2015

Observations and Teachers' Perceptions of the Implementation, Benefits, and Challenges of Breakfast in the Classroom

Dixie Shaffer
Walden University

Walden University

COLLEGE OF EDUCATION

This is to certify that the doctoral study by

Dixie Shaffer

has been found to be complete and satisfactory in all respects,
and that any and all revisions required by
the review committee have been made.

Review Committee
Dr. Darragh Callahan, Committee Chairperson, Education Faculty
Dr. Amie Beckett, Committee Member, Education Faculty
Dr. Patricia Anderson, University Reviewer, Education Faculty

Chief Academic Officer

Eric Riedel, Ph.D.

Walden University
2015

Abstract

Observations and Teachers' Perceptions of the Implementation, Benefits, and Challenges of Breakfast in the Classroom

by

Dixie Shaffer

MA, Edinboro University, 2009

BS, Indiana University, 1991

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Education

Walden University

September 2015

Abstract

The federal government established nutrition assistance programs such as the School Breakfast Program and school districts have implemented Breakfast in the Classroom (BIC) to improve participation rates, yet millions of low-income children do not partake in these programs. Thus, many school districts are failing to meet the nutritional needs of the low-income population, which can have negative effects on a child's healthy development. The purpose of this qualitative case study was to observe and explore teachers' perspectives regarding school breakfast implementation in a small school district in the Mid-Atlantic region of the United States. Research questions examined experiences with implementation, benefits and challenges to the program, and how children's needs are impacted based on Maslow's hierarchy of needs, the theoretical framework for this study. Data from the research participants' interviews, journals, and classroom observations were coded, themes were identified, and triangulation occurred to answer the research questions. Findings indicated changes need to be made with food portions, food options, food quality, the logistics of implementation, and outreach efforts. Recommendations included changing equipment, providing equal amounts of food, evaluating food options and quality, providing clean up supplies, and educating parents on BIC. Stakeholders addressing these challenges can increase support and participation rates in the program, leading to positive social change. Implications for positive social change include reduced state costs associated with hunger, decreased food insecurity for low-income families, improved behaviors in the classroom, and improved support of the physiological, safety, and socialization needs of children.

Observations and Teachers' Perceptions of the Implementation, Benefits, and Challenges of Breakfast in the Classroom

by

Dixie Shaffer

MA, Edinboro University, 2009

BS, Indiana University, 1991

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Education

Walden University

September 2015

Dedication

This study is dedicated to all children living in food insecure households. It is my hope that the findings from this study can impact the lives of our future generation by improving BIC to better meet the nutritional needs of low-income families.

Acknowledgments

I would like to thank and acknowledge several individuals for their support in completing the doctoral program. First and foremost, I would like to thank Dr. Darragh Callahan for her assistance in moving through the process at an efficient rate. I truly appreciate the guidance, encouragement, and expertise she gave during every stage of the process. Dr. Callahan is a true inspiration and a model professor who I feel blessed and honored to have had for a chair. This process was an exciting, frustrating, stressful, exhilarating, and rewarding journey, and I am thankful that Dr. Callahan was a part of the process.

In addition, I would like to thank Dr. Amie Beckett, my second committee member, as well as Dr. Patricia Anderson. The feedback and encouragement given during the various stages of the dissertation process were highly beneficial and appreciated. I am grateful for your assistance in helping me to create a meaningful study.

I would also like to thank Dr. Swetnam for the support given to me throughout my experience at Walden. It was an honor to meet her during the residency, and I truly appreciate the encouraging words and advice given to me. Even though she was not part of my specialization, she went out of her way to answer any questions and support me throughout my journey. Her professionalism is appreciated.

Dr. Share also needs to be acknowledged, as she helped to solve several problems at the beginning of my process. Although the start of my journey was quite bumpy and stressful, she worked to resolve all issues that arose and helped to decrease the anxiety I

was feeling. I appreciate her ability to be professional in all situations and work to increase the level of satisfaction with the program.

Furthermore, and most importantly, I would like to thank my family. Without each one of them, this journey would not have been successful. They accepted the time constraints of the program and knew I would be sitting at the kitchen table for many hours a week. They dealt with my occasional emotional outbursts, the drama, and my perfectionism. It is impossible to express how much I truly appreciate their understanding, encouragement, and support throughout the past three years. They are what a support system should be, and I love each of them unconditionally for helping my dream become a reality.

Finally, I would like to thank my Walden doctoral FaceBook friends, Debi LaVine and Darla Tucker. I feel blessed to have met these two fantastic ladies during our residency and cherish our friendship. It has been a pleasure supporting each other during this process, and I look forward to continuing our conversations beyond our Walden experiences. I cannot wait until our celebration excursion together; we will always be known as the Three Muskeeters!

Table of Contents

Chapter 1: Introduction to the Study

In the United States, 49 million families live in food insecure households, with 16 million children affected as a result (Coleman-Jensen, Gregory, & Singh, 2014). Food insecurity results in the inability for individuals to provide sufficient and nutritious foods for family members (Coleman-Jensen, Gregory, & Singh, 2014). To help address child hunger and prevent the negative impacts to a child's healthy development, the federal government established nutrition assistance programs, providing a safety net for low-income families and increasing food security for these families (Coleman-Jensen et al., 2014). One of the nutrition programs established by the federal government is the School Breakfast Program (SBP), which provides daily breakfasts to children in schools and childcare facilities (Food and Nutrition Service [FNS], 2012). Although these facilities offer the SBP, many low-income children who qualify for free- and reduced-priced meals are not participating (Food Research and Action Center [FRAC], 2012), leaving many children coming to school hungry.

In a Mid-Atlantic state, over 750,000 children qualified for free- or reduced-priced breakfasts (Pennsylvania Department of Education [PDE], 2014), but many of these children were not participating in the SBP. In an attempt to increase participation rates in the program (Creighton, 2013; FRAC, 2014b), districts implemented Breakfast in the Classroom (BIC), where children eat breakfast with their classmates in their own classroom, rather than in the cafeteria. However, participation continued to be below the national average, with more than 50% of low-income students not participating in the SBP. According to the state's Hunger Action Center, this Mid-Atlantic state was the 38th

worst state in meeting the nutritional needs of their students (Pennsylvania Hunger Action Center [PHAC], 2012).

Maslow (1943) proposed that meeting basic needs, such as nutrition, allow individuals to satisfy other, more advanced needs, which leads to healthy development and the ability to withstand future adversity. Without proper nutrients, children run the risk of developing physical (Arora et al., 2012), emotional, behavioral (Slopen, Fitzmaurice, Williams, & Gilman, 2010), and cognitive issues (Miller, Hooper, Simeonsson, & Torres, 2014). To ensure the healthy development of children, it is necessary to discover barriers to participation.

Although research exists on potential barriers, scholars have assessed student, parent, and administrative perceptions, with minimal attention to teacher perspectives. Thus, in this study, I addressed a gap in literature, potentially leading to increased understanding from teachers' perspectives of the lack of participation after implementation of BIC. The findings of this study provide insights into the process of classroom breakfast implementation, as well as the benefits and challenges of the BIC model. Insights should assist districts in addressing perceived challenges, thus supporting staff in successful classroom implementation. By addressing challenges to implementation, participation rates could potentially increase, leading to positive long-term academic, health, and behavioral outcomes for students (Felling, 2013). In addition, health issues associated with poor nutrition create economic costs for states (Shepard, Setren, & Cooper, 2011); therefore, an increase in participation rates in the SBP could

improve short-term and long-term health outcomes, resulting in decreased hunger costs for individual states, as well as our nation as a whole.

Problem Statement

Researchers have demonstrated that school districts are failing to meet the nutritional needs of the low-income student population. Although school districts are making efforts to increase participation in the SBP, results have been insignificant (PHAC, 2013). A small school district in a Mid-Atlantic state implemented the BIC model to improve participation in the breakfast program (Creighton, 2012). Prior to implementation of BIC, this district was serving approximately 20% of low-income children (PHAC, 2012); after implementation, the rates rose to 25% (PHAC, 2013). Thus, 75% of the low-income student population continue to be underserved and may be coming to school hungry, which can have negative effects on a child's healthy development (Kirk et al., 2014).

When low-income children participate in the SBP, positive benefits are seen in the household, as the SBP provides a means for increasing food security for parents (Coleman-Jensen et al., 2014). In addition, improving participation rates in the SBP would affect schools by increasing federal revenue for the school districts, as districts failing to serve high percentages of low-income children are losing millions of dollars in federal funding (FRAC, 2012). Furthermore, hunger costs for the state in this study exceed $4 billion (Shepard et al., 2011). Therefore, increasing participation rates in the SBP would reduce hunger for low-income children and result in lowering hunger costs for the state.

In addition, this problem directly impacts children who are food insecure because a nutritious breakfast is imperative to healthy development and can lead to short- and long-term positive health, behavioral, and academic outcomes for children (Felling, 2013). Eating breakfast improves intakes of important nutrients and foods necessary for proper development (Affenito et al., 2012; Arora et al., 2012; Kirk et al., 2014). Skipping breakfast can lead to higher body fat percentages, body mass index (BMI) scores (Nurul-Fadhilah, Teo, Huybrechts, & Foo; 2013), and waist circumference (Deshmukh-Taskar et al., 2012; Nurul-Fadhilah et al., 2013), leading to increased risks for obesity (Arora et al., 2012; Lawman et al., 2014; Nurul-Fadhilah et al., 2013) and increased costs for the nation (Wang, McPherson, Marsh, Gortmaker, & Brown, 2011).

Researchers have shown that children who consume breakfast are more attentive, focused, and alert (Haesly Nanney, Coulter, Fong, & Pratt, 2014). In addition, in the absence of hunger, attendance increases (FRAC, 2013), which has been linked to higher academic achievement (Gotfried, 2010; Morrissey, Hutchinson, & Winsler, 2014; Parke & Kanyongo, 2012). For example, literacy and mathematics scores on unstandardized (Acham et al., 2012) and standardized state tests (FRAC, 2013; Imberman & Kugler, 2012) have increased with breakfast consumption.

Increasing participation rates in the SBP has clear benefits for children, families, schools, and the state. Therefore, it was necessary to explore factors contributing to the lack of participation. Researchers have explored perspectives from students, teachers, and administrators and found possible factors contributing to the problem. Students have expressed concerns with food options, and lack of hunger (Bailey-Davis et al., 2013;

Mansourian, 2012), while parents identified food quality (Himmelrich, 2011; Sahota, Woodward, Molinari, & Pike, 2013), social stigma, and economic accessibility as barriers (Bailey-Davis et al., 2013). Lack of janitorial staff, sanitation issues, and resistance from teachers (FRAC, 2013) have been factors acknowledged by administrators.

Although teachers are responsible for implementation of BIC, minimal research exists on teachers' perspectives to what may contribute to low participation rates. In a literature search, I found two research articles on teachers' perspectives on the SBP; however, interviews occurred with middle school and high school teachers, where BIC was not the chosen breakfast model (Haesly et al., 2014; Sahota, Woodward, Molinari, & Pike, 2013). Another outdated report acknowledged teacher concerns through survey methods with no further exploration regarding expressed concerns (Salomon, 2009). Thus, further exploring teachers' perspectives in a rigorous manner was worthy of inquiry, as findings address a gap in literature and provide administrators and teachers in the local setting with a deeper understanding of challenges associated with BIC implementation and low participation rates. Identifying challenges can lead to resolutions to perceived barriers, thus potentially increasing participation rates and improving the lives of the low-income student population.

Purpose of the Study

The purpose of this qualitative case study was to explore teachers' perspectives regarding breakfast implementation and the lack of participation with BIC in a small school district in a Mid-Atlantic state. Research exists on potential barriers associated with participation in the SBP; however, the information provides the perspectives of

students, parents, and administrators, with minimal attention to teachers' perceptions. Engaging and supporting all stakeholders is imperative for the successful implementation and participation in BIC (Creighton, 2012). Therefore, an objective of this study was to fill a gap in research by understanding the perspectives of individuals who are directly involved with the implementation process. Teachers were able to provide additional insights in the process of BIC implementation, as well as to benefits and challenges associated with the BIC model, which leads to greater understanding of the issue of low participation in the SBP.

Research Questions

The central research question explored in this study was: What contributes to the lack of participation in the SBP? A general question was posed, describing the overall focus of the study. This question was broken down into subquestions, adding more specificity to the direction of the study. Although these questions were not the actual interview questions used in the study, the following subquestions guided the data collection (Lodico, Spaulding, & Voegtle, 2010).

1. What are teachers' experiences with the process of BIC implementation?
2. How do teachers describe the benefits and challenges of the BIC model, relating to student participation?
3. What are teachers' perceptions of how BIC might impact students, particularly as related to higher level needs in Maslow's hierarchy of needs?

Nature of the Study

The nature of this study was a qualitative case study design. A case study allows for an in-depth understanding of a situation, bounded by limited subjects, time, or space (Lodico et al., 2010). The goal of this study was to gain an understanding of a group (elementary teachers) within a bounded system (one school district in an eastern state). In addition, this study was designed to gain insight into a specific issue and would be classified as an instrumental case (Hamilton & Corbett-Whittier, 2013). Thus, I focused on the lack of participation in the SBP (problem) and desired to explore the factors contributing to the problem (research question). Because participation rates in the SBP continue to be below the national average (PHAC, 2012), even though BIC has been implemented system-wide, conducting a case study, with a focus on greater understanding of classroom implementation and teacher perceptions of the benefits and challenges associated with BIC, helped determine what contributes to this problem.

In this study, I explored BIC implementation and the factors contributing to the lack of participation in the SBP based on teachers' perspectives. Preschool, kindergarten, first, and second grade teachers were recruited for participation, as implementation in younger grade levels may result in greater challenges. Participants were chosen from the two elementary schools from which the researcher was not directly employed, eliminating the possibility that participants felt coerced to participate. Purposeful sampling was used to obtain information-rich cases that lead to greater understanding of the central phenomenon (Creswell, 2012). Interviews and documentation were gathered

and coded for analysis. More specific information relating to the methodology, participants, and data collection is provided in Chapter 3.

Theoretical Framework

The framework for this study was Maslow's (1943) theory of hierarchy of needs. This theory provides information on what motivates individuals to behave in certain ways (Maslow, 1943). The hierarchy, often portrayed in a five-level pyramid, places physiological needs at the first level. Physiological needs consist of the most basic biological needs of a person, which include nutritious foods (McLeod, 2014). Maslow proposed that physiological needs are the most prepotent of all needs and must be met before more advanced needs – safety, love, and esteem – can be achieved (Maslow, 1943). Thus, an individual deprived of all needs is motivated to satisfy physiological needs, resulting in a nonexistent desire to meet all other needs (Maslow, 1970).

Food insecurity creates difficulties for families to meet the nutritional needs of their children (Coleman-Jensen et al., 2014). The SBP decreases hunger for low-income families and provides a daily nutritious breakfast, thus supporting the physiological needs of student. Meeting physiological needs can potentially decrease the worry and anxiety children experience when hunger is present in the household, allowing children to focus on safety needs (Maslow, 1943). Anxiety leads to stress, which can result in psychological and medical conditions (Santiago, Wadsworth, & Stump, 2011), as well as impairments in learning and overall well-being (Shonkoff & Garner, 2012). In addition, Motoca, Williams, and Silverman (2012) found a positive relationship between youth

anxiety, poor social skills, and peer interactions; positive relationships are required to fulfill the need of love (Maslow, 1970).

When both physiological and safety needs are met, individuals will hunger for affection and desire to form relationships with others (Maslow, 1970). According to the National Scientific Council on the Developing Child (NSCDC), forming healthy relationships with others is essential for a child's healthy development (2009). The BIC model supports children's social needs by serving breakfast in the classroom where children can socialize with peers, improving socialization skills and strengthening relationships. Children who have the opportunity to develop strong social skills exhibit prosocial behaviors more frequently (Gulay, 2011), allowing children to establish lasting friendships and increase self-worth.

When an individual develops positive self-esteem, the person acquires feelings of self-confidence, personal worth, adequacy, and of being valuable to society. However, failure to meet self-esteem needs results in feelings of helplessness, weakness, and inferiority (Maslow, 1970). The lack of daily breakfast consumption can result in weight issues, resulting in higher body fat percentages, body mass index (BMI), and body weight (Nurul-Fadhilah et al., 2013). Being overweight is significantly associated with poor self-esteem, which can lead to disturbed eating patterns, bullying (Danielsen et. al, 2012), and depression (Steiger, Allemand, Robins, & Fend, 2014). Prolonged issues with self-esteem can lead to unproductivity where individuals never meet their full potential (Maslow, 1943), possibly regressing on Maslow's hierarchy of needs. Applying this framework to

the study aided in greater understanding of how BIC implementation affects a child's ability to progress through Maslow's hierarchy of needs.

Definitions

The following terms and definitions are used throughout this study:

Food insecurity: "whenever the availability of nutritionally adequate and safe foods or the ability to acquire acceptable foods in socially acceptable ways is limited or uncertain" (Anderson, 1990).

Food security: "access at all times to enough food for an active, healthy life" (Anderson, 1990).

Hunger: "an uneasy or painful sensation caused by a lack of food" (O'Brien, Aldeen, Uchima, & Staley, 2004).

Low-income individual: "an individual whose family's taxable income for the preceding year did not exceed 150% of the poverty level amount" (U.S. Department of Education, 2014).

Assumptions

In this qualitative case study, I made three assumptions. It was assumed that the participants chosen for the study would be representative of all primary teachers within the district. To address this assumption, email invitations were sent to kindergarten, first, second, and third grade teachers in the selected schools. Participants were then chosen from the volunteers so representatives from each grade level would be a part of the interview process. It was also assumed that participants would answer interview questions truthfully and genuinely. To address this assumption, participants were ensured

anonymity and confidentiality, participation was voluntary, and participants were allowed to withdraw at any time without ramifications. A final assumption was that the data collected would assist in answering the research questions and contribute to the body of research associated with the SBP.

Scope and Delimitations

The scope of this study involved teachers' perspectives of the implementation of BIC, as well as the benefits and challenges to participation in the program. In this study, I aimed to identify factors contributing to the lack of participation in the SBP in the elementary schools; thus, the study was delimited to the elementary schools within the rural public school district in a Mid-Altantic state. Teachers were chosen from kindergarten, first, second, and third grade classrooms, as BIC implementation in primary grades could provide additional challenges not apparent in older grade levels. Although findings were not expected to be generalizable to other settings, other districts with similar demographics and context could determine the findings are transferable and useful to their own settings (Lodico et al., 2010).

Limitations of the Study

This study included limitations that should be acknowledged. One limitation was the small sample size, which was chosen exclusively from primary grade levels within two elementary schools within the same school district. Although I selected participants so that kindergarten, first, second, and third grade teachers were equally represented, choosing only nine participants may not reflect the perspectives of all primary grade level

teachers within the district. In addition, the sample limits the generalizability to other grade levels and districts that may have different demographics.

A second limitation was the potential for the interviewees to provide limited or deceptive answers to interview questions. In addition to teachers representing different grade levels, years of teaching experience also varied. Therefore, the substance of responses could have differed due to personal experiences with the breakfast program. To address this limitation, I established rapport with the participants prior to the interview, ensured confidentiality (Bogdan & Biklen, 2007), and used an interview protocol that allowed for flexibility and probing for greater clarification and expansion of information from the participants (Creswell, 2012).

This study was also limited by my own bias and personal interpretation of the data. Due to being a teacher, dealing with BIC in my own classroom, and having background in living a healthy lifestyle, my personal experiences were a limitation. However, I attempted to minimize my biases by documenting reflective field notes (Creswell, 2012) during every stage of data collection and analysis. In addition, member checking established accurate interpretations of the interviewees' words (Creswell, 2012; Lodico et al., 2010), helping ensure the participants' perspectives were independent of my personal biases.

Significance of the Study

Although research exists on potential barriers to participation in the SBP, the body of scholarship is outdated. Researchers have assessed parental and administrative perceptions to implementation, with minimal attention to teacher perceptions. Thus, in

this study, I addressed a gap in literature, potentially leading to increased understanding of teachers' perspectives for the lack of participation after implementation of BIC. The findings provide additional insights, which can be applied locally and professionally to implement positive social change.

Local Application

Information on the process of BIC implementation, as well as the benefits and challenges related to participation were identified in this study. The findings from this study can assist the district in reducing the challenges related to BIC implementation. Local application could help improve the participation rates in the SBP, allowing the district to meet the nutritional needs of a greater percentage of low-income students.

Professional Application

The findings of this study may assist teachers and practitioners in the field in improving teacher practices with implementation of breakfast programs in classrooms. The outcomes also contribute to research, providing additional information from teachers' perspectives on possible benefits and challenges associated with participation in the SBP. In addition, it further supports the need for policy development to resolve identified challenges.

Significance to Social Change

Insights from this study may lead to positive social change that impacts all key stakeholders. By gaining a deeper understanding of the challenges associated with BIC from teachers' perspectives, districts are able to address perceived challenges, thus supporting staff in successful breakfast implementation. By addressing challenges to

implementation, participation rates could potentially increase, resulting in a decrease of food insecurity for low-income households (FRAC, 2012). Greater participation from low-income children would also allow districts to obtain more federal funding, which could assist districts in meeting federal nutrition guidelines (FRAC, 2012).

