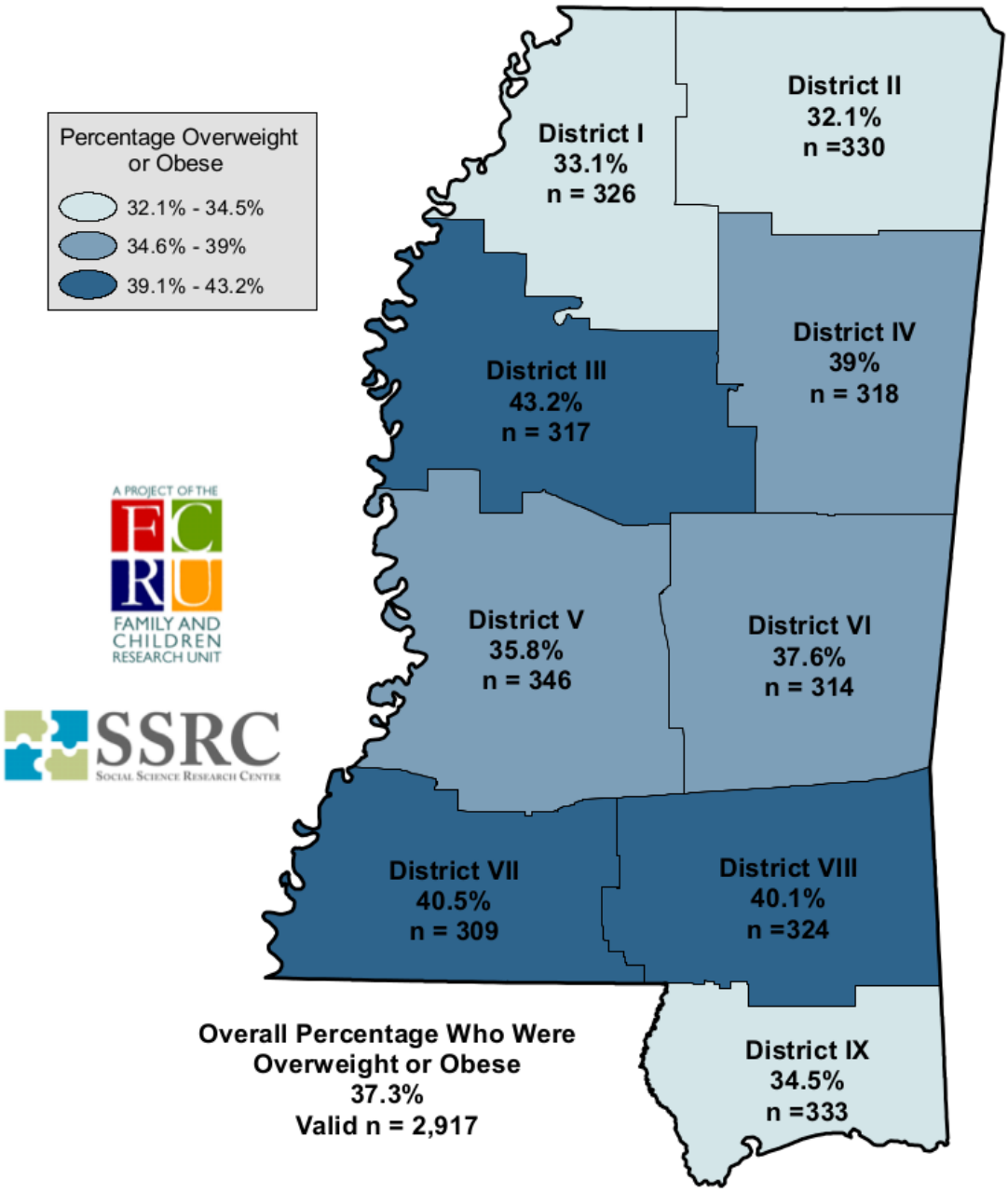
A PROJECT OF THE FAMILY AND CHILDREN RESEARCH UNIT

SSRC Social Science Research Center

MISSISSIPPI STATE UNIVERSITY

* Self-report data

Percentage of School-aged Children (K-12) Who Were Overweight or Obese 2009



A PROJECT OF THE FAMILY AND CHILDREN RESEARCH UNIT

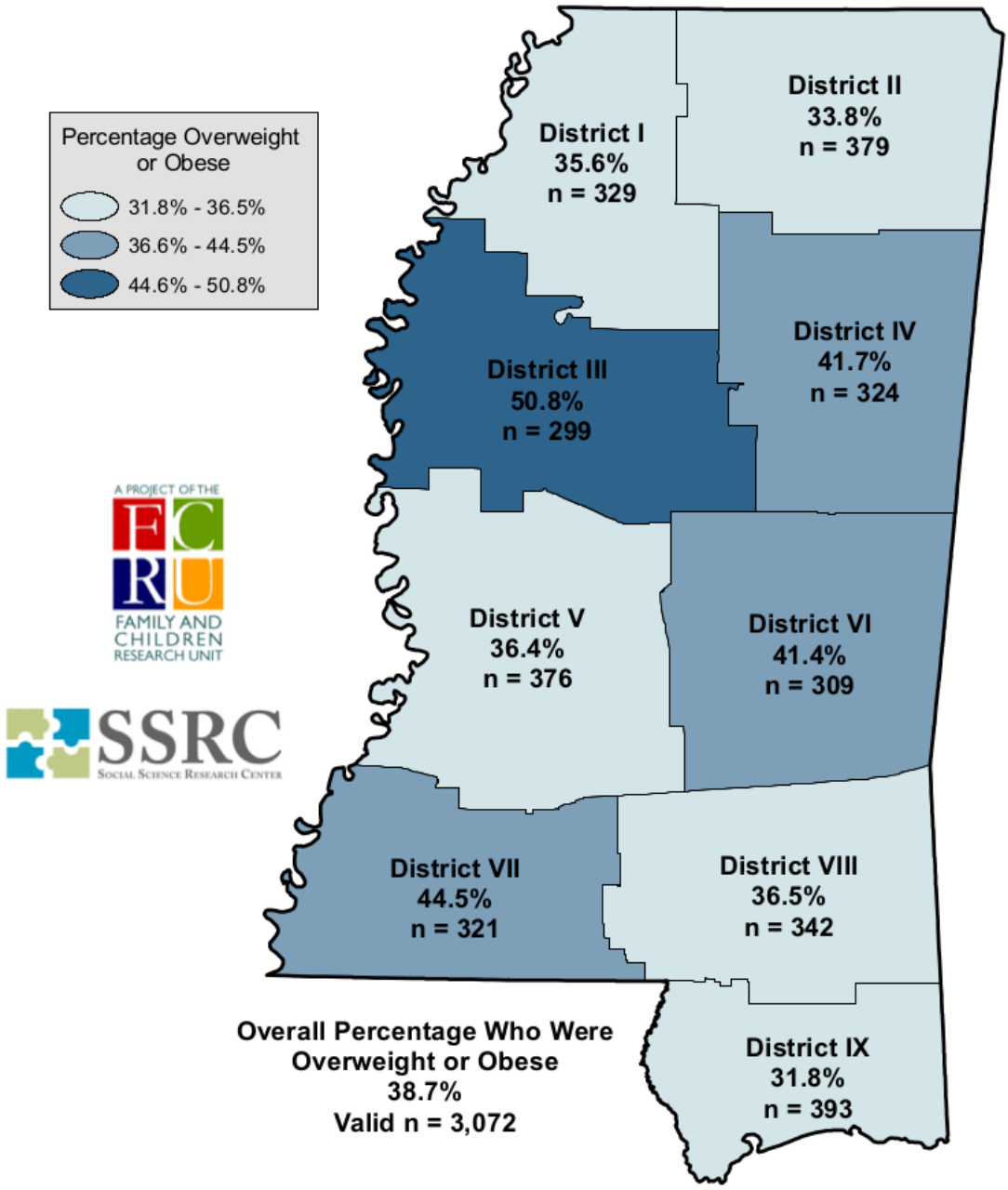
SSRC Social Science Research Center

Overall Percentage Who Were Overweight or Obese
37.3%
Valid n = 2,917

MISSISSIPPI STATE UNIVERSITY

* Self-report data by parents

Percentage of School-aged Children (K-12) Who Were Overweight or Obese 2010



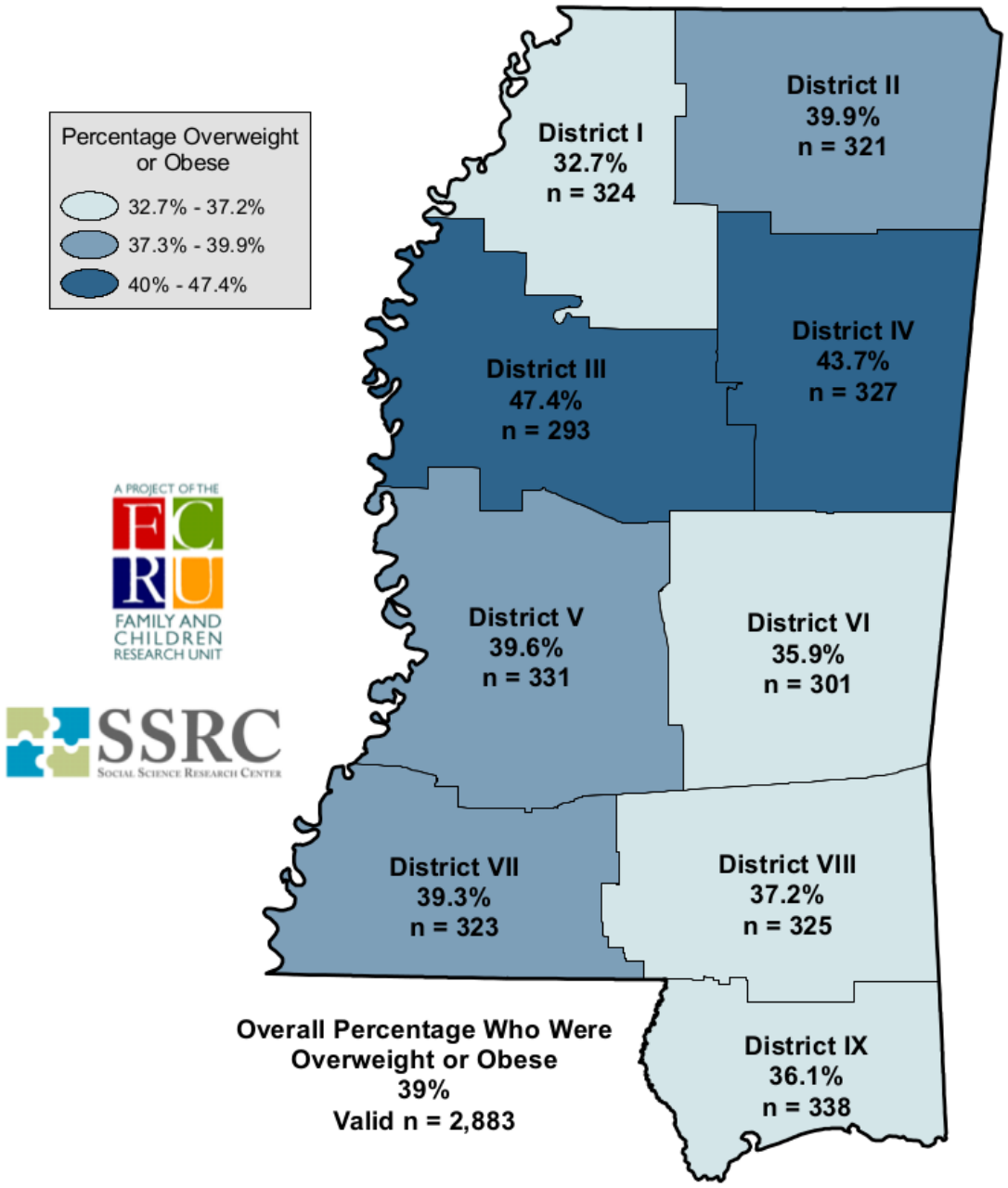
A PROJECT OF THE FAMILY AND CHILDREN RESEARCH UNIT

SSRC Social Science Research Center

MISSISSIPPI STATE UNIVERSITY

* Self-report data by parents

Percentage of School-aged Children (K-12) Who Were Overweight or Obese 2011



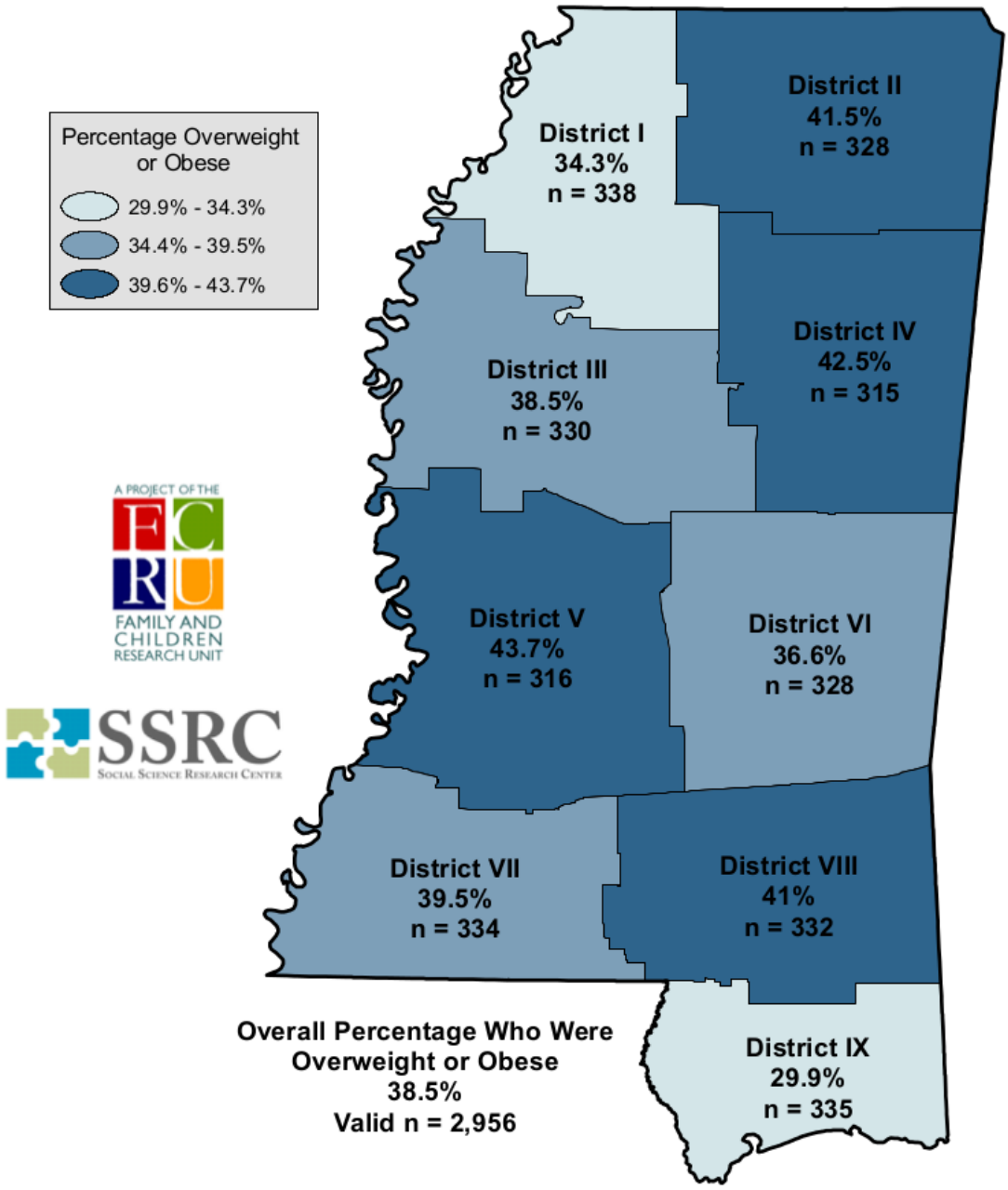
A PROJECT OF THE FAMILY AND CHILDREN RESEARCH UNIT

