Corner Stores as Community-Based Enterprises for Health Promotion:

A Qualitative Case Study

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THESIS

Submitted as partial fulfillment of the requirements
for the degree of Doctor of Philosophy in Public Health Sciences
in the Graduate College of the
University of Illinois at Chicago, 2017

Chicago, Illinois

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This thesis is dedicated to my husband, Aaron and my son, Ivan. Without their support, motivation and inspiration, achievement of this accomplishment would not have been possible.

ACKNOWLEDGEMENTS

I would like to thank the members of my thesis committee: Drs. Michele Kelley, Jennifer Hebert-Beirne, Angela Odoms-Young, Jesus Ramirez-Valles and Christina Welter. Your tireless dedication to the completion of my thesis, and constant support and motivation to continue to "think like a scholar" was essential to accomplishing this goal. To my advisor, Dr. Michele Kelley, your dedication to my work coupled with your understanding of my need for work-life balance was critical in completing this thesis. Your constant positive influence and encouragement was necessary when I thought I would never see the finish line. I will forever be grateful for your guidance and your mentorship.

I would also like to thank Gina Massuda Barnett and Steve Seweryn, from the Cook County Department of Public Health. Thank you for providing me the opportunity to work with you on the Suburban Cook County Communities Putting Prevention to Work project. I learned numerous professional and personal lessons working under your supervision. Additionally, thank you for allowing me to utilize the Healthy HotSpot Pilot project data to complete this thesis.

This research study would not have been possible without the support of the store owners, community-based organization staff and consumers who volunteered their time and perspectives for the Healthy HotSpot Pilot project evaluation. Thank you for your thoughtful insight.

Finally, I would like to thank my family and friends, especially my husband, Aaron, my son Ivan, my mother, Cindy, my Uncle Mike and my mother and father-in-law, Maryann and Mark for their love and support through this process. Thank you for listening when I was frustrated or upset, helping to watch Ivan or the dogs when I needed writing time and taking care

of other things around the house when I could not. Your assistance and support was central to keeping me motivated and energized to meet my goals.

TABLE OF CONTENTS

CHAPTER			PAGE
I.	INTRODUCTION		1
	A.	Background	1
		1. Community Context	4
	B.	Statement of the Problem	7
	C.	Purpose of the Study	9
	D.	Aims of the Study and Research Questions	11
	E.	Significance of the Problem	12
	F.	Significance of the Study	13
II.	CONCEPTUAL FRAMEWORK AND RELATED LITERATURE		16
	A.	Conceptual Framework	16
		1. Preliminary Conceptual Framework Description	18
	B.	Review of Related Literature	20
		1. Community-Based Interventions and Healthy Eating Outcomes	21
		2. Influences on Healthy Eating in Community Settings	27
		3. Corner Store Interventions in Low-Income Communities	30
		4. Community-Based Enterprises for Health Promotion	32
		5. Conclusions from Literature Review	33
III.	METHODOLOGY		35
	A.	Study Overview	35
	B.	Epistemological Approach	37
	C.	Positionality of the Researcher	38
	D.	Study Design	40
	E.	Setting	42
	F.	Sample	43
	G.	Data Sources	45
		1. Store Typology Data	46
		2. Community Context Data	49
		3. In-Depth Interview Data	49
		4. Consumer Focus Group Data	51
	H.	Data Analyses	51
	I.	Protections from Research Risk	55
IV.	FINDINGS		57
	A.	Description of Store Owner and Community Demographics	57
	B.	Narrative Descriptions of the CBE Construct	60
	C.	Research Question 1: Corner Store Typologies	65
	D.	Research Question 2: Impact of Healthy HotSpot Participation on CBE Identity	69

TABLE OF CONTENTS (CONTINUED)

CHAPTER PAGE

E. Research Question 3: Prioritizing Community Health 78
F. Research Question 4: Contextual Factors and the CBE Identity 79
1. Negative Contextual Influences on the CBE Identity 79
2. Positive Contextual Influences on the CBE Identity 86

V. DISCUSSION AND CONCLUSIONS 88
A. Refined Conceptual Framework 88
B. Implications of the Findings 91
1. Research Question 1: Corner Store Typologies 91
2. Research Question 2: Impact of Healthy HotSpot Participation on CBE Identity 92
3. Research Question 3: Prioritizing Community Health 94
4. Research Question 4: Contextual Factors and the CBE Identity 95
C. Implications for Research and Practice 96
D. Limitations and Challenges 99
E. Conclusions 102

APPENDICES 104
Appendix A 105
Appendix B 107
Appendix C 108
Appendix D 109
Appendix E 111
Appendix F 113
Appendix G 114
Appendix H 115
Appendix I 122
Appendix J 125
Appendix K 129

CITED LITERATURE 142

VITA 155

LIST OF TABLES

TABLE		PAGE
I.	CASE STUDY DATA SOURCES	47
II.	COMMUNITY AND STORE OWNER DEMOGRAPHICS AND SOCIOECONOMIC STATUS	58
III.	NARRATIVE DESCRIPTORS OF THE CBE IDENTITY	62
IV.	HEALTH PROMOTING STORE RANKINGS	67
V.	IMPACT OF HH ON CBE IDENTITY	71
VI.	NARRATIVE DESCRIPTORS OF PRIORITIZING COMMUNITY HEALTH	80
VII.	CODEBOOK	105

LIST OF FIGURES

FIGURE		PAGE
1.	Preliminary Conceptual Framework	17
2.	Healthy HotSpot Project Theory of Change	19
3.	Data Analysis Process	53
4.	Store Owner Education	59
5.	Store Owner Race/Ethnicity	59
6.	Factors Influencing Store Owners' CBE Identities	88

LIST OF ABBREVIATIONS

BMI	Body Mass Index
CBE	Community-Based Enterprise
CBO	Community-Based Organization
CBPR	Community-Based Participatory Research
CCDPH	Cook County Department of Public Health
CDC	Centers for Disease Control and Prevention
CPPW	Communities Putting Prevention to Work
F/V	Fruits and Vegetables
GED	General Educational Development
HH	Healthy HotSpot
HIV	Human Immunodeficiency Virus
HS	High School
NPR	National Public Radio
PHIMC	Public Health Institute of Metropolitan Chicago
QUAL	Qualitative
QUANT	Quantitative
REACH US	Racial and Ethnic Approaches to Community Health United States
SCC	Suburban Cook County
SES	Socio-Economic Status
STI	Sexually Transmitted Infection
US	United States

SUMMARY

This study identifies and describes the locally relevant understanding of healthy corner stores as community-based enterprises (CBEs) within eight suburban communities. In this study, CBEs are defined as a community-lead or community-oriented small businesses with a common goal to improve population health (Peredo and Chrisman, 2006). The 21 corner store owners assessed in this study were participants of the suburban Cook County Healthy HotSpot (HH) corner store pilot project. In collaboration with eight local community-based organizations (CBOs), owners facilitated increasing healthy food access within low-income communities. The aims of this study are: 1) to explicate the locally relevant understanding of corner stores as CBEs and health promoting agents, and 2) to theorize about the role of store owners' CBE identities in the institutionalization of health promoting activities, to foster healthy eating over the long-term.

