Student and Parent Perceptions of Barriers to and Benefits of the School Breakfast Program in Elementary Schools in Southeast Alabama

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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 study was to explore the factors impacting participation in the School Breakfast Program (SBP) for elementary school students in southeast Alabama.

Methods:
Focus groups were used to gather qualitative data from southeastern Alabama public school fourth and fifth grade students and their parents. Six student focus groups and three parent/guardian focus groups were conducted, from a total of five schools. Focus group interviews were transcribed and analyzed using the constant comparison method.

Results:
Five major themes emerged to explain why students do or do not participate in the SBP: 1) belief that breakfast is important; 2) dislike of or sensitivity to the foods offered; 3) timing and scheduling; 4) cost of the school breakfasts; and 5) stigma. The cost of the breakfast as a barrier was a surprising find; parents not qualifying for free- or reduced-price meals stated that they cannot afford the cost of the breakfast meal.

Applications for Child Nutrition Professionals:
Expanding the program to provide meals for all students, regardless of their family’s income, could increase SBP participation and also address the stigma barrier. Improving the palatability and variety of foods offered, and allowing students who are late to still eat breakfast, may also increase SBP participation.

INTRODUCTION

The School Breakfast Program (SBP) was established to ensure that breakfast “be made available in all schools where it is needed to provide adequate nutrition for children in attendance” (U.S. Department of Agriculture [USDA], 2010). Only 63% of Alabama’s public school children participate in the National School Lunch Program (NSLP) and only 48% of the children participating in the NSLP also participate in the SBP (Food Research & Action Center [FRAC], 2008).

These are unfortunate findings given the many benefits associated with eating breakfast. Consistently eating breakfast has been strongly linked to improvement in school attendance, psychosocial functioning, behavior in school, and math grades (Berkey, Rockett, Gillman, Field, & Colditz, 2003; Kim et al., 2003; Kleinman et al., 2002; Murphy et al., 1998; Powell, Walker, Chang, & Grantham-McGregor, 1998). Furthermore, there is a strong link between breakfast consumption and positive effects on memory, both long-term and short-term (Lopez-Sobaler, Ortega, Quintas, Navia, & Requejo, 2003; Pollitt, Cueto, & Jacoby, 1998; Rampersaud, Pereira, Girard, Adams, & Metzl, 2005; Simeon & Grantham-McGregor, 1989; Wyon, Abrahamsson, Jarvelius, & Fletcher, 1997).
In addition to the cognitive and academic outcomes, breakfast consumption may also promote healthful body weight. Gleason and Dodd found that the odds of children and adolescents being overweight or obese are 30% lower if they consume breakfast at least five times a week (2009). Further, a student that eats school breakfast every day is expected to have a Body Mass Index that is 0.75 kg/m\(^2\) lower than a student that never eats it, if age, race, and socioeconomic status are otherwise equal.

Healthy weight maintenance is not the only health benefit of breakfast consumption. Breakfast-skipping children have been shown to have higher serum cholesterol levels as well (Rampersaud et al., 2005). Child and adolescent breakfast eaters are also more likely to meet the Dietary Reference Intakes for micronutrients, specifically with Vitamins A and C, riboflavin, calcium, zinc, and iron.

Previous studies have shown that barriers to SBP participation include a social stigma attached to participating in the program, a reluctance to arrive at school earlier to participate, disinterest in the foods offered, and the belief that meals offered are not of adequate nutritional quality (Greves et al., 2007; Huang, Lee, & Shanklin, 2006; James, Rienzo, & Frazee, 1996; McDonnell, Probart, Weirich, Hartman, & Birkenshaw, 2004). To our knowledge, no studies have been conducted in the southeastern United States. The purpose of this study was to investigate the attitudes of fourth and fifth grade school children and their parents regarding the SBP in Alabama, and perceptions of barriers to and benefits of the program.

**METHODOLOGY**

**Research Method**

This study used focus group interviews, as described by Krueger and Casey (2000). Nine focus groups were conducted from May through December, 2010. Three focus groups were conducted with parents and/or legal guardians in three schools. Six focus groups were conducted with students in four schools.

**Recruitment of Participants**

School selection was based on several factors: a) suggestions from Alabama state child nutrition program staff, b) willingness of school nutrition directors, principals, and teachers to support participation and recruitment, and c) travel and personnel resources. Five schools in southeastern Alabama were selected. Fourth and fifth grade students and their parents were invited to participate in the focus groups. The use of the two different population groups allowed the researcher to make comparisons both from one group to another within a category (e.g., between student groups) and from one group category to another, comparing what students said to what parents said (Krueger & Casey, 2000).

The students and parents were invited to participate through a letter sent home with the students explaining the purpose and timeline for the study, in addition to consent and permission forms. Students who returned their forms to their teacher by the date of the focus group were eligible to participate. The parents brought their consent forms with them on the day of the focus group to participate.

