Local Ghanaian Stakeholder Perceptions After One Year of a New School Feeding Program in Adjeikrom, Ghana

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LOCAL GHANAIAN STAKEHOLDER PERCEPTIONS AFTER ONE YEAR OF A NEW SCHOOL FEEDING PROGRAM IN ADJEIKROM, GHANA

THESIS

A thesis submitted in partial fulfillment of the requirements for the degree of Master of Sciences
College of Agriculture
at the University of Kentucky

By

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ABSTRACT OF THESIS

LOCAL GHANAIAN STAKEHOLDER PERCEPTIONS AFTER ONE YEAR OF A NEW SCHOOL FEEDING PROGRAM IN ADJEIKROM, GHANA

The objective of this qualitative longitudinal study was to assess stakeholder perceptions after one year of a new school feeding program to contrast and compare to pre-program expectations. Semi-structured interviews were conducted using questions reviewed by an in-country collaborator for cultural sensitivity and appropriateness. Follow up questions were determined from participant response. The interviews were analyzed by performing content analysis using open and axial coding to find key concepts in the data. The results showed the school feeding program met stakeholder expectations regarding reduction in absenteeism and truancy, improving classroom behavior and increasing enrollment as well as relieving short term hunger. The stakeholders also reported unexpected improvements in behavior of the child at home, increased disposable income, and extra meals being served at home.

KEYWORDS: stakeholder, qualitative, paradigm model, school feeding, axial coding

Monica E. Fowler

November 19, 2012
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November 19, 2012
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DEDICATIONS

To my husband,

Joseph Shane Fowler

For always believing in me and teaching me to believe in myself

&

My children, Satchel Fowler and Rebecca Saltsman

Who are helping me grow up
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CHAPTER ONE

Introduction

Why Do School Feeding Programs Exist?

The United States National School Lunch Program was enacted in 1946 to reduce childhood hunger and improve the health of children attending public schools in the United States through use of domestic surplus commodity products (USDA, 2012). The USDA National School Lunch Program differs from the Ghanaian Food for Education program in terms of its overall goals. The USDA program goal is alleviating hunger, a Food for Education program is geared toward using school feeding programs to improve and support educational objectives (Abdulai, 2009). A 2007 review of school feeding programs throughout the world shows goals of increasing school enrollment, decreasing truancy, improving educational outcomes and for helping to relieve short term and long term hunger as well as nutritional deficiencies (Greenhalgh, Kristjansson, & Robinson, 2009). There are often unforeseen desirable and undesirable consequences of school feeding programs necessitating continual evaluation of ongoing programs. This paper reviews the stakeholder perceptions regarding the impact of a school feeding program in the rural village of Adjeikrom, Ghana.

Review of School Feeding Programs

A 2009 Cochrane review shows the context in which a feeding program exists can be critical to its success. In countries where malnutrition was a problem due to chronic poverty and need, or at times of acute economic upheaval in developed countries nutritional deficiencies have been reduced. (Kristjansson et al., 2009). Short-term hunger
relief does not always translate into improved educational outcomes. Results show school feeding programs do reduce absenteeism in countries with chronic poverty and hunger, but not always in developed countries. Evidence also shows that in families that can afford to buy some food, school feeding programs influence what is served at home. However, in places where there is a limited food supply or lack of resources, fewer changes were seen at home (Kristjansson et al., 2009).

Just as context is crucial to the success of school feeding programs, there are common characteristics that may further explain the probability of success. Providing a food substance that is not normally consumed in the daily diet of the country can cause children to refuse the food offered. If a needed nutrient is provided too late in the lifecycle then the intervention will be ineffective. It has also been found that families will compensate for food eaten at school by reducing food served at home thereby negating the desired benefits that would be derived by consuming additional calories (Kristjansson et al., 2009).

Background

In 2010 the Food and Agriculture Organization of the United Nations (FAO) estimated that nearly 1 billion people in the world are undernourished (FAO, 2010). Most of the underfed live in developing countries where needy people do not always have access to potable food and water. This access can become tenuous in times of economic upheaval or natural disaster (FAO, 2010). As of 2007, the independent African country of Ghana had nearly reached the first Millennium Development Goal of reducing the number of the underfed population from 20% to 10% by 2015 (FAO, 2010). This is due, in part, to the 2005 decision by the Ghanaian Government to pilot a school feeding
program in 10 schools in each region of Ghana. The success of the pilot program convinced the government to expand the program and by 2007 over 400,000 students attended schools with some type of feeding program. The Ghanaian approach to school feeding is to promote Home Grown School Feeding, a program developed by the World Food Program. This approach feeds students using locally produced agricultural products thereby decreasing hunger and increasing agricultural productivity by strengthening food systems and increasing opportunities for jobs, especially for women (Bundy et al., 2009).

Non-governmental organizations have been involved in starting and supporting various types of feeding programs throughout Ghana for many years. Catholic Relief Services instituted one of the first programs in 1958 as a way of encouraging females to attend school by offering hunger relief. It sought to increase school enrollment in primary schools by providing not only hot lunches, but also take home rations for female students regularly attending school (Abdulai, 2009). Children had been absent or not enrolled in school despite being of school age for myriad reasons: parents did not see the benefit of education, children were needed at home to help generate income for the family, no one was available to get the children to school in the morning. Offering a hot meal to children in exchange for attending school allowed for opportunities to educate children as well as alleviate short-term hunger. Catholic Relief Services theorized that once the students were enrolled in school the parents would see the benefits and long term education would result (Abdulai, 2009).