In order to determine store owner alignment with a CBE identity, a qualitative case study design was used. Existing outcome data from all HH stores, via a market basket assessment, was reviewed to categorize stores into three typologies (low-mid-high) of increased healthy food access. Interviews from store owners, CBO staff and consumer focus groups were analyzed to determine how corner stores aligned with CBE characteristics, and how this influenced their health promoting activities. Owners that more closely associated with the CBE identity were more likely to value community health, have a positive, familial relationship with their consumers, view their store as a community resource and have an overall health promoting vision for their store in the community. Consumers and CBOs also valued the store presence in the community and had a positive view of the store owner. Study results can assist in theory development and intervention design in working with corner stores and other small businesses, as CBEs that promote healthy behaviors and economic vitality in low-income communities.

I. INTRODUCTION

A. Background

Nearly 24 million residents of the United States (US) have limited or no access to healthy foods (Ver Ploeg et al., 2009). A majority of individuals with limited access to healthy foods often reside within communities of low socioeconomic status, which are more likely to have disproportionate rates of obesity and other chronic diseases (Powell et al., 2007; Ver Ploeg et al., 2009). Communities with limited access to healthy foods also have an abundance of chain pharmacies, fast food restaurants and other small format food stores, or corner stores, and a significant lack of full-service grocery stores (Ver Ploeg et al., 2009; Cannuscio et al., 2010; Story et al., 2008). This phenomenon has stimulated initiatives within small stores, or corner stores, in low-income and low-food access communities to sell healthier foods with the intent to improve healthy food access and prevent obesity (Gittelsohn et al., 2012; Bunnell et al., 2012).

The connection between healthy eating and obesity is a significant driver of corner store interventions nationwide (Mozaffarian et al., 2011; Story et al., 2008). A total of 29 US states have overweight and obesity rates at or over 30%, and for the first time in history US children born today are expected to have a shorter life expectancy than their parents (Centers for Disease Control and Prevention, 2015; Flegal et al., 2010; US Department of Agriculture and US Department of Health and Human Services, 2010). Additionally, obesity rates are higher among low-income and racial and ethnic minorities both nationwide and in Illinois (Flegal et al., 2010; Ogden et al., 2014). The public health community has turned to improving healthy food access in low-income communities through the use of corner stores (Gittelsohn et al., 2012; Bunnell et al., 2012), as one of many methods to address the obesity epidemic. Corner store interventions are new to the public health toolkit, and therefore, few published reports exist regarding effective

methods in community engagement and factors important to long-term health outcomes. Furthermore, corner stores and the role they may play in promoting community health, as a community-based enterprise (CBE) (Peredo and Chrisman, 2006) - or community-oriented small business with a common goal to improve community health - has not been discussed explicitly in the public health and social entrepreneurship literature (Lehner and Kansikas, 2013; Volkmann, et al., 2012; Peredo and McLean, 2006; Mair and Marti, 2004; Gorman et al., 1997). Given that corner store interventions are growing in popularity and usage nationwide, specifically as a driver for improving community healthy food access, it is important to understand the processes and actions needed to effectively collaborate with corner store owners to facilitate health promoting activities and institutionalize healthy behaviors in low-income communities (Gittelsohn, et al., 2013; Brennan et al., 2011; Altman, 1995). This study contributes to the literature for the purposes of theory development and intervention design in working with corner stores as health promoting agents. Additionally, this study discusses the utility of the community-based enterprise construct, specifically within corner stores for health promotion activities, and enhances understanding of corner store interventions as a key strategy to prevent obesity and improve healthy eating. The CBE construct is new to the public health and business literature, as there are currently gaps that exist in discussing utilization of small businesses as change agents for community health. This study attempts to address this gap in the literature through the lens of corner store owners in eight low-income, suburban communities. The next paragraph describes the Healthy HotSpot (HH) corner store pilot project, which provided a basis for the current study to explore the role corner store owners played in advancing community health, and the transformation of their store into a health promoting resource for the community – or a community-based enterprise.

The Healthy HotSpot corner store pilot project involved 21 (of 200) corner stores in suburban Cook County (SCC) and eight local community-based partner organizations who facilitated the intervention with store owners. The intervention took place from January 2011 – June 2012. Local community organizations (CBOs) were identified as partners for the HH project based on a previous outreach process conducted by staff of the Suburban Cook County Communities Putting Prevention to Work (CPPW) initiative. The initiative was funded by a grant from the Centers for Disease Control and Prevention (CDC) and lead by the Cook County Department of Public Health (CCDPH) and the Public Health Institute of Metropolitan Chicago (PHIMC).

Participating CBO outreach was prioritized for SCC municipalities that had large populations and a significant percentage of the population living in poverty (US Census, 2011). There is an uneven distribution of families living in poverty within SCC, therefore, a concentrated effort was made to ensure diversity of regional representation of each intervention community. Outreach methods to local CBOs included electronic mail, telephone, and in-person meetings as needed.

During the initial phase of the intervention (which lasted six months), the local CBOs recruited stores from the eight communities into the project. Each participating store owner was asked by the partnering local CBO to add six new healthy products to their store, including one fresh fruit and one fresh vegetable. Healthy HotSpot project staff provided a menu to participating stores from which to choose these products. If store owners added the six new healthy food items within their stores, they were invited to participate in the second phase of HH, conversion. Stores participating in the conversion phase (which lasted four months) received a small stipend, new equipment, marketing materials, a plan for healthy product and equipment

placement, and enhanced community outreach and engagement by the local CBOs. Training and technical assistance was provided to local CBO staff to enhance their capacity in working with and recruiting corner stores into a healthy corner store project, with a goal to improve the availability of healthy foods in low-income communities. Materials and trainings for CBO staff included: store point-of-purchase marketing, store follow-up and technical support, community member outreach and holding in-store marketing events (Jaskiewicz et al., 2015). Each store was offered an additional small stipend after completing the conversion phase of the project and was allowed to keep the purchased equipment and resources for future use in the sale of healthy foods. A more detailed description of this project can be found in Jaskiewicz et al. (2013).

The HH project was designed to build capacity of local community organization staff and store owners for improved access to healthy foods in low-income communities. Organizational capacity descriptions are limited in the literature (Sobeck and Agius, 2007), therefore, the HH project focused on increasing knowledge and confidence of local CBO staff in implementation and sustainability of project activities. The project incorporated elements of community-based organizational capacity building into a model created by The Food Trust in Philadelphia, PA and modified for the HH project. The HH project model improved organizational capacity (Crisp et al., 2000) through a directed, top-down approach, that increased organizational resources such as financial and human capital to carry out the project with fidelity. The project also used a bottom-up approach that trained CBO staff to enhance their skills in corner store recruitment, healthy product placement, sales and promotions and marketing (Crisp et al., 2000).

1. Community Context

The HH project, which provided a foundation for the development of the current study, took place within suburban Cook County, Illinois. The HH project was a component of a larger

obesity prevention initiative lead by the CCDPH and PHIMC and was focused in low-income, low-healthy food access communities within SCC. Suburban Cook County surrounds the City of Chicago and is a large, geopolitically complex area in the Midwestern United States. It covers 735 square miles and contains 125 municipalities with over two million people (US Census, 2011; Jaskiewicz et al., 2015).

