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School Wellness Policy Implementation: Attitudes of School Professionals and Parents in Elementary Schools

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Please note that this study was published before the implementation of Healthy, Hunger-Free Kids Act of 2010, which went into effect during the 2012-13 school year, and its provision for Smart Snacks Nutrition Standards for Competitive Food in Schools, implemented during the 2014-15 school year. As such, certain research may not be relevant today.

ABSTRACT

Purpose/Objectives:
The purpose of this research was to explore the attitudes and barriers related to the implementation of the local wellness policy (LWP) in the elementary school setting.
Methods:
Researchers used a two-phase approach. Phase I included focus group interviews with school nutrition directors, principals, teachers, parents, and other individuals involved with implementation of the LWP to identify issues surrounding policy implementation. In phase II, 2,800 questionnaires were distributed to school nutrition directors, principals, teachers, and parents from all seven USDA regions.
Results:
A total of 575 surveys were used in the final data analysis, with nearly equal numbers of participants in each group. Slightly more than half reported playing a role in implementing the wellness policy. Participants ranked meeting the USDA requirements for school meals as the most important component in implementing an LWP. Respondents considered encouraging students to eat healthy was their primary responsibility in implementing the policy and believed the wellness policy would improve physical fitness among elementary students. Having a clean and sanitary cafeteria and a safe and secure campus were most commonly agreed upon as important for a healthy school environment. In addition, respondents strongly agreed they needed training on strategies to implement the school wellness policy.
Application to Child Nutrition Professionals:
Support from administration, teachers, and parents is necessary to implement, manage, and evaluate an LWP. Additionally, adequate training and credible resources can lay a foundation for achieving the LWP goals, providing strategies for effective LWP implementation, and fostering the need for a collaborative LWP team.

INTRODUCTION

The Centers for Disease Control and Prevention (CDC) (2007) has identified six primary health risk behaviors from unhealthy dietary behaviors to alcohol, drug and tobacco use that schools can address in a coordinated school health program (CSHP). A CSHP uses a team approach to help improve the health and well-being of children and adolescents. The eight essential elements of a CSHP include: health education, health services, nutrition services, health promotion for school staff, physical education, mental health and social services, healthy and safe school environments, and family/community involvement. This approach encompasses the health of the student as well as the school environment and requires collaboration among key stakeholders, including school administrators, faculty, staff, school nutrition professionals, parents, and community members (Geiger, Petri, & Barber, 2004). With 121,000 schools in the U.S. there is ample opportunity to teach the nation's youth about health and develop skills that promote healthy behaviors (CDC, 2007).

In an attempt to improve the health of children and address the ever increasing obesity epidemic in the United States, Congress enacted the Child Nutrition and Women, Infants and Children (WIC) Reauthorization Act of

2004 (Pub. L. No. 108-265, § 204), mandating that all local education agencies (LEAs) participating in the National School Lunch Program establish a local wellness policy (LWP) by July 2006. The law specifies that wellness policy components are to include goals for nutrition education, physical activity, and extra-curricular school-related activities promoting student wellness. Additionally, schools must ensure that reimbursable school meals are in compliance with the Child Nutrition Act and Richard B. Russell National School Lunch Act, and all foods served and sold on campus during the school day must follow nutrition guidelines established by the LEA that promote student health and reduce childhood obesity. Districts also need to establish procedures to measure implementation of the policy and appoint an individual to oversee the implementation of and adherence to the policy. Finally, each district is required to have a committee consisting of parents, students, school nutrition personnel, the school board, school administrators, and public representation to develop and implement a school wellness policy.

The mandate for an LWP presents a unique opportunity for schools to form partnerships with health professionals, community organizations, food vendors, and parents to not only promote child and adolescent health, but also create a healthy school environment. Principals, district administrators, and others having direct oversight of the planning, implementation, and assessment of an LWP are the gatekeepers to a healthier school environment. Their influence on nutrition and vending policies can impact the overall environment of health in each school (Shahid, 2003). The focus of an LWP provides schools numerous opportunities to model healthy behaviors, promoting a healthy school environment in the elementary school setting. Furthermore, principals, teachers, school nutrition professionals, and parents can reinforce the nutrition curriculum by modeling and incorporating healthy behaviors into their daily activities. Therefore, the purpose of this research was to identify attitudes of school nutrition directors (SNDs), principals, teachers, and parents regarding implementation of an LWP as well as perceived barriers to implementing an LWP in the elementary school setting. Researchers also explored their views toward school meals, healthy food options, dining environment, and nutrition education.