In January 2011, a new school feeding program was started at the Kentucky Academy kindergarten in Adjeikrom, Ghana under the auspices of the University Of Kentucky School of Human Environmental Sciences. Adjeikrom, Ghana is a rural
farming community where many of the older children are not in school because they are
needed to work on family farms. There are limited outlets for Ghanaian farmers to sell
their products other than at roadside stands. It is not unusual to see parents and children
working daily at roadside stands selling their products. The lack of infrastructure
hampers rural Ghanaians’ ability to transport and receive goods. Poor road conditions
make it difficult for farmers to move beyond small-scale farming. Land for small
gardens is cleared with machetes and other hand tools. Dr. Kwaku Addo, faculty in the
Department of Dietetics and Human Nutrition at the University of Kentucky and a
native Ghanaian, recognized the need for a kindergarten program in Adjeikrom, the
home village of his wife, Esther Addo. At that time there were few resources for
kindergarten age children to attend school in Adjeikrom. Those privileged enough to
attend school did so sporadically due to stresses on family income and time constraints.
Parents were not able to send money to school to feed the children during the day and
children who were attending school often left during the day seeking food and did not
return (Miller-Spillman, Addo, 2012).

Beyond the economic realities facing families in Adjeikrom, the school physical
structure was in poor repair. By the end of 2000, with community support and private
donations, a new classroom building had been constructed. The new kindergarten was
named The Kentucky Academy. With support from the Kentucky Extension
Homemakers Association a dining pavilion and outdoor kitchen was constructed in
2009. The Kentucky Extension Homemakers Association has continued to provide
financial support to The Kentucky Academy. In 2010 a school feeding program was
started at the Kentucky Academy under the guidance of Dr. Janet Mullins, faculty in the
Department of Dietetics and Human Nutrition at the University of Kentucky. The school feeding program provides free school lunch to kindergarten students who attended The Kentucky Academy. The village chief allocated land for a school garden (Miller-Spillman et al., 2012). Although the Ghanaian government mandated the expansion of the government sponsored school feeding program to all schools, it had not arrived in Adjeikrom in 2011 when the school feeding program first began at The Kentucky Academy. A 2012 news report on Ghana Web stated school feeding programs are now in 4,500 schools (Ghana Web, 2012). In 2012 the government had funded the feeding of primary students in the adjoining Adjeikrom public school. Caterers had been contracted by the government to purchase and prepare food for the school. Stakeholders were skeptical as to the quality of the food being served by the primary school caterers. One researcher was told the primary school cooks were “putting on a show” while the study group was present and the food being served was of better quality than usual. A news story published on Ghana web in October 2012 stated that many of the caterers that had been contracted by the government to provide food have either been underpaid or not paid at all by the government. This has led to some school children no longer being fed at some Ghanaian schools (Ghana Web, 2012).

**Statement of the Purpose**

The purpose of this study is to assess stakeholder’s perceptions regarding the impact of a new school feeding program at the Kentucky Academy in Adjeikrom, Ghana on student learning and behavior as well as the community at large.
Research Questions

1. Have perceptions changed regarding how the school feeding program affects student behavior, attendance and learning from January 2011 to June 2012?

2. Have perceptions changed regarding the impact the school feeding program has on the community from January 2011 to June 2012?

Justification

School attendance is influenced by parental and other stakeholder attitudes. A school feeding program can provide an incentive to parents to send their children to school thus making it possible for them to get an education. It is important to know if and how opinions held by stakeholders involved in a newly instituted school feeding program have changed after participating for a year. Positive perceptions regarding the school feeding program could increase village support of the program and provide incentives for continued financial support. Negative perceptions for the program can guide improvements needed for the program to remain sustainable.

Assumptions

It was assumed the Ghanaian stakeholders were honest in providing their opinions in January 2011 and will provide honest opinions in June, 2012. It was assumed the opinions of those interviewed reflect the opinions of the village at large. It was also assumed that there will be a negligible language barrier between the Ghanaian Stakeholders and the investigators of this study.
CHAPTER TWO

Literature Review

**Issues Arising While Assessing School Feeding Programs**

Studies assessing quantitative outcomes from school feeding programs are prevalent in the literature. However, studies assessing perceptions and expectations of a feeding program using qualitative data have been rare. Studies about school feeding programs that involve perceptions and opinions from the shareholders involved are not widely undertaken (Williams, McIntyre, Dayle, & Raine, 2003). Williams et al found in their review that studies about school feeding programs are focused on nutritional outcomes rather than on the perceptions of the people involved in the intervention. One of the issues that often make examining perceptions stakeholder hold about school feeding programs is that stakeholders might be reticent to talk to investigators about problems that exist within new school feeding programs. Investigators have found that some shareholders describe school feeding programs in glowing terms because they are worried that their jobs or status in the community depend in some part on the success of the school feeding program (Williams, McIntyre, Dayle, & Raine, 2003).