Demographic shifts in SCC have followed national trends, with an increasing number of low-income and minority populations migrating to the Chicagoland suburbs, particularly within the south and west areas of the county (Berube and Kneebone, 2006; US Census, 2011). From 2000 to 2009, the number of impoverished people (defined as household incomes at or below 200% of the federal poverty level) living within SCC increased 41%, as compared to a 4% increase in Chicago (US Census, 2011; Cook County Department of Public Health, 2011). Increases were also seen among racial and ethnic minority populations, including a 20% increase in African Americans and a 44% increase among Latinos/Hispanics within the last decade (Berube and Kneebone, 2006; US Census, 2011; Cook County Department of Public Health, 2011).

Obesity and other chronic conditions and diseases disproportionately impact minority populations in SCC (Cook County Department of Public Health, 2011). Nearly 2/3 of the SCC population is overweight or obese and coronary heart disease rates among African Americans (152.8 per 100,000) are 17% higher than among whites, and 52% higher than the Healthy People 2020 goal of 100.8 per 100,000 (Cook County Department of Public Health, 2011). Additionally, African Americans in SCC have a diabetes mortality rate (93.5 per 100,000) that is 85% higher than among whites (Cook County Department of Public Health, 2011).

In 2010, the CCDPH identified several municipalities within SCC with limited access to healthy foods (Block et al., 2012). The Healthy HotSpot corner store pilot project was designed to address this disparity and increase the availability of healthy foods within eight low-income communities. The project focused on engaging and training local CBOs to work with corner store owners to improve community access to healthy foods. In alignment with community-based public health principles (Israel et al., 1998) the objectives of the HH project included: 1) facilitating local input and centralized communication with participating stores; 2) recruitment of corner stores by local CBOs to promote sustainability and community ownership of the initiative and 3) continued promotion of healthy food availability to increase consumer demand for healthy products. Project outcomes also included, improved capacity of CBO staff to collaborate with local corner stores, and increased store owner capacity to recognize and incorporate the sale of more healthy foods within their stores.

An evaluation of the HH project was conducted from March-June 2012 and sought to define the impact of the intervention on: 1) corner store healthy food availability and access; 2) store owner motivation to continue to sell healthy foods; 3) local community organization staff capacity to work with corner store owners; and 4) increasing consumer demand for healthy foods. In terms of healthy food availability and access, the evaluation found that participating stores were more likely to offer quality fresh fruits and vegetables at equal or less cost than large supermarkets (Block and Odoms-Young, 2012). Qualitative data collected found the following: 1) that store owners were likely to continue the intervention if sales of healthy foods continued to be profitable; 2) local CBO staff within seven of the eight intervention communities reported increased knowledge in working with store owners and improved confidence in continuing the work beyond the project timeline; and 3) consumer awareness of healthy foods sold in corner

stores increased within some intervention communities, however, this did not always translate to the purchase of healthy foods. These findings will be enhanced with the results of this case study (Creswell, 2013; Ragin and Becker, 1992), which will use information collected from the HH project to further explore the CBE concept and corner store utility as health promoting agents. The existing data will be assessed to understand and explicate healthy corner store progression in becoming a community-based enterprise (Peredo and Chrisman, 2006) and the role of store owners' CBE identities on institutionalizing community-based health promotion activities. Further understanding of the CBE concept will assist in the development of other public health interventions that plan for collaborations with small businesses to improve community health.

B. Statement of the Problem

Over the past two decades, the focus of public health interventions has progressively shifted to address rising rates of obesity and other chronic disease. In reviewing the results of healthy eating interventions whose primary participants were low-income or racial and ethnic minority communities, health behaviors often displayed in the immediate time following the intervention were usually dissipated at intervention follow up and not sustained (Brennan et al., 2011; Sallis and Glanz, 2009; Story et al., 2008). The inability of public health interventions to make behavior change "stick" within communities has shifted intervention design to focus on improving healthy eating environments within communities prior to engaging in health promotion activities for behavior change, such as nutrition education or healthy cooking classes (Frieden, 2010; Story et al., 2008). Most recently, national investments in programs such as Racial and Ethnic Approaches to Community Health (REACH US), Communities Putting Prevention to Work and Community Transformation Grants have ignited multiple interventions focused on changing policies and environments within communities to support healthy behaviors

(Bunnell et al., 2012; Dombrowski et al., 2013). Within these broad interventions rests several healthy corner store projects – whose primary goal is to increase the type, quality and amount of healthy foods offered in local stores, in order to improve healthy food access for low-income communities. To date, understanding the role corner stores may play as CBEs (or health promoting agents) within communities and the impact corner store interventions may have on improving healthy eating over the long-term is varied and mostly unknown. This is likely due to the limited number of published studies in the literature and lack of reports which focus on corner stores as health promoting agents (Gittelsohn et al., 2012; Gittelsohn et al., 2013; Hagan and Rubin, 2013).

Usage of corner stores as healthy food access points in low-income communities is a new strategy in community development (Hagan and Rubin, 2013). Corner stores and other small-format grocery stores have historically served low-income communities' food access needs prior to their engagement in public health interventions, due to the fact that large-scale grocery development is limited in low-income settings (Morland and Evanson, 2008; Block and Chavez, 2008). Corner stores have also served as a point of economic development in resource poor settings, providing jobs, supporting local food providers and serving as a natural food resource in communities that have historically been underserved (Hagan and Rubin, 2013). These qualities make corner stores a likely candidate for becoming a community-based enterprise, or rather a community-oriented small business with a common goal to improve community health (Peredo and Chrisman, 2006).

There are limitations in conducting healthy eating interventions in settings, which may profit more from the sale of unhealthy products (alcohol, tobacco) or foods (chips, soda). For example, store owners may have a difficult time conceptualizing increased sales of healthy foods

(over unhealthy foods) in their stores if they have historically profited from selling chips and candy. Additionally, store owners may be unwilling to provide prime sale space for healthy product placement if it is not viewed as the most profitable product of their establishment (Gittelsohn et al., 2012; Gittelsohn et al., 2013). Corner store interventions to date have focused primarily on changing the store landscape and increasing community access to healthy foods. As is seen in other behavioral interventions, this does not always translate to community healthy eating, especially if increased access is not also coupled with community engagement and health education (Sallis and Glanz, 2009; Brennan et al., 2011; Mejia et al., 2015). There is a need to conduct research that critically reviews the role of corner stores within community health interventions, particularly in the areas of promotion of healthy eating behaviors, in addition to improved healthy food access. Through a qualitative exploration of healthy corner stores in suburban Cook County, this study explicates the role of corner store owners as facilitators of community-based health promotion activities, and how this role is connected to their identity as a community-based enterprise.

C. Purpose of the Study

Corner store projects throughout the country have helped to inform a national movement, in which food providers are engaged in the process of improving healthy eating and health outcomes for community members (Hagan and Rubin, 2013; Almaguer et al., 2014; Paloma, 2015). Given the more recent involvement of corner store and other food providers in obesity prevention interventions, little is known to date on the role of small businesses as health promoting agents within healthy eating interventions – especially as this relates to improving community healthy eating behaviors (Linnan and Ferguson, 2007; Ford et al., 2009; Releford et al., 2010; Gittelsohn et al., 2012; Gittelsohn et al., 2013). This study informs the literature in two

ways. First, this study discusses the key components needed for effective implementation of healthy corner store interventions to develop stores as health promoting agents. These key components include the types and amounts of resources (e.g., financial, technical) needed when working with local community partners to increase staff capacity and understanding of healthy corner store interventions. The key components also include the type and amount of resources needed to work with local corner store owners in conducting these types of interventions – an area of the literature that is more robust (Gittelsohn et al., 2012; Gittelsohn et al., 2013). Additionally, this study describes the primary strategies larger non-government and government agencies can use in conducting corner store interventions in complex community settings with local partners.