More importantly, findings may lead to social change for children, which can result in positive long-term behavioral, academic, and health outcomes for students (Felling, 2013). Addressing challenges to BIC implementation and increasing participation rates for low-income children support the physicological needs of the at-risk population. When nutritional needs are met, there is a decrease in anxiety and worry associated with food insecure children (Fram et al., 2010). In addition, the lack of hunger results in increased attention (Wesnes, Pincock, & Scholey, 2012), which can improve academic performance (Felling, 2013). Furthermore, increasing participation in the SBP can ensure children are receiving adequate nutrition based on dietary guidelines, improving the health outcomes of students.

Furthermore, health issues associated with poor nutrition create economic costs for states. For the Mid-Atlanic state in this study, health care costs associated with hunger exceeds $4 billion. In addition, indirect costs associated to health care needs were $130.5 billion greater in 2010 for our nation due to food insecurity and hunger (Shepard, Setren, & Cooper, 2011). Therefore, an increase in participation rates in the SBP could improve short-term and long-term health outcomes, resulting in decreased hunger costs for the Mid-Atlantic state, as well as our nation as a whole.

Summary and Transition

In Chapter 1, I provided an explanation of the problem and identified the need to gain a deeper understanding of teachers' perspectives related to implementation of BIC and the benefits and challenges associated with participation in the program. Research questions have been provided, as well as a rationale for choosing a qualitative case study design. In the theoretical framework, I grounded the study and provided justification for the need to increase understanding of the problem. The significance for positive social change within local and professional contexts was addressed, providing relevance for conducting the study.

Chapter 2 includes a review of the literature related to the problem statement and purpose of the proposed study. I break the review into themes related to the various aspects of the problem, describing benefits and challenges related to breakfast consumption. The review contains concise summaries of the literature, helping to substantiate the rationale for the study.

In Chapter 3, I provide an explanation of the research design and methodology for the proposed study. The choice of a case study design is justified with an explanation of why other design choices would be inappropriate. Criteria for participant selection and sample size are discussed, with attention also given to the measures being used to provide ethical protection to participants. In addition, data collection procedures, data analysis, and the methods to address validity and trustworthiness are examined.

Chapter 4 includes an explanation of data analysis, describing how data were generated, gathered, and recorded. Information on data analysis procedures, specific

codes used, and emerging themes are discussed. Evidence of trustworthiness is provided, with attention given to any adjustments made to strategies presented in Chapter 3.

Chapter 5 includes a summary and the interpretations of the findings. Implications for social change are addressed, as well as recommendations for practice, as appropriate. Recommendations for future research, which are grounded in the strengths and limitations of the current study, are reviewed.

Chapter 2: Literature Review

Even though the federal government established food assistance programs, such as the SBP, to decrease food insecurity for low-income families, millions of disadvantaged children are not participating in the program (FRAC, 2012). To improve participation rates in the SBP, districts are implementing BIC (Creighton, 2013; FRAC, 2014b). However, rates continue to be below the national average, with more than 50% of low-income students not participating in the SBP (PHAC, 2012). Teachers are directly responsible for implementation of BIC, yet there is an absence of research addressing elementary teacher perceptions of the program. More research is needed to explore teachers' perspectives regarding breakfast implementation and the lack of participation with BIC.

I have organized this review of literature around themes, with six topics addressed. The first section includes information on the history of school food programs. Associations between food insecurity and hunger are described in the second section of the literature review, with an emphasis placed on the negative impact hunger has on child development. The third, fourth, and fifth sections contain a discussion on the relationship between breakfast consumption to behavior, academic achievement, and health respectively. Challenges related to breakfast consumption are discussed in the final section of the review.

The articles contained in the literature review are current peer-reviewed sources, with the exception of one outdated article used to justify the need for additional research. Relevant articles were obtained by searching multiple databases including: EBSCO

HOST, NCBI, ProQuest, and Google Scholar. Government websites were also used to gather applicable documents and sources for the review. Key words used to obtain sources included: *School Breakfast Program, Breakfast in the Classroom, breakfast, breakfast consumption, food insecurity,* and *hunger.* Additional words were used in combination with the keywords to locate resources related to the various topics within the review. These words consisted of the following: *behavior, attention, attendance, discipline, relationships, cognition, academic achievement, literacy, math, health, dietary intake, weight, obesity,* and *challenges.*

Theoretical Framework

Maslow's hierarchy of needs was the framework for this study, as the theory is applicable to all settings and age groups. Maslow (1970) pointed out that individuals are motivated to move up the five-level pyramid toward self-actualization. However, if prepotent needs are not met, other needs become nonexistent and ignored. Physiological needs, which include nutritious foods, are at the base of the pyramid and need to be met before other advanced needs can be achieved. Food insecure families have difficulty meeting the nutritional needs of their children (Coleman-Jensen et al., 2014).; thus, schools are in a unique position to offer consistent meals to low-income students, which assists in meeting a child's most basic needs.

For learning to take place, children must be engaged and attentive. However, if hunger is present, a child will think only of satisfying the need for food (Maslow, 1970), rather than focusing on instruction. Consistent breakfast consumption increases attention (Wesnes et. al, 2012) and alertness (Micha, Rogers, & Nelson, 2011), leading to

improved academic performance. Participating in the SBP supports the physiological needs of students, which can lead to moving up Maslow's hierarchy.

In addition, children thrive from undisrupted, predictable routines. An organized world helps a child feel a sense of security, which is the second level of Maslow's hierarchy (Maslow, 1970). Children who live in food insecure households worry about having enough food to eat, develop a sense of helplessness, and become fully aware of parents' stress and changing behaviors when food is scarce (Fram et al., 2010). These feelings negatively impact the ability to develop a sense of security. Participating in the SBP can counteract feelings of anxiety, as children have access to breakfast each day. In addition, BIC allows children to eat in the classroom in familiar surroundings, which can increase feelings of safety.

When children consume breakfast daily and feel safe in their surroundings, positive peer relationships can be developed. According to Maslow (1970), individuals hunger for affection from others and desire positive relationships with peers. The BIC model supports this level on the hierarchy, as children eat breakfast with their classmates, improving socialization skills and strengthening friendships. Stronger social skills lead to more positive prosocial behaviors (Gulay, 2011), which can improve a child's self-worth.

Developing a positive self-image is essential to living a productive life. Feeling adequate and worthy motivates individuals to work toward self-actualization. However, failure to meet self-esteem needs can result in health issues and lead to unproductivity where individuals never meet their full potential (Maslow, 1970). Implementation of the

BIC offers teachers the opportunity to encourage relationships and increase self-esteem in low-income students.

I chose Maslow's theory for this study for several reasons. The theory is based on individual need fulfillment and is easily applied to all settings. In addition, research using the hierarchy has focused mainly on adults (Cao, Jiang, Oh, Li, & Chen, 2013; Lester, 2013; Thielke et al., 2011), with a lack of research relating the hierarchy to children. Furthermore, using Maslow's theory aided in a greater understanding of how BIC implementation affected a child's ability to progress through Maslow's hierarchy of needs, helping to expand on existing theory.

Literature Review

History of School Food Programs

Food service programs in schools began as early as the 1850's, with private societies and associations undertaking efforts to create food services for children. Societies, clubs, churches, and private individuals funded these programs (Gunderson, 2014). With the Great Depression in the 1930's, concern increased for children affected by malnourishment and hunger, leading to additional states and municipalities adopting legislation that would serve meals to school children. However, locating funding necessary to support food services became an issue, and federal assistance became inevitable (Gunderson, 2014).

In 1935, Congressional action provided aide to the school lunch programs, allowing schools to receive food commodities (Gunderson, 2014). Initially, schools obtained commodities based on participation from underprivileged and undernourished

children. However, this criterion quickly changed to represent the total number of children participating in the lunch program. Over 92,000 schools received donated foods and served over 6 million children each day (Gunderson, 2014). However, with the beginning of World War II, food supplies required to support the U.S. Armed Forces drained farm surpluses and negatively impacted the lunch program, resulting in a decline of more than 58,000 schools serving meals to students (Gunderson, 2014). This decline led to the authorization of federal funds to maintain school lunch programs. Nevertheless, expansion did not ensue, as schools were fearful of undertaking a program where appropriations occurred on a yearly basis (Gunderson, 2014).

Congress recognized the need to create legislation, ensuring continuance of the program (Gunderson, 2014). In 1946, President Harry Truman signed the National School Lunch Act, which established the National School Lunch Program (NSLP) (School Nutrition Association [SNA], 2015). The assurance of continuity encouraged participation and expanded the program. For the next 20 years, amendments were made to the NSLP, which created improvements in the legislation. The relationship between nutrition and healthy child development was recognized, resulting in the desire to extend and expand efforts to meet the nutritional needs of students (Gunderson, 2014). Therefore, the Child Nutrition Act of 1966 emerged, creating a 2-year pilot breakfast program (SNA, 2015) known as the SBP.

The SBP pilot project provided grants to chosen schools located in poor areas or areas where children traveled lengthy distances to school (FNS, 2013). Schools had to meet nutritional standards established by the Secretary of Agriculture and serve free or

reduced priced meals to children unable to pay the full price (Gunderson, 2014). During the next few years, Congress extended the program, making modifications to expand the SBP. In 1975, the SBP received permanent authorization, making the program available to all schools (FNS, 2013). However, over the next few decades, Congress challenged child nutrition funding, seeking to cut government spending to all child nutrition programs. Fortunately, food programs for children remained intact and eventually led to President Barack Obama signing the Healthy, Hunger-Free Kids Act (HHFKA) into law in 2010, which is a reauthorization of the Child Nutrition Act (SNA, 2015).

The HHFKA provides funding for child nutrition programs, increases access to nutritious foods, and promotes student health. The reauthorization in 2010 allowed the United States Department of Agriculture the opportunity to improve child nutrition programs, including the SBP, by expanding meal services, establishing nutritional standards for foods served in schools, and strengthening wellness policies (National Education Association [NEA], 2015). Although the child nutrition programs are permanent, Congress reviews the laws every 5 years through the reauthorization process. The HHFKA expires in September 2015. Therefore, Congress will review and modify programs, creating improvements to strengthen the nutrition programs and increase low-income student participation in the SBP (FRAC, 2014a).

Food Insecurity and Hunger

Increasing low-income participation rates in the SBP is essential, as income level has been associated with food insecurity (Coleman-Jensen, 2014). Children and adolescents from food insecure households skip breakfast more frequently then youth

living in food secure homes (Deshmukh-Taskar, 2010; Khan et al., 2011). A lack of access to nutritious and sufficient amounts of food results in mental health issues in children (Melchior et al., 2012) and adolescents (McLaughlin et al., 2012), which lead to behavior problems (Melchior et al., 2012), anxiety, mood, and substance disorders (McLaughlin et al., 2012).

The SBP helps reduce the risk of food insecurity for low-income families (Bartfeld & Ahn, 2010). Nalty, Sharkey, and Dean (2012) found that food insecurity was less severe during the school year when low-income children had access to a school food program. In addition, parent surveys of elementary children indicated that children living in low-income households were less likely to skip breakfast in schools offering the SBP (Bartlet & Ryu, 2011). Nevertheless, millions of low-income children do not participate in the SBP (FRAC, 2012). Exploring challenges in existing programs could potentially increase participation rates, reduce child hunger, and advance the benefits associated with breakfast consumption.

Breakfast Consumption and Behavioral Outcomes

Daily breakfast consumption is associated with positive behavioral outcomes. Wesnes et. al (2012) conducted a study with 1,386 children aged 6 to 16 years and found that breakfast consumers had superior performance on tasks requiring attention and memory. Without breakfast, children's on-task behaviors decreased by 7%, speed declined by 9%, and the ability to maintain attention was compromised. In addition, eating breakfast affects a child's energy level and mood (Kral, Heo, Whiteford, & Faith, 2012; Micha et al., 2011). Micha et al. (2011) found that low glycemic foods increased

alertness and cheerfulness, while decreasing anxiety. The changes to the nutritional standards in the SBP require schools to serve low glycemic foods, such as fresh fruits, whole grains, and skim milk (Hayes & Berdan, 2013). Therefore, it is probable that the specific carbohydrate profiles of school meals may improve attentiveness in the classroom, resulting in increased learning.

Hunger can also lead to misbehavior, resulting in disciplinary actions. Findings from a survey of teachers revealed that hungry children find it difficult to focus on instruction, which can lead to irritability, emotional outbursts, and impulsivity (Felling, 2013). According to Haesly et al. (2014), teachers reported breakfast consumers were more attentive, focused, and alert, resulting in a decrease of outbursts from emotional and behavioral students. Consistent with Haesly et al. (2014), Salomon (2009) found similar results in teacher surveys, indicating improved behaviors with children consuming breakfast. According to principals surveyed on BIC, breakfast consumption resulted in fewer disciplinary referrals in their schools (FRAC, 2013).

Moving breakfast from the cafeteria to the hallway or classroom can also improve relationships. Haesly et al. (2014) conducted a qualitative case study with high school students and teachers. Respondents built stronger relationships with one another, as increased interaction resulted when students consumed breakfast among grade-level peers and school staff. Thus, implementing BIC in elementary schools could potentially assist students in developing positive socialization skills, increasing chances of children moving up Maslow's hierarchy of needs. However, research is needed in this area, as no studies were found that explore this possibility.

With BIC implementation, principals noticed an increase in attendance, as well as a decrease in tardiness (FRAC, 2013). Similarly, Anzman-Frasca et al. (2015) found improved attendance rates were associated with BIC programs in 257 urban elementary schools in the United States. In addition, in the absence of hunger, children exhibit fewer avoidance behaviors, leaving the classroom less often for ailments such as stomachaches and headaches (Felling, 2013; FRAC, 2013). When children do not make unnecessary trips to the nurse's office for ailments associated with hunger rather than illness, attendance in the classroom increases, which can result in academic improvements.

Researchers have linked attendance with higher academic achievement. In a correlation study, Gottfried (2010) found consistent and statistically significant relationships between school attendance and academic achievement for students in elementary and middle schools. Morrissey et al. (2014) found similar results in a longitudinal study of a diverse sample of 35,419 elementary students, where poor attendance predicted lower academic achievement, especially for low-income students. Parke and Kanyongo (2012) would agree, as results from a study of elementary through high school students in 80 schools showed poor attendance negatively affecting mathematics achievement on state assessments. Children mistakenly sent home for ailments associated with hunger are missing classroom instruction. Ensuring low-income children are served breakfast eliminates hunger and contributes to increased attendance (Augustine-Thottungal, Kern, Key, & Sherman, 2013; FRAC, 2013). Thus, increasing attendance can enhance the academic achievement of children.

Breakfast Consumption and Academic Achievement

Although attendance plays a role in increasing the academic achievement of students, researchers have shown that daily breakfast consumption is also associated with greater cognitive and academic performance. Pivik, Tennal, Chapman, and Gu (2012) recorded electroencephalographic (EEG) brain activity in 8 to11 year-olds, while these children solved basic addition problems following an overnight fast. Some of the children received breakfast based on the nutritional requirements established for the SBP. Testing occurred again following breakfast or no breakfast consumption. Results showed breakfast consumers exhibiting enhanced mental functions necessary for reasoning and mathematical thinking. Imberman and Kugler (2012), as well as Acham, Kikafunda, Malde, Oldewage-Theron, and Egal (2012) would concur, as study results indicated breakfast consumption increased academic achievement.

While Imberman and Kugler (2012) used state testing data for 11 year-olds, Acham et al. (2012) assessed academic achievement using unstandardized tests to represent what children learned in class. In this study, math and literacy achievement were significantly related to breakfast consumption, especially for boys (Acham et al., 2012) and low-income children with low prior achievement (Imberman & Kugler, 2012). Hannum, Liu, and Frongillo (2012) found similar results when assessing literacy achievement of 9 to12 year-olds and comparing findings to breakfast consumption practices. Undernourished and food insecure children had significantly lower literacy scores compared to regular breakfast consumers living in higher income households. FRAC (2013) supports these findings, as results from surveys completed by principals

indicated students eating breakfast showed improvements on standardized, literacy, and mathematics test scores. Research is lacking, however, from teachers' perspectives on the relationship between daily breakfast consumption and academic achievement. Exploring information related to teachers' observations of children over time could provide a greater understanding of how breakfast consumption impacts achievement.

In addition to improved literacy and mathematics achievement, breakfast consumption leads to increased cognitive function, including higher intelligence quotient (IQ) scores. Liu, Hwang, Dickerman, and Compher (2013) assessed the IQ of 1,269 kindergarten children, spanning urban, rural, and suburban living environments. Children who regularly consumed breakfast had significantly higher full, verbal, and performance IQ test scores compared to infrequent breakfast eaters. Even when controlling for socioeconomic status, increases in IQ scores persisted, suggesting a direct effect between eating breakfast and cognitive ability. Rahmani et al. (2011) assessed the IQ of 9 to 11 year-olds during an experimental design, where the intervention group received daily milk consumption for three months. It was revealed that daily milk consumption significantly improved IQ scores of students. These results are promising, as a nutritional requirement of the SBP is providing milk to students (Hayes & Berdan, 2013). Thus, milk consumption in the SBP may potentially increase the IQ scores of children participating in the program.

Nutritional guidelines for the SBP align with the Dietary Guidelines for Americans, providing the proper nourishment for the healthy development of children (Hayes & Berdan, 2013). Dea and Mugridge (2012) conducted a study with 824 students

in third through seventh grades, covering a mix of urban, suburban, and rural areas. Similar to other studies, Dea and Mugridge (2012) investigated the relationship between eating breakfast and academic achievement. A unique aspect of the study included a dietitian interviewing children on foods eaten for breakfast that morning. The dietician analyzed the items and provided a score for the nutritional value of the breakfast. Results indicated that a nutritious breakfast was associated with higher achievement. Therefore, because the foods served in the SBP are required to meet dietary guidelines, participants receive a nutritious breakfast, possibly improving the academic performance of students.

Wesnes et al. (2012) also found improvements in maintaining cognitive functioning following breakfast consumption. In addition, FRAC (2013) provided information from principals indicating that students who ate breakfast improved on test scores related to cognitive performance. Similarly, Defeyter and Russo (2013) found evidence for increased cognitive functioning on some tasks. However, Kral et al. (2012) suggested contradictory results. Participants performed cognitive tests once a week for two weeks. Results revealed that skipping breakfast once did not affect cognitive functioning. It might be argued, however, that the small sample size of 21 (Kral et al., 2012) compared to a sample of 1,386 participants (Wesnes et al., 2012) limited the study, which may have provided inaccurate results.

Kral et al. (2012) also suggested the possibility of the omission of one breakfast in regular breakfast consumers might not adversely affect cognitive performance. Boschloo et al. (2012) would concur, as habitual breakfast skipping had a positive association with lower school performance in a study of 605 high school participants. Interestingly,

Boschloo et al. (2012) used a homogenous sample to control for education levels, choosing participants from the two highest tracks in the school. Although breakfast skipping tends to be less common in higher performing groups, a positive relationship between eating breakfast and school performance still existed. Therefore, it is likely that a stronger relationship would exist for lower track students (Boschloo, 2012).

In addition, low-income children are more likely to skip breakfast compared to children from higher income households (Deshmukh-Taskar et al., 2010; Khan, Pinckney, Keeney, Frankowski, & Carney, 2011). Thus, results related to cognitive functioning and school performance for low-income children missing breakfast every day might show even stronger results. More information is needed on the relationship between habitual breakfast skipping and academic achievement of low-income children to substantiate results. However, the potential for increased academic achievement and cognitive functioning with breakfast consumption suggests the importance of meeting the nutritional needs of children.

Breakfast Consumption and Health Outcomes

Although there are obvious educational benefits with breakfast consumption, participation rates in the SBP for low-income children continue to be poor. These children may be consuming nutrient-poor, energy-dense foods (Kirk et al., 2014; Myers, Gibbons, Arnup, Volders, & Naughton, 2014) or skipping breakfast altogether. Mansourian (2012) discovered that low-income children skip breakfast more frequently than children living in higher income households. Skipping breakfast leads to inadequate

intakes of important nutrients and foods, which are necessary for a child's healthy development.

Consuming dairy products improves bone health and is necessary for developing bone mass in children and adolescents (United States Department of Agriculture [USDA], 2014a). Arora et al. (2012) found when assessing dietary behaviors of 1,814 adolescents aged 12 to 18, breakfast consumers had higher intakes of dairy products than children who skipped breakfast. Kirk et al. (2014) found similar results with a large sample of 10 to 11 year-olds, showing a deficit in meeting required nutrition guidelines for milk products for non-breakfast eaters. Younger children are also affected, as intakes of calcium from dairy products were significantly lower for preschool (Myers et al., 2014) and elementary school children (Affenito et al., 2013) who skipped breakfast.