Why Stakeholder Involvement and Perceptions are Important

Stakeholder perceptions can help shape programs to meet the needs and expectations of the population of the provided intervention. The Millennium Project Hunger Task Force proposed in 2003 that school feeding programs be linked to local and domestic food sources. The Task Force posited buying local foods would increase food sovereignty and encourage community involvement as well as improve local economies.
The Ghana School Feeding Program began in 2007. In 2008 a review of the program in four districts in Ghana found that stakeholders felt specific improvements were needed for qualified cooks, increased use of locally sourced foods and the attachment of school farms to existing school feeding programs (Quaye, Essegbey, Frempong, & Ruivenkamp, 2010). Stakeholders were of the opinion that parents should be allowed to be involved in choosing what foods the students ate at school. However, there has been less community involvement than anticipated (Quaye et al., 2010). Community members were supposed to be involved in management decisions related to the school feeding program in their community. This was to promote transparency within the school feeding program and to allow for local communities to make decisions tailored to specific needs of their communities (Quaye et al., 2010). The research shows that although most Ghanaians are aware of the school feeding program, adults participating in the management of the program on a local level or who had market access ranged from 39% in the Mfantsiman district to 5% in the Tolon Kumbungu district (Quaye et al., 2010). Community participation is considered vital to success of food sovereignty and is felt to be integral to sustainability of school feeding programs. When stakeholders have a sense of ownership in a program they are more likely to advocate for the program during shifting political climates (Quaye et al., 2010). Stakeholders interviewed stated two of the most positive outcomes of the Ghana School Feeding Program were that more children were being sent to school and that money previously used for food in the family budget was being allocated for other family needs. This outcome shows that one of the long term goals of the Ghana School Feeding Program, a reduction in poverty, is being realized (Quaye et al., 2010).
The literature also suggests lay involvement allows the program to reach otherwise
hard-to-reach populations, thus increasing the scope of the intervention, cost savings
from volunteerism and benefits to the lay workers themselves. Allowing community
involvement in interventions can help assure the intervention is culturally appropriate
(Kennedy, 2010). Research demonstrates that communities being served by outside
agencies found groups considered “difficult to reach” more receptive when approached
by trained community members. This is attributed to shared similar experiences in their
daily lives. These shared experiences were found to be crucial when trying to overcome
barriers experienced by personnel from outside of the community (Kennedy, 2010). The
literature suggests that community involvement also leads to improved conditions at
schools where school feeding programs exist. A review of a school feeding program in
Pakistan by the Department of Community Health Sciences at the Aga Khan University
in Karachi, Pakistan found that using community based approaches improved the
outcomes of the school feeding intervention. Allowing local women to plan the meals
and aid in purchasing the food along with serving the meals led to an increase in the
number of teachers needed due to the increase in enrollment. The children were more
attentive and the schools operated on a more structured time schedule. There were also
improvements to the school structures and improved food safety practices in the kitchen
(Pappas et al., 2008).

While it is well documented that stakeholder involvement helps to ensure the
quality of the program, getting stakeholders to be involved is difficult. The time and
resources of parents are often stretched thin even in affluent communities in developed
countries. The Catholic Relief Services program in Ghana in 1958 was designed for
heavy participation by community members because they felt this would improve program outcomes and would ensure that the intervention was culturally sensitive. Even so, upon review, Catholic Relief Services found most of the work was being performed by school teachers rather than volunteers. Volunteers reported they found it difficult to make it to the school daily to help (Abdulai, 2009). Organizations that depend on community volunteerism continue to struggle to find ways of increasing community support and instill a sense of ownership in programs. They also continue to work to fight ennui in those who feel needed changes are not made in an efficient manner (Abdulai, 2009).

**Who Attends School and Why?**

A 2000 study published in *Social Forces* found bias from parents regarding the gender of children allowed to attend school. Female children are at a disadvantage with regard to school attendance. Male children are perceived in some countries to have a better chance at earning a higher income if they are educated (Buchmann, 2000). Female children may therefore remain at home to help rather than attend school (Hadley, Lindstrom, Tessema, & Belachew, 2008). A large scale intervention in Pakistan conducted from 2002 to 2005 found that a school feeding program engaging community women as the primary managers of the program increased enrollment for girls for the duration of the program. The school feeding program was suspended in 2005 resulting in a decreased in school attendance. This provides further evidence that school feeding programs lead to increased enrollment, especially for females (Pappas et al., 2008)
CHAPTER THREE

Methodology

Qualitative Data

Qualitative content analysis is a research method which seeks a deeper understanding of the underlying context of written, verbal or electronic communications. It is not used to quantify the results statistically, but to understand why certain phenomena occur, rather than the rate of occurrence. Qualitative analysis allows the researcher to view the data from a perspective unbound by existing theory. It allows the researcher to study the phenomena within the social context of the native population. The results of qualitative research are not used to generalize about a whole population, but can be useful for understanding the actions and emotions of the sample, or similar populations. Qualitative research can lead to the development of theories that can then be tested in comparable settings (Swift & Tischler, 2010).

Data Collection

The phenomenon being observed in this study is how starting a school feeding program in a kindergarten affects a West African village in Ghana. This research study was approved by the Institutional Review Board at the University of Kentucky, in April 2012. After obtaining informed consent, semi-structured interviews were conducted by two investigators. Prepared open-ended questions were reviewed by Vivian Tackie-Ofosu, lecturer in the Department of Family & Consumer Sciences at University of Ghana-Legon and in-country collaborator, for cultural sensitivity, appropriateness and content validity. The questions were asked, along with follow up questions determined
from participant response, in the dining pavilion at The Kentucky Academy. Interviews were video and audio taped. The primary investigators also took handwritten notes to provide perceptions not accurately captured by the recordings. Survey questions asked prior to the beginning of the school feeding program were again asked concerning stakeholder perceptions of community impact in general and child hunger issues related to the learning environment. The sample for this study included 44 interviews conducted with stakeholders of the school feeding program, which began January, 2011. Interviews were conducted to compare and contrast perceptions relating to the school feeding program in June of 2012 to those held prior to its inception in 2011.