Secondly, this study enhances understanding of the concept of corner stores as community-based enterprises for health promotion, or a community-oriented small business with a common goal to improve population health (Peredo and Chrisman, 2006). Healthy corner stores that follow a progression to become a community-based enterprise, and enhance their CBE identity, will likely have three primary characteristics including: 1) a strong relationship with their local community-based partner organization (as well as with other local networks) that includes a shared responsibility for community health; 2) a sense of social entrepreneurship and other intrinsic motivators among corner store owners via engagement of their consumers (and the community at large) in community-based health promotion for healthy eating; and 3) a shared motivation to institutionalize the health promoting activities of the project (i.e., increasing the sale and promotion of healthy foods) regardless of external rewards or influences (i.e., continue the project for the greater community good vs. profit or incentives). Given that corner stores and other food providers are increasingly being considered to participate in interventions to improve

community healthy eating, the results of this study are relevant and timely to the public health workforce, communities and partners who hope to engage small businesses as change agents for health promotion.

Health promoting intervention studies in the public health literature are often limited in focus to short-term health outcomes (Shediac-Rizkallah and Bone, 2008) and do not usually take into account community context and engagement in the institutionalization of change vs. the implementation of change (Glanz et al., 2008; Kelly et al., 2013). This study explores the progression of 21 stores who participated in the HH intervention in eight suburban communities to understand how these stores: 1) promoted healthy eating within the resource poor communities they served and 2) how participating stores developed into a community-based enterprise to foster health promoting activities over the long-term. By clarifying and improving understanding of the role of corner stores within healthy eating interventions, this study documents how health promoting activities generated in corner stores were institutionalized for long-term impact on community health.

D. Aims and Primary Research Questions

Corner stores are defined as the 21 stores, and their owners, that successfully participated in the Healthy HotSpot intervention within eight suburban SCC communities.

The aims of this proposed research study are:

1) To explicate the locally relevant understanding of corner stores as community-based enterprises for health promotion within low-income communities; and
2) To theorize about the role of store owners' CBE identities in the institutionalization of health promoting activities, to foster healthy eating over the long-term.

Research questions for this study include:

1) How do typologies (low vs. high) of HH intervention completion relate to the corner store owners' CBE identity?
2) What aspects (e.g., training, equipment, financial incentives, healthy food marketing events and materials, consumer feedback) of the HH intervention were perceived as useful for corner store owners in their role as health promoting agents, and is this perception related to their CBE identity?
3) To what degree are community health goals valued and prioritized among corner store owners?
4) To what degree did contextual factors (e.g., local economy, community demographic changes, community preferences and influence, store owner relations with the community) facilitate or impede the functioning of corner stores as a community-based enterprise, and health promoting agent?

E. Significance of the Problem

Corner store interventions are increasingly becoming a primary approach to increase healthy food access in low-income and low-healthy food access communities, however little is known about strategies for success in terms of corner stores' role in promoting consumer healthy eating (Gittelsohn et al., 2012) and their development as CBEs (Peredo and Chrisman, 2006). Corner stores appear to be a likely community partner in the fight against obesity as they are abundant in low-income communities and, if properly engaged, can serve to fill a food access void, which has been illustrated in a number of communities across the country (O'Malley et al., 2013; Dannefer et al., 2012; Song et al., 2011; Gittelsohn et al., 2010a; Gittelsohn et al., 2010b). Historically, corner stores often served as the primary food provider in low-income communities

prior to the advent of large supermarkets and warehouse type grocery stores (e.g., Costco) (Cannuscio et al., 2010), and today corner stores serve as the primary food provider for individuals with little to no access to transportation (D'Angelo et al., 2011). Additionally, corner stores frequently serve as primary food providers for low-income, school-aged youth before, during and after school, especially when located near school buildings (Dennisuk et al., 2011; Borradaile et al., 2009). Given the documented research on communities' usage of corner stores to obtain food, it is important to understand successful strategies for effective implementation of corner store interventions that develop stores as community-based enterprises to foster community health over the long-term.

The HH project in SCC was successful in increasing healthy food access in eight low-income, low-food access communities during a two-year CDC funded project. Through a qualitative case study exploration (Creswell, 2013; Ragin and Becker, 1992), this study determines if the HH intervention was also successful in enhancing the development of corner stores as CBEs and, if health-promoting activities within stores were institutionalized. This research contributes to a new and growing knowledge base about the use of corner stores for increasing community healthy food access and uniquely reports the development of corner stores as community-based enterprises for health promotion.

F. Significance of the Study

This study contributes to our knowledge of promoting community-based healthy eating through institutionalization of a healthy retail strategy that incorporates local stores as community-based enterprises and resources for health (Peredo and Chrisman, 2006; Glanz et al., 2008). Additionally, this study discusses the key intervention components needed for delivering successful healthy corner store interventions for long-term impact on community health.

The public health research activity to date has focused primarily on developing healthy corner stores for short-term health outcomes (e.g., increasing healthy food access) and a majority of these outcomes have been met among the reported interventions (O'Malley et al., 2013; Dannefer et al., 2012; Song et al., 2011; Gittelsohn et al., 2010). However, very little has been discussed around the intersection between corner stores as businesses and health promoting agents within the community, and how this agency can influence community healthy eating. Through a qualitative case study (Creswell, 2013; Ragin and Becker, 1992) of existing data among 21 local corner store owners, community-based partner organizations and corner store consumers in eight SCC communities, this study furthers understanding of factors that enable corner stores to be effective health promoting agents. This study also discusses the utility of the community-based enterprise concept in healthy corner store interventions, in order to articulate effectiveness of corner store interventions on long-term health outcomes, such as community healthy eating behaviors.

Utilizing corner stores as CBEs, or health promoting resources within communities, is an important construct to understand within the health promotion literature. A few studies have partnered with community-based small businesses to deliver health promoting messages and health education on topics ranging from cancer screening and prevention (Meade et al., 2011) to reduction of sexual risk behaviors (Woods et al., 2010). Most notably, there were several projects housed within barbershops and beauty salons to promote healthy behaviors among African American communities (Linnan and Ferguson, 2007; Ford et al., 2009; Releford et al., 2010) with varying success on long-term health outcomes. Primary drivers of the successful barbershop and beauty salon interventions included a sense of social entrepreneurship, shared values for community health and other intrinsic motivators among staff and owners of the hair salons

(Meade et al., 2011, Linnan and Ferguson, 2007; Ford et al., 2009). Social entrepreneurship is an essential component of health promoting interventions with small businesses, as this construct can provide an understanding as to why and how local business owners see themselves as health promoting resources in order to address chronic disease burden through community-based action (DeLeeuw, 1999). Additionally, national leaders in public health, such as the Robert Wood Johnson Foundation, have noted a need to understand and recognize the role small businesses can play in improving community health (Paloma, 2015). This study attempts to address this need and examine the construct of social entrepreneurship by exploring how corner stores encompass the community-based enterprise identity and what actions or processes define this identity among store owners. This study contributes to closing a gap in the literature by providing a greater understanding of healthy corner stores as health promoting agents - through development of their CBE identity - for sustainable community health improvement. Further, this study informs future community intervention research utilizing other community-based enterprises for health promotion activities, such as barbershops and beauty salons in African American communities (Meade et al., 2011, Linnan and Ferguson, 2007; Ford et al., 2009).