In addition to poor intakes of dairy products, breakfast skippers have lower consumption of fruits and vegetables (FV). When eating breakfast, adolescents consume 1 to 5 times more FV daily than non-breakfast consumers (Arora et al., 2012). Findings were similar for all elementary and secondary grade levels (Affenito et al., 2013; Hanson & Olson, 2012). In addition, in a population-based survey, Storey and Anderson (2014) found that food insecurity exacerbates lower consumption of FV. School food programs, such as the SBP, follow dietary guidelines and contribute to the overall daily intakes of FV, especially for low-income children.

Robinson-O'Brien, Burgess-Champoux, Haines, Hannan, and Neumark-Sztainer (2010) analyzed fourth to sixth graders in primarily low-income urban schools participating in the SBP. Children who participated in the SBP consumed more than half

of the daily FV requirements at school. In contrast, Fung, McIsaac, Kuhle, Kirk, and Veugelers (2013) did not find significant increases in FV consumption with implementation of food programs. However, analysis took place before and after implementation of a breakfast program (Fung et al., 2013), rather than examining an existing food system (Robinson-O'Brien et al., 2010). Fung et al. (2013) noted that following implementation, students were more likely to bring packed food to school, rather than participate in the program. Thus, the lack of FV consumption may be due to the lack of participation in the implemented food program. More research is needed in schools implementing BIC, as teachers have the opportunity to observe FV intake of children.

Fruits and vegetables contain important nutrients vital to health, which can reduce the risk of chronic diseases (USDA, 2014b). An important nutrient contained in FV is dietary fiber. Storey and Anderson (2014) found that dietary fiber intake for Americans of all ages is far below the recommended levels. Dietary fiber is essential for improving gastrointestinal health (Storey & Anderson, 2014), reducing blood cholesterol levels, decreasing the risk for heart disease, protecting the body against certain types of cancer, and lowering the risk of Type 2 diabetes. In addition, FV contain vitamin C, which is important for iron absorption, healing cuts and wounds, keeping gums and teeth healthy, and repairing body tissues. These foods also provide a feeling of satiety and contain lower caloric intake (USDA, 2014b), potentially improving childhood obesity issues.

Childhood obesity affects 17% of youth in the United States, with no significant changes in prevalence since 2003 (Ogden, Carroll, Kit, & Flegal, 2014). Children living

in food insecure households have more weight issues (Kirk et al., 2014) and skip breakfast more frequently than children living in higher income households (Deshmukh-Taskar et al., 2010). Nurul-Fadhilah et al. (2013) found that adolescents who skipped breakfast frequently had significantly higher waist circumference, body fat percentages, weight, and body mass index (BMI) scores than breakfast consumers. Similarly, elementary-aged breakfast skippers showed a higher prevalence of obesity and waist circumference then breakfast consumers (Deshmukh-Taskar et al., 2010). Thus, skipping breakfast is associated with a higher risk for obesity in all age levels (Arora et al., 2012; Lawman et al., 2014; Nurul-Fadhilah et al., 2013; Sandercock, Voss, & Dye, 2010), which can lead to behavioral, social, and health issues related to weight problems.

An association exists between obesity, behavioral, and social issues. In a large, nationally representative sample, Griffiths, Dezateux, and Hill (2011) found that obese preschool boys showed more conduct, attention, and peer relationship problems than normal weight boys, while girls had poorer prosocial behaviors. Sawyer, Harchak, Wake, and Lynch (2011) also found boys and girls exhibiting poorer peer relationships, leading to teacher-reported emotional issues for preschool children. Similarly, results from a study of over 43,000 participants showed attention and conduct problems associated with obese elementary and secondary students (Halfon, Larson, & Slusser, 2012). More research is needed, however, to corroborate these findings.

In addition to behavioral and social issues, obesity results in negative mental and physical health outcomes. Allergies, headaches, joint problems, ear infections, and depression are more common in obese children (Halfon et al., 2012). A greater risk for

hypertension and diabetes also exists with obesity (Levi, Segal, Laurent, & Kohn, 2011). Type 1 and type 2 diabetes has increased in frequency in youth (Centers for Disease Control and Prevention [CDC], 2014), which can result in long-term damage to the skin, teeth, nerves, kidneys, eyes, blood vessels, and the cardiovascular system (National Diabetes Education Program [NDEP], 2014). However, daily breakfast consumption can counteract risks related to these ailments.

Witbracht et al. (2014) discovered an association with habitual breakfast skipping and cardiometabolic risks, which increases the chance of an individual developing diabetes, heart disease, or strokes; thus, consuming breakfast could potentially protect against these risks. Odegaard et al. (2013) found that daily breakfast consumption reduced the risk for metabolic conditions and hypertension related to obesity. In addition, daily breakfast consumption decreased the risk for Type 2 diabetes and cardiovascular disease in children (Donin et al., 2014), while increasing levels of cardiorespiratory fitness (Sandercock et al., 2010). Research showing health related benefits associated with breakfast consumption is promising, as obesity leads to increased costs for the nation. If obesity trends continue to increase, by 2030, medical costs associated with obesity could rise to $66 billion a year (Wang et al., 2011). Therefore, encouraging children to consume breakfast daily is important to help prevent adiposity during critical stages of development.

Challenges Associated with the SBP

While there are clear benefits associated with breakfast consumption, participation rates in the SBP continue to be below the national average. Although

parents and students value breakfast as important for health and nutrition (Bailey-Davis et al., 2013; Himmelrich, 2011), challenges exist for families. FRAC (2012) noted that students refrain from participating due to the stigma associated with the program being for poor children. Results from a survey conducted with 400 middle school and high school students in Maryland (No Kid Hungry Maryland, 2011), as well as a phenomenological study with middle school students and parents (Bailey-Davis et al., 2013), confirmed this finding. However, surveys from principals revealed that implementing BIC helps reduce stigma experienced by low-income children, as it allows children to eat and socialize with peers in classrooms. Similarly, case study research with individual parent interviews and student focus groups showed that stigma was less of a problem for respondents (Sahota et al., 2013). What seems to be missing from the body of research in this area are teachers' perceptions on stigma associated with participation in BIC, as these individuals are directly involved in the implementation process and have the opportunity to observe children's concerns with the program.

Along with possible issues of stigma, concerns with food quality and food options are significant (Sahota et al., 2013). In a descriptive study of 7,426 primary students in urban and rural areas, Veghari and Mansourian (2012) found that uninteresting food options were an important factor in skipping breakfast. Findings from interviews revealed parents also felt food options and nutritional quality of breakfast were issues, leading to a desire for children to refrain from participating in breakfast programs (Himmelrich, 2011). In addition to nutritional quality and food options, survey results indicated that students of all ages expressed a lack of appetite as a reason for skipping breakfast (No

Kid Hungry Maryland, 2011; Veghari & Mansourian, 2012). For middle school and high school students', sleeping patterns were also an issue (Bailey-Davis et al., 2013), as a significant amount of these students chose to sleep longer, rather than consume breakfast (Haesly et al., 2014). In addition, teachers could provide greater insight into this issue, as direct observation during BIC could reveal why primary children may not consistently consume the breakfasts served at the school. However, research could not be found in this area and is needed to increase understanding of this barrier to participation.

Along with concerns of nutritional value and food options, parents expressed additional barriers. Urban transit, tight morning schedules, and late arrival due to transportation issues were challenges for low-income families (FRAC, 2012). In addition, while some schools offer universal breakfast where breakfast is free for all students, others charge rates based on family income. Students who qualify for reduced-priced meals pay no more than 30 cents per breakfast (FRAC, 2014b). However, even the reduced-priced is an issue for struggling families (FRAC, 2012). Furthermore, the application process to qualify for free- or reduced-priced meals can be burdensome and complicated (FRAC, 2010).

In interviews with educators in primary schools and secondary schools in England, teachers indicated factors that might impede the application process. Teachers suggested that issues of pride, privacy, and independency might prevent families from completing applications (Sahota et al., 2013). Language barriers and confusions on eligibility rules might also prevent parents from completing required paperwork (FRAC, 2010). Parents, on the other hand, felt the process was relatively easy, especially when

given assistance from school staff (Sahota et al., 2013). It should be noted, however, that this study took place in England, where the application process might be different than in the United States.

Principals, teachers, and cafeteria staff also expressed challenges related to breakfast consumption. Open-ended survey questions and follow up phone interviews with principals revealed that bus schedules and late arrivals hinder the ability to participate in BIC (FRAC, 2013). Limited janitorial staff was also an issue, which lead to cleanup and sanitation concerns from both principals (FRAC, 2013) and teachers (Salomon, 2009). In addition, food waste was a concern for all school staff and administration, as children threw away large portions of food products (Blondin, Djang, Metayer, Anzman-Frasca, & Economos, 2014). Blondin et al. (2014) pointed out that the school used in the study had currently implemented BIC. Therefore, food waste may decrease with consecutive years in the program. Further research with schools implementing BIC for more than one year could provide information on how food waste is managed within classrooms.

Although teachers have concerns with loss of instructional time with BIC implementation, educators in schools with BIC reported little change in workload (Salomon, 2009). Principals concur, as survey results indicated their teachers observed increased instructional time (FRAC, 2013), which could be due to children eating in the classroom, rather than leaving to consume breakfast in the cafeteria. However, these studies focus on all elementary grade levels, with little attention to primary grades. Further investigation could potentially answer questions on why loss of instructional time

may be greater in different classrooms, as well as how primary teachers implement the program within individual classrooms.

In addition, some principals noted resistance from teachers with BIC implementation (FRAC, 2013), which increased reported barriers in these schools. However, with flexibility to differentiate the program based on student and classroom needs, support can be increased for the program (Lowry, 2014). Communication between stakeholders is essential for buy-in and success with breakfast programs (FRAC, 2013; Haesly et al., 2014; Salomon, 2009; Slawson et al., 2013). Thus, it is probable that challenges decrease with an increase in stakeholder support, which could potentially result in higher participation rates in the SBP. With participation rates for low-income children being below the national average, further research is necessary to better understand barriers associated with participation. Gaining teacher perceptions on why children may not be participating in BIC, as well as thoughts on how improvements can be made to increase participation rates, would add to the body of knowledge in this area.

Methodology

The review of literature included numerous studies with varying methodologies, most of which were quantitative in nature. Using statistical tests, the results of the studies showed the association between behavior, academic achievement, health, and breakfast consumption. The majority of the researchers used survey research, which identified benefits and challenges to breakfast consumption. However, very few researchers in these studies employed qualitative methods to expand upon trends found within survey results (Creswell, 2012).

The literature review consisted of only a few qualitative research designs, as minimal research exists that explores teachers' perceptions of the SBP and is only recently beginning to surface. Researchers from two case study designs investigated teachers' beliefs through open-ended interviews, with respondents employed at middle schools and high schools (Haesly et al., 2014; Sahota et al., 2013). Thus, it was necessary to gain understanding of teachers' perspectives in elementary schools, as middle and high schools tend to operate the SBP differently.

In addition, only one outdated study included surveys of teachers' perspectives of BIC (Salomon, 2009), with no qualitative exploration of responses. With elementary schools beginning to implement BIC to increase participation rates in the SBP, it was necessary to gain additional understandings of what factors may contribute to low participation. Furthermore, no known research exists that focuses on teachers' perspectives of BIC in primary grade levels. Therefore, conducting a qualitative case study with primary level teachers and further exploring the themes found in the literature review was worthy of investigation. Findings from the study add to the existing literature by filling a gap in research, as well as provides a deeper understanding of benefits and challenges associated with BIC.

Summary and Conclusions

I presented themes in the literature review that examined the benefits and challenges related to breakfast consumption. Although a few articles contained information that contradicted major findings, the majority of the literature clearly established positive behavioral, academic, and health benefits associated with eating

breakfast. In addition, a few study researchers identified challenges related to participation in the SBP. However, much of the researchers used quantitative measures, without rigorous exploration of the results.

The majority of researchers that employed qualitative measures focused on middle school and high school stakeholders, with minimal research focused on perceptions of elementary teachers who are directly responsible for BIC implementation. In addition, no research exists on the perspectives of primary teachers, where implementation may result in greater challenges due to the young age of the students. Therefore, exploring the perceptions of primary teachers in relation to BIC addresses a gap in literature, as well as provide a greater understanding of the central phenomena. Chapter 3 includes a comprehensive review of the methodology and justification for a qualitative case study design for the proposed research.

Chapter 3: Research Method

The purpose of this qualitative case study was to explore teachers' perspectives regarding breakfast implementation and the lack of participation with BIC in a small school district in a Mid-Atlantic region in the United States. Research exists on the benefits and potential barriers associated with participation in the SBP; however, the information includes the perspectives of students, parents, and administrators, with minimal attention to teachers' perceptions. Engaging and supporting all stakeholders is imperative for the successful implementation and participation in BIC (Creighton, 2012). Therefore, an objective of this study was to fill a gap in research by understanding the perspectives of individuals who are directly involved with the implementation process. Teachers were able to provide additional insights in the process of BIC implementation, as well as to benefits and challenges associated with the BIC model, which lead to greater understanding of the issue of low participation in the SBP.

This chapter includes the research design and the rationale for the selection. A discussion of participant selection, measures for ethical protection, and the role of the researcher is also included. In addition, the section consists of data collection and analysis procedures, along with methods to address trustworthiness.

Research Design and Rationale

The nature of this study was a qualitative case study design. A case study allowed for an in-depth understanding of a situation, bounded by limited subjects, time, or space (Lodico et al., 2010). The goal of this study was to gain an understanding of a group (primary grade level teachers) within a bounded system (one school district in a Mid-

Atlantic state). In addition, I designed this study to gain insight into a specific issue and would be classified as an instrumental case (Hamilton & Corbett-Whittier, 2013). Thus, I focused on the lack of participation in the SBP (problem) and desired to explore the factors contributing to the problem (research question). Because participation rates in the SBP continue to be below the national average (PHAC, 2012), even though BIC has been implemented system-wide, conducting a case study, with a focus on greater understanding of classroom implementation and teacher perceptions of the benefits and challenges associated with BIC, helped determine what contributes to this problem.

Survey designs have been the prominent method of data collection with the issue of low participation rates in the SBP. However, survey designs enumerate the *what* and fail to answer the *why* questions. Case studies, on the other hand, are designed to explore the *whys* and *hows* of a phenomenon (Creswell, 2013). The purpose of this study was to gain a deeper understanding of how teachers implement BIC, to discover the benefits and challenges from a teacher's perspective, and explore how children's needs are met, in relation to Maslow's hierarchy, through participating in the BIC. Although surveys can be developed with open-ended questions, it is not possible to probe for clarification and extension of answers without interviewing participants. Therefore, a case study was more appropriate, as this design aligned with my research questions and the purpose of this study.

In addition to a survey design, I also considered other methods. Although a case study falls under the realm of ethnographies (Creswell, 2012), the goal of the study was to gain a greater understanding into an issue, rather than shared cultural beliefs and

behaviors of a group (Lodico et al., 2010). A phenomenological design would not have been appropriate, as this method involves the examination of an individual's interpretation of lived experiences (Lodico et al., 2010) and would be more appropriate for experiences that captured the emotions and feelings of intense, sentimental situations (Merriam, 2009). In addition, because the goal of this study was not to generate or discover a theory, a grounded theory design would not have been an appropriate method (Creswell, 2013). After carefully considering each method, I selected a case study design, as it most closely aligned with the goals of the study.

Research Questions

The central research question being explored in this study was: What contributes to the lack of participation in the SBP?. I broke this question down into subquestions, adding more specificity to the direction of the study. Although these questions were not the actual interview questions that I used in the study, the following subquestions guided the data collection (Lodico, Spaulding, & Voegtle, 2010).

1. What are teachers' experiences with the process of BIC implementation?
2. How do teachers describe the benefits and challenges of the BIC model, relating to student participation?
3. What are teachers' perceptions of how BIC might impact students, particularly as related to higher level needs in Maslow's hierarchy of needs?

Context

The school district that was the site for this study has three elementary and three high schools, all of which are situated in rural areas in the Mid-Atlantic region of the

United States. The high schools, however, were eliminated from the chosen sites, as the study focused on elementary-aged children. Participants were chosen from the two elementary schools that had similar demographic characteristics.

I chose two elementary schools that contained over 1,000 kindergarten through sixth grade students. The ethnic composition of both schools is 99% Caucasian, with 1% being a mixture of Asian and African American students. In addition, over 40% of the students in both schools qualify for free- or reduced-priced meals.

Participant Selection

In this study, I explored the factors that contribute to the lack of participation in the SBP, specifically with primary grade levels. Therefore, kindergarten, first, second, and third grade teachers were selected to participate in the study. Purposeful sampling was used to obtain information-rich cases, which lead to greater insight and understanding of the central phenomenon (Creswell, 2012). More specifically, maximum variation sampling was used for participant selection so that the sample reflected a range of individuals who differed on characteristics (Lodico et al., 2010). Using maximum variation sampling increased the chances that the findings would reflect different perspectives (Creswell, 2013), allowing for a more comprehensive picture of the central phenomenon.

Every primary teacher in the chosen schools experienced the implementation of BIC within their own classrooms. There were 23 primary teachers who I considered for participant selection. One teacher from each primary grade level in each of the two schools was chosen for interviews and classroom environment observations, producing

six respondents for the sample size, providing equal representation for interpretation of the phenomenon. Three additional primary teachers were chosen to complete a two-week journal related to the research questions. In addition, if data analysis warranted further exploration, all nine participants would have been invited to participate in a focus group. The goal for the proposed study was to gain a greater understanding of the lack of participation in the SBP in primary grades at the school district, rather than to generalize to a broader population; therefore, a larger sample was not needed. In addition, selecting a greater number of participants could lead to redundant information during data collection (Morgan, 2008).

Access to Participants

To gain access to participants, obtaining permission from varying levels was necessary. I sent a letter of cooperation to the superintendent of the school district (Appendix A), which seeked permission to conduct the study in the specified schools. The letter contained information explaining procedures for recruitment, data collection, and dissemination. A copy of the approved proposal was available if requested by the gatekeepers (Creswell, 2012). In addition, approval needed to be obtained from the Institutional Review Board (IRB) by completing a Research Ethics Review Application. The application contained detailed descriptions of the study, as well as described how the ethical principles of beneficence, respect for persons, and justice would be established and maintained.

Ethical Considerations

In any research study, ethical issues could develop. Therefore, I took several steps to ensure ethical standards were met. After receiving approval from the district and the IRB (approval # is 05-11-15-0351258) to conduct the proposed study, participants were invited to participate via an email invitation (see Appendix B). Upon receiving interest in participating, I chose nine respondents to ensure there was representation from each primary grade level. Informed consent was obtained from chosen participants (see Appendix C), which included the purpose of the study, benefits, foreseeable risks, procedures to protect confidentiality, any compensations for participation, and conditions of involvement (NIH Office of Extramural Research, n.d.). During data collection, I reminded respondents of their volunteer status and the ability to withdraw from the study at any time (Creswell, 2012).

In addition, minimal disruptions took place at the research site, with anticipated times for data collection conveyed prior to data being collected (Creswell, 2012). I maintained the privacy and confidentiality of the participants during the course of the study. Fictitious names or participant numbers were assigned to participant files, with data stored in a password protected file (Creswell, 2013). Interviews were transcribed on a home computer to ensure others in the workplace did not obtain access to the information. Analysis of data was done in a rigorous, fair, and accurate manner that reported the information in an honest way (Creswell, 2013). Written reports maintained confidentialty of the participants and the district from which data were collected (Ethics in Qualitative Research, 2007).

Role of the Researcher

I did not work with any of the prospective participants, nor did I hold a supervisory position over any of the teachers. Therefore, a conflict of interest did not exist, which eliminated the chance that teachers would feel coerced to participate. However, many of the participants knew me due to working in the local area. Even though a familiarity existed, efforts were made to ensure interactions were normal and nonthreatening (Bogdan & Biklen, 2007) so that participants felt a higher level of comfort in my presence (Creswell, 2012). In addition, interviews were semistructured, allowing for probing questions to be asked, which resembled more of a natural conversation than a formal interview (Bogdan & Biklen, 2007; Creswell, 2012).

Due to working in a local school, I have had personal experiences with BIC implementation in my own classroom. In addition, I have had ample life experiences with nutrition and have created meal plans for individuals based on nutritional guidelines. Both of these experiences potentially brought bias into the study. To keep conscious of my possible bias, I kept reflective fieldnotes throughout the study (Creswell, 2012) and used member checking to ensure the interpretations were accurate (Creswell, 2013).

Data Collection

Case studies involve the collection of data from a range of sources to develop a comprehensive picture of the case (Creswell, 2013). Collecting different sources help to establish more convincing and accurate conclusions, and thus corroborate the findings through triangulation (Yin, 2014). This case study included one-to-one semistructured interviews, participant journals, an observation of the classroom environment, and the

possibility of a follow-up focus group if needed. I triangulated all data sources to answer the research questions.

Interviews

Interviews are an important source of information for most qualitative research, especially for the case study design (Yin, 2014). With teachers being directly responsible for BIC implementation, interviewing these participants lead to a greater understanding of how BIC is implemented in primary grade levels, as well as what benefits and challenges are associated with participation. I developed open-ended interview questions based on the research questions so that *why* and *how* questions could produce answers that lead to understanding the central phenomenon (Yin, 2014).