Research Methods

The transcribed interviews were initially open coded by the primary investigator. Open coding is “the process of breaking down, examining, comparing, conceptualizing and categorizing data” (Strauss & Corbin, 1990). How the data is coded is left to the discretion of the researcher based on the data. The data can be coded line-by-line, by sentence, complete paragraph or by entire interview (Strauss & Corbin, 1990).

For the analysis the coder read through the interviews and made notes and initial codes names in the margin regarding what concept emerged from that particular piece of data. The coder referred back to what had been previously coded so that similar concepts were given the same code name. This “constant comparison” process was used to help central themes emerge in the data (Strauss & Corbin, 1990). After initial analysis of the data, all concepts were compiled into a central code book. Each concept was given a definition. The code book was then sent to additional researchers for use when analyzing the data. The additional coders then coded the same data adding new concepts where
deemed necessary. When all the data had been analyzed independently, the coders met and grouped the concepts into categories, discussing where disagreement existed on the data. Disagreements were discussed until unanimous agreement had been reached. Each category was then given properties to help describe the category. The properties were given dimensions, which illustrates where those properties lie on a spectrum. A new code book was generated based on this set of categories. The coders then independently recoded the data using the new categories. The primary researcher then grouped the data by code from the interviews conducted in 2011 and 2012. This grouping allowed the primary researcher to compare and contrast the perceptions held by stakeholders before the kindergarten school feeding program began to perceptions held after one year in operation.

After the data had been re-analyzed and re-coded with the new code book and the data had been grouped by code, the coders met again to perform axial coding on the data. Corbin & Strauss describe axial coding as “a way of making connections between a category and its sub-categories” (Strauss & Corbin, 1990). This helps illuminate the phenomenon within the context of how and why it is occurring. A paradigm model is created to help link the causal conditions to the phenomenon being studied as demonstrated: 1) causal conditions > 2) phenomenon > 3) context > 4) intervening conditions > 5) action/interaction strategies > 6) consequences (Strauss & Corbin, 1990).

The paradigm model resulting from data analysis of the 2011 and 2012 interviews became: 1) causal conditions [environmental & system limitations, low income, time constraints] > 2) phenomenon [childhood food insecurity], > 3)
context [rural Ghana, lack of infrastructure, unstable government school feeding program policies] > 4) intervening conditions [lack of resources, lack of technology, no government assistance programs] > 5) action/interaction strategies [school feeding program, school garden] > 6 consequences: intended [short term hunger relief, increased enrollment, improved school behavior, decreased truancy, community participation, community acceptance] unintended positive [extra meals at home, primary school feeding program, increased disposable income, improved behavior at home] unintended negative: [underage children attending school, community not participating].

CHAPTER FOUR

Results

The data analysis from interviews conducted at The Kentucky Academy in Adjeikrom, Ghana revealed overall stakeholder perceptions after one year matched pre-program expectations regarding student impact in the classroom, community acceptance of the program, enrollment and absenteeism, truancy, and short-term hunger relief. The 2011 interviews revealed stakeholders thought a school feeding program would increase enrollment at the school, reduce absenteeism and improve classroom behavior. There were differences however in the perceived impact the program would have on behavior at home and impact on family lifestyle as well as community volunteerism in the program. The 2011 interviews showed that improved behavior at home by students receiving food at school and the effect the school feeding program had on the lifestyle of the families involved were not seen as potential benefits of the program. The stakeholders also felt community members would embrace the programs and would be eager to volunteer to be
part of the program. Interviews conducted in 2012 indicate community involvement as volunteers was less than expected.

**Truancy**

The rate of truancy was reported to be high before the school feeding program began. Teacher interviews conducted prior to the school feeding program revealed it was not uncommon to have students leave, or to be picked up by a parent mid-day in order to be fed. The children would not return for several hours or the remainder of the school day. Prior to the school feeding program stakeholders felt that being fed at school would motivate children to come to school and stay at school throughout the day. An interview prior to the school feeding intervention revealed:

“*It will help a lot. Because when the children come to school they have not eaten. They will run back to the house to get food so their mind is on food, they are not listening to what the teacher is saying. Some students come back to class two hours after break because their parents are cooking.*”

Many people living in Adjeikrom, Ghana still use wood or charcoal fire for cooking. Most in the people living in the village do not have electricity or gas in their homes. Although convenience foods are becoming more readily available in Ghana, financial constraints, lack of transportation, poor infrastructure and the use of local ingredients and recipes, such as banku, yam and fufu that require extended cooking time, make preparing a mid-day meal laborious and time consuming. Cooking food in large quantities for later use is rarely an option due to lack of refrigeration. Interviews obtained in 2012 indicate that stakeholders believe that truancy among kindergartners has been greatly reduced.
“Before the school feeding program you see lots of children roaming about – not in school, but you don’t see that now.

“Before the school feeding program the students would sneak out of school around 10 or 11 to go home to have a meal, but now with the school feeding program they stay the whole time.”

**Attendance & Enrollment**

The school feeding program is also perceived to have improved attendance and increase enrollment. Prior to the school feeding program, Adjeikrom parents may have allowed children to miss school to help the family at home. Families kept children at home if they could not afford to send money with them to school to purchase food, or were unable to bring them food during the day. Many of the residents of Adjeikrom are unable to leave work during the day or do not have the transportation needed to bring food to the child at school. Interviews conducted in 2011 indicate that stakeholders felt the school feeding program would help to improve overall attendance and enrollment:

“The school feeding program will act like a magnet. It will attract the students.”

“The food will be very useful to the children. Anyone who sees them knows something is happening in the village. You will need more room.”

“It will greatly improve attendance because the children will love to come.”