**Focus Group Procedures**

A trained facilitator conducted each focus group using standard moderation techniques (Krueger & Casey, 2000). Questions for parent and student groups was developed and tested in a pilot focus group before the focus groups were conducted. Open-ended questions were used to start the discussion and capture a wide range of beliefs, barriers, and behaviors.

These questions served as a guide for the facilitator, who took a flexible approach so that the group directed the discussion rather than the moderator. Students and parents were asked parallel sets of questions with additional questions to clarify or explain responses to the standard questions (Table 1).

<table>
<thead>
<tr>
<th>Question</th>
<th>Student</th>
<th>Parent</th>
</tr>
</thead>
<tbody>
<tr>
<td>What does “breakfast” mean to you?</td>
<td>Tell me about your morning and when you first eat. Include what you eat, who it’s with, what time, etc.</td>
<td></td>
</tr>
<tr>
<td>Tell me about your typical breakfast on a school day. (e.g. where do you eat, with whom)</td>
<td>Do you know what a School Breakfast Program is?</td>
<td></td>
</tr>
</tbody>
</table>
How much time do you usually have in the morning to eat breakfast, before leaving for school? [If they seem to know: Tell me about what the perfect SBP would look like to you.]

If you are not eating breakfast before school, what are the reasons?

When you hear the term “School Breakfast Program” what is the first thing that comes to mind?

If you don’t have breakfast in the morning, how would you feel? (e.g. tired, unable to listen to the teacher, etc.)

Who do you imagine participating in the program?

How does snacking in the morning affect your school day? Does it help you in learning or playing (e.g. sports, music, games)?

Who do you imagine participating in the program?

What are some of the things that would keep your child from eating breakfast at school?

When you think about breakfast served at school, tell me what you picture. Who is there and what are they eating?

When you think “nutritious breakfast”, what foods come to mind? What types of foods do not come to mind?

What school breakfast foods would you want to eat?

How can a SBP provide a healthy breakfast?

Did I forget to ask anything? / Is there anything else that you wanted to say?

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All focus groups were conducted at the school from which participants were recruited, in meeting rooms with chairs arranged in a circular manner around a boardroom style table, as suggested by Kitzinger (1995). All focus groups were audio recorded.

Data Analyses
The researcher and a research assistant transcribed the audio-recordings of each group verbatim. All participant and school names were excluded from the transcriptions for protection of privacy. Written notes recorded by the researcher were used to aid the transcription process, as suggested by Krueger and Casey (2000). Following transcription and accuracy checking, the transcripts were uploaded to the software program ATLAS.ti (version 6.2.17, 2011, ATLAS.ti Scientific Software Development GmbH, Berlin). Then, coding of text fragments based on content was done through multiple coding by the researcher and a research assistant independently, and compared for inter-rater reliability (Barbour, 2001).

The coding process followed the method of constant comparison, developed by Glaser and Strauss (1967), and summarized by Dick (2005). In this method, the researcher approaches the first set of data with a set of basic questions: “What is going on here? What is the situation? How is the person managing that situation?” (Dick, 2005). The second set of data is then coded with the first set and its categories and early themes in mind. As categories emerge, categories begin to appear with higher frequency and a connection to multiple other emerging categories is made. The categories that appear most frequently are identified as the “core categories.” Once the researcher has identified them, coding ceases for text unrelated to these categories, and the analysis becomes focused on the categories that are related to core categories. When the data sets fail to add new information to what is already known about a category, its properties, and its relationship to the core category, then saturation is reached and coding ceases for that category.

Ethical approval for this project was obtained from the Institutional Review Board at Auburn University.

RESULTS AND DISCUSSION
A total of 78 subjects participated in the study. Participants included 49 students from the fourth and fifth grade, in six focus groups, and 29 parents and guardians of the fourth and fifth grade students in three focus groups. Focus group sizes ranged from 5 to 12 participants, with with an average of 8 focus group participants. Five categories and 12 themes emerged (Figure 1).

Figure 1. Categories and themes emerging from data analysis.

**Breakfast Consumption**
The importance of breakfast consumption was a common theme in the student and parent focus groups, as was the effect of breakfast skipping on both parents and students. When asked to define breakfast, common responses from students included that it was “brain food” and “it gives energy and nutrients.” Students also were aware of the physical effects of skipping breakfast, and how it can impact them in school. They discussed how when they missed breakfast they felt sick, got stomachaches, were “grouchy,” and could not concentrate.

The students also talked about the importance of the SBP, and appeared to consider it essential at their school. One student’s response showed the positive association the student had with the SBP and their gratefulness for the program:

I think it's a privilege that the school gives you a chance to have breakfast if you don't have time at the house. It’s giving you a chance to still get breakfast.