II. CONCEPTUAL FRAMEWORK AND RELATED LITERATURE

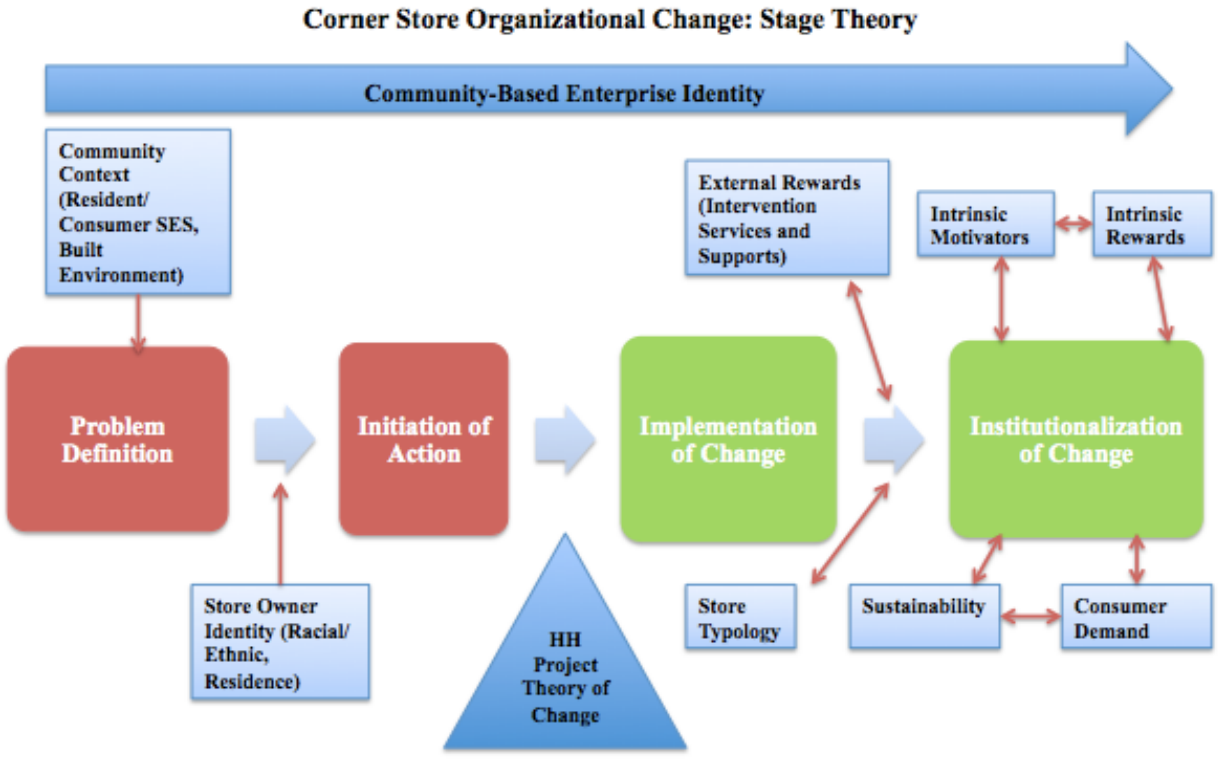
A. Conceptual Framework

This exploratory case study (Creswell, 2013; Ragin and Becker, 1992) concerns an emerging topic in public health that attempts to address gaps in the literature around progression of healthy corner stores as community-based enterprises to improve community health. Given this, a grounded theory approach (Gilgun, 2001; Charmaz, 2006) was used to allow for a methodological process that developed the meanings between and among the constructs identified in this study, as well as new constructs that were not illustrated in the preliminary conceptual framework and subsequent literature (Miles et al., 2013; Charmaz, 2006). The proposed preliminary framework was used as a starting guide or "sensitizing concept" (Charmaz, 2014) within the qualitative analysis of the case study data. However, this framework was not tested and did not drive the development of the three key thematic categories that define key constructs and relationships among the constructs that most influence progression of corner stores in becoming community-based enterprises and health promoting agents (Peredo and Chrisman, 2006). Additionally, key constructs and conceptual categories were identified and explored to understand the institutionalization of health promotion activities within stores for improvements in community health and healthy eating (Glanz et al., 2008; Charmaz, 2014).

The preliminary conceptual framework for this study can be viewed in Figure 1. This framework was modeled from Organizational Change: Stage Theory (Glanz et al., 2008) and shows the proposed progression of participating Healthy HotSpot stores through various stages. The HH project (historical study) took place from Problem Definition to the Implementation of Change. The current study was concerned with corner store progression from the Implementation of Change to the Institutionalization of Change (Figure 1), as it was proposed that within these

final two stages, owners' CBE identities and health promoting activities were maximized. The Organizational Change: Stage Theory (Glanz et al., 2008) which informed the development of the conceptual framework served as a sensitizing concept (Charmaz, 2014) in this study and was only used to guide the preliminary qualitative analysis, as category definitions arose from the processes and actions outlined within the iterative qualitative analysis.