Interviews from 2012 found that stakeholders still felt that the school feeding program was a pivotal reason attendance had improved and enrollment had increased:

“The enrollment has increased. When they go home they tell others to come to school because there is rice and meat.”

“Now the parents are eager to send children to school. Prior to the program the parents didn’t care if the children went to school or not.”

“It has really helped the village. Prior to the program there was a private school up the way where parents sent their children who could. Since the feeding program started a lot of parents are moving their children back to here.”
**Attitudes Regarding School Attendance**

Stakeholders felt the school feeding program would make children more excited about attending school. In interviews prior to the school feeding program, stakeholders revealed students did not enjoy coming to school and often tried to find ways to stay out of school. Many of the stakeholders interviewed, but especially the parents, talked about the desire for their children to be “happy” and “content” in school. Stakeholders perceived children would be eager to come to school and be content and happy to be there once they arrived if they were provided a meal. In the 2012 interviews parents and stakeholders commented on “happy children”.

“Happy children. See them as more content, more happy. Because they are happy they are always eager to come to school.”

“The child comes home and shares about what he has eaten at school. He comes home happy.”

“Because for the first time I see they didn’t cook for the children, they are not happy. But now I see when we are cooking for them, they are happy. They come to the house and they say, “Mama, Mama, we have eaten rice”.”

**Classroom Behavior**

Stakeholders believed a school feeding program would positively affect classroom behavior. Prior to the school feeding programs stakeholders felt acute hunger kept the child from concentrating at school. Stakeholders thought the school feeding program would help to alleviate acute hunger and focus in the classroom would improve.

“The food will make them clever. When they are hungry, they only think about getting something to eat. When they eat, they remain calm and they pay attention.”

“In some homes there are many children and it is a problem to feed all the children. So coming to school will help them to forget problems at home. When they are hungry their mind is zooming out. When they get food, they will be able to pay attention.”
“The school lunch program will improve their education. When a child is hungry they cannot learn. When a child is hungry their brain is on food, they cannot learn. When they aren’t hungry they can concentrate on what the teacher is teaching them.”

“A hungry mind is an angry mind, but once you are fed you become satisfied.”

“If they are hungry they will not even hear you.”

“Children are just like chickens. The more they eat the more they grow. The more they eat the more it will instill in them to learn more. The more they eat the more their brains will grow. They will become happy. They can be doctors or lawyers. They can study better.

When researchers questioned stakeholders regarding classroom behavior in 2012 the same sentiment was felt regarding the effect the school feeding program had on the students in the classroom.

“A well fed child is focused.”

“Prior to the program the children were thinking about home and their minds would be at home because they were thinking about how to come home for food. But given the fact they are being fed here they are concentrated and more focused.”

“It helps them learn because they don’t have divided attention.”

**Behavior at Home**

The data analysis revealed the perceptions held by the stakeholders regarding changes in the behavior of the children when they were at home was an outcome that was unexpected in 2011. In interviews prior to the school feeding program in 2011, little was mentioned regarding behavior at home. In interviews conducted in 2012 stakeholders improved behavior at home was seen as one of the most positive outcomes of the school feeding program. It was reported that children were more likely to help out at home, be more talkative and enthusiastic about school and be more respectful.

“From the first time they have tried to feed them from the school there is change. More change from the first time because if she is coming to the house and she is satisfied and
you tell her to do this or that she will do it. If she comes to the house and she is hungry and you tell her to do this she won’t do it.”

“It is really helping them when they get home. They are not asking for food. When you ask them to run errands they willingly do it.”

**Food Insecurity**

Stakeholders expected the school feeding program to provide acute hunger relief to the students. The comments prior to the school feeding show expectations were that the school feeding would allow children to be fed thereby increasing the amount of food the children were eating each day. There was no indication from interviews prior to the beginning of the school feeding program that parents would adjust the amount of food received at home because the children were receiving food at school. It was also indicated in the 2011 interviews that stakeholders were concerned about how acute hunger affects the students both in the long and short term.

“When a child is hungry as adults they are angry with you. Like a cow without grass.”

“They will become very tall. When no food to eat, dull. With food they will run to school.”

“Their brains are going to develop.”

“Many of the children come to school starving and the parent’s don’t have money to feed the children, so with this project the children will get to eat.”

Interviews collected in 2012 indicate that parents and other stakeholders feel the school feeding program has had a definite positive effect on the students regarding reducing short term food insecurity. One stakeholder claimed her son had “sores all over his body”, but since he had been receiving the food at school each day the sores had healed and when he comes home he no longer complains of being hungry. Other stakeholder commented on the fact that when the students came home from school they
did not ask for food and were able to wait for the evening meal to eat. Several of the stakeholders commented on the children now being able to eat three meals a day.

“Prior to the school feeding program a lot of the students came to school on empty stomachs.”

Assistance to Families

Interviews from 2011 indicated that parents expected the school feeding program to offer some financial relief to the families with students attending The Kentucky Academy. Some stakeholders suggested the school feeding program would allow parents to use money normally spent on food for other purposes. In 2012 stakeholders commented on having “extra money at home.” One parent revealed that prior to the school feeding program she kept one child at home because she did not have enough money available to send both of her children to school. Another parent said that prior to the school feeding program she would have to borrow money from her parents to afford food but she no longer have to borrow money because the children were being fed at school.