METHODOLOGY

Focus Groups - Phase I

Phase I of the research included focus groups, which were conducted with four school districts geographically dispersed across the United States. Participants in the focus groups included a combination of teachers, parents, principals, school nutrition directors (SNDs), and community professionals. Eight questions were used to obtain information regarding attitudes and perceived benefits and barriers related to implementation of the wellness policy. The information gathered from the four focus group sessions was used to develop a quantitative survey (Phase II of the research).

Sample

The sample for this research study included 700 SNDs representing the seven USDA regions. A random sample was selected using Market Data Retrieval, a company that maintains education databases. SNDs, as well as principals, teachers, and parents from each SND's school district were also included for a total sample of 2,800 participants nationwide.

Survey development and distribution – Phase II

The survey consisted of five main sections with Likert-type responses and a demographics section. The five sections related to an LWP included goals, roles and responsibilities, implementation issues, healthy school environment, and training and resources. Separate cover letters were developed for the SND, principal, teacher, and parent explaining the study purpose and instructions for survey completion. The SND's cover letter outlined how the other three surveys were to be distributed to a principal, teacher, and parent in the school district.

SNDs from the focus groups, as well as a committee of state agency directors representing the seven USDA regions participated in the pilot study. In addition to completing the survey, participants were asked to complete an evaluation form to assess the clarity and readability of the survey and cover letters. A total of 10 surveys and evaluations were distributed. Changes were made to the formatting of the survey and letter, as suggested by pilot participants.

The set of four identical surveys, one each for the SND, principal, teacher, and a parent, along with three cover letters were mailed to the 700 SNDs. A postage-paid, self-addressed return envelope was included with each participant's survey; participants were given approximately one month to return the completed survey. The protocol for Phase I and Phase II of the study were reviewed and approved by the Human Subjects Protection Review Committee (HSPRC) of The University of Southern Mississippi.

Data analysis
Surveys were analyzed using the statistical package SPSS Version 12.0 for Windows. Descriptive statistics included means, standard deviations, and frequencies of total responses. One-way Analysis of Variance was used to evaluate the differences in responses based on degree of implementation of the wellness policy, group (principal, teacher, SND, parent), and level of participation in the wellness committee.

RESULTS AND DISCUSSION

Sample characteristics
Of the 2,800 surveys mailed and distributed, 575 were returned (20.5%); no follow-up methods were employed to encourage respondents to return the surveys. The groups of respondents were almost equally divided, with principals representing the majority of the respondents (30.4%) and parents representing the smallest group (20%). The southeast region (AL, FL, GA, KY, MS, NC, SC, and TN) had the largest number of respondents (19.8%). More than half (57.5%) of those returning the survey had an active role in implementation of the wellness policy. However, nearly one-fourth (22.3%) had never heard of the wellness committee. Twenty-four percent stated that the policy was fully implemented, while 37% indicated the policy was partially implemented, and 28.5% were not sure of the level of implementation of the policy.

Section I: Goals
Nine statements regarding school wellness goals were listed and participants were asked to rank the level of importance of each of the goals when implementing a wellness policy using a 4-point scale, with 4 being the highest rating of importance. School meals meet USDA requirements was ranked as the most important goal when implementing an LWP (3.84 + .41). Physical education is included in the curriculum was ranked second in importance (3.82 + .44), followed by physical activity as part of the elementary school day (3.81 + .47). The goal having the lowest ranking was the nutrition education is part of the elementary school day (3.23 + .77). However, it should be noted that all mean values were above 3.0, indicating that all nine goals addressed were considered as important.

When the same nine goals were used to assess attainment of the wellness policy, “not applicable” was added as an option, assuming that some of the respondents would not know the level of attainment. Twenty-three percent of the respondents marked not applicable, and these data were dropped from the calculated mean score. The goal ranked with the highest level of attainment was school meals meet USDA requirements (3.83 + .46). Physical education is included in the curriculum (3.76 + .53) and physical activity is part of the elementary school day (3.69 + .59) were ranked as second and third in attainment. Foods sold on campus include healthy choices was ranked as the least attainable goal (2.88 + 1.19), but ranked as important to very important (3.52 + .81). However, this finding should be interpreted with some caution. Nearly 25% (n=122) of the respondents indicated that this question was not applicable. Given the fact that many elementary schools do not allow vending, it is difficult to discern if this result was the product of vending being disallowed in the school.

It is interesting to note that the importance goals ranking in the top four were also ranked in the top four for the attainment level. On the other hand, nutrition education is part of the elementary school day ranked last in importance (3.23 + .77) and next to last in level of attainment (3.00 + .77), indicating that perhaps it was ranked low in importance because of the perception that this goal lacked attainability at the time of the study. Table 1 presents the means and standard deviations for all statements regarding wellness goals in descending order by level of importance.