I conducted interviews in a private, quiet room that was free from distractions (Creswell, 2013) after school at a time convenient for each participant. Each interview lasted 45 minutes to an hour. In addition, interviews were semistructured to allow for probing, which provided greater explanation and clarification of responses (Creswell, 2012). An interview protocol was developed and consisted of procedural guidelines, five to seven questions, and closing comments (Appendix D). Using an interview protocol allowed me to remain focused, ensured interviews remained similar in nature, and provided a formal plan for taking notes (Creswell, 2012; Lodico et al., 2010).

Prior to beginning the interview, I reiterated the purpose of the study, the anticipated length of the interview, and the availability of the study's findings. I also restated how confidentiality would be maintained, as well as reminded each participant of the freedom to withdraw from the study at any time (Creswell, 2012). I obtained a

consent form from each participant. With permission from participants, interviews were audiotaped and adequate recording devices were used to ensure an accurate account of the responses (Creswell, 2013; Yin, 2014). Demographic information was obtained prior to asking the interview questions.

Interview questions were asked in a friendly and nonthreatening manner, resembling more of a conversation than a formal interview (Yin, 2014). During responses, I listened attentively and remained neutral, increasing the comfort level of the interviewee. When interviewees feel more comfortable, it is likely that more extensive information will be provided in response to the questions (Bogdan & Biklen, 2007). At the conclusion of the interview, I thanked the participant and reiterated the confidentiality of the responses.

Following the interview, I transcribed the responses. The names of each participant were protected by utilizing a respondent number for identification purposes, with all transcriptions kept in a single protected folder on a personal computer. Member checking was used to ensure the interviewee's responses were interpreted accurately (Creswell, 2012). I then analyzed all transcriptions for themes that answered the research questions.

Journals

Along with the six interviews, I selected three additional primary teachers to keep a participant journal to document their experiences and reflections with BIC implementation, as well as benefits, challenges, and frustrations experienced with the process. The journals were supplemental pieces of evidence to the interviews, which

provided another type of perspective for data analysis (Hatch, 2002). Prior to providing journal directions, informed consent (Appendix E) was obtained from each participant (Creswell, 2012). After consent had been obtained, teachers were given specific directions for journaling, which included topics, length of entries, amount of entries, and deadlines (Appendix F).

I asked the participants to complete two entries a week for two weeks, focusing on one topic each time; however, additional information could be added to past entries during the course of data collection. The entries could be completed at the teacher's convenience, with the days and times chosen by each participant. Participants were given a choice to complete a hand-written or computer generated journal. Topics included benefits seen to BIC implementation, challenges to participation, frustrations derived from the program, and reflections on how the program could be improved to increase participation. I reminded the participants of the freedom to withdraw from the study at any time and assured that confidentiality would be maintained. In addition, participants were given my contact information, and I encouraged each participant to express any confusions or questions that arose during the process.

Journal entries were collected following the end of the two-week cycle, allowing a few additional days to provide information. I personally collected handwritten journals, while computer generated journals were emailed directly to me to a private email account. I checked all entries to examine the usefulness for answering the research questions (Creswell, 2012). Incomplete entries were eliminated from analysis. Handwritten entries were typed, and all entries were kept in a separate password

protected file on a home computer. I used coding to develop emerging themes, as well as to compare information gathered from one-to-one interviews.

Classroom Observation

I conducted a quick classroom observation on a day after school or immediately following each interview when children were not present. The purpose of the observation was to analyze the physical arrangement and environment of the classroom, as this information helped to answer all research questions. An observational protocol (Appendix G) was developed that contained information about the observational session, a descriptive section, and a reflective notes section (Creswell, 2013).

The descriptive section included information on the physical setting of the classroom (Lodico et al., 2010). I incorporated a brief checklist so that the observation remained focused on specific aspects of the classroom, all of which was derived from past research. The reflective notes section consisted of my reflections, insights, and emerging themes gathered from the observation. In addition, I drew a sketch and took photographs of the setting so that details could be remembered during data analysis (Creswell, 2012). All notes were typed following the observations and kept in a separate file from other data sources (Bogdan & Biklen, 2007).

Focus Groups

A focus group interview would have been the last data source I had gathered, following initial coding of other sources and arriving at emerging themes, and only if analysis had warranted further exploration to obtain additional information. Holding a focus group would have allowed me to obtain further clarification and additional

information that may have been lacking from one-to-one interviews. A focus group could have been advantageous, as all participants would have been similar to one another (Creswell, 2012) and have had similar experiences with BIC implementation.

I would have invited all participants to attend the focus group interview at a centralized location in a private room free of distractions. The process would have been similar to the one-to-one interviews, where participants would have been reminded of the freedom to withdraw from the study and ensured their confidentiality would have been maintained. The focus group would have been videotaped after gaining each participant's permission.

I would have developed an interview protocol to ensure the interview remained focused on the specific aspects of the case study under question. The focus group interview would have lasted 30 to 45 minutes, with all participants being encouraged to contribute to the discussion. Following the session, I would have transcribed the interview on a home computer. Triangulation would have been used to compare all data sources to answer the research questions.

Data Analysis

I developed a grid that highlighted which data sources addressed each research question (Appendix H). As analysis ensued, I consistently reflected on the various components to ensure the study and analysis remained focused. In addition, as data sources were being collected, I organized each source within an independent file on a home computer, all of which were housed in a main password protected folder. As data sources were collected, I reviewed the information several times, writing notes and

observer comments related to insights, hunches, and connections that were emerging (Bogdan & Biklen, 2007; Creswell, 2013). This preliminary exploratory analysis provided an overall sense of information, helping to arrive at initial coding of the data (Creswell, 2012).

Following an initial review of all data sources, I transferred text files over to a qualitative data analysis computer program. Using a program such as NVivo helped with organizing the data, assigning codes, and searching through the various data sources to locate similar words and phrases (Creswell, 2012). Once codes had been assigned, data was extracted based on assigned codes and further analysis ensued so that coded data could be condensed into larger units, or similar themes (Bogdan & Biklen, 2007; Creswell, 2013). I examined these themes across all sources to identify discrepant data. However, I found no evidence of nonconforming data. Therefore, triangulation of the data sources continued until a comprehensive analysis had occurred (Lodico et al., 2010), providing answers to the research questions and a greater understanding of the central phenomenon (Creswell, 2012).

Issues of Trustworthiness

Credibility

During the process, I took several steps to ensure the credibility of this study. Interviews were audiotaped and transcribed, preserving the integrity of the data (Lodico et al., 2010). Prior to coding the data, member checking was used to ensure the interviewee's responses were interpreted accurately (Creswell, 2012). To examine my own biases and subjective thoughts, reflective field notes were taken during preliminary

analysis of all data sources (Lodico et al., 2010). Furthermore, all data sources were triangulated to corroborate the findings (Yin, 2014).

Transferability

The goal of this study was not to generalize the findings to other settings. However, I took steps so that transferability could be possible. Maximum variation sampling was used to ensure a range of teachers were selected as participants. In addition, thorough, detailed descriptions were provided of the context of the study, allowing readers to make judgments and connections to their own situations, leading to possible transferability to other settings (Lodico et al., 2010).

Dependability

While thick descriptions of the context of a study can increase transferability, explicit, detailed descriptions of data collection and analysis can improve the dependability of a study (Lodico et al., 2010). Therefore, I provided precise information regarding data collection and data analysis procedures so that others could replicate the study. In addition, all data were assembled in a database, sufficiently organized for easy retrieval by myself or other interested researchers (Yin, 2014). Furthermore, multiple sources of data were collected and triangulated to corroborate findings. These steps increased the dependability of the study.

Confirmability

In qualitative research, it is inevitable that interpretation of data involves personal experiences from the researcher and causes potential bias to result. However, there are ways that confirmability can be increased in a qualitative study. I accepted and

recognized my own biases to the proposed study, was upfront about them, and used methodological practices to respond to my biases (Jensen, 2008).

Reflective fieldnotes were taken, assisting me in examining subjective thoughts and biases (Creswell, 2012). Data collection and analysis procedures were clearly described, with examples of the coding process being provided in the final document (Jensen, 2008). In addition, throughout the study, I acknowledged my personal background and experiences related to the study, explaining how this information informed my interpretations (Yin, 2014).

Implications for Social Change

Insights gained from this case study may lead to positive social change for all key stakeholders, as well as the state and nation as a whole. Addressing challenges identified by teachers may improve implementation practices and lead to increased participation rates from low-income children, improving food security in households. Proper nutrition leads to a child's healthy development, resulting in positive long-term behavioral, academic, and health outcomes (Felling, 2013). Improved health outcomes, in turn, lower economic costs for states, as well as the nation. Therefore, this study may potentially create positive social change for millions of individuals.

Summary

This chapter included an explanation of the chosen qualitative design, with a rationale for the selection of a case study approach to explore BIC implementation, as well as the benefits and challenges associated with the program. In addition, the chapter included a discussion of participant selection, measures for ethical protection, and the

role or the researcher. An explanation of data collection, data analysis, and methods to address trustworthiness is also included.

Chapter 4: Results

Introduction

The purpose of this qualitative case study was to explore teachers' perspectives regarding breakfast implementation and the lack of participation with BIC in a small school district in the Mid-Atlantic region. Due to minimal research existing on teachers' perspectives of BIC, an objective of this study was to fill a gap in research by exploring the perceptions of those directly involved with BIC implementation. Additional insights were gained by asking participants several questions related to the following research questions:

1. What are teachers' experiences with the process of BIC implementation?
2. How do teachers describe the benefits and challenges of the BIC model, relating to student participation?
3. What are teachers' perceptions of how BIC might impact students, particularly as related to higher level needs in Maslow's hierarchy of needs?

In this chapter, I describe participant demographics relevant to the study, as well as explain the details of data collection. In addition, the process of data analysis is presented, along with a results section that addresses each research question, with quotations from transcripts and journal entries to support the findings. This chapter also includes strategies that I used in the study to establish and maintain reliability and validity. Finally, I provide a summary of this chapter.

Demographics

In this study, I explored BIC implementation and factors associated with low participation in the SBP. I specifically chose participants employed as kindergarten, first, second, or third grade level teachers, as I felt BIC implementation in younger grade levels could result in greater challenges. Maximum variation sampling was used to ensure the sample would reflect a range of individuals, differing on characteristics (Lodico et al., 2010), such as grade level and years of teaching experience, which is shown in Table 1. Obtaining participants from each grade level, as well as varying levels of experience, helped ensure the data reflected differing perspectives (Creswell, 2013), allowing for a more comprehensive picture of the central phenomenon.

Table 1

Participant Demographics

Name	Grade level	Years experience
Interviewee 1 - T1	1st	11 to 20
Interviewee 2 - T2	1st	31 to 40
Interviewee 3 - T3	3rd	21 to 30
Interviewee 4 - T4	3rd	21 to 30
Interviewee 5 - T5	Kinder	0 to 10
Interviewee 6 - T6	Kinder	11 to 20
Journal Participant 1 - TJ1	Kinder	21 to 30
Journal Participant 2 - TJ2	1st	11 to 20
Journal Participant 3 - TJ3	2nd	11 to 20

Data Collection

I used a range of sources during data collection to increase the accuracy of the findings through triangulation (Yin, 2014). This study included one-to-one

semistructured interviews, observations of the classroom environment, and participant journals. Interviews were conducted with six participants: two kindergarten, two first grade, and two third grade teachers. Observations and photographs of the classroom environment were also conducted with the same six participants. An additional three participants completed a journal, which included a kindergarten, first grade, and second grade teacher.

Interviews, Observations, and Photographs

I obtained participant email addresses through the school district's website, where invitations to participate (see Appendix B) in the study were sent to each individual, as well as consent forms (see Appendix C and Appendix E) for their review. Upon obtaining responses to volunteer, participants were chosen based on varying grade levels. Interview schedules were established based on convenient days and times for each participant.

I conducted all interviews after school in the participant's classroom, allowing for a quiet, distraction-free atmosphere. At the beginning of each interview, I established a friendly conversation to ensure the participant felt comfortable in my presence. In addition, I reiterated the purpose of the study, the significance of the interview, the methods to ensure confidentiality, and the ability to withdraw at any time (Creswell, 2012). Prior to the actual interview beginning, each participant completed a consent form (see Appendix C), as well as gave permission to audiotape the interview.

Prior to asking the interview questions, I collected demographic information. Participants identified their grade level, years of teaching experience, and number of children participating in the SBP within their classroom. I used an interview protocol (see

Appendix D), allowing me to remain focused and ensure similarity between interviews (Creswell, 2012; Lodico et al., 2010). The interviews were semistructured, permitting me to use probing questions for further clarification and explanation of responses (Creswell, 2012). The majority of the interviews lasted from 20-25 minutes, with one being approximately 12 minutes in length. All interviews were audiotaped in separate files on the Olympus WS-821 digital voice recorder.

Immediately following the interview, I conducted a 5-minute classroom observation, focusing on the physical arrangement and environment of the classroom. An observation protocol (Appendix G) was used, which included a descriptive section, as well as an area for reflective notes. While the descriptive section included a checklist on the physical setting of the room, the reflective section allowed me to record my insights, hunches, and emerging themes obtained from each observation. In addition, a few photographs of the classroom setting were taken so that details could be remembered during data analysis (Creswell, 2012). I typed the observation notes immediately following each interview and saved each document in a password-protected file.

I transcribed all responses within two days of each interview, assigning participant numbers to protect the confidentiality of each participant. Individual transcriptions were kept in a single file folder on a personal computer, which was password protected. In addition, participants received their transcripts and reviewed the content to confirm the accuracy of their responses. Using member checking, I ensured that I interpreted the interviewee's responses accurately (Creswell, 2012). Only one

participant modified the information by changing the format of the responses, rather than the content; the transcript now reads more like a journal entry rather than an interview.

Journals

After obtaining interest to participate in the study and having chosen interview participants, I selected three additional primary teachers to complete a participant journal. Participants documented their experiences with BIC implementation, focusing on the benefits, challenges, and frustrations with the process. When visiting each participant, I delivered directions (Appendix F), answered questions, and obtained participant consent (Appendix E). In addition, I reminded participants of the freedom to withdraw at any time and assured the confidentiality of their involvement.

Journal directions requested the participants to complete two journal entries a week for 2 weeks, focusing on one of the four provided topics each time. Participants completed the entries at their convenience, allowing the participant to choose the days and times suitable to their schedules. Although participants were allowed to write the entries by hand, all three participants chose to type the entries in a Microsoft Word document. At the end of two weeks, participants sent the entries to a private email account. I checked the entries for thoroughness and usefulness for answering the research questions (Creswell, 2012). All entries contained responses to each topic; therefore, I kept all entries for analysis, assigning participant numbers to each journal and keeping them in a password-protected file. Information within the journals was used to help corroborate the themes found in the interview transcripts.

Variations in Data Collection

The only variation in data collection from the plan that I presented in Chapter 3 was the use of a focus group. I initially included a focus group as a last data source, which would be used to obtain additional information if analysis warranted further exploration. However, the interviews, journal entries, and classroom observations provided sufficient information to answer the research questions. Therefore, conducting a focus group was not necessary and was not included in the study.

Data Analysis

As I collected my data, I organized each source into a password-protected computer file, as well as printed each source to allow for the documentation of reflective field notes and the beginning of preliminary exploratory analysis. During my initial analysis, I consistently reflected on the components of the research question grid (see Appendix H) I created for the study. In addition, I reviewed each source several times, continuing to write observer comments in the margins of the data sources. This preliminary analysis provided an overall sense of the information, assisting me in developing initial codes for the data.

After reviewing each of my data sources, I transferred all files to NVivo, a qualitative data analysis computer program. Due to many of the initial codes overlapping and connecting with one another, I felt a computer program would be more efficient in organizing the information and allowing me to place words, phrases, and passages into multiple codes. I began with a short list of codes and then extracted the data based on the assigned codes for further analysis. The information within each code was then organized

into smaller segments. For example, one of the initial codes was ‘Benefits to Child’, which was further broken down into academic, behavior, social/emotional, and nutritional benefits. Finally, I extracted and printed these smaller units for further analysis, which allowed me to determine the frequency of the responses and triangulate the data sources to substantiate the findings and provide answers to the research questions.

Study Results

Data for Research Question 1

Research Question 1 was: What are teachers’ experiences with the process of BIC implementation? Interview questions, journal topics, and classroom observations yielded data to answer this question. The following questions were asked of the participants:

1. How is BIC implemented in your classroom? (Interview Question 1)
2. Explain the frustrations you have with BIC implementation. How have you managed these frustrations, or how would you like to see these frustrations improved? (Journal Topic 3)
3. How can BIC be improved to increase participation rates? (Interview Question 5)
4. Explain why you believe children do not participate in the program. How do you believe the lack of participation could be improved? (Journal Topic 4)

Establishing routine. The responses of all participants to the questions were consistent, with teachers indicating the logistics of implementation being a challenge at

the beginning of the school year. One theme that emerged from the various responses was *establishing routine*. One teacher stated:

> My main frustration is implementing it [BIC] on the first week of school. The first week of school…is like no other. They [children] do not know any routines, expectations, or behaviors that are desired. In the first 30 minutes, there is no time for BIC. (JT1)

In addition, T5 stated, "What I do is open the box and train my kids at the beginning of the year that they are supposed to get their milk and the main part of the breakfast." Similarly, another teacher indicated, "The first month I distributed it [food] to them….Once they were comfortable, I would say, 'You know what you need. Come and get it" (T6). T1 conveyed that "once you teach routine, they are pretty independent about it…They just have to learn the routine and get familiar with it." Furthermore, teachers expressed the importance of establishing a system for those who order breakfast, which involves communication with students. As one teacher stated:

> In the beginning of the school year, I put their names down because there was confusion. Some kids will say they ordered breakfast and then we would be short. After a while, they understood you have to order if you want to eat. (T3)

Classroom observations substantiated the need to develop a classroom system for BIC implementation, as teachers had specific places for straws, napkins, and other supplies needed for breakfast consumption. In addition, sign-up systems for ordering breakfast were established in each classroom.

Products. Another theme that emerged dealing with the logistics of implementation was *products*, which included equipment and food issues. As JT3 stated, "There are a number of challenges that I have witnessed in the years we have had BIC. First, the logistics of transporting the meals up to the classroom and disposing of the waste afterwards needed to be rectified." Another teacher indicated that "at the beginning of the year, my students are too little and not strong enough to carry the breakfast box from the cafeteria" (T5). Similarly, T1 acknowledged the need to reduce the size of the bag by stating:

> Some people send their kids up to get it [breakfast bag], but it takes two of our kids to carry that, and they're struggling because of the size and awkwardness of it. I think the size of the cooler needs to be smaller.

In addition, teachers communicated concern with the choices and portions of food provided to the BIC participants. One teacher stated:

> I think that the choices need to be better. I think some of the stuff that's offered is not preferred by the kids. And with the whole fruit and juices, you need to have equal of everything that you are offering. (T1)

Another teacher supported this statement by saying:

> Children are told to pick a fruit or a juice, but there is not enough if they all choose the same thing. Students that get breakfast later usually don't have a choice and many not like the option that is left. (TJ2)

Teachers also voiced their concern over portions of food offered to the children. As T2 stated, "Some days it's two things. Some days it's one thing….Why does it vary so

much? The volume of food, whether it's one thing or two things to try to eat, changes the time factor too." Another teacher mirrored this statement by saying:

> I believe children do not participate in the program due to the selection of breakfast items. Many children have become "picky" eaters, not wanting to try something new. Then many are not healthy eaters and only want the "goodie" items. Having a choice of fruit, dry cereal, and milk is plenty for a grab breakfast. Too many choices and too much just makes it harder on the child to choose and then to eat. (TJ1)

Communication. A final theme that emerged from the data was the necessity to *communicate* with parents. As one teacher stated, "Teachers are typically not aware of the students on the free/reduced list, and therefore are unable to encourage those student to get usually a much needed breakfast meal" (TJ2). Similarly, TJ1 indicated that "another frustration is knowing who is eligible with free or reduced and then those whose parents are willing to pay for it. It just takes communication and time to learn." Communication with parents, according to T1, T5, T6, and TJ1, is achieved in their classrooms through consent letters, which identify those children who are allowed to participate in the program on a daily basis.

In addition, teachers conveyed the need to educate parents on BIC and the processes involved with implementation. One teacher stated, "My observations point to a reluctance by parents to take the necessary steps to fill out paperwork for free/reduced breakfast and lunch" (TJ3). Similarly, T4 indicated:

> I think there is so much paperwork that goes home that first week of school. That free and reduced form…it looks pretty lengthy and rather tedious, so I think it's just one of those things that gets put to the back burner.

Furthermore, participants conveyed the need to educate parents on the various aspects of BIC. One teacher stated, "I also believe the understanding of BIC is limited. Communication and explanation is crucial with parents, especially with those parents just entering into the school career" (TJ1). T2 also expressed this need by saying, "I think parents need to know a little bit more about what is available out there and why it is important to have breakfast." Another teacher indicated that "you have to educate parents….I just wish we had more education on nutrition in school – for parents, teachers, and everyone. I think we all need education on what is healthy" (T5). Another participant stated that participation rose with awareness of the program indicating that "as the year went on, I had more students participate as their parents became more aware of the program. Educating parents about BIC is key" (TJ2).