Stakeholders also commented on how the school feeding program had affected other aspects of family life. Parents stated that the school feeding program alleviated some of the stress associated with worrying about what the student’s would eat for the midday meal. It gave them more leisure time because is lessened the amount of time spent cooking for students when they would come home midday for food. Some parents indicated that the time saved by not cooking the midday meal allowed them to allocate more time for cooking the evening meal. Some stakeholders indicated that the food served at the school feeding program impacted what was served for dinner at home. Parents indicated they would change what was going to be served for dinner based on
what the child had eaten at school that day. It was also implied that the school feeding program allowed for a more peaceful morning and afternoon at home for the whole family. Parents did not feel as rushed in the morning and children did not come home from school asking for food in the afternoon.

**Community Acceptance of Program**

Community Acceptance was defined as any indication of acceptance for the program. This included actions by the stakeholders and their perceptions regarding needed changes in the program. Interviews from 2011 indicate that stakeholders were excited about the program. They remarked that the program would bring changes to the community as a whole. Stakeholders indicate that merely having the school feeding program in place provides a benefit that goes beyond relieving short term hunger and increasing enrollment. The interviews indicate that the school feeding program provides a sense of pride and purpose in the village.

“Great opportunity for the community, will improve the lives of everyone in the village.”

“It will give the community some spirit”

“It will elevate the status of the village as one of responsible adults.”

The comments from the initial interviews in 2011 indicate that all stakeholders think keeping children enrolled in school would have a long term lasting impact on the community. The stakeholders felt the long term impact of the school feeding program would affect not only the school children and village of Adjeikrom, but the nation of Ghana.

“It will raise the morale of the village. The learning of the students will make the village become great and in turn make the country great.”
“...the program is good because it is preparing the children to become responsible adults and the village children are the future.”

In 2011 some of the stakeholders expressed a desire to see local foods used for the school feeding program. Stakeholders also communicated that they did not want a school feeding program was not sensitive to the needs and desires of the village.

“Certain things need to be considered: building relationships with the village and not just coming, starting the feeding program and not following up with the school or the village”.

Although some stakeholders indicated wholehearted acceptance of the program in 2012 and stated they felt no there should be no changes, others felt there were areas where improvements could be made. It was perceived by some that more local foods could be used in the school feeding program. Stakeholders did not indicate whether they considered “local” to be food bought in Adjeikrom or food raised in Adjeikrom. Some stakeholder indicated that local Ghanaian rice should be used while others commented on the fact that all of the children loved when “foreign” rice was served. One stakeholder stated that increasing the use of local food would increase farming overall in the village and therefore there would be more food available in the village. Two stakeholders commented that the quantity of the food served to the older students should be increased.

Community Involvement

The literature clearly shows that program developers consider community involvement vital to the success of a school feeding program. The school feeding program in Adjeikrom gave opportunities for parents to work in the school garden and to bring produce raised on family farms to the school for use. The interviews from 2011 indicated that stakeholders would be willing to support the school feeding program by
volunteering labor or produce. The 2012 interviews indicate that finding volunteers to help with the school garden was difficult and that people were only occasionally donating locally raised foods to the school. The researchers also found that the school garden had been only sporadically tended. The path to the garden was overgrown.

**Unintended Consequences**

There have been some unintended consequences as a result of the success of the school feeding program. While overall enrollment had increased at The Kentucky Academy for school aged children, the number was artificially higher due to parents sending children as young as 2 ½ years old to school because they knew they would be fed. This has led to problems in the classroom as teachers try to care for the young children. One teacher also commented that although the children were better behaved at school, when the first classroom prepared to go to lunch children in other classroom had divided attention because they would begin anticipating lunch time.

There were positive unintended consequences resulting from the success of the school feeding program. Families indicated more disposable income as well as more free time at home. Parents also felt children exhibited improved behavior at home. Parents also indicated some children were receiving 3 meals a day. Upon return to Adjeikrom in 2012, program planners found that the Ghanaian government had funded a school feeding program for the primary school in Adjeikrom. The addition of the primary school feeding program further alleviated financial limitations for families.
CHAPTER FIVE

Discussion

The purpose of this qualitative longitudinal study was to assess stakeholder perceptions regarding a new school feeding program. The opinions expressed in the interviews indicated acceptance and satisfaction with the program on most of the areas discussed. The interviews revealed the stakeholders perceive the school feeding program has improved the lives of the students attending The Kentucky Academy regarding attendance, behavior and short-term hunger relief. It is perceived that the school feeding program is responsible for a decrease in truancy, an increase in attendance and improved behavior both at school and at home. Stakeholders also feel that the school feeding program has made it possible for families to have more disposable income and more free time at home. Stakeholders commented more about changes on student behavior at home in 2012 interviews than in initial interviews prior to the feeding program. This may indicate that parents were unaware of the overall affect short term hunger can have on the children prior to them receiving the additional meal at school. Several parents mentioned that children were receiving three meals a day as a result of the school feeding program. This may indicate the school feeding program made it possible for the families to allocate resources toward feeding the students before sending them to school. Some parents indicated that the children eat porridge or drink cocoa for breakfast before coming to school. This was not indicated in interviews prior to the school feeding program. Some stakeholders interviewed stated that the meals served at school impacted what was served at home for dinner. This supports the research that families who can afford to purchase some food change what is served at home based on the food served at school.
Stakeholders also commented more in 2012 interviews about having peace at home as a result of the school feeding program. This peace at home was used to not only describe improved behavior by the student, but also as a way of describing how the knowledge that their child would be fed at school led to less stress and worry. The interviews also support previous research that stakeholders find community input and involvement to be important. Similar to school feeding programs funded by the Catholic Relief Services, finding ways to involve stakeholders has been difficult. It is evident from the responses that the use of local foods and the success of the school farm are important to the stakeholders. Many of the stakeholders spoke of the long term effects expected from the school feeding program. They mention their children becoming doctors and lawyers, and that education will elevate the whole village. These expectations cannot be evaluated after only one year of the school feeding program. It is evident that adults in Adjeikrom, Ghana value education and feel that providing education for the young will improve the economic status of the village. No person interviewed spoke about the children becoming educated and leaving Adjeikrom. They view education as a way to improve the future lives of everyone in Adjeikrom.