The parent focus groups also discussed how eating breakfast may influence their child’s behavior, academic performance, and energy level. They also discussed the importance of schools to providing breakfast. Parents appreciated that an SBP gave them one less thing to worry about during their busy mornings, for example:

It's a positive for me, and also a major convenience. Because I have two girls, so I can focus on getting them prepared . . . for school rather than going in the kitchen trying to fix the food, and then trying to get them ready.”

**Foods Offered**
When asked what they envision when they think of school breakfasts, the most frequent response from students and parents was negative. With the response primarily being dislike of the foods, the discussion sought to determine what about the foods they don’t like. Preparation was frequently talked about in both the parent and student groups. Parents and students perceived the food to be undercooked. Parents also believed that most of the foods served were not hot foods, but instead consisted of “quick items” like cereal, fruit cups, and toast. The students also perceived the milk to be “watery,” “expired,” “spoiled,” and “freezer burned.”

The students and parents perceived that school breakfasts did not provide adequate nutritional value and that the portion sizes were too small. In each of the focus groups parents stated they believed the breakfasts being served consisted of “junk food” and “something simple and easy, like cups of fruit.” Other parents stated they thought the schools were providing nutritious food, but they just didn’t think they were providing enough of it.

Allergies to the foods being served were another issue perceived as a barrier to participation in the SBP. As one parent said, “A lot of kids can’t eat certain foods . . . some of them have allergies, so they can’t tolerate them.” Food sensitivities noted included lactose, gluten, and peanuts. Lactose intolerance was an issue mentioned in all nine student and parent focus group.

When asked what foods students and parents would like to see offered by their schools, a wide variety of foods were listed, which ranged in nutritional value. A variety of fresh fruit options were the most commonly mentioned foods by both students and parents. Other suggested foods listed by both groups included: fruit juices; yogurt; waffles; grits; sausage biscuits; oatmeal; “more grains;” croissants; and breakfast burritos.

**Timing**
Timing and scheduling was a category discussed throughout the focus groups, and was the barrier most frequently mentioned by parents and students. Students who were late for school, due to a late bus, sleeping in, or a delay caused by parents, either missed breakfast altogether or were rushed to eat their breakfast in a short amount of time.

Buses were a major theme in the focus groups, and often posed a barrier to student breakfast consumption. Parents and students said when a bus was late to school, the students on that bus proceeded directly to their
classroom without breakfast. The parents expressed disapproval of this policy because they felt bus delays were not the child’s fault.

Sleeping in and/or running late was a common barrier to SBP participation mentioned in student focus groups. Students reported missing their bus because of sleeping in, arriving at school after breakfast ended. Students also mentioned traffic and parents as other reasons for arriving late for the breakfast meal.

Rushing to eat breakfast upon arrival at school was another common barrier mentioned in the focus groups, for example:

Most kids, when they can get breakfast at school, it’s just grabbing it, popping it in their mouth . . . and then going to get to class before they’re tardy.

Reasons given for students being rushed to eat included students being late on their own, long lines in the lunch room, not enough time provided for them to eat, and students being sent to the end of the lunch line for talking while in line.

Costs
Cost of the breakfast meal was a barrier mentioned only in parent focus groups. The two themes relating to costs were: eligibility for participation in the free- or reduced-price SBP and problems with the payment system at the schools. Parents discussed the lack of eligibility for a free or reduced-price breakfast as a barrier to their child’s participation in the SBP. Parents commented that if they were just slightly above the poverty guidelines and didn’t qualify for a free or reduced-price breakfast, they still might not be able to afford the meal, for example:

I mean, if you’re a blank dollar or two dollar over, your child doesn’t get. So technically you may not really be able to afford of this, you can’t fund your meals. And so that’s just really not fair because you still have some kid in that game and they’re eating, everyone knows, and your stomach is rumbling, and you can’t concentrate.

The other theme regarding costs was issues with the payment system that the schools used. Parents used either an online payment system or provided a check or cash to be applied to their child’s school meal account. When the student’s account was empty, the parents said that the child was sent out of the meal line without any food. Parents also stated that they frequently did not know the status of their child’s account.

Stigma Issue
A stigma associated with SBP participation was discussed in several of the groups. This stigma was most commonly associated with the perception that the school breakfast was provided for students whose families cannot afford to feed them at home. A student’s explanation of who typically is eating breakfast at school demonstrates a negative connotation associated with the program:

Maybe some of the kids’ parents don’t have enough money to buy their children breakfast and stuff, so the kids just come to eat breakfast at school.

All of the parent groups discussed the stigma issue and the impact that it can have on the children. Parents felt that participation in the SBP could be associated with being unable to afford breakfast at home, as well as setting children apart as different from the other students, for example:

At our kids’ age, they don’t like to take their lunch; they want to do what everyone else is doing. Then it’s like, oh, well, you can’t afford breakfast, or, oh, you’re getting free breakfast, and it puts that stigma so early on a child.