Data for Research Question 2

Research Question 2 was: How do teachers describe the benefits and challenges of the BIC model, relating to student participation? Interview questions and journal topics yielded data to answer this question. The following questions were asked of the participants:

1. What benefits do you see to BIC? Why do you believe these are benefits? (Interview Question 2)

2. Explain the benefits you see to BIC. Explain why you feel these are benefits to the program and to the students participating in the program. (Journal Topic 1)
3. What challenges do you see to BIC? Why do you believe these are challenges? (Interview Question 3)
4. Explain the challenges you see to BIC. Explain why you feel these are challenges to the program and to the students participating in the program. (Journal Topic 2)
5. Why do you believe children do not participate in the program? (Interview Question 4)
6. How can BIC be improved to increase participation rates? (Interview Question 5)
7. Explain why you believe children do not participate in the program. How do you believe the lack of participation could be improved? (Journal Topic 4)

Responses from all participants revealed benefits and challenges to both teachers and children as emerging themes. Benefits for teachers included control and time, while there were behavioral and nutritional benefits for children. Challenges consisted of messes and food options for both teachers and students.

Benefits for teachers: Time. Teachers believe that having children eat in the classroom, rather than the cafeteria, saves valuable *time* with getting the day started. One teacher stated:

> It is a time saver. The children used to have to eat down in the cafeteria for breakfast. Sometimes they would take a longer time eating and then they would doddle coming back up. Once they come in the door from the busses, they have to go directly to their homeroom. They immediately eat, and that does save a lot of time. (T3)

Another participant responded, "BIC makes it simple and easy for students to get the breakfast they need, with little fuss or wasted time" (TJ2). In addition, T5 stated, "Well, it definitely saves on time. I know that when the students ate in the cafeteria, they wouldn't be back until almost 25 after. That was an issue." Similarly, T6 indicated:

> I'm thinking back to when they used to go to the cafeteria, and we would lose time, especially with pokey eaters. We might not get them back to the room until 8:30 or later. Then you are waiting to start morning meeting and get things accomplished. So I really prefer having it in the room.

Benefits for teachers: Control. Along with believing BIC saves time, participants expressed pleasure in having more *control* over what takes place with in the classroom during breakfast consumption. One teacher stated, "You have more control over who is here and who is not here versus the straggling in from the cafeteria. You can keep things moving" (T2). Another participant responded:

> Children are able to eat in the room, while taking care of anything else that may need done, such as finishing complete work, or having difficult concepts reinforced. Kids do not miss anything that is taking place in the classroom during breakfast time. (TJ2)

Similarly, TJ3 indicated:

> The fact that the breakfast takes place in the classroom allows the student to not lose out on important information given at the start of the school day. I offer tutoring time in the mornings that often overlap the bus arrivals and breakfast.

In addition, teachers discussed the ability to control the actual eating that takes place in the classroom. One participant conveyed satisfaction with having BIC by stating, "I like that they are in the room. I can keep an eye on them. I can prompt them to eat, and we can get started with the day quicker" (T6). Another teacher indicated that "it allows me to see that the students who are hungry are fed with regularity" (TJ3). Likewise, T2 responded:

> In the classroom it's a little easier in some ways, because then those children who use it as a social time, you have those controls over how much time they're spending talking and how much time they're spending eating….I feel more in control of knowing they ate or they didn't eat. When they are starving later in the morning, you can say, "You know what, if you finished breakfast instead of wanting to do something else, then it might have been better." You don't have the interaction otherwise, because you have no idea if they ate anything or not.

Benefits for children: Behavioral. Several participants discussed the *behavioral* benefits of their breakfast consumers, indicating that eating breakfast increases attention and enhances mood. One teacher stated, "I definitely see the importance of BIC at our school. Kids are more alert after eating breakfast and feel more full" (T5). Mirroring this statement, T6 said, "The ones that eat are awake. They're attentive. They don't seem

drowsy. They are on-task." Further substantiating this remark, another participant indicated that "when a child's stomach is not hurting from hunger, the child can actually focus on what is presented to them on a daily basis" (TJ1). In addition, T5 shared a story on one child whose mood was enhanced upon participating in the breakfast program. The participant stated:

> At the beginning of the year, I had a child who came to school grumpy and emotional. This student never expressed that they were hungry, but I would ask if they had a breakfast or not. The student always said they did eat breakfast, when actually they did not. I noticed on the BIC questionnaire, that this student's parent agreed that breakfast is allowed for their child at school. I told the student that I would sign them up for breakfast and that they would feel much better. The child received a breakfast and their mood completely changed from emotional to motivated and happy. (T5)

Benefits for children: Nutritional. Some of the participants expressed their concern over the *nutritional* quality of the food served to the students. One teacher stated, "I sometimes question the nutritional value of the breakfast served. Sugar is one of the first few listed ingredients in most items" (TJ2). Another participant indicated that "another challenge has been how to get a nutritious meal to the rooms without giving up quality of items. The limitation of the classroom eating area, in my opinion, has limited the variety and freshness of the menu" (TJ3). In addition, T3 said, "We used to have eggs, sausage, toast, and things were a little more nutritional. Now everything is packaged. There's less nutrients and freshness to all of it, except for the fresh fruit."

However, even though the quality of some foods was questioned, participants identified the nutritional value of some of the products and expressed the necessity of children having something in their stomachs. T3 indicated that "they do have fresh fruit in there sometimes – bananas, apples- those are a benefit." In addition, another teacher stated, "I like that there is always a fruit, and the kids really like the fruit" (T6). TJ3 also added that "the menu has both milk and juice options, as well as a variety of whole grain items."

Furthermore, teachers conveyed the importance of children having something to eat. One teacher stated, "Those students who come are hungry. Many of them have been on the bus for over an hour and are not fed before school" (TJ1). Similarly, T6 indicated that "the ones I worry about not getting fed their full meals, I think that there are great benefits for those kids with eating the school breakfast." T4 reiterated this comment saying, "I think that the fact that some of them might not get a breakfast if they didn't eat one at school." Likewise, another teacher stated, "It really does help a lot of those kids who maybe have a peanut butter sandwich and haven't had anything else all night. It's something in the morning to keep them going" (T2).

Challenges: Food options. Participants expressed concern over the challenges some of the *food options* cause themselves and the children. One of the concerns dealt with children not preferring the breakfast products offered to them. T1 and T6 indicated that the children do not always take all of the items. One participant stated, "Sometimes they don't eat. Sometimes they don't like what is in the breakfast box" (T5). T3 believes that "some kids are picky eaters," which was also conveyed when TJ1 indicated that

"many children have become 'picky' eaters, not wanting to try something new." This challenge was further substantiated when another participant stated, "The menu items are not looked upon favorably by the kids, even though chocolate donuts and 'sweet' items are offered. Many of my students turn their noses up at the breakfast choices" (TJ3).

In addition, some of the products become a physical and time challenge for the teachers and children. Even though teachers indicated the nutritional advantages of having fresh fruit as an option, whole fruits can produce added challenges. One participant stated:

> I know fresh fruit is wonderful, but fresh fruit is really hard to eat in a short amount of time, except for bananas. Oranges, even apples, get to be a challenge for the kids to eat, because they are still working with preferences like not wanting the peel of the apple. (T2)

In addition, T1 indicated that "one of the other challenges is that they send fruit, and we have asked not to send oranges or whole apples, because they take too long and the oranges are horribly messy." Similarly, T5 expressed concern saying:

> The oranges that come down in the breakfast box are difficult. The children do not eat the oranges, because there's not enough time to peel the orange and then eat it and do everything else. If we could maybe get a different fruit or maybe a fruit that is already cut. Grapes would be nice. Anything that is sliced or just easy to start eating. Fruit that is already cut or peeled would help tremendously, because we do not have a lot of time in the morning.

Challenges: Messes. Although the participants indicated that there are systems in place to control sanitation issues, such as community garbage cans in the hallway and custodial services for major spills, *messes* were the biggest challenge identified by the teachers. Liquid spills and crumbs were the most common messes discussed. As T2 stated, "Some days still are a mess because of the crumbs. It just depends on the food item". Another participant said, "I do have occasionally some of the kids getting wet paper towels and having to wipe up their desks. Crumbs are a mess" (T3). Similarly, one teacher stated:

> Also, I know muffins are pretty crumbly and the donuts are too. The kids will break them apart and then put them in their mouths. So then all those little crumbs and all those little pieces…it gets onto the ground. It can be messy, and I do not have an effective way of picking up the crumbs. (T5)

Although crumbs were discussed as being messy, participants mentioned liquid as a more common issue with BIC. One teacher stated, "Spills are a concern. Young children often spill milk and other items. Classroom carpets get stained and my room actually has a spoiled milk odor now, due to all the spills that have occurred this year" (TJ2). Similarly, another participant indicated that "sour milk smell, spills on carpeted areas, sticky papers and desks were common and still take place with some regularity" (TJ3). In addition, T5 stated:

> I have several juice and milk spills each week. The milk or juice spills on themselves, on the carpet, all over the table. It's quite messy when the drinks pour onto their nametags, morning work, and into the book bins.

An additional challenge with spills is having the necessary supplies to clean them sufficiently. As one participant stated, "Sometimes I give the kids wipes to clean their tables off. If it's bad…the custodian has to come down and clean it up and use the machine. Because of the milk on the carpet and then that stains" (T1). Another participant said, "I've used hand sanitizer on a paper towel, because it was a little sticky. I don't have cleaners, so that is what I used" (T6).

Although every grade level involved mentioned spills as being a challenge, some participants felt that this issue was more severe with the youngest children. One participant stated, "I think depending upon the grade level, obviously older students…I'm not saying they can't spill things, because they do. But you will have less spills with the older kids" (T3). Another participant mirrored this comment by saying:

> The younger students have a harder time regulating their eating habits. Third grade seems to be the cut-off grade level…Early in the year there are spills and messes. They become less frequent in later months. Kindergarten to second grade seems to have a lot of accidents. (TJ3)

Data for Research Question 3

Research Question 3 was: What are teachers' perceptions of how BIC might impact students, particularly as related to higher level needs in Maslow's hierarchy of needs? Interview questions, journal topics, and classroom observations yielded data to answer this question. The following questions were asked of the participants:

1. What benefits do you see to BIC? Why do you believe these are benefits? (Interview Question 2)

2. Explain the benefits you see to BIC. Explain why you feel these are benefits to the program and to the students participating in the program. (Journal Topic 1)
3. How are children's needs met through BIC? (Interview Question 6)

Responses from participants were analyzed for evidence of what needs may be met related to Abraham Maslow's hierarchy of needs. Interview, journal entries, and classroom observations provided data that led to the themes of basic needs, safety and security, and love and affection.

Basic Needs. *Basic needs* include having appropriate and adequate foods. All data sources revealed that participants believe and take efforts to ensure their students basic needs are met through BIC. As one participant stated, "BIC can ensure children get breakfast, when they may not get it at home due to parents refusal to prepare it" (TJ2). Another teacher indicated that "some students arrive in school having not had a healthy breakfast. Some will arrive without having a decent dinner from the night before" (TJ3). T1 also said, "I have kids that depend on that every morning, because they are so hungry."

Participants also expressed the ability to use leftover food for snacks, allowing children to have their basic needs met later in the day when they may be hungry. One teacher stated, "If they choose not to eat the belly bears, then I just keep them for a snack later in the day for anyone who wants them. I also keep the juice and the milk in the classroom" (T5). Similarly, T1 responded, "I keep it for snack for the afternoon. If they

didn't eat it in the morning, maybe they will eat it later, or another kid that didn't order breakfast that day got it." Another teacher indicated that:

> If someone ate just part of a breakfast or just drank the milk…if it's something what would keep, I keep that because I have kids that on odd days don't eat breakfast at home and are starving. So we do that and save that. (T2)

T5 also stated:

> Even if they did not get a breakfast at home, and they come to school without a breakfast and their form says they cannot participate in BIC, I have cereal and things in my classroom that I give to them. Also, their friends that have a breakfast…if there is something there they don't want, they will donate that. We share.

Classroom observations also revealed that children's basic needs are met through snack boxes, as T1, T2, T4, and T5 had bins located in their rooms for children to access.

Safety and security. When children participate in BIC, they feel more *secure* knowing they will receive a breakfast on a daily basis. As one participant stated, "Kids feel more secure that they are going to be able to come to school and have something to eat" (T3). Another teacher noted that "some of them for sure would feel secure…because it's a component they may not have at home otherwise" (T6). Furthermore, another teacher noted:

> I think so, because I have kids, like I said, that come from homes that don't have the food. So they're hungry when they get here. Maybe they didn't eat dinner the night before, and it's the only food that they get really. I think we would benefit to

> offer the breakfast regardless of whether you're free or reduced to all of the kids. (T1)

In addition, participants revealed the ability to ensure children are receiving breakfast on a daily basis. T5 stated, "I make sure that they get all of the parts of their breakfast." Another teacher noted, "I like that they are in the room. I can keep an eye on them. I can prompt them to eat, and we can get started with the day quicker" (T6). A third participant further indicated that "they know I am going to check on them and say, 'Hey, you usually get breakfast. You didn't put it down. You normally put a 'c' by your name" (T4).

Consuming breakfast in the classroom also allows children to feel secure in understanding the routine and knowing instruction is not being missed. Participants indicated that children become self-sufficient in the process. One teacher indicated that "children are able to eat in the room, while taking care of anything else that may need to done…Kids do not miss anything that is taking place in the classroom during breakfast time" (TJ2). Mirroring this statement, TJ3 stated, "The fact that the breakfast takes place in the classroom allows the student to not lose out on important information given at the start of the school day."

Learning the routine for BIC helps children feel comfortable in their surroundings. One teacher stated:

> Once they were comfortable, I would say, "You know what you need. Come and get it." I have napkins and straws back on the little table. They are real self-

> sufficient. They come in. They do their morning jobs. They wash their hands. They grab what they need and sit down. (T6)

Similarly, another participant noted:

> They bring it upstairs to our classroom and put it on my back table. Then as the other students come in, everyone knows who they are that get breakfast, and they go over and grab breakfast from the bag. They go back to their own seat, and they eat. There are napkins, straws, spoons, and anything they need there for that particular day for breakfast. (T3)

A journal participant corroborated this information by stating, "After a few modeled lessons…they learn how to clean up, take care of garbage, and manage time" (TJ1).

Love and affection. Participants also revealed that BIC helps children feel as though they are cared for and loved. One teacher indicated that "they are feeling love and acceptance when you are providing them with food" (T5). Similarly, another participant stated, "The kids have a feeling of love that someone is caring about them" (T3). T2 noted, "I think it gives them a sense of community and a sense of belonging – a sense of somebody cares for them." In addition, a journal participant stated, "It allows me to see that the students who are hungry are fed with regularity" (TJ3). Furthermore, another teacher noted:

> They feel as though they are being taken care of, and that we care about them, making sure they have what they need…In our grade level, overall, there is a nurturing component of it. It's part of the routine – part of the day. I always want them to feel loved. (T6)

Participant responses also revealed that BIC allows children to socialize with one another. One teacher responded, “They do their jobs…when they are finished, they sit down and converse at their tables while they are working” (T6). Another teacher indicated that “everybody is occupied with something. They will interact. I allow conversations, so it’s as much a social time that way too. They might talk to somebody” (T2). Similarly, another participant stated:

> I have some students who like to work and eat at the same time and others who eat and then complete their morning work. Once students are finished with their breakfast and morning assignment, they work in their morning journals, read a book with a friend, or read poems from their poetry journals. (T5)

Mirroring these comments, another teacher noted:

> I know the kids are more comfortable. They can talk to their friends, as long as they are sitting. I don’t want them walking around with food, but they can just get that friendly start to their day. When you eat, it should be like a conversation and a social activity, so I think it is more like that now than when it was in the cafeteria. (T4)

Another participant reiterated these comments by stating:

> I think they are more relaxed down here in the classroom then they are in the cafeteria, so they do socialize. I think that when they are in the cafeteria, they are rush, rush, rushed, because they are hurrying up to get them out of there…So I think it’s more relaxed. It’s more of a family setting then it is in the cafeteria. (T1)

The ability for children to socialize was recognized in classroom observations as well. The classrooms contained either hexagon-shaped tables, rectangular-shaped tables, or individual desks. Children sitting at hexagon- or rectangular-shaped tables had the ability to sit across from other students, allowing for conversation between peers. In addition, individual desks were arranged in rows, where desks were pushed against one another, allowing conversation to take place between neighbors.

Evidence of Trustworthiness

Credibility

To ensure the credibility of the study, I audiotaped and transcribed the interviews, which helped preserve the integrity of the data (Lodico et al., 2010). Prior to coding the data, respondents participated in member checking, ensuring I interpreted the responses accurately (Creswell, 2012). During preliminary analysis, I documented reflective field notes in the margins of the data sources to examine my personal biases (Lodico et al., 2010). Furthermore, I analyzed each data source, and as themes emerged from one source, evidence from the other sources was triangulated to substantiate the findings (Yin, 2014).

Transferability

Although generalization of the findings to other settings was not a goal of this study, I took steps so that transferability might be possible. Selected participants came from a range of grade levels and varying levels of teaching experience to ensure a more comprehensive picture of the central phenomenon. In addition, I used thick descriptions, providing thorough, detailed information and direct quotations to support the findings.

These detailed descriptions allow the reader to determine whether the findings can be transferred to other settings (Lodico et al., 2010, Yin, 2014).

Dependability

Along with thick descriptions of the context and findings of the study, I included detailed descriptions of data collection and analysis. High-quality taping devices were used for interviews, which were transcribed with pauses and overlaps in responses (Yin, 2014). A research log was kept during the data collection process. In addition, I used QSR NVivo, a computer program that assisted in managing, organizing, and analyzing the data sources. This program also kept a Project Event Log, tracking modifications and work I completed each day within the data sources. The research log of the data collection, as well as the Project Event Log of the data analysis provides concise information for others to replicate the study. Furthermore, along with all data sources being stored in QSR NVivo, all data have been stored in a password-protected file, organized for easy retrieval by myself or other researchers (Yin, 2014). Finally, I collected data from multiple sources and triangulated the information to corroborate the findings, increasing the dependability of the study.

Confirmability

Due to being an elementary teacher and also employed in a school where BIC has been implemented, it was inevitable that my personal experiences caused potential bias to result. However, by documenting reflective field notes, I was able to examine my subjective thoughts (Creswell, 2012) and report them honestly within my study (Jensen,

2008). In addition, throughout the study, I acknowledged my personal background and experiences that might inform the interpretations of the findings (Yin, 2014).

Summary

In Chapter 4, I described the findings of a case study related to teachers' perceptions of BIC. This chapter also contains information on the participant demographics, data collection, data analysis, and evidence of quality for the study. Three research questions were developed and answered through interviews, participant journals, and classroom observations.

The first research question for this study involved the experiences teachers had with the process of BIC implementation. Responses from participants were consistent and revealed patterns with the logistics of implementation. Three main themes emerged: establishing routine, products, and communication. Participants felt that establishing routine was important to ensure BIC ran smoothly. In addition, the teachers felt the breakfast bag could be a problem for primary students and believed some of the food options and portions provided to the children were questionable. Furthermore, participants' identified the need to communicate with parents, educating them on the aspects of BIC.

The second research question involved asking participants to identify the benefits and challenges related to the BIC model. Answers revealed that time and control were benefits for the teachers, while there were behavioral and nutritional benefits for the child. Participants felt that BIC saves valuable time with getting instruction started and found satisfaction with having the control of what took place in the classroom during

breakfast consumption. In addition, participants indicated that children who consume breakfast exhibit more appropriate behaviors in the classroom. Although the quality of some of the food products was questioned, teachers expressed the necessity of children having something to eat.

Along with benefits, responses also revealed patterns related to the challenges of BIC. Themes included food options and messes. Teachers expressed concern with children not preferring some of the breakfast products, with the physical and time challenges posed by having to peel whole fruits, and with the messes caused by crumbs and liquid spills, especially with the youngest elementary students.

The third research question addressed how BIC meets the needs of children, as related to Maslow's hierarchy of needs. Responses from participants revealed three themes: basic needs, safety and security, and love and affection. Teachers indicated that nutritional needs of students are met through BIC. In addition, responses revealed that children feel secure knowing they will receive a breakfast and understanding the breakfast routine established in the classroom. Furthermore, teachers indicated that BIC allows children to feel as though they are cared for, as well as provides time for students to socialize with their peers.

Chapter 5 includes the interpretation of the findings, as compared to peer-reviewed literature, as well as in connection to the theoretical framework. Limitations to the study and recommendations for further research are included. Implications for social change are also discussed.