SSRC Social Science Research Center

MISSISSIPPI STATE UNIVERSITY

* Self-report data by parents

Percentage of School-aged Children (K-12) Who Were Overweight or Obese 2012

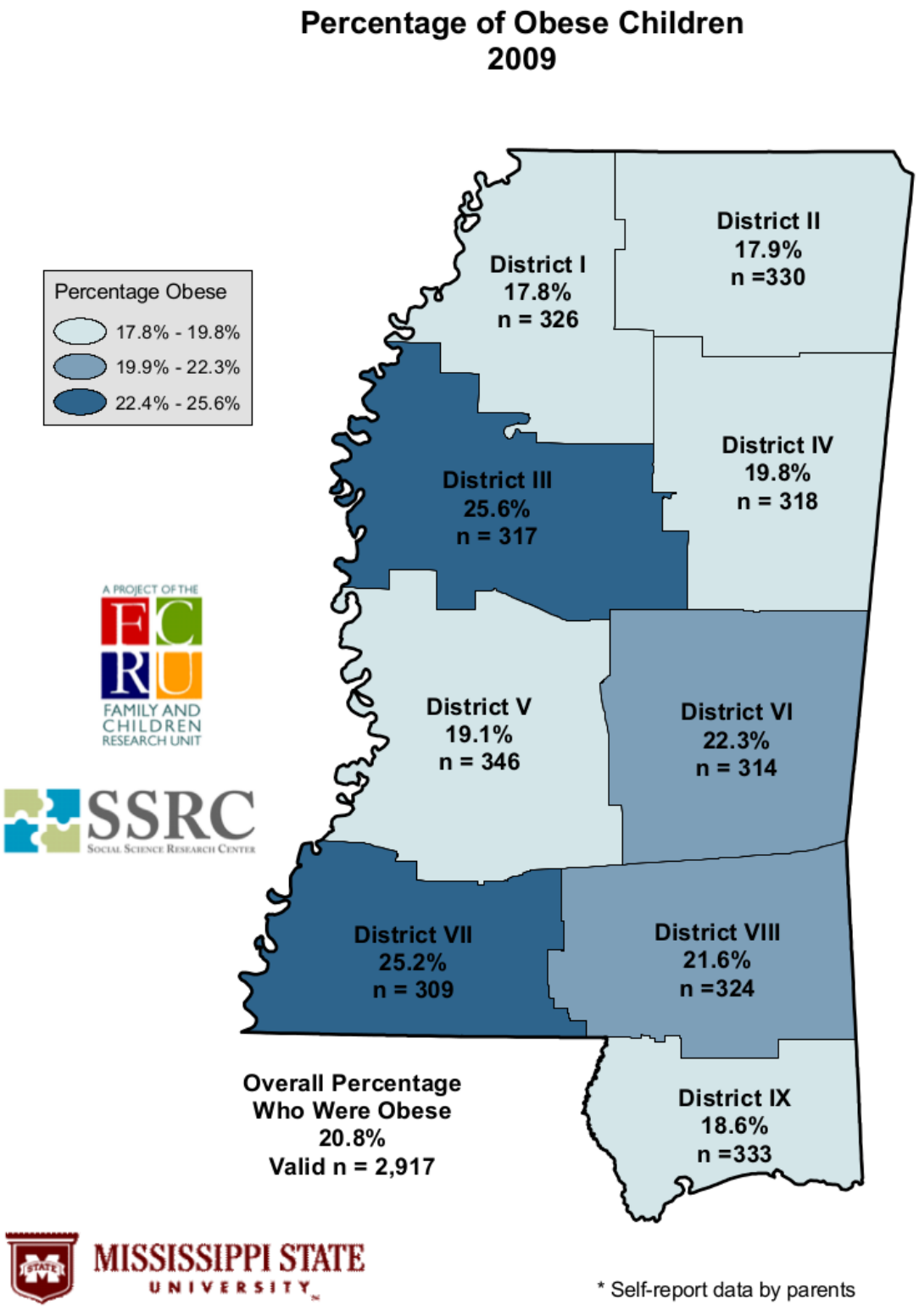


A PROJECT OF THE FAMILY AND CHILDREN RESEARCH UNIT

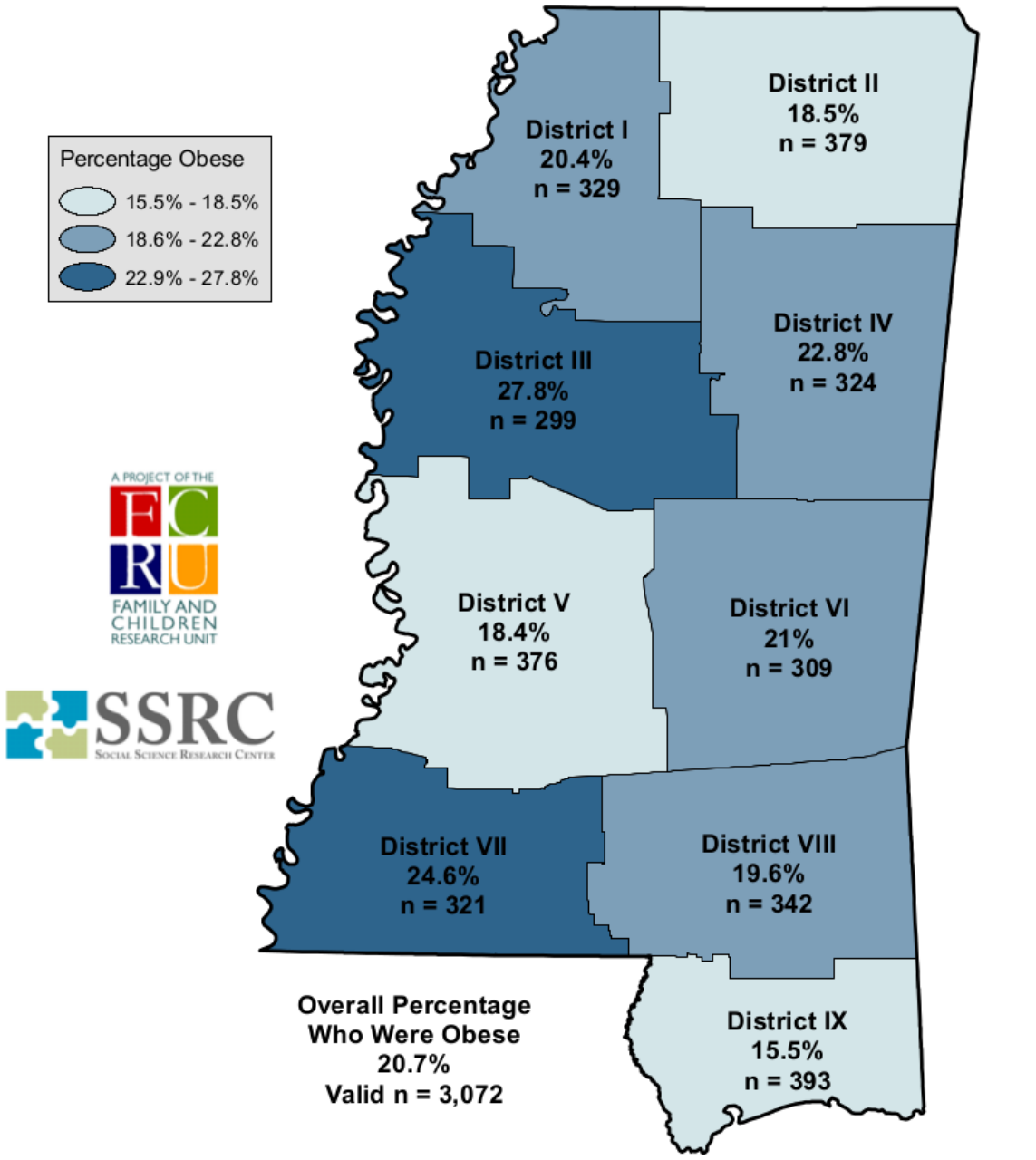
SSRC Social Science Research Center

MISSISSIPPI STATE UNIVERSITY

* Self-report data by parents


Percentage of Obese Children
2009
Percentage Obese
17.8% - 19.8%
19.9% - 22.3%
22.4% - 25.6%
District I
17.8%
n = 326
District II
17.9%
n =330
District III
25.6%
n = 317
District IV
19.8%
n = 318
District V
19.1%
n = 346
District VI
22.3%
n = 314
District VII
25.2%
n = 309
District VIII
21.6%
n =324
District IX
18.6%
n =333
Overall Percentage
Who Were Obese
20.8%
Valid n = 2,917
A PROJECT OF THE
FAMILY AND CHILDREN RESEARCH UNIT
SSRC
Social Science Research Center
MISSISSIPPI STATE UNIVERSITY
* Self-report data by parents