Although procedures are in place to avoid overtly identifying students as free- or reduced-price participants, these responses indicated that the children are still aware of who is paying and who is not. One parent suggested: “It should be equal for everyone . . . just provide the breakfast for everyone.”

CONCLUSIONS AND APPLICATIONS

Focus groups were conducted with students and parents of students in southeast Alabama to explore perceived barriers and benefits to SBP participation. The significance of the benefits of SBP participation, including increased breakfast consumption, was identified, as well as barriers, including foods offered, timing, costs, and stigma.
Among the key barriers found, the most striking is the barrier of cost. The SBP was founded with the intent that the program “be made available in all schools where it is needed to provide adequate nutrition for children in attendance” (“School Breakfast Program: Program History,” February 2009). Eligibility for free- and reduced-price meals is based on the poverty guidelines, but the parents in this study indicated that although they did not qualify for free- and reduced-price meals, they could not afford their child’s participation in the SBP. A common discussion in the parent groups was their desire for the schools to provide breakfast to all the students who attend, despite their family’s income.

The parents and students strongly believe that breakfast is the most important meal of the day, and they understand the negative impacts that breakfast skipping can have on children, academically and physically. Dissatisfaction with foods offered is a theme identified in many research studies on school breakfast (Greves et al., 2007; James et al., 1996; Lambert & Carr, 2005; McDonnell et al., 2004). The students in every school talked about their perception that the milk was spoiled and food was undercooked. Guidance for the schools, published by USDA’s Food and Nutrition Service, recommends that the milk dates are checked to ensure safety and quality (2005). In addition, a program to educate the students about the meaning of the terms used to label milk may be beneficial, because students may not understand the milk date labeling.

Parents stated that they were not happy with the quality of the food being offered, as they perceived it as nutritionally inadequate. Additionally, both students and parents named some suggested foods for the SBP that contain high fat and calories. Education may be needed for parents regarding the federal nutrition standards that meals must meet, including that breakfasts must provide one-fourth of the Recommended Dietary Allowance for protein, calcium, iron, vitamins A and C, and calories (USDA, 2010). Further education on healthy breakfast options would also be beneficial for students and parents, based on focus group responses.

The issue of food insensitivities was another barrier found in this study that has not been previously identified in research studies. Many parents and students discussed lactose intolerance and its impact on school breakfast consumption. When a meal is offered for breakfast that contains milk products, the students don’t have a second option and have to skip the meal. If schools provide a lactose-free milk option, lactose-intolerant students may also be able to eat foods containing lactose, including cereal, rather than skipping the meal altogether due to their intolerance. This also pertains to other food sensitivities, such as gluten intolerance and peanut allergies.

The stigma issue associated with SBP participation is a barrier found in many studies (FRAC, 2002; James et al., 1996; Lambert & Carr, 2005; Lambert, Raidl, Carr, Safaii, & Tidwell, 2007; Lent & Emerson, 2007; McDonnell et al., 2004). One possible solution suggested by the parents is providing all students with a free breakfast, regardless of income, to change the perception that only “poor” students participate in the SBP. Instead, the norm would be that all students eat breakfast at school, and every child would do so.

Despite the many reported benefits of school breakfast, including grades, school attendance, memory, and healthy weight, barriers to participation in the SBP still exist and participation in the SBP remains far lower than participation in the NSLP. Understanding the perceptions of students, parents, and school nutrition personnel may assist in designing successful approaches to promoting the SBP. This research supports past studies regarding perceptions of the SBP program, in addition to finding new barriers. The most significant new barrier is the impact of the cost of breakfast for those who do not qualify for the free- or reduced-price meal.

This research has many implications for the future study of SBP participation, especially in Alabama. First, it provides a basis for further exploration of what foods students and parents would like to see offered in schools, how timing and scheduling in schools may affect breakfast consumption, qualification for free- and reduced-price school meals, and the stigma that is associated with participation in the SBP. In addition, identified themes under these categories build a conceptual knowledge base for further exploring factors influencing SBP participation. Findings also support evidence regarding the benefits of breakfast consumption in school-age children and possible side effects of breakfast skipping. Though quantitative research is present to show the lack of participation in the SBP in Alabama, no prior research has focused exclusively on the perceptions of stakeholders on the barriers to and benefits of SBP participation in Alabama.

Future research recommendations include: focusing on methods to successfully promote the SBP to increase participation; and combining qualitative and quantitative methods to explore the connections among perceptions, family income, dietary intake, nutritional status of students, and participation in the SBP. A study involving an expanded population of stakeholders involved in the SBP in Alabama, such as school nutrition directors and managers, and school principals, would also give further insight into SBP participation.
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REFERENCES


**BIOGRAPHY**

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