Chapter 5: Discussion, Conclusions, and Recommendations

The purpose of this qualitative case study was to explore teachers' perspectives regarding breakfast implementation and the lack of participation with BIC. Specifically, in this study, I explored kindergarten, first, second, and third grade teachers' perceptions of BIC implementation, as well as benefits and challenges associated with the breakfast program. In addition, I examined how BIC impacts students, particularly as related to higher-level needs in Maslow's hierarchy (1943) of needs. Due to minimal research existing on teachers' perspectives of BIC, an objective of this study was to fill a gap in research by exploring the perceptions of those directly involved with BIC implementation.

Findings revealed that teachers believed there are benefits and challenges associated with BIC implementation. Benefits included being able to begin instruction earlier, having control of breakfast routines, observing more appropriate behaviors from breakfast consumers, and ensuring children's nutritional needs were met. Challenges consisted of children not preferring some of the products, having to clean up crumbs and liquid spills, and dealing with the logistics of implementation. Participants identified the need to communicate with parents, educating them on the aspects of BIC. Furthermore, responses revealed that teachers believe BIC helps meet the physiological, safety, and social needs of children.

Interpretation of Findings

Three main research questions guided the collection of data for this study. The interpretation of findings is separated into the three central questions and focus on the themes identified through interviews, journals, and classroom observations.

Research Question 1

The first research question was: What are teachers' experiences with the process of BIC implementation? Findings included consistent patterns with the logistics of implementation. Three main themes emerged from the data and included establishing routine, products, and communication.

Establishing routine. Teachers described their classroom procedures for implementation, and although food products and equipment were consistent among classrooms, procedures for establishing routine were unique. The location of supplies, the manner in which breakfast items were distributed, and clean-up procedures varied among classrooms. The ability to establish unique procedures seemed to increase the support and acceptance of the program among staff members. This finding validates the assertion that having flexibility to modify the BIC program within classrooms is valued and supported (Lowry, 2014).

In addition, all participants discussed the challenges associated with establishing BIC at the beginning of the school year. Participants indicated that as children learned procedures, the process became less challenging. It was evident that establishing routine and ensuring children understand procedures are important for successful BIC implementation. Throughout my literature review, no known research was found relating

to establishing routine as a method for successful BIC implementation. Therefore, this finding appears to be unique in extending knowledge in the area of BIC.

Products. Participants expressed concerns over the size of the breakfast bag and unequal food portions. The bulkiness and size of the breakfast bag made transporting it to and from the classroom a major obstacle for the younger students. Although some teachers employed the assistance of fifth and sixth grade students to deliver the bags, some participants did not have this luxury. While the challenges of equipment were not supported in the literature reviewed, most teachers felt this issue could hinder the success of the program.

In addition to concerns with equipment, participants conveyed issues with food options and portions. In this study, it was revealed that children are offered a variety of foods each morning but the portions are unequal. For example, children are provided a juice and a fruit each day, but there may be six juices provided, while only three apples are available. Children who arrive later than others may not prefer the remaining items and choose not to participate in the program that day, thus contributing to the low participation rates in the SBP. Although I did not locate literature to support this issue, the unequal food portions may be a modification implemented by this particular district and not a frequent problem with BIC in general.

Communication. Findings revealed the importance of educating parents on the various aspects of BIC. Teachers identified a limited understanding of the SBP and expressed the necessity of communication with parents to increase participation rates in the breakfast program. One teacher indicated that as parents became more aware of the

program, the participation in her classroom increased. FRAC (2013), Haesly et al. (2014), Salomon (2009), and Slawson et al. (2013) support this finding, as research emphasized that communication between stakeholders is essential for buy-in and success with breakfast programs.

In addition, according to the participants in this study, the application process to qualify for free- or reduced-priced meals is lengthy and tedious, which may be a factor in low-income children not participating in the program. Parents may be reluctant to complete the necessary paperwork due to the overwhelming nature of the process or may not want to be acknowledged as needing support. According to FRAC (2010), the application process can be burdensome and complicated for families. In addition, Sahota et al. (2013) found that teachers believed that issues with pride, privacy, and independency deterred families from completing applications. However, with assistance from school staff, parents felt the process was relatively easy (Sahota et al., 2013). Thus, by increasing communication with parents, it is probable that participation rates would increase as a result.

Research Question 2

The second research question was: How do teachers describe the benefits and challenges of the BIC model, relating to student participation? Findings revealed patterns related to benefits for teachers and students, with time and control emerging as themes for participants and behavioral, as well as nutritional, benefits for students. Emerging themes related to challenges included food options and messes.

Time. BIC allows students to consume breakfast in their own classrooms. Although there were initial concerns regarding loss of instructional time, teachers in this study expressed their satisfaction with the time eating in the room saves with getting instruction started earlier. Salomon (2009) validates this finding, as teacher participants also had concerns with wasted instructional time but found little change in workload with BIC implementation. Similarly, survey results from principals have indicated that teachers observed increased instructional time with this breakfast model (FRAC, 2013).

Control. Teachers in this study found gratification with having control of what took place in the classroom during BIC. Participants expressed the ability to immediately ascertain which children were absent and could ensure children completed morning requirements. In addition, many participants expressed the ability to control the actual eating in the room, allowing the teachers to observe how much and what foods were consumed, as well as ensuring children were fed with regularity. While the reviewed literature included challenges associated with BIC for educators, research was not found related to the benefits perceived by teachers. Although identifying challenges to a program can lead to improvements, identifying benefits are equally as important, as the positives can encourage greater support from stakeholders. When teachers have the opportunity to observe the eating patterns of their students, the nutritional needs of the low-income population can be met.

Behavioral. In this study, it was revealed that consuming breakfast improves behaviors. Several participants conveyed that eating breakfast increased attention and enhanced the mood of their students. Children exhibited more on-task behaviors and were

more alert during the morning hours. Wesnes et al. (2012) confirms this finding, as research indicated attention decreased without breakfast. Similarly, Kral et al. (2012) and Micha (2011) found that breakfast enhanced a child's mood. Furthermore, low glycemic foods increased alertness (Micha et al., 2011). Low glycemic foods, such as whole grains, milk, and fruits are required nutritional standards in the SBP, which may be the reason participants noticed increased attentiveness in their breakfast consumers.

Nutritional. Although participants questioned the quality of certain food products, many were pleased with fresh fruit as a daily choice and indicated that the children enjoyed these options. Fruits contain dietary fiber, which is a vital nutrient protecting individuals from specific types of health ailments and is far below the recommended levels for all ages (Storey & Anderson, 2014). However, Robison-O'Brien et al. (2010) found that SBP participants consumed more than half of the daily fruit requirements at school. Therefore, it is probable that children participating in BIC are receiving the required amount of fruits their bodies need for healthy development.

In addition, findings revealed that milk is a daily option and that if children do not prefer the food products, students will normally drink the milk. The USDA (2014a) indicated that dairy products are essential for improving bone health and developing bone mass in children. The finding from this study is promising, as Arora et al. (2012), Affenito et al. (2013), Kirk et al. (2014), and Myers et al. (2014) found that breakfast consumers had higher intakes of dairy products than non-breakfast eaters.

Food options. Participants conveyed that the options given to children can be a challenge. According to the teachers, children do not always prefer the breakfast

products, which results in children selecting one item or skipping breakfast altogether. This is supported by the work of Veghari and Mansourian (2012) who found that uninteresting food choices are a key reason for children choosing to skip breakfast. Participants felt that children were finicky eaters, not wanting to try new products. Furthermore, it was emphasized by most teachers that children skip the choices due to the physical and time challenges posed by certain products.

Although participants expressed satisfaction with the nutritional value of offering fresh fruit to children, whole fruits cause additional issues for young students. Whole fruits, such as apples and oranges, can be difficult for children to eat. Peeling these fruits cause challenges for children, as primary students may not have fully developed fine motor skills. Attempting to peel the fruits intensifies the messes in the classroom, as well as increases the time it takes to consume breakfast. Thus, children may be avoiding eating fruits, which are necessary for healthy development, due to the physical and time constraints posed by whole fruits.

Literature supports the finding that children skip breakfast due to food choices (Veghari & Mansourian, 2012); however, no known research exits that explores the reasons why children avoid specific products. Although these findings may be unique to the district in which this study took place, the information extends the knowledge of the SBP and addresses a gap in the literature.

Messes. In past research, cleanup and sanitation concerns due to lack of janitorial staff were common among principals (FRAC, 2013) and teachers (Salomon, 2009). In contrast, participants in this study indicated that custodial staff was available for large

spills and messes that could not be handled independently. In addition, community garbage cans were housed in hallways to alleviate sanitation concerns. It appears that the district in which this study took place chose measure to alleviate these issues for their staff. However, teachers expressed additional concerns with messes caused by crumbs and smaller liquid spills.

Although smaller spills and messes made from crumbs did not require custodial services, participants conveyed the necessity of being provided sufficient materials for cleanup purposes. Smaller spills create sticky areas and ruin work, leading to a loss of instructional time to deal with the situation. Many teachers emphasized the lack of appropriate cleaners to handle the messes efficiently. In addition, even though all participants mentioned minor messes as a concern, it was noted that this issue is more common with the younger students and becomes less problematic as children advance through the elementary grades. Throughout my literature review, no known research was found relating to minor messes as a common concern among teachers; therefore, this finding expands information on potential challenges associated with BIC.

Research Question 3

The third research question was: What are teachers' perceptions of how BIC might impact students, particularly as related to higher level needs in Maslow's hierarchy of needs? This question was connected to the theoretical framework for this study. Responses revealed three basic themes, each related to the first three levels of Maslow's hierarchy: basic needs, safety and security, and love and affection.

Basic needs. Having appropriate and adequate food is one of the basic needs for all individuals. Maslow (1970) proposed that until the physiological, or basic, needs are met, more advanced needs are ignored. Participants in this study indicated that BIC offers consistent meals to students, ensuring children obtain adequate nutrition each morning. Teachers emphasized the importance of BIC for food insecure families, as it was noted that many low-income students come to school without having breakfast or even a decent meal the night before. This finding is consistent with research from Coleman-Jensen et al. (2014), which noted the difficulties for food insecure families to meet the nutritional needs of their children.

Safety and security. Findings also revealed that children feel a sense of security, as they realize breakfast will be received on a daily basis. Participants also indicated that breakfast in the classroom establishes a consistent, predictable routine for children, allowing them to feel confident and comfortable in their surroundings, thus further increasing feelings of safety and security. This is consistent with Maslow's (1970) second level on the hierarchy of needs, which indicates an organized world assists in meeting an individual's safety needs.

Love and affection. An additional finding revealed the satisfaction of having the ability to ensure children receive a daily breakfast and the opportunity to confirm that students consumed the breakfast products. Teachers conveyed that BIC allows children to feel a sense of belonging and that others care for them. Maslow (1970) proposed that individuals hunger for affection and desire positive relationships with others. When

teachers are interactive with the students during breakfast consumption, positive adult-child relationships can be formed.

In addition, BIC provides the opportunity for socialization with peers. Teachers indicated that children interacted and conversed with their peers during breakfast consumption. This finding is consistent with Haesly et al. (2014), who found increased interaction, resulting in stronger relationships with others, when breakfast was eaten in the classroom. Although participants did not identify an association between BIC and self-esteem, which is Maslow's fourth level on the hierarchy of needs, stronger social skills lead to more positive prosocial behaviors (Gulay, 2011); because children have the opportunity to build relationships during BIC, it is probable that eating in the classroom with peers can improve a child's self-worth.

Recommendations

In this study, I explored the perspectives of BIC from the point of view of primary grade level teachers. Kindergarten, first, second, and third grade teachers were recruited for participation, as implementation in younger grade levels could result in greater challenges. Therefore, the perspectives of intermediate grade level teachers (fourth, fifth, and sixth grades) warrant investigation, as perceptions may differ as children become older. Exploring the perspectives of upper grade level teachers could identify additional benefits and challenges related to breakfast consumption with older students.

In addition, participants conveyed that establishing routine with BIC procedures was important for successful implementation. Data sources were gathered for this study during the last month of the school year. Therefore, conducting qualitative research at the

beginning of the school year with primary grade level teachers, when routines are being established, warrants further investigation. Conducting research at the start of the year could identify additional challenges that participants might not have remembered at the closing of the year when this study took place.

I conducted this study in two elementary schools within the same school district. Research should be done with primary grade level teachers in other districts as well, which have differing demographics. Although generalization to other settings was not a goal of this study, conducting further research in this area with schools having varying characteristics could increase the transferability to other settings.

Furthermore, the bulk of research related to breakfast consumption is quantitative in nature, with survey research being most prominent. I found very few studies that employed qualitative methods to expand upon the trends found within survey results (Creswell, 2012). With minimal research existing that explores teachers' perceptions of the SBP, it seems appropriate to conduct additional qualitative studies with all grade levels. In addition, there is a lack of qualitative research on the perceptions of other key stakeholders. Engaging and supporting all stakeholders is imperative for successful implementation and participation in BIC (Creighton, 2012). Therefore, further research with students, parents, administrators, custodians, and food service personnel deserves attention.

Finally, much of the literature related to school breakfast is centered around the traditional school breakfast program where children eat in the cafeteria. Breakfast delivery models, such as the BIC, have only recently surfaced in an attempt to increase

participation rates in the SBP (Creighton, 2013; FRAC, 2014b). Consequently, there is less literature available focusing specifically on BIC and alternate delivery models. Therefore, additional research at all grade levels warrants further investigation to gain a deeper understanding of what breakfast models are most successful for increasing participation at varying grade levels.

Implications for Positive Social Change

The federal government established the SBP in an effort to meet the nutritional needs of children and reduce food insecurity (Gunderson, 2014). However, many low-income children who qualify for free- or reduced-priced meals are not participating in the program (FRAC, 2012). Many school districts have implemented various breakfast delivery models in an effort to increase participation rates in the SBP. BIC is one model that has shown significant gains in participation rates in schools across the nation (Creighton, 2013; FRAC, 2014b). Although some schools implementing BIC observe gains in participation, other schools do not. Having conducted this study on BIC implementation in a district that has not seen dramatic growth in participation rates helped increase the understanding of the benefits and challenges associated with the program, thus creating clear implications for positive social change.

In this study, I provide information on the challenges associated with BIC implementation and include how the district can alleviate the problems, which can positively impact all key stakeholders. The information is particularly helpful for administrators and nutrition personnel who are looking to improve BIC implementation and support school staff in the process. In addition, it is likely that other districts

beginning BIC implementation would benefit from the challenges identified in this study. The information will enable districts to address challenges to BIC and consequently increase the support and participation in the breakfast program.

By increasing the support and participation rates for BIC, positive social change would occur for families and their children. Food insecure families are unable to provide sufficient foods for their children (Coleman-Jensen et al., 2014). Increasing participation rates would decrease food insecurity for low-income households (FRAC, 2012) and allow funding to be used for other meals when children are not in school. In addition, this study has shown there are clear benefits for children who participate in the program.

Data from this study provide evidence that BIC supports the physiological needs of children and helps them feel secure knowing a daily breakfast is provided, which allows children to move along Maslow's hierarchy of needs. Having a sense of security decreases the anxiety and worry associated with food insecurity (Fram et al., 2010). In addition, this study shows that BIC affords children the opportunity to socialize with their peers, allowing them to develop friendships with their classmates. Data also indicate that breakfast consumers exhibit better behaviors, with a lack of hunger increasing attention of those children participating in the program. Increased attention can lead to better academic performance (Felling, 2013). Furthermore, increasing participation in the SBP can ensure low-income students are receiving appropriate nutrition based on dietary guidelines, which can improve the health outcomes of children.

This study also has implications for positive social change for the state in which this study took place. Food insecurity and hunger create economic costs for states, as

these issues can result in indirect costs associated with health care needs (Shepard et al., 2011). Addressing identified challenges for BIC and increasing participation rates in the SBP could improve health outcomes for children, resulting in decreased hunger costs for the state, as well as our nation as a whole.

Recommendations for Practice

Although there are clear benefits derived from participating in BIC, there are also challenges that need to be rectified. When challenges are present, difficulty arises in successful implementation. Based on the major findings of this study, I have developed the following recommendations to improve BIC implementation and potentially lead to greater participation rates in the SBP.

One of the findings from this study indicates problems with the logistics of implementation. Most of the teachers in the youngest grade levels expressed the challenge of students transporting the heavy breakfast bag to and from the cafeteria. One suggestion to alleviate this problem is to provide alternate bags for primary grade levels. However, if this solution is not financially feasible, an alternate resolution would be obtaining the assistance of older students in fifth or sixth grade. A few of the participants indicated that having older children transport the bag to the classroom has been quite helpful in addressing this challenge.

The findings also reveal that most teachers are not satisfied with food portions, food options, or food quality. Participants expressed that although the children are provided whole grains, milk, and fresh fruit, the nutritional quality is questionable with many of the items. In addition, teachers indicated that portions of provided foods vary,

which becomes an issue for children who arrive late and may not be partial to what is left in the breakfast bag. Therefore, the nutrition personnel should be perceptive and take efforts to alleviate these issues. It is suggested that an equal amount of food be provided to those participating in the breakfast program, as well as evaluate which food options are not preferred so that alternate foods can be offered.

This study indicates that the greatest challenge relates to the mess caused by crumbs, whole fruits, and liquid spills. Whole fruits that need to be peeled or cut create difficulty for young children whose fine motor skills are not fully developed. It is recommended that whole fruits be peeled or cut prior to distribution or alternate fruits, such as bananas and grapes, be offered instead. In addition, although custodians handle large spills, crumbs and smaller liquid spills become an issue for teachers. Participants indicated that sufficient and effective supplies are not available to properly clean these messes. Therefore, schools should ensure teachers have proper equipment and cleaning supplies to address these problems.

The final recommendation is to educate parents on the various aspects of BIC. The study indicates that understanding of the BIC is limited and needs addressed. The school should conduct rigorous outreach efforts by providing flyers, pamphlets, and newsletters with information on the various aspects of BIC. In addition, a few participants alluded to the reluctance of parents to complete the necessary paperwork to qualify for free- or reduced-priced meals. Therefore, schools should provide assistance in completing forms, as well as direct parents to other facilities that can assist with filling out the application. Parents make the decision as to whether or not their child will

participate in the breakfast program. Ensuring parents are knowledgeable about the aspects of BIC could garner more support and increase participation rates for the SBP.

Reflections of the Researcher

When I began research on the topic of the SBP, I never imagined that I would learn as much as I have during my time at Walden. My district had just implemented BIC when I decided to investigate this topic, as teachers within my school, including myself, had several reservations about the program. The more I learned, the more I understood the rationale behind the implementation of a program within a child's classroom and grew to accept it as a necessary component of my daily routine. Having a greater understanding of the benefits derived from the program could have lead to personal bias and perceived ideas. However, this realization helped assist me in analyzing my own possible biases against the concrete data obtained through this study.

In addition, over the past 15 years, I have learned a great deal about the importance of nutrition, especially with eating breakfast, with my own personal endeavors to combat obesity in our nation. I have done speaking engagements in the local community, developed a fitness and nutrition website, held various charitable events, and have coached individuals in obtaining healthier lifestyles. Due to my work in the community, many individuals know who I am and are aware of my work in this area. Therefore, it is possible that this knowledge could have had effects on the manner in which participants responded to me and the interview questions. However, precautions were taken and prompting was used to ensure answers were honest and thoroughly clarified.

Due to my previous knowledge on the topic and my own beliefs about the program with having experience with direct implementation, I had my own ideas of the benefits and challenges of BIC. Much of the information obtained with interviews, journals, and observations supported my own beliefs, as well as what was found in the literature. In my school, one of the biggest challenges that has been mentioned is the loss of instructional time. However, the findings of this study indicated that teachers believe there is actually an increase in instructional time with children eating in the classroom. In addition, during my research, I had the perceived notion that improving the program would involve a great deal of monetary output and time. However, based on participant responses, increases in participation could result from simple, timely, and inexpensive improvements to the program. This information is invaluable, as immediate action could improve the lives of our young children.

Conclusions

The findings from this study revealed that there are benefits and challenges to BIC implementation. Participants perceived the program to increase instructional time; provide individual control with establishing classroom procedures and routines; improve on-task behaviors and mood; meet the nutritional needs of students; enhance feelings of safety and security; and provide socialization opportunities that strengthen bonds between peers. Identified challenges included establishing routines at the beginning of the year; unequal portions of food products; lack of parental knowledge of the SBP; increased physical and time constraints with certain food options; and dealing with crumbs and smaller liquid spills in an efficient manner.

The challenges revealed in this study could be contributing to the lack of participation in the SBP. Identifying challenges to BIC is important, but addressing the issues are essential to strengthening the program and increasing participation rates of the low-income population. The district in which this study took place, along with other districts where transferability is applicable, would profit from examining the outcomes of this study and taking steps to rectify the issues. Improving the program can ultimately create positive social change for all key stakeholders, particularly for the young children in the nation living in food insecure homes.