Percentage of Obese Children
2010



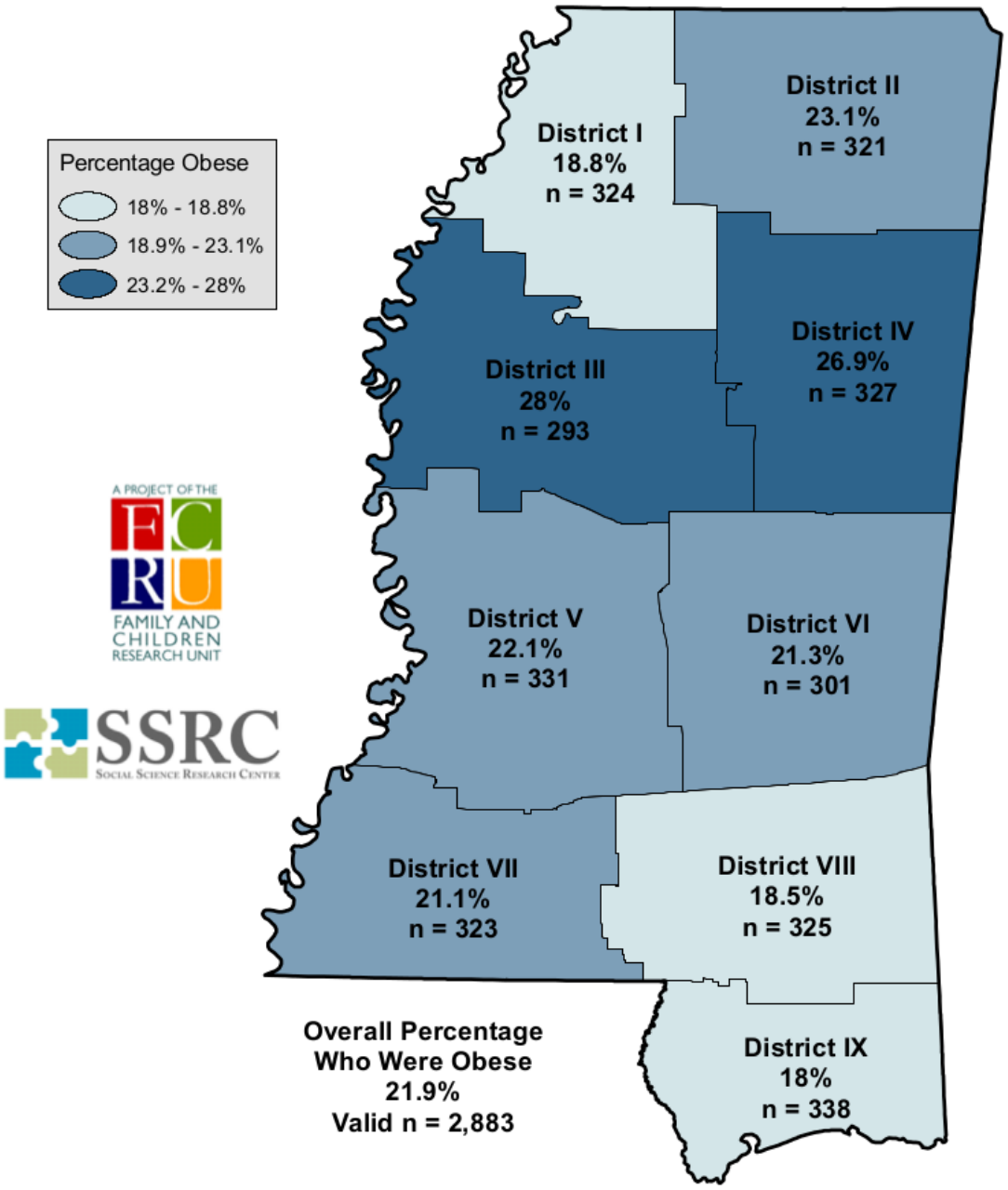
A PROJECT OF THE FAMILY AND CHILDREN RESEARCH UNIT

SSRC Social Science Research Center

MISSISSIPPI STATE UNIVERSITY

* Self-report data by parents

Percentage of Obese Children
2011



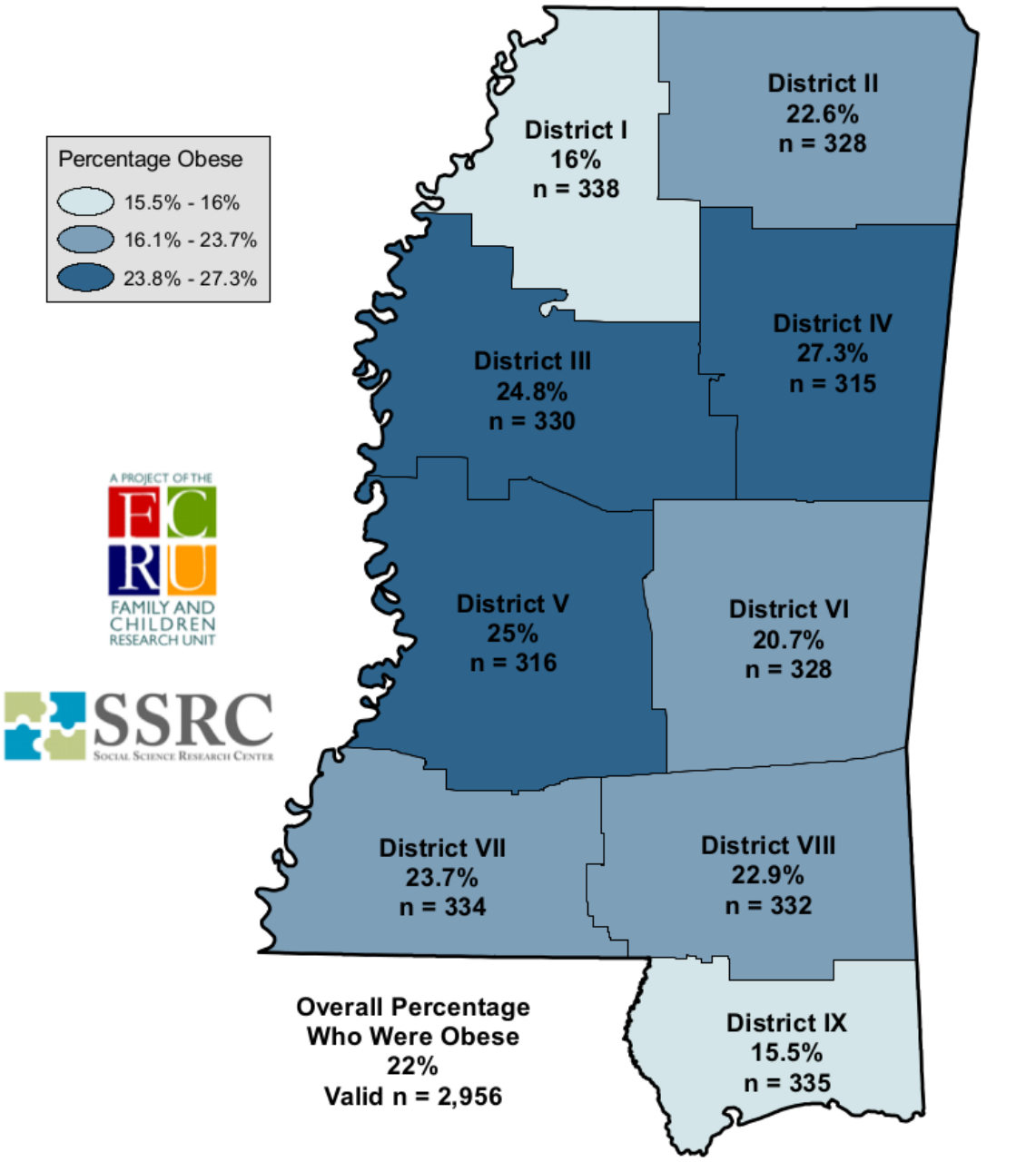
A PROJECT OF THE FAMILY AND CHILDREN RESEARCH UNIT

SSRC Social Science Research Center

MISSISSIPPI STATE UNIVERSITY

* Self-report data by parents

Percentage of Obese Children
2012



A PROJECT OF THE FAMILY AND CHILDREN RESEARCH UNIT

SSRC Social Science Research Center

MISSISSIPPI STATE UNIVERSITY

* Self-report data by parents

2012 Mississippi Parent - Child Eating Habits Survey

Question Q1
How many school age children do you have living with you? child(ren)

Question Q2
Starting with the youngest one, please tell me what grade each child is in.

0. Kindergarten
1. 1st Grade
2. 2nd Grade
3. 3rd Grade
4. 4th Grade
5. 5th Grade
6. 6th Grade
7. 7th Grade
8. 8th Grade
9. 9th Grade
10. 10th Grade
11. 11th Grade
12. 12th Grade
13. Don't Know/Not Sure
14. Refused

Question Q3
Enter the grade of the student listed below.

0. Kindergartener
1. 1st Grader
2. 2nd Grader
3. 3rd Grader
4. 4th Grader
5. 5th Grader
6. 6th Grader
7. 7th Grader
8. 8th Grader
9. 9th Grader
10. 10th Grader
11. 11th Grader
12. 12th Grader
13. Respondent Didn't Know Grade of selected child
14. Respondent Refused to give grade of selected child

Question Q4
How old is your _____ grader? years old

First I am going to ask you some questions about foods your family ate within your own household during the past week.

Question Q5
How many days in the past week did your family eat fresh, frozen or canned fruit? days

Question Q6
How many days in the past week did your family eat raw or cooked, fresh, canned, or frozen vegetables, including salads? days

Question Q7
Do you have any problems finding or purchasing fresh fruits and vegetables?

1. Yes
2. No
3. Don’t Know/Not Sure
4. Refused

Question Q8
What are the problems that you have?

1. Location of grocery store that sells them (too far to drive to find them)
2. Cost (too expensive)
3. Children don’t eat them
4. Transportation (doesn’t have a vehicle or means to get to grocery store)
5. Other(s)
6. Has no problems
7. Don't Know/Not Sure
8. Refused

Question Q9
How many days in the past week did your family eat high-fat foods like French fries, chips or desserts? days

Question Q10
Not including drinks like Hi-C and Sunny Delight, how many days in the past week did your family drink 100% natural juices? days

Question Q11
How many days in the past week did your family drink milk? days

Question Q12
How many days in the past week did your family drink sodas? days

Question Q13
How many nights in an average week does your family sit down to an evening meal together?

1. One night
2. Two nights
3. Three nights
4. Four nights
5. Five nights
6. Six nights
7. Seven nights
8. None
9. Don't Know/Not Sure
10. Refused

Question Q14
How many TIMES in an average week does your family eat or pick up food from a "fast food" restaurant like, McDonald's, Wendy's, KFC, or Popeyes? times

Question Q15
How many servings or helpings of fruits and vegetables do you think a person should eat each day for good health? servings

Question Q16
In the past year, have you and your family been trying to change your diet to a healthier eating pattern?

1. Yes
2. No
3. Don't Know/Not Sure
4. Refused

Question Q17
In the past year, has the physical activity level in your own family increased, decreased or stayed about the same?

1. Increased
2. Decreased
3. Stayed about the same
4. Don't Know/Not Sure

5. Refused

Question Q18
What is the PRIMARY reason for this change in physical activity level?

1. Information from child’s school
2. Recent health event in family
3. Doctor visit
4. Something I read
5. Become healthier
6. Manage weight
7. Something I saw on TV
8. Other (Specify):
9. Don’t Know/Not Sure
10. Refused

These next questions are specifically about YOUR participation in physical activity during the past 7 days.

Question Q19
During the past 7 days how many days have you exercised by walking, swimming, running, jogging, weight lifting, or bicycling?

1. One Day
2. Two Days
3. Three days
4. Four days
5. Five days
6. Six days
7. Seven days
8. None
9. Don't Know/Not Sure
10. Refused

Question Q20
Last week, on days when you exercised, on average, how long did you exercise each day?

hours minutes

Question Q21
What is the PRIMARY reason why you do not exercise or are not physically active at least 5 days a week?

1. others discourage me
2. self-conscious about my looks
3. afraid of injury
4. a lack of time
5. too tired
6. lack a safe place to exercise or walk
7. have care-giving duties
8. the weather is bad
9. not in good health
10. lack the energy to exercise
11. don't like or want to exercise
12. job-related activities provide enough exercise
13. Other (specify):
14. Don’t know/Not sure
15. Refused

Question Q22
During the past 7 days, how many days have you exercised or been active with your family by doing things like going to the park, playing sports, or riding bikes?

1. One Day
2. Two Days
3. Three days
4. Four days
5. Five days
6. Six days
7. Seven days
8. None
9. Don't Know/Not Sure
10. Refused

Question Q23
Last week, on days when you exercised or were active with your family, on average, how long were you active each day?

hours minutes

Question Q24
On an average day, how long do you usually watch television or videos?

hours minutes

Question Q25
On an average day, how long do you typically use a computer for non-work activities?

hours minutes

Question Q26
Do you know or have you heard about any health problems that can happen when children are overweight?

1. Yes
2. No
3. Don't Know/Not Sure
4. Refused

Question Q27
What health problems have you heard about happening to overweight children?