Table 1. Level of Importance and Attainment of Implementing School Wellness Goals

Section I survey statements	Total n	Importanceab Mean ± SD	Total n	Attainmentc Mean ± SD
School meals meet USDA requirements	558	3.84 ±.41	521	3.83 ±.46
Physical education is included in the curriculum	560	3.82±.44	536	3.76 ±.53
Physical activity is part of the elementary school day	555	3.81±.47	527	3.69±.59

Healthy menu items are available for children to select	554	3.77±.48	531	3.49±.82
Foods sold on campus include healthy choices	544	3.52±.81	531	2.88±1.19
Nutrition education is included in the curriculum	560	3.48±.68	527	3.16±.74
Additional wellness activities are planned throughout the year	558	3.34±.70	528	3.06±.77
A designee oversees implementation of the wellness policy	548	3.30±.78	523	3.17±.86
Nutrition education is part of the elementary school day	553	3.23±.77	521	3.00±.77

[a] Scale = 4 (*very important*) to 1 (*not important*)
[b] Importance mean and standard deviation scores in descending order
[c] Scale = 4 (*goal attained*) to 1 (*not applicable*)

Section II: Roles and Responsibilities

The level of importance, as well as the level of involvement relating to implementation of an LWP, was evaluated using a 4-point scale with 4 being the highest rating of importance. Respondents ranked *encourage students to eat healthy* (3.70 + .51), *promote physical activity* (3.66 + .54), and *ensure that guidelines are met when implementing the policy* (3.60 + .60) as the top three importance roles or responsibilities to implementing an LWP. Conduct taste tests for new foods was ranked with lowest mean score for importance (2.67 + .95). The levels of involvement in implementing a wellness policy were considerably lower than levels of perceived importance. Whereas the highest levels of involvement were reported as *create awareness of school wellness*(3.52 + .96) and *encourage students to eat healthy* (3.06 + .86), all other survey statements measuring participants' level of involvement ranked somewhat involved to not involved. The statement with the lowest ranking score for level of involvement *was including nutrition education information in the lesson plans* (1.99 + 1.01). Table 2 presents the means and standard deviations for all statements regarding roles and responsibilities and are presented in descending order by level of importance. Cross-tabulations were conducted to determine if any differences in responses existed between study groups. With the large number of variables included in the analysis, no statistical significance was found. However, some trends in the data emerged. SNDs were more likely to rate higher level of involvement in areas related directly to the school nutrition program, including*ensure that state/federal guidelines are met when implementing policy, interpret school wellness policy requirements, and explore/investigate/locate healthy food alternatives.*

Table 2. Level of Importance and Involvement Related to Roles and Responsibilities of Implementing a School Wellness Policy

Section II survey statements	Total *n*	Importance[a] Mean± SD	Total *n*	Involvement[b] Mean ± SD
Encourage students to eat healthy	561	3.70 ±.51	544	3.06 ±.86
Promote physical activity	557	3.66 ±.54	542	2.73 ± 1.08
Increase physical activity	555	3.63 ±.59	541	2.52 ± 1.11

Ensure that guidelines are met when implementing the policy	554	3.60 ±.60	539	2.07 ± 1.17
Be a positive model/example of healthy behaviors for elementary students	561	3.46 ±.67	546	2.88 ±.89
Promote school wellness	558	3.40 ±.66	547	2.72 ±.97
Provide nutrition education information	552	3.34 ±.68	533	2.44 ± 1.00
Motivate students to follow the wellness policy	559	3.32 ±.70	541	2.52 ±.97
Interpret school wellness policy requirements	558	3.28 ±.71	538	2.60 ± 1.08
Educate the local community on wellness policy guidelines	556	3.25 ±.73	536	2.25 ±.96
Monitor and enforce wellness policy and procedures	562	3.25 ±.72	548	2.66 ±.98
Create awareness of school wellness	558	3.25 ±.71	543	3.52 ±.96
Discourage high calorie/high fat foods brought from home	559	3.19 ±.79	548	2.44 ± 1.04
Explore/investigate/locate healthy food alternatives	553	3.11 ±.82	545	2.31 ± 1.10
Educate parents/families on wellness policy guidelines	553	3.10 ±.80	536	2.12 ±.97
Seek resources for implementing the local wellness policy	559	3.07 ±.80	543	2.28 ± 1.04
Include nutrition education information in lesson plans	556	3.07 ±.83	530	1.99 ± 1.01
Advocate for change in the school community	552	3.05 ±.82	541	2.37 ±.99
Conduct taste tests for new foods	559	2.67 ±.95	545	2.01 ± 1.15