References

Acham, H., Kikafunda, J., Malde, M., Oldewage-Theron, W., & Egal, A. (2012). Breakfast, midday meals and academic achievement in rural primary schools in Uganda: Implications for education and school health policy. *Food and Nutrition Research, 56*, 1-2. doi: 10.3402/fnr.v56i0.11217

Affenito, S., Thompson, D., Dorazio, A., Albertson, A., Loew, A., & Holschuh, N. (2013). Ready-to-eat cereal consumption and the School Breakfast Program: Relationship to nutrient intake and weight. *Journal of School Health, 83*(1), 28-35. doi:10.1111/j.1746-1561.2012.00744.x

Anderson, S. A. (1990). Core indicators of nutritional state for difficult-to-sample populations. *Journal of Nutrition*, *120*, 1559-1660. Retrieved from http://jn.nutrition.org/content/120/11_Suppl/1555.full.pdf

Anzman-Frasca, S., Djang, H., Halmo, M., Dolan, P., & Economos, C. (2015). Estimating impacts of a Breakfast in the Classroom program on school outcomes. *The Journal of the American Medical Association Pediatrics, 169*(1), 71-77. doi:10.1001/jamapediatrics.2014.2042

Arora, M., Nazar, G., Gupta, V., Perry, C., Reddy, K. & Stigler, M. (2012). Association of breakfast intake with obesity, dietary and physical activity behavior among urban school-aged adolescents in Delhi, India: Results of a cross-sectional study. *BMC Public Health, 12,* 1-12. doi:10.1186/1471-2458-12-881

Augustine-Thottungal, R., Kern, J., Key, J., & Sherman, B. (2013). Ending childhood hunger: A social impact analysis. *Deloitte Development.* Retrieved from

http://www.nokidhungry.org/pdfs/school-breakfast-white-paper.pdf

Bailey-Davis, L., Virus, A., McCoy, T., Wojtanowski, A., Veur, S., & Foster, G. (2013). Middle school student and parent perceptions of government-sponsored free school breakfast and consumption: A qualitative inquiry in an urban setting. *Journal of the Academy of Nutrition and Dietetics, 113*(2), 251-257. doi:10.1016/j.jand.2012.09.017

Bartfeld, J. & Ahn, H. (2010). The School Breakfast Program strengthens household food security among low-income households with elementary school children. *The Journal of Nutrition, 141,* 470-475. doi:10.3945/jn.110.130823

Bartfeld, J. & Ryu, J. (2011). The School Breakfast Program and breakfast-skipping among Wisconsin elementary school children. *Social Service Review, 85*(4), 619-634. doi:10.1086/663635

Blondin, S., Djang, H., Metayer, N., Anzman-Frasca, S., & Economos, C. (2014). It's just so much waste: A qualitative investigation of food waste in a universal free School Breakfast Program. *Public Health Nutrition,* 1-13. doi:10.1017/S1368980014002948

Bogdan, R. C. & Biklen, S. K. (2007). *Qualitative research for education: An introduction to theories and methods* (5th ed.). Boston, MA: Allyn & Bacon.

Boschloo, A., Ouwehand, C., Dekker, S., Lee, N., Groot, R., Krabbendam, L., & Jolles, J. (2012). The relation between breakfast skipping and school performance in adolescents. *Mind, Brain, and Education, 6*(2), 81-88. doi:10.1111/j.1751-228X.2012.01138.x

Cao, H., Jiang, J., Oh, L., Li, H., & Chen, Z. (2013). A Maslow's hierarchy of needs analysis of social networking services continuance. *Journal of Service Management,*

24(2), 170-190. doi:10.1108/09564231311323953

CDC. (2014). Diabetes in youth. Retrieved from http://www.cdc.gov/diabetes/risk/age/youth.html

Coleman-Jensen, A., Gregory, C., & Singh, A. (2014). *Household food security in the United States in 2013* (Economic Research Report No. 173). Retrieved from USDA website: http://www.ers.usda.gov/media/1565415/err173.pdf

Creighton, L. (2012). Stakeholder engagement for successful breakfast in the classroom implementation. *Journal of School Health, 82*(11), 496-498. Retrieved from Walden Library databases.

Creswell, J. W. (2012). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (Laureate custom ed.). Boston, MA: Pearson Education.

Creswell, J. W. (2013). *Qualitative inquiry & research design* (3rd ed.). Thousand Oaks, CA: SAGE Publications, Inc.

Danielsen, Y., Stormark, K., Nordhus, I., Maehle, M., Sand, L., Ekomas, B., & Pallesen, S. (2012). Factors associated with low self-esteem in children with overweight. *Obesity Facts, 5*(5), 722-733. doi:10.1159/000338333

Dea, J. & Mugridge, A. (2012). Nutritional quality of breakfast and physical activity independently predict the literacy and numeracy scores of children after adjusting for socioeconomic status. *Health Education Research, 27*(6), 975-985. doi:10.1093/her/cys069

Defeyter, M. & Russo, R. (2013). The effect of breakfast cereal consumption on

adolescents' cognitive performance and mood. *Frontiers in Human Neuroscience, 7*(789), 1-10. doi:10.3389/fnhum.2013.00789

Deshmukh-Taskar, P., Nicklas, T., O'Neil, C., Keast, D., Radcliffe, J., & Cho, S. (2010). The relationship of breakfast skipping and type of breakfast consumption with nutrient intake and weight status in children and adolescents: The national health and nutrition examination survey 1999-2006. *Journal of the American Dietetic Association, 100*(6), 869-878. doi:10.1016/j.jada.2010.03.023

Donin, A., Nightingale, C., Owen, C., Rudnicka, A., Perkin, M., Jebb, S.,…Whincup, P. (2014). Regular breakfast consumption and Type 2 diabetes risk markers in 9- to 10-year-old children in the Child Heart and Health Study in England (CHASE): A cross-sectional analysis. *PLOS Medicine, 11*(9), 1-12. doi:10.1371/journal.pmed.1001703

Ethics in qualitative research. (2007). In U. Flick (Ed.). *Designing Qualitative Research,* (pp. 68-77). London, England: SAGE Publications. Retrieved from http://srmo.sagepub.com.ezp.waldenulibrary.org/view/designing-qualitative-research/n7.xml?rskey=CwYt09&row=3

Felling, C. (2013). Hungry kids: The solvable crisis. *Educational Leadership, 70*(8), 56-60. Retrieved from Walden Library databases.

FNS. (2012). The School Breakfast Program. Retrieved from http://www.fns.usda.gov/sites/default/files/SBPfactsheet.pdf

FNS. (2013). School Breakfast Program: Program history. Retrieved from http://www.fns.usda.gov/sbp/program-history

FRAC. (2010, June). *How to expand participation in school breakfast* (Issue Brief No. 6).

Washington, DC: Levin. Retrieved from http://frac.org/newsite/wp-content/uploads/2010/04/cnr06_breakfast.pdf

FRAC. (2012). School breakfast scorecard: School year 2010-2011. Retrieved from http://frac.org/pdf/school_breakfast_scorecard_2010-2011.pdf

FRAC. (2013). Start the school day ready to learn with Breakfast in the Classroom: Principals share what works. Retrieved from http://frac.org/dg/frac_naespf_bic_principals_report2013.pdf

FRAC. (2014a). *School breakfast: Reaching more children, making breakfast better* (Issue Brief No. 1). Washington, DC: Levin. Retrieved from http://frac.org/pdf/brief_breakfast_cnr_2015.pdf

FRAC. (2014b). School breakfast scorecard: 2012-2013 school year. Retrieved from http://frac.org/pdf/School_Breakfast_Scorecard_SY_2012_2013.pdf

Fung, C., McIsaac, J., Kuhle, S., Kirk, S., & Veugelers, P. (2013). The impact of a population-level school food and nutrition policy on dietary intake and body weights of Canadian children. *Preventive Medicine, 57*(6), 934-940. doi:10.1016/j.ypmed.2013.07.016

Gottfried, M. (2010). Evaluating the relationship between student attendance and achievement in urban elementary and middle schools: An instrumental variables approach. *American Educational Research Journal, 47*(2), 434-465. doi:10.3102/0002831209350494

Griffiths, L., Dezateux, C., & Hill, A. (2011). Is obesity associated with emotional and behavioural problems in children: Findings from the millennium cohort study.

International Journal of Pediatric Obesity, 6, 423-432. doi:10.3109/17477166.2010.526221

Gulay, H. (2011). Assessment of the prosocial behaviors of young children with regard to social development, social skills, parental acceptance-rejection, and peer relationships. *Journal of Instructional Psychology, 38*(3), 164-172. Retrieved from Edinboro University or Pennsylvania databases.

Gunderson, G. (2014). National School Lunch Program (NSLP): Background and development. Retrieved from http://www.fns.usda.gov/sites/default/files/NSLP-Program%20History.pdf

Haesly, B., Nanney, M., Coulter, S., Fong, S., & Pratt, R. (2014). Impact on staff of improving access to the School Breakfast Program: A qualitative study. *Journal of School Health, 84*(4), 267-274. doi:10.1111/josh.12142

Halfon, N., Larson, K., & Slusser, W. (2012). Associations between obesity and comorbid mental health, developmental, and physical health conditions in a nationally representative sample of US children aged 10-17. *Academic Pediatrics, 13*(1), 6-13. doi:http://dx.doi.org/10.1016/j.acap.2012.10.007

Hamilton, L. & Corbett-Whittier, C. (2013). Defining case study in education research. In *Research methods in education: Using case study in education research* (pp. 3-22). London: SAGE Publications Ltd. doi:http://dx.doi.org.ezp.waldenulibrary.org/10.4135/97814739138851.n1

Hannum, E., Liu, J., & Frongillo, E. (2012). Poverty, Food Insecurity and Nutritional Deprivation in Rural China: Implications for Children's Literacy Achievement.

International Journal of Educational Development, 34, 90-97. doi:10.1016/j.ijedudev.2012.07.003

Hanson, K. & Olson, C. (2012). School meals participation and weekday dietary quality were associated after controlling for weekend eating among U.S. school children aged 6 to 17 years. *The Journal of Nutrition, 143,* 714-721. doi: 10.3945/jn.112.170548

Hatch, A. (2002). *Doing qualitative research in education settings*. Albany, NY: State University of New York Press.

Hayes, D. & Berdan, G. (2013). School nutrition programs: Challenges and opportunities. *American Journal of Lifestyle Medicine, 10*(10), 1-8. doi: 10.1177/1559827613490504

Himmelrich, S. (2011). Parental perceptions of school meal programs in Guilford County, North Carolina (Master's thesis). Retrieved from Walden University database. (UMI No. 1499589)

Imberman, S. & Kugler, A. (2012). The effect of providing breakfast on student performance: Evidence from an in-class breakfast program (Working Paper No 17720). *National Bureau of Economic Research*. Retrieved from https://aefpweb.org/sites/default/files/webform/imberman%20kugler%202012.pdf

Jensen, D. (2008). Confirmability. In L.M. Given (Ed.), *The sage encyclopedia of qualitative research methods,* (p. 113). Thousand Oaks, CA: SAGE Publications, Inc. doi: http://dx.doi.org.ezp.waldenulibrary.org/10.4135/9781412963909.n60

Khan, S., Pinckney, R., Keeney, D., Frankowski, B. & Carney, J. (2011). Prevalence of food insecurity and utilization of food assistance program: An exploratory survey of a Vermont middle school. *Journal of School Health, 81*(1), 15-20. doi:10.1111/j.1746-

1561.2010.00552.x

Kirk, S., Kuhle, S., McIsaac, J., Williams, P., Rossiter, M., Ohinmaa, A…Veugelers, P. (2014). Food security status among grade 5 students in Nova Scotia, Canada and its associations with health outcomes. *Public Health Nutrition,* 1-9. doi:10.1017/S/1368980014001414

Kral, T., Heo, M., Whiteford, L., & Faith, M. (2012). Effects on cognitive performance of eating compared with omitting breakfast in elementary schoolchildren. *Journal of Developmental & Behavioral Pediatrics, 33*(1), 9-16. doi:10.1097/DBP.0b013e31823f2f35

Lawman, H., Polonsky, H., Veur, S., Abel, M., Sherman, S., Bauer, K…Foster, G. (2014). Breakfast patterns among low-income, ethnically-diverse 4th-6th grade children in an urban area. *BMC Public Health, 14*, 1-9. doi:10.1186/1471-2458-14-604

Lester, D. (2013). Measuring Maslow's hierarchy of needs. *Psychological Reports, 113*(1), 15-17. doi:10.2466/02.20.PRO.113x16z1

Levi, J., Segal, L., Laurent, R., & Kohn, D. (2011). F as in fat: How obesity threatens America's future. Retrieved from http://healthyamericans.org/reports/obesity2011/Obesity2011Report.pdf

Liu, J., Hwang, W., Dickerman, B., & Compher, C. (2013). Regular breakfast consumption is associated with increased IQ in kindergarten children. *Early Human Development, 89*(4), 257-262. doi:10.1016/j.earlhumdev.2013.01.006

Lodico, M., Spaulding, D., & Voegtle, K. (2010). *Methods in educational research: From theory to practice* (Laureate Education, Inc., custom ed.). San Francisco: John

Wiley & Sons.

Lowry, K. (2014). *Perceptions of leadership personnel on the Breakfast in the Classroom program: A qualitative case study* (Doctoral dissertation). Retrieved from http://search.proquest.com.ezp.waldenulibrary.org/docview/1655359843/6223308C79AC40B2PQ/34?accountid=14872#

Maslow, A. H. (1943). A theory of human motivation. *Psychological Review, 50*, 370-396. Retrieved from http://psychcentral.com/classics/Maslow/motivation.htm

Maslow, A. H. (1970). *Motivational personality* (2nd ed.). New York: Harper.

McLaughlin, K., Green, J., Alegria, M., Costello, E., Gruber, M., Sampson, N…Kessler, R. (2012). Food insecurity and mental disorders in a national sample of U.S. adolescents. *Journal of the American Academy of Child & Adolescent Psychiatry, 51*(12), 1293-1303. doi:10.1016/j.jaac.2012.09.009

McLeod, S. (2014). Maslow's hierarcy of needs. *Simply Psychology.* Retrieved from http://www.simplypsychology.org/maslow.html

Melchior, M., Chastang, J., Falissard, B., Galera, C., Tremblay, R., Cote, S…Boivin, M. (2012). Food insecurity and children's mental health: A prospective birth cohort study. *PLOS One, 7*(12), 1-7. doi:10.1371/journal.pone.0052615

Merriam, S. (2009). *Qualitative research: A guide to design and implementation* (2nd ed.). San Francisco, CA: Jossey-Bass.

Micha, R., Rogers, P., & Nelson, M. (2011). Glycaemic index and glycaemic load of breakfast predict cognitive function and mood in school children: a randomized controlled trial. *British Journal of Nutrition, 106,* 1552-1561.

doi:10.1017/S0007114511002303

Miller, K., Hooper, S., Simeonsson, R., & Torres, S. (2014). Weighing in on the relationship between macronutrient intake, weight status, cognitive functioning, and academic performance in school-aged children. *Archives of Clinical Neuropsychology, 29*(6), 550-556. doi:10.1093/arclin/acu038.126

Morgan, D. (2008). Sample size. In L. M. Given (Ed.), *The SAGE Encyclopedia of Qualitative Research Methods* (p. 799). Thousand Oaks, CA: SAGE Publications, Inc. Retrieved from http://srmo.sagepub.com.ezp.waldenulibrary.org/view/sage-encyc-qualitative-research-methods/n412.xml

Morrissey, T., Hutchison, L., & Winsler, A. (2014). Family income, school attendance, and academic achievement in elementary school. *Developmental Psychology, 50*(3), 741-753. doi:10.1037/a0033848

Motoca, L., Williams, S., & Silverman, W. (2012). Social skills as a mediator between anxiety symptoms and peer interactions among children and adolescents. *Journal of Clinical Child and Adolescent Psychology, 41*(3), 329-336. doi:10.1080/15374416.2012.668843

Myers, J., Gibbons, K., Arnup, S., Volders, E., & Naughton, G. (2014). Early childhood nutrition, active outdoor play and sources of information for families living in highly socially disadvantaged locations. *Journal of Paediatrics and Child Health*, 1-7. doi:10.1111/jpc.12713

Nalty, C., Sharkey, J., & Dean, W. (2012). School-based nutrition programs are associated with reduced child food insecurity over time among Mexican-origin

mother-child dyads in Texas border colonies. *The Journal of Nutrition, 143*, 708-713. doi:10.3945/jn.112.168757

NDEP. (2014). Overview of diabetes in children and adolescents. Retrieved from http://www.ndep.nih.gov/media/Overview-of-Diabetes-Children-508_2014.pdf

NIH Office of Extramural Research. (n.d.). Informed consent. Retrieved from https://phrp.nihtraining.com/respect/03_respect.php

No Kid Hungry Maryland. (2011). First class breakfast in Maryland: A guide to expanding school breakfast. Retrieved from mdhungersolutions.org/ pdf/first_class_breakfast_toolkit.pdf

NSCDC. (2009). *Young children develop in an environment of relationships* (Working Paper 1). Retrieved from http://developingchild.harvard.edu/index.php/resources/ reports_and_working_papers/working_papers/wp1/

Nurul-Fadhilah, A., Teo, P., Huybrechts, I., & Foo, L. (2013). Infrequent breakfast consumption is associated with higher body adiposity and abdominal obesity in Malaysian school-aged adolescents. *PLOS One, 8*(3), 1-5. doi:10.1371/journal.pone.0059297

O'Brien, D., Aldeen, H., Uchima, S., & Staley, E. (2004). Hunger in America: The definitions, scope, causes, history, and status of the problem of hunger in the United States. *The UPS Foundation and the Congressional Hunger Center*. Retrieved from http://hungercenter.wpengine.netdna-cdn.com/wp-content/uploads/2012/10/Hunger-in-America-Americas-Second-Harvest.pdf

Odegaard, A., Jacobs, D., Steffen, L., Van Horn, L., Ludwig, D., & Pereira, M. (2013).

Breakfast frequency and development of metabolic risk. *Diabetes Care, 36*, 3100-3106. doi:10.2337/dc13-0316

Ogden, C., Carroll, M., Kit, B., & Flegal, K. (2014). Prevalence of childhood and adult obesity in the United States, 2011-2012. *The Journal of the American Medical Association, 311*(8), 806-814. doi:10.1001/jama.2014.732

Parke, C. & Kanyongo, G. (2012). Student attendance, mobility, and mathematics achievement in an urban school district. *The Journal of Educational Research, 105*, 161-175. doi:10.1080/00220671.2010.547231

PDE. (2014). Pennsylvania Department of Education Food and Nutrition Division: 2013-2014 building data report. Retrieved from http://www.portal.state.pa.us/portal/server.pt/community/national_school_lunch/7487

PHAC. (2012). The Pennsylvania school breakfast report card. Retrieved from http://www.pahunger.org/html/news/SBPReport11-12.pdf

PHAC. (2013). The Pennsylvania school breakfast report card. Retrieved from http://www.pahunger.org/html/news/Full%20Report%2011-12%20FINAL.pdf

Pivik, R., Tennal, K., Chapman, S., & Gu, Y. (2012). Eating breakfast enhances the efficiency of neural networks engaged during mental arithmetic in school-aged children. *Physiology & Behavior, 106,* 548-555. doi:10.1016/j.physbeh.2012.03.034

Rahmani, K., Djazayery, A., Habibi, M., Heidari, H., Dorosti-Motlagh, A., Pourshahriari, M., & Azadbakht, L. (2011). Effects of daily milk supplementation on improving the physical and mental function as well as school performance among children: Results from a school feeding program. *Journal of Research in Medical Sciences, 16*(4), 469-

476. Retrieved from http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3214350/

Robinson—O'Brien, R., Burgess-Champoux, T., Haines, J., Hannan, P., & Neumark-Sztainer, D. (2010). Associations between school meals offered through the National School Lunch Program and the School Breakfast Program and fruit and vegetable intake among ethnically diverse, low-income children. *Journal of School Health, 80*(10), 487-492. doi:10.1111/j.1746-1561.2010.00532.x

Sahota, P., Woodward, J., Molinari, R., & Pike, J. (2013). Factors influencing take-up of free school meals in primary and secondary school children in England. *Public Health Nutrition, 17*(6), 1271-1279. doi:10.1017/S136898001300092X

Salomon, J. (2009). Wisconsin school teachers' perceptions about Breakfast in the Classroom 2009 survey findings. Retrieved from http://fyi.uwex.edu/wischoolbreakfast/files/2009/10/Wisconsin-School-Teachers-Perceptions-about-Breakfast-in-the-Classroom-20091.pdf

Sandercock, G., Voss, C., & Dye, L. (2010). Associations between habitual school-day breakfast consumption, body mass index, physical activity and cardiorespiratory fitness in English schoolchildren. *European Journal of Clinical Nutrition, 64*, 1086-1092. doi:10.1038/ejcn.2010.145

Santiago, C., Wadsworth, M., & Stump, J. (2011). Socioeconomic status, neighborhood disadvantage, and poverty-related stress: Prospective effects on psychological syndromes among diverse low-income families. *Journal of Economic Psychology, 32,* 218-230. doi:10.1016/j.joep.2009.10.008

Sawyer, M., Harchak, T., Wake, M., & Lynch, J. (2011). Four-year prospective study of

BMI and mental health problems in young children. *Pediatrics, 128*(4), 677-684. doi:10.1542/peds.2010-3132

Shepard, D., Setren, E., & Cooper, D. (2011). Hunger in America suffering we all pay for. *Center for American Progress*. Retrieved from http://www.americanprogress.org/issues/2011/10/pdf/Hunger_paper.pdf

Shonkoff, J. & Garner, A. (2012). The lifelong effects of early childhood adversity and toxic stress. *Pediatrics, 129*(1), e232-e246. doi:10.1542/peds.2011-2663

Slawson, D., Southerland, J., Lowe, E., Dalton, W., Pfortmiller, D., & Schetzina, K. (2013). Go slow whoa meal patterns: Cafeteria staff and teacher perceptions of effectiveness in winning with wellness schools. *Journal of School Health, 83*(7), 485-492. doi:10.1111/josh.12056

Slopen, N., Fitzmaurice, G., Williams, D., & Gilman, S. (2010). Poverty, food insecurity, and the behavior for childhood internalizing and externalizing disorders. *Journal of the American Academy of Child and Adolescent Psychiatry, 49*(5), 444-452. Retrieved from http://scholar.harvard.edu/files/davidrwilliams/files/2011-poverty_food_insecurity-williams.pdf

SNA. (2015). SNA history & milestones. Retrieved from http://www.schoolnutrition.org/AboutSNA/HistoryMilestones/

Steiger, A., Allemand, M., Robins, R., & Fend, H. (2014). Low and decreasing self-esteem during adolescence predict adult depression two decades later. *Journal of Personality and Social Psychology, 106*(2), 325-338. doi:10.1037/a0035133

Thielke, S., Harniss, M., Thompson, H., Patel, S., Demiris, G., & Johnson, K. (2011).