CHAPTER SIX

Conclusion

This study was an opportunity to see if stakeholders felt a school feeding program at a kindergarten school in rural Ghana impacted the students and families living there. It provided the opportunity to assess what stakeholders felt needed to be changed to improve the intervention and to explore avenues for increasing stakeholder participation.
As our paradigm model shows, causal conditions in Ghana can hinder the progress of the school feeding program. There is no government safety net for parents in Ghana to provide needed programs for families with young children. Most Adjeikrom families do not have the technological advances needed to make preparing foods more convenient. They also are limited in ways to store cooked foods safely. These limitations all contributed to the negative unintended consequences that arose as a result of the school feeding program. These negative unintended consequences may be viewed by program developers as opportunities. Enrollment had increased in the school as a result of the school feeding program. This supports previous research that school feeding programs lead to increased enrollment. Although enrollment had increased in the school the number was inflated due to the underage children being sent to the school so they would be fed. The underage children currently being sent to school for food has caused teachers to spend time caring for their particular needs therefore reducing instructional time. Program directors will have to find ways to provide care and resources for the underage children if they continue to be present at school. The 2008 Pakistan study showed the increased enrollment led to more teachers being hired (Pappas et al., 2008). Lowering the minimum age requirement by adding a preschool program would offer more children the opportunities for education and provide jobs for more teachers. It would afford parents more time to work without having to worry about childcare. This would support the objectives of Food for Education programs by offering increased educational opportunities for the children of Adjeikrom. This study also supports the findings of the 2010 review of the Ghana School Feeding Program published in the *International Review of Sociology*. That study found that school feeding programs made
it possible for money in the family budget to be used for other expenses. Our study shows that families felt they had increased disposable income as a result of the school feeding program. Our study also supports the findings that for families who could afford some food, the school feeding program had an impact on foods served at home.

The directors of the school feeding program will have to continue to assess the opinions of the stakeholders of the school feeding program. They must find community leaders who have the time and passion needed to advocating for the success of the school feeding program. The success of the school garden will rely heavily on volunteers. According to recent news accounts the long term outlook for continuation of the Ghana School Feeding Program is unclear. It is important that the school feeding program at The Kentucky Academy continue to be supported. Program directors must continue to develop relationships with village leaders. The literature shows that empowering women to aid in school programs increases volunteerism in a program. The school garden offers an opportunity for the program directors to increase female involvement in the program. Increased community involvement also ensures cultural sensitivity is maintained. There were limitations to this study. The sample size of 44 was small and was limited to stakeholders that were able to come to the school on a work day. Despite the limitations, this study supports the literature that finds school feeding programs enhance not only educational opportunities for the children receiving the intervention, but also impacts the families of the children attending the school as well as the village at large.
### Appendix A: Interview Questions

<table>
<thead>
<tr>
<th>Initial Interview Questions</th>
<th>Possible Follow Up Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>How do you feel the school feeding program has affected the lives of the students? Their families? The village of Adjeikrom, Ghana?</td>
<td></td>
</tr>
<tr>
<td>Do you think student attendance has changed since the school feeding program began?</td>
<td></td>
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<tr>
<td>Do you think the school feeding program has impacted student learning?</td>
<td>How do you feel the school feeding program has impacted student learning?</td>
</tr>
<tr>
<td>Do you think the school feeding program has had any effect on student behavior in the classroom?</td>
<td>How do you feel the school feeding program has impacted behavior in the classroom?</td>
</tr>
<tr>
<td>As a stakeholder in the program, how do you perceive the school feeding program?</td>
<td></td>
</tr>
<tr>
<td>Has the school feeding program had any unintended consequences for the village?</td>
<td>Were there any changes in the village or your family that surprised you?</td>
</tr>
<tr>
<td>If you could change the program, what would you do to make it better?</td>
<td></td>
</tr>
<tr>
<td>What feedback do students bring from home about meals?</td>
<td>Has the school feeding program changed the way you eat at home?</td>
</tr>
<tr>
<td>What contributions are parents or other stakeholders making to the school feeding program?</td>
<td>Why do you feel more people are not getting involved in the school feeding program?</td>
</tr>
</tbody>
</table>
# Appendix B: Initial Code Categories

<table>
<thead>
<tr>
<th>Concepts</th>
<th>Definitions</th>
</tr>
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<tbody>
<tr>
<td>Behavior at Home</td>
<td>Perceptions of how children act at home as a result of less hunger</td>
</tr>
<tr>
<td>Benefits of Education</td>
<td>Perceptions of why education is important</td>
</tr>
<tr>
<td>Community Acceptance of Program</td>
<td>Indications of acceptance of School Feeding Program</td>
</tr>
<tr>
<td>Community Impact</td>
<td>How the school feeding program will affect the community</td>
</tr>
<tr>
<td>External Distractions</td>
<td>Pertains to anything that distracts the child from learning.</td>
</tr>
<tr>
<td>Financial Impact</td>
<td>How the school feeding program impacts family finances.</td>
</tr>
<tr>
<td>Improved Health Outcomes</td>
<td>Perceived health benefits of school feeding program</td>
</tr>
<tr>
<td>Learning</td>
<td>How being hungry or being fed affects learning</td>
</tr>
<tr>
<td>Parental/Community Involvement</td>
<td>Perception of how involved parents will be in the program</td>
</tr>
<tr>
<td>Parental Impact</td>
<td>Any perceived help the school feeding program provides that is not financial.</td>
</tr>
<tr>
<td>School Feeding Program Improvements</td>
<td>Perceived needs in the school feeding program.</td>
</tr>
<tr>
<td>Student Attitudes</td>
<td>Perceptions of how children feel about school as a result of school feeding</td>
</tr>
<tr>
<td>Truancy</td>
<td>Leaving school early or being tardy</td>
</tr>
</tbody>
</table>
### Appendix C: Joint Code Book