High blood pressure
Diabetes
Asthma or Other respiratory problems
Heart disease/ heart problems
High cholesterol
Other (Specify):
THAT IS ALL - GO TO NEXT QUESTION
Nothing
Don’t Know/Not Sure
Refused

Question Q28
How likely do you think it is that overweight children will develop one or more
health problems because they are overweight? Would you say:

1. Very likely,
2. Somewhat likely,
3. Somewhat unlikely, or
4. Very unlikely?
5. Don’t Know/Not Sure
6. Refused

Question Q29
How likely do you think it is that overweight children will become overweight adults? Would you say:

1. Very likely,
2. Somewhat likely,
3. Somewhat unlikely, or

4. Very unlikely?

5. Don’t Know/Not Sure

6. Refused

Question Q30
Do your children have a regular doctor or health care provider?

1. Yes

2. No

3. Don't Know/Not Sure

4. Refused

Question Q31
In the past year, has your doctor or health care provider said that any of your children weigh too much?

1. Yes

2. No

3. Don't Know/Not Sure

4. Refused

The next few questions are about the relationship between health and the community.

Question Q32
Do you think schools in your community should require physical education for all students?

1. Yes
2. No
3. Don't Know/Not Sure
4. Refused

Question Q33
Are public school facilities, that is, buildings and grounds available for individuals in the community to use for physical activity outside of school hours?

1. Yes
2. No
3. Don't Know/Not Sure
4. Refused

Question Q34
Does your family use these facilities outside of school hours?

1. Yes
2. No
3. Don't Know/Not Sure
4. Refused

Question Q35
What are the reasons your family does not use these facilities?
Lack of time
Transportation issues
Lack of structured activities
Safety concerns
Lack of information on facilities (what’s available)
Lack of companions (nobody to go with)
Other (Specify):
No reason
Don't Know/Not Sure
Refused

Question Q36
Do you have a park nearby where your children can play?

1. Yes

2. No

3. Don't Know/Not Sure

4. Refused

Question Q37
Do any of your children play there?

1. Yes

2. No

3. Don't Know/Not Sure

4. Refused

Question Q38
What are the reasons why your children do not play there?

1. Lack of time
2. Financial Issues (park or activity fees)
3. Safety Issues
4. Park facilities are not maintained
5. Transportation issues
6. Lack of information or structured activities
7. Lack of information on facilities (what’s available)
8. Lack of companions (nobody to go with)
9. Other (specify):
10. THAT IS ALL the reasons - GO TO NEXT QUESTION
11. No reason
12. Don't Know/Not Sure
13. Refused

Question Q39
Do you think local government funds should be spent to build and maintain places in your community where people can exercise?

1. Yes
2. No
3. Don't Know/Not Sure
4. Refused

Question Q40
Do any of your children walk or bike to school?

1. Yes
2. No
3. Don't Know/Not Sure
4. Refused

Question Q41
State laws and rules now require schools to offer only healthy foods to children and to increase physical education. Do you support these changes?

1. Yes

2. No

3. Don't Know/Not Sure

4. Refused

Question Q42
How important would you say is the role of the school in trying to prevent childhood overweight problems or obesity? Would you say the school's role is:

1. Very important,

2. Somewhat important,

3. A little important, or

4. Not at all important?

5. Don't Know/Not Sure

6. Refused

Question Q43
Which of the following BEST expresses your belief about the foods and beverages that should be offered to students in vending machines at school?

1. Offer only healthy items like low-fat & low-sugar snacks, low-sugar & non-carbonated drinks,
2. Offer both healthy and less healthy snacks and drinks and let students decide for themselves, or
3. Schools should not have vending machines available to students?

4. Don't Know/Not Sure

5. Refused

Question Q44
Some schools collect information on children's heights and weights and give a report to parents. Are you in favor of this?

1. Yes

2. No

3. Don't Know/Not Sure

4. Refused

Question Q45
Now I am going to ask you about your _____ grader. Please answer all of the remaining questions as they pertain to your _____ grader.

Question Q46
Is your _____ grader a boy or girl?

1. Boy
2. Girl
3. Refused

Question Q47
What is your relationship to your _____ grader?

1. Parent (either biological, adoptive or step)
2. Grandparent
3. Aunt or Uncle
4. Brother or Sister
5. Other Relative
6. Legal Guardian
7. Foster Parent
8. Other Non-Relative
9. Don’t Know/Not Sure
10. Refused

Question Q48
On an average day, how long is she/he physically active outside of school hours?

hours minutes

Question Q49
Which of the following are reasons why your _____ grader is not physically active more than 30 minutes each day, outside of school hours?

Not enough time after school
Unsafe neighborhood
Child’s health
Involved in other after school activities
Nowhere to play
Lack of companions to play with
Weather
Job responsibilities
Other reason(s):
Don't Know/Not Sure
Refused

Question Q50
On an average day, how long does she/he usually participate in electronic entertainment such as watching TV or videos, playing video games, hand-held games, and using the internet?

hours minutes

Question Q51
Do you have a home computer?

1. Yes

2. No

3. Don't Know/Not Sure

4. Refused

Question Q52
On an average day, how long does she/he usually use a computer for fun, not school work?

hours minutes

Question Q53
During the past 12 months, how would you describe her/his grades in school?

1. Mostly A’s
2. Mostly B’s
3. Mostly C’s
4. Mostly D’s
5. Mostly F’s
6. Don’t Know/Not Sure
7. Refused

Question Q54
During an average week, does your _____ grader mostly eat food prepared in the school cafeteria or take her lunch to school?

1. Eats school lunch
2. Takes lunch to school
3. About 50-50
4. Don't Know/Not Sure
5. Refused
6. Child does NOT eat lunch

Question 55
Are you aware of any changes in vending machines, school lunch choices, or physical exercise requirements at her/his school?

1. Yes
2. No
3. Don't Know/Not Sure
4. Refused

Question Q56

How would you rate her school on providing a healthy environment in terms of offering healthy foods and opportunities for physical activity? Would you say that the school provides a:

1. Very healthy environment,
2. Somewhat healthy environment,
3. Somewhat unhealthy environment, or
4. Very unhealthy environment?
5. Don't Know/Not Sure
6. Refused

Question New1
Does her/his school conduct physical fitness testing?

1. Yes
2. No
3. Don't Know/Not Sure
4. Refused

Question NEW2
Are you in favor of schools sending children's physical fitness testing information to their parents?

1. Yes
2. No
3. Don't Know/Not Sure
4. Refused

Question Q57
How satisfied are you with her/his school in terms of promoting healthy foods?

Are you:

1. Very satisfied,
2. Somewhat satisfied,
3. Somewhat dissatisfied, or
4. Very dissatisfied?
5. Don't Know/Not Sure
6. Refused

Question Q58
How satisfied are you with her/his school in terms of promoting physical activity?
Are you:

1. Very satisfied,
2. Somewhat satisfied,
3. Somewhat dissatisfied, or
4. Very dissatisfied?
5. Don't Know/Not Sure
6. Refused

Question Q59
How often do you receive information from her/his school about ways your family
can eat healthier foods? Would you say:

1. Very often,
2. Occasionally, or
3. Never?
4. Don't Know/Not Sure
5. Refused

Does her school have a health committee, council or task force?

1. Yes
2. No
3. Don't Know/Not Sure

4. Refused

Question Q61
Have you ever attended a meeting or event?

1. Yes
2. No
3. Don't Know/Not Sure
4. Refused

Question Q62
How much does your _____ grader weigh without shoes? pounds

Question Q63
How tall is she/he without shoes? feet inches

Question Q64
What would you say best describes her/his weight?

1. Underweight,
2. A healthy weight,
3. Overweight, or
4. Obese?
5. Don’t Know/Not Sure
6. Refused

Question Q65
How worried are you about her/his weight? Would you say:

1. Very,
2. Somewhat,
3. Slightly, or
4. Not at all worried?
5. Don’t Know/Not Sure
6. Refused

Question Q66
Does she/he regularly eat breakfast?

1. Yes

2. No

3. Don't Know/Not Sure

4. Refused

Question Q67
Where does she/he usually eat breakfast?

1. At home

2. On the way to school

3. At School

4. Doesn't eat breakfast

5. Don’t Know/Not Sure

6. Refused

Question Q68
Do you limit the amount of chips, soda or sweets your _____ grader eats?

1. Yes
2. No
3. Don't Know/Not Sure
4. Refused

Question Q69
In the past year, have you or your _____ grader taken any action to address Her/his weight gain or loss?

1. Yes
2. No
3. Don't Know/Not Sure
4. Refused

Question Q70
In the past year, have you increased her/his exercise or physical activity?

1. Yes
2. No
3. Don't Know/Not Sure
4. Refused

Question Q71
Including school-related and non school-related activities, is your child involved in any organized activities where she/he is physically active outside
of school hours?

1. Yes
2. No
3. Don't Know/Not Sure
4. Refused

Question Q72
What kind of organized activities does your child participate in outside of

school hours where she is physically active?

School sports team(s)
Community/city-sponsored sports (rec. sports)
Girl/Boy Scouts
Boys and Girls Club
Karate/Taekwondo
Band
Cheerleading
Other (specify):
THAT IS ALL - GO TO NEXT QUESTION
Don't Know/Not Sure
Refused

Question Q73
Do you have health insurance?

1. Yes

2. No

3. Don't Know/Not Sure

4. Refused

Question Q74
Does your ___ grader have health insurance?

1. Yes

2. No

3. Don't Know/Not Sure

4. Refused

Question Q75
Do you have a regular doctor or health care provider?

1. Yes
2. No
3. Don't Know/Not Sure
4. Refused

The following background questions are just for statistical purposes. Remember, all your answers will be confidential.

Question Q76
What year were you born? 19

Question Q77
Are you Hispanic or Latino?

1. Yes
2. No
3. Don't Know/Not Sure
4. Refused

Question Q78
Which of the following groups would you say best represents your race or ethnic background?

1. White;
2. Black or African American;
3. Asian;
4. Native Hawaiian or Pacific Islander; or
5. American Indian or Alaska Native?
6. Other (Specify):
7. Don’t Know/Not Sure
8. Refused

Question Q79
Are you currently:

1. Married,

2. Divorced,

3. Widowed,

4. Separated,

5. Never been married, or

6. A member of an unmarried couple?

7. Refused

Question Q80
What is the highest grade or year of school you completed?

1. Never attended school or only attended kindergarten

2. Grades 1 through 8 (Elementary)

3. Grades 9 through 11 (Some high school)

4. Grade 12 or GED (High school graduate)

5. College 1 year to 3 years (some college or technical school)

6. College 4 years or more (College graduate)

7. Refused

Question Q81
Are you currently:

1. Employed full-time,

2. Employed part-time,

3. Self-employed,

4. Out of work for more than 1 year,

5. Out of work for less than 1 year,

6. A Homemaker,

7. A Student,

8. Retired, or

9. Unable to work?

10. Refused

Question Q82
About how much do you weigh without shoes? pounds

Question Q83
How tall are you without your shoes on? feet inches

Question Q84
What would you say best describes your own weight? Would you say:

1. Underweight,
2. Normal weight,
3. Overweight, or
4. Obese
5. Don’t Know/Not Sure
6. Refused

Question Q85
How worried are you about your weight? Would you say:

1. Very,
2. Somewhat,
3. Slightly, or
4. Not at all?
5. Don’t Know/Not Sure
6. Refused

Question Q86
Considering your three closest friends, how many would you say are overweight or obese?

1. One

2. Two

3. Three

4. None

5. Don’t Know/Not Sure

6. Refused

Question Q87
What is the gender of the respondent? (Ask if necessary)

1. Male

2. Female

3. Refused and could not tell for sure

Question Q88
I am going to read some income categories, please stop me when I get to the one that best describes your total 2010 household income before taxes.

1. BELOW $20,000

2. $20,000 TO $40,000

3. $40,000 TO $60,000

4. $60,000 TO $80,000

5. $80,000 TO $100,000

6. $100,000 AND ABOVE

7. DON’T KNOW/NOT SURE

8. REFUSED

Question Q89
What is your zip code?

Child/Adolescent Questionnaire

Now that we have completed our interview, if she/he is available I would like to have your permission to ask your _____ grader a few questions as well. The interview with your child will last about 10 minutes and the questions will be similar to the questions I have been asking you. Your child's participation is completely voluntary and her answers will remain confidential and will be used for research purposes only. Your child may discontinue the interview at any time and skip any questions she would prefer not to answer..

May I have your consent to do an interview with your _____ grader?

1. Yes
2. Yes, but she is not available.
3. No
4. Refused

May I interview her/him now?