Maslow's hierarchy of human needs and the adoption of health-related tehcnologies for older adults. *Ageing International, 37*(4), 470-488. doi:10.1007/s12126-011-9121-4

USDA. (2014a). Dairy: Nutrients and health benefits. Retrieved from http://www.choosemyplate.gov/food-groups/dairy-why.html

USDA. (2014b). Fruits: Why is it important to eat fruit. Retrieved from http://www.choosemyplate.gov/food-groups/fruits-why.html

U.S. Department of Education. (2014). Federal TRIO programs current-year low-income levels. Retrieved from http://www2.ed.gov/about/offices/list/ope/trio/incomelevels.html

Veghari, G. & Mansourian, A. (2012). Breakfast consumption amongst school children in Northern Iran. *Journal of Nepal Paediatric Society, 32*(3), 193-200. doi:http://dx.doi.org/10.3126/jnps.v32i3.6095

Wang, Y., McPherson, K., Marsh, T., Gortmaker, S., & Brown, M. (2011). Health and economic burden of the projected obesity trends in the USA and the UK. *The Lancet, 378*, 815-825. doi:http://dx.doi.org/10.1016/S0140-6737(11)60814-3

Wesnes, K., Pincock, C., & Scholey, A. (2012). Breakfast is associated with enhanced cognitive function in school children: An internet based study. *Appetite, 59*, 646-649. doi:10.1016/j.appet.2012.08.008

Witbracht, M., Keim, N., Forester, S., Widaman, A., & Laugero, K. (2014). Female breakfast skippers display a disrupted cortisol rhythm and elevated blood pressure. *Physciology & Behavior, 140*, 215-221. doi:10.1016/j.physbeh.2014.12.044

Yin, R. (2014). *Case study research: Design and methods* (5th ed.). Los Angelos: SAGE Publications, Inc.

Appendix A: Letter of Cooperation

Dixie Shaffer
564 Smith Street
Meadville, PA 16335
Date

Superintendent
School District

PERMISSION TO CONDUCT A CASE STUDY ON BREAKFAST IN THE CLASSROOM (BIC)

As we have discussed in previous meetings, I am currently enrolled at Walden University as an Ed.D student in the Early Childhood doctoral program. I would like to conduct a case study entitled *Teachers' Perspectives of the Implementation, Benefits, and Challenges of Breakfast in the Classroom*. The purpose of the study is to explore teachers' perspectives related to the process of BIC implementation, as well as to benefits and challenges associated with the BIC model, with a goal of developing a greater understanding of the issue of low participation in the SBP.

This letter is being written to seek permission to conduct the study in the elementary schools within the district. With your approval, the following steps would be taken during the study. Nine primary grade level teachers would be chosen for the study, all of which would be chosen on a volunteer basis through an email invitation. After obtaining informed consent and ensuring the confidentiality of their responses, six participants will be interviewed individually during after school hours at the teacher's convenience. The other three participants will be keeping a journal for two weeks, documenting information twice each week on specified topics relating to the purpose of the study.

In addition to interviews and journals, a brief classroom observation will be completed immediately following the individual interviews. These observations will be done after school, with no children present in the classroom. The purpose of the observation will be to analyze the physical arrangement and classroom environment. Sketches and photographs of the physical arrangement will be taken to assist in remembering the details of the classroom environment. Following all data collection, a focus group interview with all interested participants may be organized to gain further clarification on themes that have emerged from data analysis.

After obtaining your approval to conduct this study in the district, according to university procedures, I will need your signature on a letter of cooperation. A letter is attached for your convenience; however, you may choose to create your own letter of cooperation instead. The letter of cooperation can be signed in pen or as an electronic signature. If

signed electronically, it is required that the form be sent via email to IRB@waldenu.edu or cc-ed so that the e-signature can be verified.

If you have any questions related to this letter or the case study procedures, please do not hesitate to contact me. Additional information on the methodology can be provided by sending the proposal at your request. At the conclusion of the study, a copy of my final dissertation will be available for your review. If allowed to conduct this study at the district, I assure you that my actions and procedures will remain professional and ethical at all times. Data collection will remain confidential, and the anonymity of participants and the district will be maintained. I look forward to conducting my study at the district.

Sincerely,

Mrs. Dixie Shaffer

Appendix B: Email Invitation to Teachers

Dear kindergarten, 1st grade, and 2nd grade teachers,

Most of you know me as an elementary school teacher. However, I am also a doctoral student at Walden University and am currently working on my dissertation. I will be conducting a study at the district entitled *Teachers' Perspectives of the Implementation, Benefits, and Challenges of Breakfast in the Classroom (BIC).* The purpose of the study is to explore primary teachers' perspectives related to the process of BIC implementation, as well as to benefits and challenges associated with the BIC model, with a goal of developing a greater understanding of the issue of low participation in the School Breakfast Program (SBP).

This letter is an invitation to participate in the study, allowing you to help add to the body of research on the SBP. Specific information on what would take place is listed below. Upon receiving responses back from each of you, six individuals will be chosen for the interview process, and three will be chosen for the journal process. Please know that all information received during the interviews and journals will be kept strictly confidential, with all identifying characteristics eliminated from documents; In addition, all documents will be kept in a password-protected file on my home computer.

Upon reviewing the information, please respond by emailing me at **(insert email address)** by **(insert date)**. Please let me know if you would be interested in volunteering for the interview process, the journal process, or if you have no preference. In addition, if you would rather not be a participant in the study, please let me know that as well. If you have any questions at all, please do not hesitate to contact me at the listed email or by calling **(insert phone number)**. Thank you for considering being a volunteer for my study. I look forward to hearing back from each one of you.

Sincerely,

Interview Process	**Journal Process**
If you participate in the interview process, you will be asked to: • Participate in a 45 minute to hour-long audiotaped face-to-face interview after school on a day and time convenient for you. • Supply demographic information, such as what grade level you teach, how long you have been teaching, how many children participate in BIC, etc. • Allow the researcher to observe the classroom for approximately 10 minutes on a day after school or following the interview to make note and take photographs of BIC procedures and the physical arrangement of the classroom. • Review the copy of the interview transcript to ensure the researcher has accurately portrayed your responses to the interview questions. This process may take approximately an hour to complete all components.	If you participate in the journal process, you will be asked to: • Complete two journal entries a week for two weeks, focusing on one provided topic each time; however, additional information can be added to past entries during the two-week period. Entries can be completed at your convenience, with the days and times chosen by you. • Either write the entries by hand or type them on the computer. • Email computer entries to my email. Handwritten journals will be collected by the researcher. Topics will be provided. There is no minimum requirement for the amount to be written. This process may take approximately a total of an hour to complete, over the two-week process.

Appendix C: Informed Consent for Interviews

CONSENT FORM

Dear Participant,

You are invited to take part in a research study of Breakfast in the Classroom (BIC). You are being invited to participate in the study because of your personal experience with BIC implementation and your standing as a primary grade teacher.This form is part of a process called "informed consent" to allow you to understand this study before deciding whether to take part.

This study is being conducted by a researcher named Dixie Shaffer, who is a doctoral student at Walden University. You may already know the researcher as an elementary teacher, but this study is separate from that role.

Background Information:
The purpose of this study is to explore primary teachers' perspectives related to the process of BIC implementation, as well as to benefits and challenges associated with the BIC model, with a goal of developing a greater understanding of the issue of low participation in the SBP.

Procedures:
If you agree to be in this study, you will be asked to:

- Participate in a 45 minute to hour-long audiotaped face-to-face interview after school on a day and time convenient for you.
- Supply demographic information, such as what grade level you teach, how long you have been teaching, how many children participate in BIC, etc.
- Allow the researcher to observe the classroom for approximately 10 minutes on a day after school or following the interview to make note and take photographs of BIC procedures and the physical arrangement of the classroom.
- Review the copy of the interview transcript to ensure the researcher has accurately portrayed your responses to the interview questions.

Here are sample questions:

- How is BIC implemented in your classroom?
- What benefits do you see to BIC? Why do you feel these are benefits?
- What challenges do you see to BIC? Why do you feel these are challenges?
- Why do you believe children do not participate in the program?
- How can BIC be improved to increase participation rates?
- How are children's needs met through BIC?

Voluntary Nature of the Study:
Participation in this study is voluntary. Everyone will respect your decision of whether or not you choose to be in the study. No one at the district will treat you differently if you decide not to be in the study. If you decide to join the study now, you can still change your mind later and withdraw at any time. You are encouraged to ask any questions you may have about the study prior to participating or throughout the time of participation. In addition, you may choose not to answer specific questions or partake in parts of the procedures that you find uncomfortable.

Risks and Benefits of Being in the Study:
Minimal risks are common in all types of research; being in this type of study will not involve any risks or discomfort that are not already encountered in daily life. Minor discomforts that may be encountered would include fatigue and stress. However, no risks to your safety or wellbeing will be associated with your participation.

The expected benefits associated with participating in the study are the findings related to low participation rates in the School Breakfast Program that may be linked to BIC implementation. In addition, by participating in this study, you have the opportunity to contribute to the body of research on breakfast programs. Once the research is completed, I would be happy to share the findings with you.

Compensation:
There is no compensation for participating in this study.

Privacy:
Any information you provide will be kept confidential. The researcher will not use your personal information for any purposes outside of this research project. Also, the researcher will not include your name or anything else that could identify you in the study reports. Data will be kept secure by assigning a number to your interview, eliminating all identifying characteristics, and keeping transcriptions in a password protected file on a home computer. Data will be kept for a period of at least 5 years, as required by the university.

Contacts and Questions:
You may ask any questions you have now. Or if you have questions later, you may contact the researcher via **(insert phone number)** or **(insert email address)**. If you want to talk privately about your rights as a participant, you can call Dr. Leilani Endicott. She is the Walden University representative who can discuss this with you. Her phone number is 612-312-1210. Walden University's approval number for this study is **IRB will enter approval number here** and it expires on **IRB will enter expiration date.**

The researcher will give you a copy of this form to keep.

Statement of Consent:

I have read the above information and I feel I understand the study well enough to make a decision about my involvement. By signing below, I understand that I am agreeing to the terms described above.

Printed Name of Participant _____

Date of consent _____

Participant's Signature _____

Researcher's Signature _____

Appendix D: Interview Protocol

Interview Protocol
Project: Teachers' Perspectives of the Implementation, Benefits, and Challenges of Breakfast in the Classroom

Time of Interview:
Date:
Place:
Interviewer:
Interviewee:
Position of Interviewee:
Years of Experience:
Number of children normally participating in the breakfast program:

[Describe the project, telling the interviewee about (1) the purpose of the study, (2) the individuals and sources of data being collected, (3) what will be done with the data to protect confidentiality, and (4) how long the interview will take.]
[Have the interviewee read and sign the consent form.]
[Turn on the tape recorder is permission has been granted.]

Questions:

1. How is BIC implemented in your classroom?
2. What benefits do you see to BIC? Why do you feel these are benefits?
3. What challenges do you see to BIC? Why do you feel these are challenges?
4. Why do you believe children do not participate in the program?
5. How can BIC be improved to increase participation rates?
6. How are children's needs met through BIC?

(Thank the interviewee for their cooperation and participation in the interview. Assure them of the confidentiality of the responses and the potential for a future focus group interview.)

Appendix E: Informed Consent for Journals

CONSENT FORM

Dear Participant,

You are invited to take part in a research study of Breakfast in the Classroom (BIC). You are being invited to participate in the study because of your personal experience with BIC implementation and your standing as a primary grade teacher.This form is part of a process called "informed consent" to allow you to understand this study before deciding whether to take part.

This study is being conducted by a researcher named Dixie Shaffer, who is a doctoral student at Walden University. You may already know the researcher as an elementary teacher, but this study is separate from that role.

Background Information:
The purpose of this study is to explore primary teachers' perspectives related to the process of BIC implementation, as well as to benefits and challenges associated with the BIC model, with a goal of developing a greater understanding of the issue of low participation in the SBP.

Procedures:
If you agree to be in this study, you will be asked to:

- Complete two journal entries a week for two weeks, focusing on one provided topic each time; however, additional information can be added to past entries during the two-week period. Entries can be completed at your convenience, with the days and times chosen by you.
- Either write the entries by hand or type them on the computer.
- Email computer entries to the email listed in this consent form. Handwritten journals will be collected by the researcher.

Here are sample topics:

- Explain the benefits you see to BIC. Explain why you feel these are benefits to the program and to the students participating in the program.
- Explain the challenges you see to BIC. Explain why you feel these are challenges to the program and to the students participating in the program.
- Explain the frustrations you have with BIC implementation. How have you managed these frustrations, or how would you like to see these frustrations improved?
- Explain why you believe children do not participate in the program. How do you believe the lack of participation could be improved?

Voluntary Nature of the Study:
Participation in this study is voluntary. Everyone will respect your decision of whether or not you choose to be in the study. No one at the district will treat you differently if you decide not to be in the study. If you decide to join the study now, you can still change your mind later and withdraw at any time. You are encouraged to ask any questions you may have about the study prior to participating or throughout the time of participation. In addition, you may choose not to journal on specific topics that you find uncomfortable.

Risks and Benefits of Being in the Study:
Minimal risks are common in all types of research; being in this type of study will not involve any risks or discomfort that are not already encountered in daily life. Minor discomforts that may be encountered would include fatigue and stress. However, no risks to your safety or wellbeing will be associated with your participation.

The expected benefits associated with participating in the study are the findings related to low participation rates in the School Breakfast Program that may be linked to BIC implementation. In addition, by participating in this study, you have the opportunity to contribute to the body of research on breakfast programs. Once the research is completed, I would be happy to share the findings with you.

Compensation:
There is no compensation for participating in this study.

Privacy:
Any information you provide will be kept confidential. The researcher will not use your personal information for any purposes outside of this research project. Also, the researcher will not include your name or anything else that could identify you in the study reports. Data will be kept secure by assigning a number to your journal, eliminating all identifying characteristics, and keeping typed entries in a password protected file on a home computer. Data will be kept for a period of at least 5 years, as required by the university.

Contacts and Questions:
You may ask any questions you have now. Or if you have questions later, you may contact the researcher via **(insert phone number)** or **(insert email address)**. If you want to talk privately about your rights as a participant, you can call Dr. Leilani Endicott. She is the Walden University representative who can discuss this with you. Her phone number is 612-312-1210. Walden University's approval number for this study is **IRB will enter approval number here** and it expires on **IRB will enter expiration date.**

The researcher will give you a copy of this form to keep.

Statement of Consent:
I have read the above information and I feel I understand the study well enough to make a decision about my involvement. By signing below, I understand that I am agreeing to the terms described above.

Printed Name of Participant _____

Date of consent _____

Participant's Signature _____

Researcher's Signature _____

Appendix F: Journal Directions

Journal Directions

Thank you for agreeing to participate in this study. Your responses to the provided topics will help provide additional information to what factors may contribute to the lack of participation in the School Breakfast Program. The journal process will last a total of two weeks, with you responding to provided topics twice a week; however, more responses are permitted. You may choose to handwrite your responses or type them on a computer. I will collect all handwritten journals at the end of the two-week process; typed journals can be emailed to **(insert email address)** when completed.

Procedures for Journal Responses:

1. Reflect on your experiences with Breakfast in the Classroom (BIC) implementation as you complete two journal entries a week, focusing on a different provided topic each time.
2. There is no minimum requirement for entries; the amount of information included will be determined by you.
3. You may choose the days and times to complete the entries.
4. You may handwrite or type the entries.
5. When completing an entry, please list the topic at the top of the page.
6. If you develop further insight into one of the topics, additional entries may be added.
7. Contact me with any questions you may have during the process. You may reach me at **(insert email address)** or **(insert phone number)**.
8. The journal process will begin on **(insert beginning date)** and end on **(insert ending date)**. Please email all typed entries to dixie.shaffer@waldenu.edu by **(insert date)**. I will set up a time with you to collect any handwritten journals.

Topics for Journal Entries:

- Explain the benefits you see to BIC. Explain why you feel these are benefits to the program and to the students participating in the program.
- Explain the challenges you see to BIC. Explain why you feel these are challenges to the program and to the students participating in the program.
- Explain the frustrations you have with BIC implementation. How have you managed these frustrations, or how would you like to see these frustrations improved?
- Explain why you believe children do not participate in the program. How do you believe the lack of participation could be improved?

Appendix G: Observation Protocol

Observation Protocol
Setting:
Observer:
Time:
Length of Observation:

Descriptive Notes	**Reflective Notes**
Make note of the following: • Types of spaces designated for breakfast consumption • Arrangement of furniture • High traffic areas • Access to breakfast items and clean up areas	

(Complete a sketch of the classroom to help with remembering the details of the setting.)

Appendix H: Research Grid

Research Question	**Data Collection Tools**	**Datapoints Yielded**	**Data Source**	**Data Analysis**
RQ1: What are teachers' experiences with the process of BIC implementation?	- Interview Protocol - Participant Journals - Observation Protocol	- **Interview Question 1**: How is BIC implemented in your classroom? - **Interview Question 5**: How can BIC be improved to increase participation rates? - **Participant Journal Topic 3**: Explain the frustrations you have with BIC implementation. How have you managed these frustrations, or how would you like to see these frustrations improved? - **Classroom Observation**: BIC process set up in classroom; descriptive field notes, sketch, and photographs	- Interviews - Participant Journals - Classroom Environment Observation	Interview transcriptions and journals will be consistently reviewed upon collection. Insights will be noted, and initial coding will be done. Codes will be further analyzed to arrive at themes. Triangulation of the data sources will continue until a comprehensive analysis has occurred.
RQ2: How do teachers describe the benefits and challenges of the BIC model, relating to student participation?	- Interview Protocol - Participant Journals	- **Interview Question 2**: What benefits do you see to BIC? Why do you believe these are benefits?	- Interviews - Participant Journals	Interview transcriptions and journals will be consistently reviewed upon collection.

		- **Interview Question 3**: What challenges do you see to BIC? Why do you believe these are challenges? - **Interview Question 4**: Why do you believe children do not participate in the program? - **Interview Question 5**: How can BIC be improved to increase participation rates? - **Participant Journal Topic 1**: Explain the benefits you see to BIC. Explain why you feel these are benefits to the program and to the students participating in the program. - **Participant Journal Topic 2**: Explain the challenges you see to BIC. Explain why you feel these are challenges to the program and to the students participating in the program.		Insights will be noted, and initial coding will be done. Codes will be further analyzed to arrive at themes. Triangulation of the data sources will continue until a comprehensive analysis has occurred.

		- **Participant Journal Topic 4**: Explain why you believe children do not participate in the program. How do you believe the lack of participation could be improved?		
RQ3: What are teachers' perceptions of how BIC might impact students, particularly as related to higher level needs in Maslow's hierarchy of needs?	- Interview Protocol - Participant Journals - Observation Protocol	- **Interview Question 2**: What benefits do you see to BIC? Why do you believe these are benefits? - **Interview Question 6**: How are children's needs met through BIC? - **Participant Journal**: Explain the benefits you see to BIC. Explain why you feel these are benefits to the program and to the students participating in the program. - **Classroom Observation**: BIC process set up in classroom; descriptive field notes, sketch, and photographs	- Interviews - Participant Journals - Classroom Environment Observation	Interview transcriptions and journals will be consistently reviewed upon collection. Insights will be noted, and initial coding will be done. Codes will be further analyzed to arrive at themes. Triangulation of the data sources will continue until a comprehensive analysis has occurred.