[a] Scale = 4 (*very important*) to 1 (*not important*)
[b] Importance mean and standard deviation scores in descending order
[c] Scale = 4 (*very involved*) to 1 (*not involved*)

Section III: Implementation Issues

In the third section of the survey, participants were asked to score their level of agreement to benefits and barriers related to implementation of an LWP using a 5-point scale with 5 being strongly agree, 1 being strongly disagree, and 3 as neutral. Of the 11 benefits listed on the survey, respondents most strongly agreed that the wellness policy would *improve physical fitness among elementary students* (4.35 ±.70). This benefit

was followed by *promote life-long eating habits* (4.29 ±.75), *increase intake of healthy foods* (4.28 ±.66), *improve learning ability* (4.15 ±.71), and *improve academic importance* (4.12 ±.75). Most of the respondents strongly agreed with most of the benefits listed, as 8 of the 11 items had a mean score above 4.

Regarding perceived barriers, respondents most strongly agreed that implementing an LWP will *need the support of school administration* (4.58 ±.55). This barrier was closely followed by *need the support of teachers* (4.57±.57) and *need the support of parents/families* (4.47 ±.67) to implement the policy; *takes time to implement*(4.34 ±.76), and *need funding to implement adequately* (3.92 ±.96) followed thusly. Strangely, and in contrast to what was mentioned in the focus groups regarding lack of time, respondents did not rank *leave less time for the "No Child Left Behind" program* (2.86 ± 1.15) or *demand a lot of time from teachers* (2.83 ± 1.09) as major barriers to school wellness policy implementation. See Table 3 for means and standard deviations for all statements regarding benefits and barriers to implementing an LWP.

Table 3. Level of Agreement on Benefits and Barriers Related to Implementation of a School Wellness Policy

Section III Survey Statements	Total *n*	Agreement[a] Mean ± SD
Benefits		
Improved physical fitness among students	561	4.35 ±.70
Promote life-long eating habits	560	4.29 ±.75
Increased intake of healthy foods	564	4.28 ±.66
Improved learning ability	561	4.15 ±.71
Increased academic performance	562	4.12 ±.75
Decreased illness	561	4.10 ±.80
Decreased risk of chronic disease	561	4.05 ±.83
Improved physical fitness among teachers/staff	561	4.01 ±.90
Improved attendance	563	3.99 ±.86
Improved behavior in the classroom	564	3.88 ±.88
Improved eating habits at home	561	3.79 ±.97
Barriers		
Need support of the school administration	558	4.58 ±.55
Need the support of teachers	557	4.57 ±.57
Need support of parents/families	561	4.47 ±.67
Takes time to implement	557	4.34 ±.76
Need funding to implement adequately	549	3.92 ±.96
Need funding to implement adequately	549	3.92 ±.96

Limit student's choices of food they like	562	3.09 ± 1.13
Decreased revenue from vending	554	3.06 ± 1.17
Leave less time for "No Child Left Behind" Program	556	2.86 ± 1.15
Demand a lot of time from teachers	559	2.83 ± 1.09

[a]Scale = 5 *(strongly agree)* to 1 *(strongly disagree)*

Section IV: Healthy Elementary School Environment

In 2005, the SNA released a model policy and guidelines related to school wellness in which the association recognizes that a healthy school environment encompasses more than healthy meals in the cafeteria (School Nutrition Association [SNA], 2005). Responses to this section of the survey support this notion. Using a 5-point scale with 5 being strongly agree, 1 being strongly disagree, and 3 as neutral, participants were asked to indicate their level of agreement with the statements that ended the prefix, "A healthy school environment for elementary children…." All healthy environment survey statements were highly agreed upon with means ranging from 4.01 to 4.81. The top three suffixes were *has a clean and sanitary cafeteria* (4.81 ±.41), *is safe and secure* (4.81 ±.42), and includes *daily physical activity* (4.80 ±.41). Although still high, *encourages provision of healthy food choices on campus* (4.55 ±.65) was not ranked as high as other statements but closely followed*promotes adult-student interaction* (4.57 ±.60) and *has adults who model healthy behavior* (4.56 ±.62).