1. Yes
2. No, my child is not available now.
3. Refused

Hello, my name is ___. I am calling from the Social Science Research Center at Mississippi State University. Your mother/father has given us permission to ask you some simple questions about your health and the foods you eat at home and in school. All of your answers are confidential. You don't have to take this survey if you don't want to. You may stop at any time. If you think a question is too personal you don't have to answer it. This survey will only take about 10 minutes. May I begin?

1. Yes
2. No
3. Refused

Question QA1
In school, have you learned about the importance of healthy eating and physical activity in maintaining a healthy weight?

1. Yes
2. No
3. Don't Know/Not Sure
4. Refused

Next I have some questions about the foods and drinks sold in your school.

Question QA2
Does your school have a vending machine from which students can buy food, drinks or candy?

1. Yes

2. No

3. Don’t Know/Not Sure

4. Refused

Question QA3
How many times in the past week did you purchase drinks such as bottled water,
milk, 100% fruit juice, or 100% vegetable juice from a vending machine at school? times

Question QA4
How many times in the past week did you purchase drinks such as sodas, lemonade, sweet tea or fruit-flavored drinks from a vending machine at school? times

Question QA5
How many times in the past week did you purchase snacks from a vending machine at school? times

Question QA6
Which of the following BEST expresses your belief about the foods and beverages that should be offered to students in vending machines at school?

1. Offer only healthy items like low-fat & low-sugar snacks, low-sugar & non-carbonated drinks,
2. Offer both healthy and less healthy snacks and drinks and let students decide for themselves, or
3. Schools should not have vending machines available to students?

4. Don't Know/Not Sure

5. Refused

Question QA7
Does your school cafeteria have a salad bar?

1. Yes

2. No

3. Don't Know/Not Sure

4. Refused

Question QA8

Thinking about school days only, that is, Monday through Friday; on how many of those days do you typically eat breakfast?

1. One day
2. Two days
3. Three days
4. Four days
5. Five days
6. Never/None
7. Don’t Know/Not Sure
8. Refused

The next questions are about foods you ate yesterday (last schoolday). When I ask how often the food was eaten, please tell me how many times, or how many servings you ate or drank.

Question QA9
How many servings or helpings of fruit, like apples, bananas, or canned peaches did you eat yesterday (last schoolday)? servings

Question QA10
How many servings or helpings of vegetables, like corn or green beans, including salads, did you eat yesterday (last schoolday)? servings

Question QA11
How many servings of French Fries did you eat yesterday (last schoolday)? servings

Question QA12
Not including Kool-Aid, lemonade, Hi-C, Sunny D, or Twister, how many glasses of 100% juices did you drink yesterday (last schoolday)? glasses

Question QA13
How many glasses or cans of sodas like Coke or 7-Up did you drink yesterday (last schoolday)? glasses

Question QA14
How many glasses of milk did you drink yesterday (last schoolday)? glasses

Next I am going to ask some questions about meals that you ate at home during the past week.

Question QA15
How many days in the past week did your family eat fresh, frozen, or canned fruit? days

Question QA16
How many days in the past week did your family eat raw or cooked, fresh, canned, or frozen vegetables, including salads? days

Question QA17
How many days in the past week did your family eat high-fat foods like French fries, chips or desserts? days

Question QA18
Not including drinks like Hi-C and Sunny Delight, how many days in the past week did your family drink 100% natural juices? days

Question QA19
How many days in the past week did your family drink milk? days

Question QA20
How many days in the past week did your family drink sodas? days

Question QA21
How many servings of fruits and vegetables do you think a person should eat each day for good health? servings

Question QA22
Do your parents limit the amount of chips, soda or sweets you eat?

1. Yes
2. No
3. Don't Know/Not Sure
4. Refused

Question QA23
During an average week, do you mostly eat food prepared in the school cafeteria or take your lunch to school?

1. Eats school lunch usually
2. Takes lunch to school usually
3. About 50-50

4. Don't Know/Not Sure

5. Refused

Question QA24
How healthy is the food that is served in your school's cafeteria? Would you say it is:

1. Very healthy,

2. Somewhat healthy,

3. Somewhat unhealthy, or

4. Very unhealthy?

5. Don't Know/Not Sure

6. Refused

Question QA25
In the past year have you been trying to change what you eat to be healthier?

1. Yes

2. No

3. Don't Know/Not Sure

4. Refused

Question QA26
Have you been trying to eat healthier because of something you learned at school?

1. Yes

2. No

3. Don't Know/Not Sure

4. Refused

Question QA27
What was the MAIN reason you decided to eat healthier?

1. Recent health event in family
2. Information from my school
3. Doctor visit
4. Something I read
5. Become healthier
6. Manage weight
7. Something I saw on TV
8. Other (specify):
9. Don’t know
10. Refused

Question QA28
What changes have you made? (DO NOT READ CHOICES)

Increase in chicken or fish consumption (decrease in red meat)
Switch to low-fat products
Reduce fat intake
Decrease sodas or switch to diet sodas
Decrease fried snacks such as potato chips and fries
Change cooking methods to reduce frying
Decrease portion sizes
Increase fruits and vegetables

Decrease sweets and desserts
Count calories
Eat less fast food
Eat out less often
Use nutrition labels to make choices
Other (Specify):
Don't Know/Not Sure
Refused

Question QA29
Which of the following have you done during this past school year:

Dieted
Skipped meals
Skipped snacks
THAT IS ALL - GO TO NEXT QUESTION
No (None of the above)
Don’t Know/Not Sure
Refused

Physical activity is any activity that increases your heart rate and makes you
get out of breath some of the time. Physical activity can be done in sports, playing with friends, or walking to school. Some examples of physical activity
are running, brisk walking, rollerblading, biking, dancing, skateboarding, swimming, soccer, basketball, football and surfing.

Question QA30
Not counting PE OR GYM CLASS, over the past 7 days, how many days were you physically active?

1. One day
2. Two days
3. Three days
4. Four days
5. Five days
6. Six days
7. Seven days
8. None
9. Don’t know
10. Refused

Question QA31

On days when you were physically active last week, on average, how long were you physically active each day? hours minutes

Question QA32
How many total PE courses do you plan to take in high school?

1. One PE course
2. More than one PE course
3. None (plan to substitute band or sports for my PE requirement)
4. Don't know/Not Sure
5. Refused

Question QA33
Including school-related and non school-related activities, are you involved in any organized activities where you are physically active outside of school hours?

1. Yes
2. No
3. Don't Know/Not Sure
4. Refused

Question QA34
What kind of organized activities do you participate in outside of school hours where you are physically active?

School sports team(s)
Community/city-sponsored sports (rec. sports)
Girl/Boy Scouts
Boys and Girls Club
Karate/Taekwondo
Band
Cheerleading
Other (Please specify)
THAT IS ALL of the sports - GO TO NEXT QUESTION
Don't Know/Not Sure
Refused

Question QA35
Do your parents limit the amount of time you spend watching TV or playing video games?

1. Yes
2. No
3. Don't Know/Not Sure
4. Refused

Question QA36
Do your parents limit the amount of time you spend using the Internet?

1. Yes
2. No
3. Don't Know/Not Sure
4. Refused

Question QA37
On an average day, how long do you usually participate in electronic entertainment such as watching TV or videos, playing video games, hand-held games, and using the internet?

hours minutes

Question QA38
Do you have a computer in your bedroom?

1. Yes
2. No
3. Don't Know/Not Sure
4. Refused

Question QA39
On an average day, how long do you usually use a computer for fun, not school work?

hours minutes

Question QA40
Do you have a television in your bedroom?

1. Yes
2. No
3. Don't Know/Not Sure
4. Refused

Question QA41
In the past year, have you increased the amount of exercise or physical activity that you do?

1. Yes
2. No
3. Don't Know/Not Sure
4. Refused

Question QA42
Have you been trying to increase your amount of exercise or physical activity because of something you learned at school?

1. Yes
2. No
3. Don't Know/Not Sure
4. Refused

Question QA43
What would you say best describes your weight? Would you say you are:

1. Underweight,
2. At a healthy weight,
3. Overweight, or
4. Obese?
5. Don't Know/Not Sure

6. Refused

Question QA44
Are you very, somewhat, slightly, or not at all worried about your weight?

1. Very
2. Somewhat
3. Slightly
4. Not at all
5. Don’t Know/Not Sure
6. Refused

Question QA45
Considering your three closest friends, how many would you say are overweight or obese?

1. One
2. Two
3. Three
4. None
5. Don't Know/Not Sure
6. Refused

Question QA46
During the past month, on how many days did you smoke cigarettes? days

Finally, I would like to ask some background questions for statistical purposes.

Question QA47
Are you Hispanic or Latino?

1. Yes
2. No
3. Don't Know/Not Sure
4. Refused

Question QA48

Which of the following groups would you say best represents your race or ethnic background?

1. White;
2. Black or African American;
3. Asian;
4. Native Hawaiian or Pacific Islander; or
5. American Indian or Alaska Native?
6. Other (Specify):
7. Don’t Know/Not Sure
8. Refused

Question QA49
During the past 12 months, how would you describe your grades in school?

1. Mostly A’s
2. Mostly B’s
3. Mostly C’s
4. Mostly D’s
5. Mostly F’s
6. Don’t Know/Not Sure
7. Refused

Question QA50
About how much do you weigh without shoes? pounds

Question QA51
How tall are you without your shoes on? feet inches

This completes our interview.

Thank you for taking the time to participate in this important study.

State Board of Education Interview Guide

Introduction—1st Telephone Contact:
Hello. My name is _____. I am from Mississippi State University, and am calling regarding a project that is designed to evaluate the Mississippi Healthy Students Act of 2007. As you may recall, this research is sponsored by the Center for Mississippi Health Policy and funded by the Robert Wood Johnson Foundation.

As a part of this research, we would like to interview _____, regarding his/her opinions about childhood obesity policies.

Any information we gather will only be released as group information and will not be attributed to any individual board member. Is there a time when I may speak with _____ for about 20 minutes in the next two (2) weeks?

Objectives (if asked to describe the study/project in more detail):

1. To learn State Board of Education members perspectives on the passage and implementation of the Mississippi Healthy Students Act of 2007.

2. To understand State Board of Education members knowledge, attitudes and support for ways to prevent obesity among Mississippi's children.

Interview Script/Guide:

Name:_____

Hello, Dr/Mr/Ms_____. Thank you for agreeing to participate in this interview. We appreciate your time last year and are interested in following up to learn your opinions on the childhood obesity legislation of the Mississippi Healthy Students Act of 2007. [**If the Board Member is new, the sentence above will read as follows: "We are interested in learning your opinions on the childhood obesity legislation of the Mississippi Healthy Students Act of 2007:]** As you know, this legislation affected physical education, nutrition and health education in the schools. We are also interested in your perspectives on additional policies that could assist in the prevention of obesity among Mississippi's children. We believe that the results of our research will be helpful to improve programs throughout the state of Mississippi.

We would like to have your permission to tape this interview. Any information we gather from this research will be kept confidential and will not be attributed to any individual board member. That is, the responses from all Board of Education members will be grouped together. Quotes may be used, but they will not be attributed to any individual board member. The tape will be used only to help with the transcription of the interview, and there will be no identifying information on the tape. Your name will not be used. Your participation in this interview is completely voluntary, and you do not have to answer any question that you choose not to. Should you have further questions or need more information, please feel free to contact Ms. Dorris Baggett at (662) 325-8079 or Ms. Anne Buffington at (662) 325-1590 [We will also give them a business card w/ our contact information]

Do I have your permission to record this interview?
(Note to interviewer: If yes, proceed. If no, use longer form with spaces for notes.)

May I begin?

1. How familiar are you with the requirements of the MS Healthy Students Act of 2007?
   ___ Very familiar
   ___ Somewhat familiar
   ___ Somewhat unfamiliar
   ___ Very unfamiliar
   ___ Don't know / Not sure

2. As you may recall, there are three (3) major components of the Mississippi Healthy Students Act of 2007,
   Improving physical education
   Improving school nutrition and
   Increasing health education

   Of these components, which do you see as most important? As next important?

   - Improving physical education
   - Improving school nutrition and
   - Increasing health education

3. Are you aware that the Center for Mississippi Health Policy is conducting a 5-year evaluation of the Mississippi Healthy Students Act of 2007?
   If yes, go to question 4
   If no, go to question 5

4. Have you seen a copy of the evaluation report for previous years? (show them a copy of the report)

5. On a scale of 1 to 5, with 1 being least important and 5 being most important, how important do you think prevention of childhood obesity is for the state of Mississippi?

Least important				Most important
1	2	3	4	5

6. How would you rate where the state of Mississippi is on addressing childhood obesity policies, with 1 being Mississippi's policies are not at all effective in addressing childhood obesity and 5 being Mississippi's policies are very effective in addressing childhood obesity?