Figure 1: Preliminary Conceptual Framework



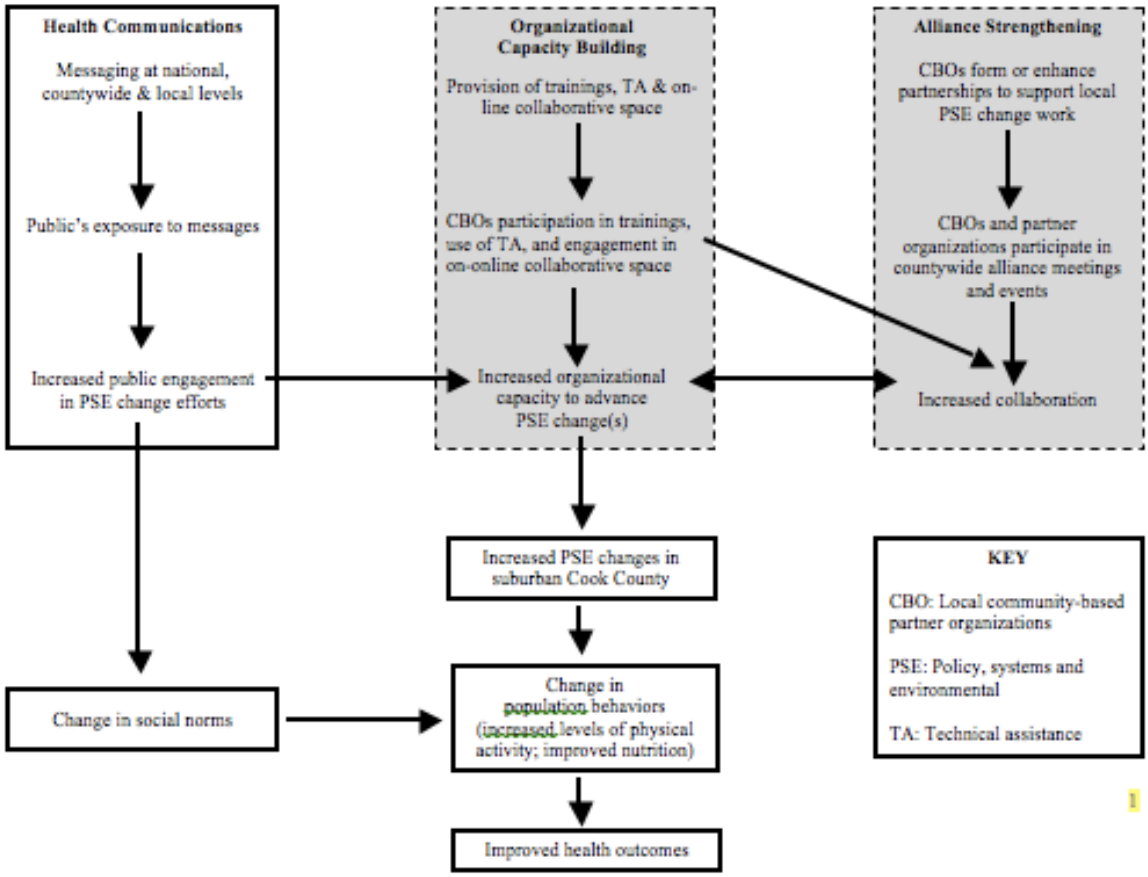
(Kaluzny and Hernandez, 1988)

The HH project (historical study) was designed using the Theory of Change (Welter and Massuda Barnett, 2010), and is presented in Figure 2 as background information for the current study. The Theory of Change is reflected in the Initiation of Action and Implementation of Change stages within the current study's preliminary conceptual framework (Figure 1), as one of the primary goals of the Theory of Change was to increase capacity among local CBOs to continue corner store efforts beyond the life cycle of the project. The Theory of Change (Figure 2) is represented in the preliminary conceptual framework (Figure 1) as recognition of the context in which the HH project took place and to outline other sensitizing concepts (e.g., capacity building of stores and local CBOs) that may have influenced the initial analyses of this inquiry but did not drive the iterative process, which ultimately arose from the data.

1. Preliminary Conceptual Framework Description

Local community organizations and CPPW staff worked together in the Problem Definition stage to identify low-healthy food access and obesity as an issue for their communities. This stage was greatly influenced by community context (e.g., socio-economic status of community, built environment) in the development of the HH project within the eight participating communities. The next stage, Initiation of Action, was defined as the first stage of the intervention in which store owners initiated changes within corner stores after having a preliminary discussion with local CBO and CPPW staff. This was greatly influenced by store owner identity (i.e., racial/ethnic identity and residence). All stores that participated in the HH project (historical study) completed the next stage, Implementation of Change, and successfully converted their stores into a healthy corner store via the addition of healthy foods and beverages, utilization of provided equipment for healthy products and receipt of marketing and promotional events by local community organizations. As opposed to other studies utilizing Organizational

Figure 2: Healthy HotSpot Project Theory of Change



[1]Figure 2 is provided as background information from the HH project (historic study).

Change: Stage Theory, this case study assessed healthy corner store progression across two stages from Implementation of Change to Institutionalization of Change (Glanz et al., 2008). Most studies reviewing Organizational Change: Stage Theory have focused on organizations within a single stage of change rather than the progression from one stage to another (Glanz et al., 2008). The movement of healthy corner stores between these two stages was thought to be influenced by store typology (i.e., level of corner store success in the HH project), external (i.e., financial incentives, equipment) and (Jaskiewicz et al., 2013; Dombrowski et al., 2013) intrinsic

rewards (i.e., store owner social entrepreneurship qualities), intrinsic motivators (i.e., store owner values for community health), consumer demand for healthy products and overall sustainability of project outcomes (i.e., institutionalization of offering healthy foods). It was expected that the relationships among these sensitizing concepts and the actions and processes stores engaged in while moving between the two stages of change also influenced and explained the degree with which corner stores progressed as community-based enterprises and health promoting agents (Peredo and Chrisman, 2006).

B. Review of Related Literature

The major sections that are included in this literature review are the following: Community-Based Interventions and Healthy Eating Outcomes, Influences on Healthy Eating in Community Settings, Corner Store Interventions in Low-Income Communities, Community-Based Enterprises for Health Promotion and Conclusions from Literature Review.

The four domains of literature, outlined above and discussed below, provide a thorough review of the relevant health promotion and business literature, for the purposes of improving understanding of corner stores as community-based enterprises and agents for health promotion. The first domain discusses the broad array of community-based interventions focused on improving healthy eating within low-income communities. This section articulates the impact that many studies have had on community healthy eating within complex community settings and calls for a change of focus to reflect a more ecological approach and sustainable outcomes. The second domain of literature discusses the many influences on individual and community-level eating behaviors to clearly illustrate the complex nature of improving healthy eating for low-income communities, who often have limited resources and access. The third domain discusses the breadth of published studies regarding healthy corner store interventions in the

United States. A number of these studies have focused on improving healthy food access (vs. healthy eating behaviors) as a primary outcome and were deemed successful. The fourth and final domain reviews the varied literature on community-based enterprises as health promoting agents. None of the studies reviewed in this domain discussed the CBE concept explicitly, however, the tone and direction appeared to align with the definition of a CBE, which is a community-lead or community-oriented small business with a common goal to improve population health (Peredo and Chrisman, 2006).

1. Community-Based Interventions and Healthy Eating Outcomes

There is increasing evidence that implicates the sources of obesity, and unhealthy eating, are complex and multilevel (Swinburn et al., 2011; Gortmaker et al., 2011). Accordingly, there is emerging evidence that sole, individual-level interventions have not been effective in changing community eating behaviors, as they do not also address cultural norms, peer and family influences, socioeconomic status and physical environments (in addition to community behavior change) (Sallis and Glanz, 2009; Brennan et al., 2011). Until recently, a majority of community-based interventions have focused on improvements in individual health behaviors vs. community-level health behavior change; this individual-level focus has been found to be ineffective and unsustainable for more complex behavior change such as healthy eating (Sallis and Glanz, 2009; Brennan et al., 2011). Several studies have illustrated the strong relationships present between low-income and racial and ethnic minority groups and unhealthy food intake and access (Powell et al., 2007; Ver Ploeg et al., 2009). In addition, the social, cultural and physical environments in which residents of lower socio-economic status (SES) live have fueled a growing obesity epidemic and dramatically increased rates of diabetes among African

American, Latino/Hispanic and American Indian/Alaskan Native populations over the past decade (Flegal et al., 2010; Ogden et al., 2014).