Section V: Training and Resources Needed to Aid in Attaining School Wellness

In order to produce desirable outcomes, appropriate resources and adequate training are necessary elements when implementing school-based programs (CDC, 1996; SNA, 2005; United States Department of Agriculture, [USDA], 1997). Using a 5-point scale with 5 being strongly agree, 1 being strongly disagree, and 3 as neutral, respondents agreed that they needed training on *strategies to implement the school wellness policy* (3.72±.93). Additional staff was ranked as the most needed resource, as having *physical education instructors* (4.41±.88) and *a nurse in every school* (4.41 ±.89) were most strongly agreed upon by respondents. Surprisingly,*funding* (4.15 ±.90) did not rank as high as researchers expected. Funding was the most frequent response reported for needed resources during focus group discussions. Table 4 displays means and standard deviations for all statements regarding training and resources.

Table 4. Level of Agreement on Training and Resources Needed to Implement the Wellness Policy

Section V survey statements	Total *n*	Agreement[a] Mean ± SD
I need training on…		
Strategies to implement the school wellness policy	542	3.72 ±.93
The school wellness policy	553	3.51 ± 1.03
Nutrition education (i.e. healthy choices, food pyramid, diet, etc.)	544	3.44 ± 1.08
The following resources are needed…		
A nurse in every school	561	4.41 ±.89
Physical education instructors	559	4.41 ±.88
Parent education materials	556	4.29 ±.74
Current information on wellness issues	559	4.25 ±.80

Exercise equipment	560	4.18 ±.86
Wellness and nutrition teaching aids (videos, posters, etc.)	557	4.18 ±.81
Funding for marketing equipment, staff, etc.	557	4.15 ±.90
Updated nutrition information	561	4.08 ±.85
Lesson plan materials for nutrition education	561	3.94 ±.91
A registered dietitian/nutrition educator on staff for the district	559	3.84 ± 1.11
In-service coordinator to plan activities and education	561	3.75 ± 1.02

[a]Scale = 5 *(strongly agree)* to 1 *(strongly disagree)*

CONCLUSIONS AND APPLICATIONS

While survey administration took place nearly eight months after the required implementation of the LWP, 61% of those responding to the survey reported full to at least partial implementation of a wellness policy. Only 1.6% reported not having a written policy. Overall, it appeared that most of the policy requirements were being implemented and there was little disagreement on the benefits of implementing an LWP; SNDs, principals, teachers, and parents considered school wellness in the elementary school setting important to the overall health of children. Participants viewed their roles as important in most aspects of a school wellness policy from encouraging students to eat healthy, to advocating for change in the school community and strongly agreed that support from administration, teachers, and parents was needed for successful implementation of an LWP. In addition, a healthy school environment was perceived by participants more broadly than anticipated, as all areas of school activities, from the playground, classroom, and cafeteria to fundraising, adult-student interactions, and adults modeling healthy behaviors, were included. Without a supportive team to implement, manage, and evaluate the LWP, the potential for excellence would be challenging. Taking a team approach can lead to program sustainability, and ultimately, a healthy school environment with healthier students. This shared responsibility requires the commitment of all members associated with the school community.

One of the primary limitations of this study occurred during the focus group interviews. Most of the participants in the focus groups were comprised of the committees developed to meet the requirements set forth by the LWP. The participants were fully immersed in planning and implementation of the policy in their school district. Therefore, the content presented in the focus group, and ultimately represented in the final survey, may not reflect the attitudes of those that were not as involved in policy planning.

A second limitation to the survey methodology was the way in which the surveys were distributed. SNDs were asked to deliver a survey to a principal, a teacher, and a parent. Since the surveys were not mailed directly to the participants and there was no follow-up method used to encourage the return of surveys, it may have influenced the low return rate of the survey. However, there was a fairly equal distribution between principals, SNDs, teachers, and parents that responded to the survey.

A statistical limitation to the survey was the large number of questions on the survey. When interpreting the ANOVA results, care must be taken not to place a large emphasis on any statistical differences found. The inclusion of parents in the study served as a limitation due to their limited knowledge regarding implementation of an LWP. While researchers believed it was important to gain the perspective of this group, many parents have limited knowledge of the wellness policy and even less knowledge related to its implementation within each school district. Therefore, some of the answers given may have been a guess, with the potential to skew the results. A final limitation was the time of year in which the survey was distributed. The survey was mailed in the late spring of 2007. This proved to be a time when school officials were busy preparing for annual achievement testing and a time of year when schools were closed for spring holidays.

Schools can play a valuable role in improving the health and wellness of children. Findings from this study confirmed a need for training and credible resources that provide strategies for effective LWP implementation. Additionally, support from the school community, the local community, and the family can promote the team approach that is essential for comprehensive school health programs. Ultimately, the first step to achieving LWP outcomes is to create messages of health and wellness which are consistent between the school, the home, and the local community.

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