Not at all effective			Very effective	
1	2	3	4	5

7. Among individuals and school districts with whom you interact, what has been your impression of their reaction to the MS Healthy Students Act of 2007?

   (Probe/follow-up, if needed: For example, have you heard anything from school personnel? Parents?)

8. How do you think we should measure success of this legislation?
   (Probe/follow-up, if needed)
   For example, fitness testing, decrease in % of children who are obese
   more 'fit' workforce (economic development issue)

9. Do you see a role for the State Department of Education in obesity prevention?
   - Yes
   - No

   If yes, go to question #10. If no, go to question #11.

10. Please rate the following target areas that can be addressed by the Department of Education, by level of importance, with 1 being not at all important and 5 being very important..

	Not at all important				Very important
Increasing physical activity	1	2	3	4	5
Increasing consumption of fruits & vegetables	1	2	3	4	5
Decreasing consumption of high calorie, dense foods	1	2	3	4	5
Decreasing children's screen time (TV viewing, computer time)	1	2	3	4	5
Decreasing consumption of sugary beverages	1	2	3	4	5

11. Do you think that the state of Mississippi has done enough to strengthen the school policies on nutrition? on health education?
on physical education?

12. If No to any of these in Q#11, then go to 12A
    12A. What other policies need to be enacted?
    If yes to all questions, then go to Q # 13.

13. Do you think that students are receiving enough education in each of the following areas?
    Nutrition?
    Health?
    Physical education?

14. Do you think it is important for schools to promote healthy lifestyles for the following groups?
    - Students?
    - Staff?

15. To what extent do you think the schools in the state are implementing the minimum requirements of Coordinated School Health Programs?, with 1 being they are not doing a very good job and 5 being they are doing a good job.

Not doing a very good job Doing a good job

1 2 3 4 5

16. Many things can have an impact on the prevention of childhood obesity. Please rate the following things that exist outside of the school setting, with a rating of 1 meaning that it has no impact and a rating of 5 meaning that it has a very large impact.

	No impact				Very large impact
Child care centers	1	2	3	4	5
Nutrition labeling	1	2	3	4	5
Media policy (restrictions on advertising, promoting positive messages)	1	2	3	4	5
Farmers' markets	1	2	3	4	5
Body Mass Index (BMI) (measuring children's height and weight) reporting	1	2	3	4	5
Built environment (sidewalks, parks, green space, bike lanes)	1	2	3	4	5
Fat and trans fat restrictions	1	2	3	4	5
Location of Supermarkets (proximity to where residents live)	1	2	3	4	5

17. Do you think local government funds should be spent to build and maintain places in your community where people can exercise?
Yes
No
Don't know/Not sure

18. Do you think schools should make school facilities, such as gym tracks, ball fields, or playgrounds, available to the community after school hours to promote physical activity/education programs?
Yes
No
Don't know/Not sure

19. Besides schools, what other places or groups/organizations if any, do you think have an important role in decreasing childhood overweight and/or obesity in Mississippi?

20. Who do you rely upon to get information on childhood obesity in Mississippi?

21. Some school districts collect information on children's *height and weight* to determine children's Body Mass Index (BMI). Are you in favor of this?
    Yes
    No
    Don't know/Not sure

22. If yes, are you in favor of sending this information to children's parents?
    Yes
    No
    Don't know/Not sure

23. School districts are required to conduct fitness testing in certain grades. Are you in favor of sending the results of this testing to students' parents?
Yes
    No
Don't know/Not sure

24. Some school districts have adopted policies stating that schools are prohibited from offering "junk" foods (foods which provide calories primarily through fats or added sugars and have minimal amounts of vitamins and minerals) in the following settings:

    What are your thoughts on each of the following?

	Prohibit	**Recommend Against**	**No Policy**	**Not Sure/No Comment**
At student parties				
In after-school or extended day programs				
At staff meetings				
At meetings attended by families				
In school stores, canteens or snack bars				
In vending machines				
At concession stands				

25. Generally speaking, what if anything, makes it most difficult for the schools in Mississippi to meet Physical Education and Nutrition requirements?

26. To what extent do you believe there is a positive association between implementation of Coordinated School Health Programs in the school district and the academic performance of the students?

    - Not at all
    - Somewhat
    - A fair amount
    - A great deal
    - Don't know/not sure

27. In your opinion, how important is it to provide staff wellness program(s)?
    - Very important
    - Moderately important
    - Not important at all
    - Don't know/not sure

28. Generally speaking, how would you rate the effectiveness of School Health Councils with 1 being not effective at all and 5 being very effective, h?

Not effective at all				Very effective
1	2	3	4	5

29. Is there anything else you would like to share about your experience and knowledge regarding childhood obesity legislation and state policies? (Probe/Follow-up if needed: How is this an education concern)?

Thank you so much for your time. We know how busy you are, and we are pleased that you made time to share this important information.

Would you like a copy of the report or to be put on a mailing list for the report? (if so, obtain email or mailing address)

Mississippi State Board of Health Members' Interview Guide

Introduction: 1st Telephone Contact:

Hello. My name is _____. I am from Mississippi State University and am calling regarding a project that is designed to evaluate the Mississippi Healthy Students Act of 2007. This research is sponsored by the Center for Mississippi Health Policy and funded by the Robert Wood Johnson Foundation.

As a part of this research, we would like to interview _____, regarding his/her opinions about childhood obesity policies.

Any information we gather will only be released as group information and will not be attributed to any individual board member. Is there a time when I may speak with _____ for about 20 minutes in the next two (2) weeks?

Objectives (if asked to describe the study/project in more detail):

1. To learn (State Board of Health Member's) perspectives on the passage and implementation of the Mississippi Healthy Students Act of 2007.

2. To understand (State Board of Health Member's) knowledge, attitudes and support for ways to prevent obesity among Mississippi's children.

Interview Script/Guide:

Name:_____

Dr/Mr/Ms_____, thank you for agreeing to participate in this interview. We appreciate your time last year and are interested in following up to learn your opinions on the childhood obesity legislation of the Mississippi Healthy Students Act of 2007. **[If Board member is new, the sentence above will read as follows: "We are interested in learning your opinions on the childhood obesity legislation of the Mississippi Healthy Students Act of 2007."]** As you know, this legislation affected physical education, nutrition and health education in the schools. We are also interested in your perspectives on additional policies to assist in the prevention of obesity among Mississippi's children. We believe that results of our research will be helpful to improve programs throughout the state of Mississippi.

We would like to have your permission to tape this interview. Any information we gather from this research will be kept confidential and will not be attributed to any individual board member. That is, the responses from all Board of Health members will be grouped together. Quotes may be used, but they will not be attributed to any individual board member. The tape will be used only to help with the transcription of the interview and no identifying information will be on the tape. Your name will not be used. Your participation in this interview is completely voluntary, and you do not have to answer

any question that you choose not to. Should you have further questions or need more information, please feel free to contact Ms. Dorris Baggett at (662) 325-8079 or Ms. Anne Buffington at (662) 325-1590 [We will also provide them with a business card with our contact information]

Do I have your permission to record this interview?
Note to interviewer
If yes, proceed.
If no….use longer form with spaces (for notes)

May I begin?

30. How familiar are you with the requirements of the MS Healthy Students Act of 2007?
___ Very familiar
___ Somewhat familiar
___ Somewhat unfamiliar
___ Very unfamiliar
___ Don't know / Not sure

31. As you may recall, there are three (3) major components of the Mississippi Healthy Students Act of 2007,
Improving physical education
Improving school nutrition and
Increasing health education

Of these components, which do you see as most important? As next important?

- Improving physical education
- Improving school nutrition and
- Increasing health education

32. Are you aware that the Center for Mississippi Health Policy is conducting a 5-year evaluation of the Mississippi Healthy Students Act of 2007?
If yes, go to question 4
If no, go to question 5

33. Have you seen a copy of the evaluation report for previous years? (show a copy of the report)

34. On a scale of 1 to 5, with 1 being least important and 5 being most important, how important do you think prevention of childhood obesity is for the state of Mississippi?

Least important				Most important
1	2	3	4	5

35. How would you rate where the state of Mississippi is on addressing childhood obesity policies, with 1 being Mississippi's policies are not at all effective in addressing childhood obesity and 5 being Mississippi's policies are very effective in addressing childhood obesity?

Not at all effective				Very effective
1	2	3	4	5

36. Among individuals and health department districts with whom you interact, what has been your impression of their reaction to the MS Healthy Students Act of 2007?
    (Probe/follow-up, if needed)
    For example, have you heard anything from school personnel? physicians, school nurses?

37. How do you think we should measure success of this legislation?
    (Probe/follow-up, if needed)
    For example, fitness testing, decrease in % of children who are obese, more 'fit' workforce (economic dev issue)

38. Do you see a role for the State Department of Health in obesity prevention?
    - Yes
    - No

If yes, go to question #10. If no, go to question #11.

39. Please rate the following target areas that can be addressed by public health, by level of importance, with 1 being not at all important and 5 being very important:

	Not at all important				Very important
Increasing physical activity	1	2	3	4	5
Increasing consumption of fruits & vegetables	1	2	3	4	5
Decreasing consumption of high calorie, dense foods	1	2	3	4	5
Decreasing children's screen time (TV viewing, computer time)	1	2	3	4	5
Encouraging breastfeeding	1	2	3	4	5
Decreasing consumption of sugary beverages	1	2	3	4	5

40. Do you see a role for the local and/or district Health Departments in promoting the MS Healthy Students Act of 2007?

41. Do you think that the state of Mississippi has done enough to strengthen the school policies

    on nutrition?

    on health education?

    on physical education?

42. If NO to any of these on Q#12, then what other policies need to be enacted?

43. Many things can have an impact on the prevention of childhood obesity. Please rate the following things that exist outside of the school setting, with a rating of 1 meaning that it has no impact and a rating of 5 meaning that it has a very large impact.

	No impact				Very large impact
Child care centers	1	2	3	4	5
Nutrition labeling	1	2	3	4	5
Media policy (restrictions on advertising, promoting positive messages)	1	2	3	4	5
Farmers' markets	1	2	3	4	5
Body Mass Index (measuring children's height and weight) reporting	1	2	3	4	5
Built environment (sidewalks, parks, green space, bike lanes)	1	2	3	4	5
Fat and trans fat restrictions	1	2	3	4	5
Location of Supermarkets (proximity to where residents live)	1	2	3	4	5

44. Do you think local government funds should be spent to build and maintain places in your community where people can exercise?

    Yes
    No
    Don’t know/Not sure

45. Is there anything else you would like to share about your experience and knowledge regarding childhood obesity legislation?

Thank you so much for your time. We know how busy you are, and we are pleased that you made time to share this important information.

Would you like a copy of the report or to be put on a mailing list for the report? (if so, obtain email or mailing address)

District Health Officers Interview Guide

Introduction: 1st Telephone Contact:
Hello. My name is _____. I am from Mississippi State University, and am calling regarding a project that is designed to evaluate the Mississippi Healthy Students Act of 2007. This research is sponsored by the Center for Mississippi Health Policy and funded by the Robert Wood Johnson Foundation.

As a part of this research, we would like to interview_____, regarding his/her opinions about childhood obesity legislation.

Any information we gather will only be released as group information and will not be attributed to any individual person. Is there a time when I may speak with _____ for about 15 minutes in the next two (2) weeks?

Objectives (if asked to describe the study/project in more detail):

1. To learn District Health Officers' perspectives on the passage and implementation of the Mississippi Healthy Students Act of 2007.

2. To understand District Health Officers knowledge, attitudes and support for ways to prevent obesity among Mississippi's children.

Interview Script/Guide:

Name:_____

Dr. _____, thank you for agreeing to participate in this interview. We appreciate your time last year and are interested in following up to learn your opinions on the childhood obesity legislation of the Mississippi Healthy Students Act of 2007. **[If Officer is new, the sentence above will read as follows: "We are interested in learning your opinions on the childhood obesity legislation of the Mississippi Healthy Students Act of 2007."]** As you know, this legislation affected physical education, nutrition and health education in the schools. We are also interested in your perspectives on additional policies to assist in the prevention of obesity among Mississippi's children. We believe that results of our research will be helpful to improve programs throughout the state of Mississippi.

We would like to have your permission to tape this interview. Any information we gather from this research will be kept confidential and will not be attributed to any individual person. That is, the responses from all District Health Officers will be grouped together. Quotes may be used, but they will not be attributed to any individual health officer. The tape will be used only to help with the transcription of the interview, and there will be no identifying information on the tape. Your name will not be used. Your participation in

this interview is completely voluntary, and you do not have to answer any question that you choose not to. Should you have further questions or need more information, please feel free to contact Ms. Dorris Baggett at (662) 325-8079 or Ms. Anne Buffington at (662) 325-1590. [We will also provide them with a business card with our contact information]

Do I have your permission to record this interview?
Note to interviewer
If yes, proceed.
If no….use longer form with spaces (for notes)

May I begin?