This exponential rise in obesity and chronic disease has created an increased interest in public health intervention research on improved healthy eating among highest burdened populations. A number of national organizations and the federal government have called for a focus on behavior change that impacts not only individuals but is also coupled with environmental and policy change to support communities in making healthier choices within a given locality (Koh, 2001; Frieden, 2010; Bunnell et al., 2012). Despite a number of investments in addressing the obesity epidemic, rates are persisting among low-SES populations (Flegal et al., 2010; Ogden et al., 2014). This is likely due to the fact that most healthy eating interventions only target or report individual-level change - which raises questions about causal pathways - and at the same time there is increasing evidence individual-level change is insufficient (Brennan et al., 2011; Story et al., 2008).

Although the support for community-focused interventions has been displayed at the national level, changing community healthy eating behaviors calls for the best interventions in which the approach is tailored to the local context, addresses community *and* individual-level social and cultural norms, and simultaneously, addresses environments where infrastructure currently does not support healthy lifestyles (Axelson, 1986; Kumanyika, 2008; Story et al., 2008). In addition, these interventions also need to assess, measure and report the process of community behavior change, including environmental changes required for communities to sustain healthy eating behaviors (Story et al., 2008). The increasing rates of chronic disease and obesity – particularly among low-SES and racial and ethnic minority communities - and the lack of evidenced-based healthy eating interventions, indicate deficiencies in the approach of

changing community eating behaviors to date (Brennan et al., 2011; Anderson et al., 2003). The public health literature of healthy eating interventions has utilized approaches that do not address the complexities of healthy eating behaviors noted above, such as changing parental and familial norms around healthy eating while also addressing community environments to provide for healthy food security and access (Brennan et al., 2011). As with other community-focused interventions, healthy eating interventions have continued to focus on the individual, rather than the at-large community, limited their use of understanding and developing community resources and assets that could sustain over time (Kumanyika, 2008; Sallis and Glanz, 2009; Braveman et al., 2011), and were non-responsive to local context and cultural norms, therefore, cultural shifts did not take place within communities to sustain healthy eating behaviors beyond the life of the intervention (Trickett et al., 2011; Story et al., 2008; Israel et al., 1998).

These deficiencies can be seen across the community intervention literature (Hawe et al., 2009), for example in changing sexual behaviors to lower risk of STIs (Campbell, 2000; Yoshikawa et al., 2005), changing school environments to promote academic achievement among under resourced students (McCarty, 1989; White and Wehlage, 1995) or engaging communities in safe water practices where access to clean drinking water is limited (Wellin, 1955). Healthy eating interventions, like other community interventions, have continued to focus their efforts as programs occurring within settings, rather than as "complex events occurring within systems" (Hawe et al., 2009; Trickett, 2009). For instance, a number of school-based interventions attempted to change students' eating behaviors by passing policies which support nutritional standards for food served in school and limit access to "competitive foods" (i.e., those foods not a part of the school lunch or breakfast program) to students during the school day (Brennan et al., 2011). While this policy focuses on changing the school environment, and while

students may in turn eat healthier during the school day – these behaviors will likely not continue into the home or the community (and be sustained) if other components of the food system are not taken into account. For example, by also focusing on the external food availability of students and the entire food system with which they may interact, such as providing healthy cooking demonstrations for parents or working on healthy product placement and pricing at the neighboring corner store, students' healthy eating behaviors experienced at school can be supported by their environments and will be more likely to be sustained. Even so, such multilevel, local interventions may not be enough for every population and one may need to think of broader change that also addresses societal level change, such as food policies to reduce sodium intake or excise taxes on unhealthy foods and beverages to improve community nutrition (Graff et al., 2012). One cannot assume that in every community this will be sufficient, as even some targeted, local environmental interventions were unsuccessful in creating healthy eating change (Brennan et al., 2011). It is more likely a combination of interventions may need to be conducted in order to produce sustainable community healthy eating (Dodson et al., 2009; Brennan et al., 2011).

Designing and developing interventions as complex events in systems encompasses the essence of an ecological perspective, which takes into account the positionality of the interventionist and an appreciation for addressing complexities of communities in order to change behavior (Trickett et al., 2011). This includes not just viewing communities as layers of social structures but considering the local characteristics and relational properties within and between those structures – which may have implications for shaping healthy eating behaviors. In addition, it includes relationships with community members, such as between local CBOs and corner store owners, to foster sustainability of healthy eating behaviors. An appreciation for an

ecological perspective, as noted above, is also lacking within the healthy eating literature (Richard et al., 2011).

Collaborative approaches such as Community-Based Participatory Research (CBPR) have introduced the utilization of an ecological perspective within public health interventions. The CBPR approach has attempted to design and develop interventions which have positive group dynamics between the research team and community; strive for community capacity building and utilization of community assets; incorporate local beliefs and values within the intervention design; and provide for population-level health outcomes vs. strictly individually-oriented outcome measurements (Minkler and Wallerstein, 2008; Viswanathan et al., 2004; Israel, 2005; Kumanyika, 2008). However, these interventions and the framework with which they are designed are not abundant in the public health arena, as there are limited resources and capacity among public health practitioners to conduct CBPR work that is most reflective of an ecological perspective (Israel et al., 1998; Trickett et al., 2011; Richard et al., 2011). In addition, even when utilization of a CBPR framework is present, it does not guarantee that researchers will also follow an ecological perspective within their intervention design, delivery and outcome measurement. There are many examples in the literature of claims for CBPR where the community served more as a setting, rather than as collaborative and integral research partners, and these reports provide no evidence that ecological processes were attended to (Trickett et al., 2011; Minkler and Wallerstein, 2008; Viswanathan et al., 2004; Richard et al., 2011).

Other problems with the literature make it difficult for the reader to know if an ecological approach was actually taken, due to the reporting and structure of published reports. For example, there are many reports that discuss the success of a population-level intervention with only individually measured outcomes (Minkler and Wallerstein, 2008; Green and Glasgow,

2006). Furthermore, even when researchers take an ecological approach within community interventions, their reports may not be comprehensive enough for others to understand the theoretical design, successes, failures and innovative adjustments needed in order to replicate that intervention in a similar community setting – as the public health literature is too often focused on study outcomes rather than processes (Trickett, 1991; Minkler and Wallerstein, 2008). Therefore, an ecological perspective could have been used by the researcher, but would only be apparent to an outsider if published within research reports, and in the healthy eating literature this type of reporting is lacking. A more explicit understanding of reporting and conducting this type of work would assist public health researchers in implementing and sustaining effective interventions that support healthy eating – especially interventions in which the community food environment is the primary focus.

Institutionalization, or sustainability, of community-based interventions in the public health literature has historically been reported as individual-level changes in health behaviors and/or continuation of program components in participating communities (Klesges et al., 2012; Shediac-Rizkallah and Bone, 1998; Altman, 1995; Schensul, 2009). After conducting a thorough review of the healthy eating intervention literature, several studies revealed a common pattern frequently displayed in community intervention reports. The majority of healthy eating interventions and reported results focused on individual-level outcomes, a short-term time perspective and consisted of interventions primarily developed outside the communities for which they were intended. Community-based researchers have sought to include a more robust definition of sustainability for health promotion interventions that include reports of both individual-level and community-level health outcomes, organizational capacity and community ownership of programmatic delivery (Schensul, 2009; Altman, 1995; Shiell and Hawe, 1996;

Griffith et al., 2010). Additionally, community-based researchers have also called for sustainability definitions to include ripple effects of interventions (both enhancing and harmful), and to envision interventions as complex events occurring within community systems (Hawe et al., 2009; Trickett, 2009). This study uses the more community-focused, robust sustainability definition to discuss institutionalization of change within corner stores for community-based health promotion, and how this influences their development in becoming a community-based enterprise (Peredo and Chrisman, 2006).