<table>
<thead>
<tr>
<th>Code</th>
<th>Definition</th>
<th>Properties</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assistance</td>
<td>Excluding hunger and behavior any perceived benefit provided by the School Feeding Program, pertaining to community enhancement, impact of parental &amp; family dynamics and financial impact on the family</td>
<td>Community, Financial, Parental/Familial</td>
<td>Beneficial → Harmful, Change → no change</td>
</tr>
<tr>
<td>Community Acceptance of Program</td>
<td>Level of acceptability of school feeding program. Any indication of acceptance (verbal or by actions, or perceived need for SFP improvements, also includes likeability</td>
<td>Community, Families, Students</td>
<td>Benefit → no benefits, Like → Dislike, Satisfied → Dissatisfied, Participation → No Participation</td>
</tr>
<tr>
<td>Student Impact</td>
<td>Any perceived effect the SFP has on the students excluding hunger</td>
<td>Attendance, Attitudes, Behavior at home, Behavior at school, Enrollment, Learning, Truancy</td>
<td>Present → Absent, Change → No Change, Change → No Change, Change → No Change, Increase → Decrease, Increase → Decrease</td>
</tr>
<tr>
<td>Hunger</td>
<td>physiological symptoms associated with hunger</td>
<td>Skin breakdown, GI symptoms</td>
<td>Symptoms → Asymptomatic</td>
</tr>
<tr>
<td>Roadblocks</td>
<td>Perceived distractions that interfere or prevent student learning</td>
<td>External Distraction, Family Dysfunction</td>
<td>Distracted → focused, Disrupting → No effect</td>
</tr>
<tr>
<td>Parental/Guardian/Community Involvement</td>
<td>Perceptions of or actual knowledge of stakeholder involvement in School Feeding Program</td>
<td></td>
<td>None → Some</td>
</tr>
<tr>
<td>Teacher Assistance</td>
<td>Anything that pertains to assistance offered by or received by a teacher</td>
<td>Financial benefit teacher, Financial burden to teacher</td>
<td>None → beneficial, None → Burden</td>
</tr>
</tbody>
</table>
## Appendix D: Axial Coding

<table>
<thead>
<tr>
<th>Causal Conditions</th>
<th>Properties of Causal Conditions</th>
<th>Context for alleviating childhood food insecurity</th>
<th>Intervening Conditions</th>
<th>Action/Interaction Strategies</th>
<th>Intended Consequences</th>
<th>Unintended Consequences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental &amp; System Limitations</td>
<td>Distance from food</td>
<td>Rural Ghana</td>
<td>Lack of resources</td>
<td>NGO school feeding program for Kindergarten School Garden</td>
<td>Short term hunger relief</td>
<td>3 meals/day</td>
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<tr>
<td></td>
<td>Technological disadvantages</td>
<td>Lack of Infrastructure</td>
<td>Lack of technology</td>
<td></td>
<td>Increased enrollment</td>
<td>Ghanaian gov’t sponsored school feeding program in primary</td>
</tr>
<tr>
<td></td>
<td>Lack of Childcare</td>
<td>Unstable school feeding program policies</td>
<td>No government assistance</td>
<td></td>
<td>Improved behavior at school</td>
<td>Increased disposable income</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Lack of upward mobility</td>
<td></td>
<td>Decreased truancy</td>
<td>Underage children being sent to school</td>
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<td></td>
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<td></td>
<td>Community volunteerism</td>
<td>Improved behavior at home</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Community acceptance</td>
<td>Limited community volunteerism</td>
</tr>
<tr>
<td>Low Income</td>
<td>Subsistence Farming</td>
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<tr>
<td></td>
<td>Lack of education</td>
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<td></td>
<td>Lack of Opportunity</td>
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<tr>
<td>Time Constraints</td>
<td>Regional Cooking Techniques</td>
<td></td>
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<td></td>
<td>Lack of Transportation</td>
<td></td>
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</table>
Appendix E: Paradigm Model

Phenomenon: Childhood Food Insecurity

Context
- Rural Ghana
- Lack of infrastructure
- Unstable government school feeding program

Causal Conditions
- Environmental & System Limitations
- Low Income
- Time Constraints

Action/Interaction Strategy
- School Feeding Program
- School Garden

Intervening Conditions
- Lack of resources
- Lack of technology
- No government safety net

Consequences

Intended
- Short term hunger relief
- Increased enrollment
- Improved behavior
- Decreased truancy & absenteeism

Positive Unintended
- Increased disposable income
- Extra meals at home
- Primary school feeding program
- Improved behavior at home

Negative Unintended
- Under-age children at school
- Lack of community participation


USDA. (2012). The National School Lunch Program Background and Development
Retrieved 10/28/12, 2012, from
http://www.fns.usda.gov/cnd/lunch/AboutLunch/ProgramHistory_5.htm

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