1. How familiar are you with the requirements of the MS Healthy Students Act of 2007?

___ Very familiar
___ Somewhat familiar
___ Somewhat unfamiliar
___ Very unfamiliar
___ Don't know / Not sure

2. As you may recall, there are three (3) major components of the Mississippi Healthy Students Act of 2007,

Improving physical education
Improving school nutrition and
Increasing health education

Of these components, which do you see as most important? As next important?

● Improving physical education
● Improving school nutrition and
● Increasing health education

3. Are you aware that the Center for Mississippi Health Policy is conducting a 5-year evaluation of the Mississippi Healthy Students Act of 2007?

If yes, go to question 4
If no, go to question 5

4. Have you seen a copy of the evaluation report for previous years?

5. On a scale of 1 to 5, with 1 being least important and 5 being most important, how important do you think prevention of childhood obesity is for the state of Mississippi?

Least important Most important

1 2 3 4 5

6. How would you rate where the state of Mississippi is on addressing childhood obesity policies, with 1 being Mississippi's policies are not at all effective in addressing childhood obesity and 5 being Mississippi's policies are very effective in addressing childhood obesity?

Not at all effective Very effective

1 2 3 4 5

7. Among individuals and health department districts with whom you interact, what has been your impression of their reaction to the MS Healthy Students Act of 2007

(Probe/follow-up, if needed: For example, have you heard anything from the district administrators? County nurses? Physicians, school nurses, parents?)

8. How do you think we should measure success of this legislation?
(Probe/follow-up, if needed)
For example, fitness testing, decrease in % of children who are obese
more 'fit' workforce (economic dev issue)

9. Do you see a role for District and County Health Offices in obesity prevention?

- Yes
- No

If yes, go to question #10. If no, go to question #11.

10. Please rate the following target areas that can be addressed by public health, by level of importance, with 1 being not at all important and 5 being very important.

	Not at all important				Very important
Increasing physical activity	1	2	3	4	5
Increasing consumption of fruits & vegetables	1	2	3	4	5
Decreasing consumption of high calorie, dense foods	1	2	3	4	5
Decreasing children's screen time (TV viewing, computer time)	1	2	3	4	5

Encouraging breastfeeding		1	2	3	4	5
Decreasing consumption of sugary beverages	1	2	3	4	5	

11. Do you see a role for the district or county health offices in promoting the MS Healthy Students Act of 2007?

12. How involved is the staff in your district in assisting the schools in implementing coordinated school health programs? Please list any initiatives that you are aware of.

13. Do you think Mississippi has done enough to strengthen the school policies on nutrition?
    on health education?
    on physical education?

14. If no to any of these on Q#13, then what other policies need to be enacted?

15. Many things can have an impact on the prevention of childhood obesity. Please rate the following things that exist outside of the school setting, with a rating of 1 meaning that it has no impact and a rating of 5 meaning that it has a very large impact.

		No impact			Very large impact
Child care centers	1	2	3	4	5
Nutrition labeling	1	2	3	4	5
Media policy (restrictions on advertising, promoting positive messages)	1	2	3	4	5
Farmers' markets	1	2	3	4	5
Body Mass Index (measuring children's height and weight) reporting	1	2	3	4	5
Built environment (sidewalks, parks, green space, bike lanes)	1	2	3	4	5
Fat and trans fat restrictions	1	2	3	4	5
Location of Supermarkets (proximity to where residents live)	1	2	3	4	5

16. Do you think local government funds should be spent to build and maintain places in your community where people can exercise?

Yes

No

Don’t know/Not sure

17. Who do you rely upon to get information on childhood obesity in Mississippi?

18. Is there anything else you would like to share about your experience and knowledge regarding childhood obesity legislation? (Probe/follow up if needed: How is this a public health concern?)

Thank you so much for your time. We know how busy you are, and we are pleased that you made time to share this important information.

Would you like a copy of the report or to be put on a mailing list for the report? (if so, obtain email or mailing address)

Mississippi Key Legislators' Interview Guide

Introduction: 1st Telephone Contact:
Hello. My name is _____. I am from Mississippi State University and am calling regarding a project to evaluate the Mississippi Healthy Students Act of 2007, the Act passed for improving nutrition and physical education in the schools. This research is sponsored by the Center for Mississippi Health Policy and funded by the Robert Wood Johnson Foundation.

As a part of this research, we would like to interview Senator/Representative _____, regarding his/her opinions regarding childhood obesity legislation.

Any information we gather would only be released as group information and would not be attributed to any individual lawmaker. Is there a time when I may speak with _____ for about 20 minutes in the next two (2) weeks?

Objectives (if asked to describe the study/project in more detail):

1. To learn Sen/Rep___ perspectives on the passage and implementation of the Mississippi Healthy Students Act of 2007.

2. To understand Sen/Rep___ knowledge, attitudes and support for ways to prevent obesity of Mississippi's children.

Interview Script/Guide:

Name:_____

Senator/Representative _____, thank you for agreeing to participate in this interview. We are interested in learning your opinions on the childhood obesity legislation of the Mississippi Healthy Students' Act of 2007. As you know, this legislation improved physical education, nutrition and health education in the schools. We are also interested in your perspectives on additional policies to assist in the prevention of obesity among Mississippi's children. We believe that results of our research will be helpful to improve programs throughout the state of Mississippi.

We would like to have your permission to tape this interview. Any information we gather from this research will be kept confidential and will not be attributed to any individual lawmaker. The tape will be used only to help with the transcriptions of the interviews and no identifying information will be on the tapes. Your name will not be used. Your participation in this interview is completely voluntary and you do not have to answer any of the questions that you choose not to. Should you have further questions or need more information, please feel free to contact Ms. Dorris Baggett at (662) 325-7127 or Ms. Anne Buffington at (662) 325-1590..

Do I have your permission to record this interview?
Note to interviewer

If yes, proceed.

If no….use longer form with spaces (for notes)

May I begin?

1. As you will recall, there are three (3) major components of the legislation,

- Improving physical education
- Improving school nutrition and
- Increasing health education

Of these components, which do you see as most important? As next important?

- Improving physical education
- Improving school nutrition and
- Increasing health education

2. Are you aware that the Center for Mississippi Health Policy is conducting a 5-year evaluation of the Healthy Students' Act of 2007?

If yes, go to question 3

If no, go to question 4

3. Have you seen a copy of the evaluation report for previous years?

4. On a scale of 1 to 5, with 1 being least important and 5 being most important, how important do you think prevention of childhood obesity is for the state of Mississippi?

5. How would you rank where the State of Mississippi is on addressing childhood obesity policies, with 1 being Mississippi's policies are not at all effective in addressing childhood obesity and 5 being Mississippi's policies are very effective in addressing childhood obesity?

1 2 3 4 5

6. IF Representative---Ask
What do you think is the general consensus of the House on maintaining improvements made by the Mississippi Healthy Students Act of 2007?

OR

IF Senator---Ask
What do you think is the general consensus of the Senate on maintaining improvements made by the Mississippi Healthy Students Act of 2007?

7. Among individuals and school districts whom you represent, what has been your impression of their reaction to the Mississippi Healthy Students Act of 2007? (Probe/follow-up, if needed)
   For example, have you heard anything from the school personnel? physicians, school nurses, parents?

8. How do you think we should measure success of this legislation? (Probe/follow-up, if needed)
   For example, fitness testing, decrease in % of children who are obese
   more 'fit' workforce(economic dev) issue

9. Do you think it is important for schools to promote healthy lifestyles
   for students?
   for staff?

10. What do you think is the role of the Mississippi legislature in promoting healthy lifestyles through state policy?

11. What is the role of other groups in promoting healthy lifestyles for children? (Probe/follow-up, if needed) For example, health care providers, public health departments, school nurses, et a.l)

12. Do you think that the state of Mississippi has done enough to strengthen the school policies
   On nutrition?
   On health education?
   On physical education?

   If no, then ask:

13. What other policies need to be enacted?

14. What about policies outside of the school settings that can be used to prevent childhood obesity?
   (Probes: child care; media; after-school programs)

15. Who do you rely upon to get information on childhood obesity in Mississippi?

   Follow-up with

16. Who else do you hear from about these policies?
   (Probe/follow-up): Do you hear from lobbyists and interest groups? Who do they represent?

17. Is there anything else you would like to share about your experience and knowledge regarding childhood obesity legislation?

Thank you so much for your time. We know how busy you are, but are pleased that you made time to speak with us and share important information.
Would you like a copy of the report or be put on a mailing list for the report?
Thanks again!

2012 Survey of School Board Members

1. On a scale from 1 to 5, with 1 being least important and 5 being most important, how important do you think prevention of childhood obesity is for the state of Mississippi?

Least important				Most important
___1	___2	___3	___4	___5

___ Don't know/Not Sure

2. How would you rank where the State of Mississippi is on addressing childhood obesity policies, with 1 being Mississippi's policies are not at all effective in addressing childhood obesity and 5 being Mississippi's policies are very effective in addressing childhood obesity?

Not at all effective				Very effective
___1	___2	___3	___4	___5

___ Don't know/Not Sure

3. How satisfied are you with your school district's progress in creating a healthy school environment?

___ Very satisfied
___ Somewhat satisfied
___ Somewhat dissatisfied
___ Very dissatisfied
___ Don't know/Not Sure

4. How familiar are you with the requirements of the MS Healthy Students Act of 2007?

___ Very familiar
___ Somewhat familiar
___ Somewhat unfamiliar
___ Very unfamiliar
___ Don't Know/Not sure

5. To what extent are the schools in your district implementing the minimum requirements of Coordinated School Health, with 1 being that your district has not at all implemented the requirements and 5 being that your district is doing all it can?

Not at all implemented				Doing all it can
___1	___2	___3	___4	___5

6. Please rate your district's progress in implementing the MS Healthy Students Act of 2007.

___ 25% or less, your district is beginning implementation
___ It is 50% Implemented
___ It is 75% Implemented
___ It is 100%, or fully, implemented
___ Don't know/Not Sure

7. Within your school district, upon whom do you **most** rely to ensure that the MS Healthy Students Act of 2007 is implemented?

___ District superintendents
___ School principals
___ School coordinator
___ Teachers
___ Nutrition/cafeteria managers
___ School Boards
___ Physical Education teachers
___ Health teachers
___ Other
___ Don't know/Not Sure

8. How would you describe the level of community support your school board receives on promoting physical education, nutrition and health education?

___ Very supportive
___ Somewhat supportive
___ Somewhat unsupportive
___ Very unsupportive (No Support)
___ Don't know/Not Sure

9. Some school districts collect information on children's *height and weight* to determine children's Body Mass Index (BMI). Are you in favor of this?

___ Yes ___ No ___ Don't know/Not Sure

10. If yes, are you in favor of sending this information to children's parents?

___ Yes ___ No ___ Don't know/Not Sure

11. Do schools in your district conduct fitness testing?

___ Yes ___ No ___ Don't know/Not Sure

12. If yes, are you in favor of sending this information to children's parents?

___ Yes ___ No ___ Don't know/Not Sure

13. Do you think that the state of ***Mississippi*** has done enough to strengthen the school policies on nutrition?

___ Yes ___ No ___ Undecided
___ Don't Know/Not Sure

14. …on Health Education?

___ Yes ___ No ___ Undecided
___ Don't Know/Not Sure

15. …on Physical Education

___ Yes ___ No ___ Undecided
___ Don't Know/Not Sure

16. Do you think that ***YOUR School Board*** has done enough to strengthen the school policies on nutrition?

___ Yes ___ No ___ Undecided
___ Don't Know/Not Sure

17. …on Health Education?

___ Yes ___ No ___ Undecided
___ Don't Know/Not Sure

18. …on Physical Education?

___ Yes ___ No ___ Undecided
___ Don't Know/Not Sure

19. Has your district adopted a policy stating that schools are prohibited from offering "junk" foods (foods which provide calories primarily through fats or added sugars and have minimal amounts of vitamins and minerals) in the following settings:

	Prohibit	**Recommend Against**	**No Policy**	**Not Sure**	**No Comment**
At student parties					

In after-school or extended day programs					
At staff meetings					
At meetings attended by families					
In school stores, canteens or snack bars					
In vending machines					
At concession stands					

20. Has your school board adopted a policy stating that schools are prohibited from using food or food coupons as a reward for good behavior or good academic performance?

    ___ Yes, we prohibit
    ___ No, but we recommend against
    ___ We do not have a policy
    ___ Don't know/Not Sure

21. Has your school board adopted a policy that prohibits schools from using physical activity (e.g., laps, push-ups) to punish students for bad behavior?

    ___ Yes ___ No ___ Don't know/Not Sure

22. The following question is about allowing commercial advertising on school premises by food or beverage companies for your school district. Please check the one that applies to your district:

    ___ We do not allow any advertising by food or beverage companies
    ___ We allow advertising of only healthy products
    ___ We do not restrict advertising at all for these companies
    ___ Don't know/Not Sure

23. Does your school board have a district-wide fundraising policy that includes nutrition guidelines?

    ___ Yes ___ No ___ Don't know/Not Sure

24. How important is it for Physical Education classes to be taught by certified Physical Education staff?

    ___ Very important ___ Moderately important
    ___ Not important at all
    ___ Don't know/Not Sure

25. Does your *district* make school facilities, such as gym tracks, ball fields, or playgrounds, available to the community after school hours to promote physical activity/education programs?

    ___ Yes ___ No ___ Don't know/Not Sure

26. What, if anything, makes it most difficult for the schools in your district to meet Physical Education and Nutrition requirements?

    _____
    _____
    _____
    _____

27. Does each school within your district have a school health council?

    ___ Yes ___ No ___ Don't know/Not Sure

28. Have you ever attended a meeting or event held by school health councils?

    ___ Yes ___ No ___ Don't know/Not Sure

29. Has your school board seen a presentation from at least one school health council within the past 12 months?

    ___ Yes ___ No ___ Don't know/Not Sure

30. …from all school health councils?

    ___ Yes ___ No ___ Don't know/Not Sure

31. With 1 being not effective and 5 being very effective, how would you rank school health councils in your district?

    Not effective Very effective

    ___1 ___2 ___3 ___4 ___5

    ___ Don't know/Not Sure

32. To what extent do you believe there is a positive association between implementation of Coordinated School Health Programs in your school district and the academic performance of your students?

    ___ Not at all ___ Somewhat ___ A fair amount
    ___ A great deal
    ___ Don't know/Not Sure

33. What level of feedback have you had from parents on implementing the MS Healthy Students Act?

    ___ None ___ Minimal ___ Moderate
    ___ High
    ___ Don't know/Not Sure

34. Please rate the type of feedback you have had from parents on the following topics:

	Very Negative	**Negative**	**Neutral**	**Positive**	**Very Positive**
Banning "junk food" sales for student/ school fund-raising activities					
Decreasing "junk food" choices in vending					

machines					
Increasing amount of physical exercise for students					
Increasing amount of health education for students					

35. The next questions are about your district's staff wellness policy and staff wellness programs.
Please check the one that applies to your district:

___ We have a policy, and we provide staff wellness programs
___ We have a policy, but we do not provide staff wellness programs
___ We have a policy, and plans are underway to implement staff wellness programs within the next 12 months
___ We do not have a policy, but we provide staff wellness programs
___ We do not have a policy, but plans are underway to implement a policy within the next 12 months
___ We do not have a policy, nor do we have plans to implement a policy within the next 12 months
___ Don't Know/Not Sure

36. In your opinion, how important is it to provide staff wellness program(s)?

___ Very important ___ Moderately important
___ Not important at all
___ Don't know/Not Sure

37. In your school district, what is the **primary** area of health education that needs to be most improved? (check one)

___ Community/Environmental Health
___ Nutrition
___ Personal Health
___ Consumer Health
___ Human Growth and Development
___ Mental Health
___ Disease Prevention and Control
___ Safety and First Aid
___ Drug Abuse Prevention
___ Family Life
___ Don't Know/Not Sure

38. How many years of experience do you have as a School Board Member? ____ years

39. Which racial or ethnic group do you most closely identify yourself with?

___ Black (African American)
___ White (Caucasian)
___ American Indian/Native American
___ Hispanic/Latino
___ Asian or Pacific Islander
___ Other, please specify _____

40. What is your gender? ___ Male ___ Female

41. What county do you reside in? _____

Survey of Superintendents of Education (2012)

1. On a scale of 1 to 5, with 1 being least important and 5 being most important:,
how important do you think prevention of childhood obesity is for the State of Mississippi?

1 2 3 4 5

- Don't know
- Refused

2. On a scale of 1 to 5, with 1 being "very ineffective" and 5 being "very effective," how would you rate the policies of the State of Mississippi in addressing childhood obesity?

1 2 3 4 5

- Don't know
- Refused

3. How satisfied are you with your school district's progress in creating a healthy school environment? Would you say . . .

- Very satisfied
- Somewhat satisfied
- Somewhat dissatisfied
- Very dissatisfied
- Don't know
- Refused

4. To what extent are the schools in your district implementing the requirements of the Coordinated School Health Program, with 1 being that your district has "not at all" implemented the requirements and 5 being that your district is "doing all it can."

1 2 3 4 5

- Don't know
- Refused

5. Within your school district, upon whom do you MOST rely upon to ensure that the Mississippi Healthy Students Act of 2007 is implemented? Would you say . . .

- District Superintendents
- School Coordinators
- Nutrition/cafeteria managers
- Physical Education teachers
- School Principals
- Teachers
- Your school board
- Health teachers
- Other
- Don't know/Not Sure
- Refused

6. How would you describe the level of community support your school board receives in promoting physical education, nutrition and health education? Would you say . . .

- Very supportive
- Somewhat supportive
- Somewhat unsupportive
- Very unsupportive (No Support)
- Don't know
- Refused

7. Some school districts collect information on children's *height and weight* to determine children's Body Mass Index (BMI). Are you in favor of this?

- Yes
- No
- Don't know/Not Sure
- Refused

8. Would you be in favor of sending the children's Body Mass Index (BMI) information to their parents?

- Yes
- No
- Don't know/Not Sure
- Refused

9. Do schools in your district conduct fitness testing?

- Yes
- No
- Don't know/Not Sure
- Refused

10. Would you be in favor of sending the children's fitness testing information to their parents?

- Yes
- No

- Don't know/Not Sure
- Refused

11. On a scale from 1 to 5, with 1 being "not at all effective" and 5 being "very effective", how would you rate the level of effectiveness of the School Councils in your school district?

1 2 3 4 5

- Don't know
- Refused

12. As you will recall, there are three (3) major components of the Mississippi Healthy Students Act of 2007 . . .
1) Improving physical education
2) Improving school nutrition, and
3) Increasing health education

Which component do you see as most important?

- Improving physical education
- Improving school nutrition
- Increasing health education
- Don't know/Not sure
- Refused

Which component do you see as the second most important?

- Improving physical education
- Improving school nutrition
- Increasing health education
- Don't know/Not sure
- Refused

13. Do you think that the state of ***Mississippi*** has done enough to strengthen the school policies on nutrition?

- Yes
- No
- Undecided
- Don't know/Not Sure
- Refused

14. …on Health Education?

- Yes
- No
- Undecided
- Don't know/Not Sure
- Refused

15. …on Physical Education?

- Yes
- No
- Undecided
- Don't know/Not Sure
- Refused

16. Do you think that ***YOUR School District*** has done enough to strengthen the school policies on nutrition?

- Yes
- No
- Undecided
- Don't know/Not Sure
- Refused

17. …on Health Education?

- Yes
- No
- Undecided
- Don't know/Not Sure
- Refused

18. …on Physical Education?

- Yes
- No
- Undecided
- Don't know/Not Sure
- Refused

19. Has your school board adopted any policies within the last year to improve student nutrition?

- Yes
- No
- Don't know/Not Sure
- Refused

20. Do you routinely meet with an official or group responsible for implementing the Coordinated School Health Program?

- Yes
- No
- Don't know/Not Sure
- Refused

21. With whom do you meet? _____

How often do you meet? _____

22. Does your school district have a policy that prohibits the use of food or food coupons as a reward for good behavior or good academic performance?

- Yes, we prohibit
- No, but we recommend against this practiice
- We do not have a policy
- Don't know/Not Sure
- Refused

23. Does your school district have a policy that prohibits the use of physical activity (e.g. laps, push-ups) to punish students for bad behavior?

- Yes
- No
- Don't know/Not Sure
- Refused

24. We define JUNK FOOD as food that provides calories primarily through fats or added sugars and have minimal amounts of vitamins and minerals.

In which of the following settings has your district adopted a policy stating that schools are prohibited from offering "junk" foods

	Prohibit	**Recommend Against**	**No Policy**	**Not Sure**	**No Comment**
At student parties					
In after-school or extended day programs					
At staff meetings					
At meetings attended by families					
In school stores, canteens or snack bars					
In vending machines					
For fundraisers					
At concession stands					

25. Which of the statements best describes your school district's policy concerning commercial advertising on school premises by food or beverage companies?

- We do not allow any advertising by food or beverage companies.
- We allow advertising of only healthy products.
- We do not restrict advertising at all for these companies
- Don't know/Not Sure
- Refused

26. In the past year, has your school district adopted any new policies to increase the student's physical activity?

- Yes
- No
- Don't know/Not Sure

- Refused

27. How important do you think it is that Physical Education classes be taught by a certified Physical Education teacher? Would you say . . .

- Very important
- Moderately important
- Not important at all
- Don't know
- Refused

28. Does your school district allow school facilities, such as gym tracks, ball fields, or playgrounds, to be available to the community after school hours in order to promote physical activity or physical education programs?

- Yes
- No
- Don't Know/Not Sure
- Refused

28a. Does your school district have any formal, written agreements for such use?

- Yes
- No (just informal agreements)
- Don't Know/Not Sure
- Refused

29. What, if anything, makes it most difficult for the schools in your district to meet Physical Education and Nutrition requirements?

_____
_____
_____

30. Does each school within your district have a health council?

- Yes
- No
- Don't know/Not Sure
- Refused

31. Have you ever attended a meeting or event held by a school health council?

- Yes
- No
- Don't know/Not Sure
- Refused

32. In the past 12 months, has your school board seen a presentation from at least one school health council?

- Yes
- No

- Don't Know/Not Sure
- Refused

33. In the past 12 months, approximately what percentage of school health councils have made a presentation to the school board?

_____%

34. To what degree do you believe there is a positive association between implementation of Coordinated School Health Programs and the students' academic performance? Would you say there is . . .

- No association between the two
- A moderate association
- A strong association
- A very strong association
- Don't know
- Refused

35. What level of feedback have you had from parents on implementing the Mississippi Healthy Students Act?

- None
- Minimal
- Moderate
- High
- Don't know
- Refused

36. On a scale of one to five, with 1 being VERY NEGATIVE and 5 being VERY POSITIVE: Please rate the type of feedback you have had from parents regarding the following four topics

	Very Negative	Negative	Neutral	Positive	Very Positive	No Comment
Banning JUNK FOOD sales at student or school fund-raising activities						
Decreasing JUNK FOOD choices in vending machines						
Increasing amount of physical exercise for students						
Increasing amount of health education for students						

37. Which of the following would best describe your school district's staff wellness policy and staff wellness programs? Would you say your school district . . .

- has a policy and provides staff wellness programs
- has a policy, but does not provide staff wellness programs
- has a policy and plans to implement staff wellness programs within the next 12 months
- has a policy but no plans to implement any staff wellness programs
- does not have a policy, but provides staff wellness programs

- does not have a policy, but plans to implement a policy within the next 12 months
- does not have a policy, nor plans to implement a policy within the next 12 months
- Don't Know/Not Sure
- Refused

38. In your opinion, how important is it to provide a staff wellness program? Would you say . . .

- Very important
- Moderately important
- Not important at all
- Don't know
- Refused

39. In your school district, what is the PRIMARY area of health education that needs the MOST improvement? Would you say . . .

- Community/Environmental Health
- Nutrition
- Personal Health
- Consumer Health
- Human Growth and Development
- Mental Health
- Disease Prevention and Control
- Safety and First Aid
- Drug Abuse Prevention
- Family Life
- Other (please specify)
- Don't know/Not Sure
- Refused

40. Which of the following would best describe your school district's progress in implementing the Mississippi Healthy Students Act of 2007?

- 25% implemented or less
- 50% implemented
- 75% implemented
- 100% or fully implemented
- Don't know
- Refused

Finally, we'd like to ask you a few background questions for statistical purposes only.

41. How many years of experience do you have as Superintendent? _____

42. How many years of experience have you had as a Superintendent in your CURRENT school district? _____

43. Which racial or ethnic group do you most closely identify yourself with?

- Black (African American)
- White (Caucasian)
- American Indian / Native American

- Hispanic/Latino
- Asian or Pacific Islander
- Other, please specify
- Don't know/Not sure
- Refused

44. In what year were you born? _____

45. What is the respondent's gender?

- Male
- Female
- Refused

That completes our interview. Thank you for taking the time to participate in this important study. Goodbye.