2. Influences on Healthy Eating in Community Settings

Eating behaviors are complex behaviors that are deeply rooted in family and community norms and influenced by community surroundings, particularly in low-income and racial/ethnic minority communities (Axelson, 1986; Kumanyika, 2008; Story et al., 2008; Mejia et al., 2015). Eating preferences and behaviors are learned early in childhood, through teachings from caregivers, parents and peers; individuals are exposed to different types of foods and begin to develop particular palates as early as infancy (Kumanyika, 2008). The role of women, parents and caregivers in food purchasing and preparation in minority communities plays a significant role in diet and nutritional practices of families, and learned behaviors of children (Ahye et al., 2006; Cullen et al., 2002). Often, low-income women have cited their child's preference for unhealthy foods as major barriers to increasing healthy eating behaviors (Kahlor et al., 2009; Sonneville et al., 2009; Henry et al., 2003). Smith and Morton (2009) found that positive perceptions of healthy foods by parents and families increased healthy food consumption, but was often negatively affected by limited access.

Social influences on healthy diets play an integral role in the opportunities one has to choose healthier foods, as well as internal or group motivations to do so (Kawachi and Berkman,

2003). A study conducted among Texan elementary school students and their parents showed a significant difference in peer influence on fruit and vegetable consumption among African American participants as compared to their Hispanic and white counterparts (Cullen et al., 2001). Another study among the same sample of Texan elementary school students showed strong correlations among parental modeling of eating healthy foods and child consumption of healthy foods across ethnic groups (Cullen et al., 2002). These studies support the concept that parental and peer influences are important indicators of fruit and vegetable consumption and overall diet among racial and ethnic minority children (Baranowski, 1997; Cullen et al., 2002).

In addition to social and cultural norms, the environments in which foods are acquired and prepared play a significant role on the consumption of healthy foods whether in the home, daycare, worksite or school (Story et al., 2008). Throughout the United States there appears to be a pattern among low-income and racially and ethnically diverse communities coupled with limited access to healthy foods (Powell et al., 2007). These findings are also true in specific localities. Morland and Evanson (2008) conducted a cross sectional study in two southeastern US localities on supermarket availability. After surveying residents and cross mapping with supermarket availability they found low healthy food access (and high unhealthy food access) was associated with a higher prevalence of obesity (Morland and Evanson, 2008). Additionally, studies by Gallagher (2006), Block and Chavez (2008) and Block and Kouba (2006) in the urban and suburban Chicago area neighborhoods showed significant associations among low healthy food access, minority status and negative health outcomes (i.e., higher obesity and other chronic disease incidence and prevalence, increased morbidity and mortality rates). Researchers in Louisiana also found a significant positive correlation with Body Mass Index (BMI) and high-

energy snack food availability on store shelves in low-income, low-healthy food access communities (Rose et al., 2009).

Additionally, the presence of large supermarkets has consistently shown positive correlations with healthy food choices among community residents. Rose and Richards (2004) found that individuals participating in the US Food Stamp program were more likely to purchase healthier foods if they were living within close proximity of a large supermarket. Morland et al. (2002) also found similar results among participants in an arthrosclerosis study as their intake of fruits and vegetables increased with their decreased proximity to a local supermarket. Zenk et al. (2005) found that women in Detroit were more likely to consume fruits and vegetables if they purchased their food at supermarkets rather than smaller independent grocery stores, due to the fact that higher-quality, lower-cost fruits and vegetables were more abundant at large supermarkets vs. independent grocers. Supermarkets rather than small format grocers offer low food access communities the lowest cost options to purchase healthy foods (Chung and Myers, 1999). Small format grocers or convenience stores, which are often the primary source of healthy foods in low food access communities (Block and Kouba, 2005), have been found to have increased costs on average groceries than large supermarkets (Morris et al., 1992). The overabundance of small format grocers and limited competition from large supermarkets in low food access communities has increased average grocery cost in these environments (Hendrickson et al., 2006).

Food cost in addition to food availability plays a significant role in purchasing, especially among low-income families (Henry et al., 2003). Several studies have indicated a correlation between low-income families and poor nutrition (Drewnowski and Darmon, 2005a; Drewnowski and Darmon 2005b; Finkelstein et al., 2005; Dammann and Smith, 2010). A study conducted by

Glanz et al. (1998) found cost of foods determined food selection, second only to taste among a large sample of 3,000 households. In addition to cost, family status plays an integral role in the diets of families. Single-parent households were found to have less time to prepare healthy meals (Crepinsek and Burstein, 2007), and less funds to purchase healthier food options (Rosenkranz and Dzewaltowski, 2008) than their two-parent household counterparts. Lower family income was also associated with food insecurity and eating behaviors among families that included skipping meals or missing meals at various times of the month (Tarasuk, 2001). Food insecure environments also prompted eating behaviors among low-income families that consistently favored intake of unhealthy, high calorie foods when food became available (Tarasuk, 2001). These studies show the numerous influences on healthy eating behaviors in low-income, low food access communities and also play a significant role on the intake of healthy foods when access is improved through completion of a successful healthy corner store intervention.

3. Corner Store Interventions in Low-Income Communities

Peer-reviewed articles on corner store interventions are limited in the public health literature (Gittelsohn et al., 2012; Langellier et al., 2013). Of the studies that have been published, all took place within low-healthy food access communities and a large majority of intervention studies found success in increasing consumer access to healthier foods - as this is the primary outcome of most healthy corner store interventions (Laska et al., 2010; Gittelsohn et al., 2010a; Gittelsohn et al., 2010b; Paek et al., 2014; Dannefer et al., 2012; Song et al., 2009). Additionally, a number of interventions reported using a point of sale purchasing strategy as well as marketing and promotional activities to encourage increased purchasing of healthy foods among corner store consumers (Song et al., 2009; Laska et al., 2010; Gittelsohn et al., 2010a;

Gittelsohn et al., 2010b; Dannefer et al., 2012; Glanz et al., 2012; Paek et al., 2014; Cavanaugh et al., 2014).

A few published studies discussed the importance and impact on improving long-term community health outcomes, such as healthy eating behaviors and reduction of BMI. However, only two published reports found improvements in consumer purchasing of healthy foods as a result of increased availability and health education within the local corner store (Martin et al., 2012; Bleich et al., 2012). Additionally, another report showed no significant improvements in BMI or nutritional intake among store consumers when assessed among a large sample (>200) of urban healthy corner stores (Lent et al., 2014).

There are no reports in the peer-reviewed literature that discuss progression of healthy corner stores in becoming community-based enterprises to improve community health, in particular, from the perspective of the local store owners. One published study, however, did report on community involvement in the formation of a healthy corner store intervention (Ortega et al., 2014). Specifically, the report discussed how the creation of a youth-engaged pipeline in the development of the corner store intervention has improved the implementation trajectory overall in East Los Angeles. While this report captures the essence of a healthy corner store as a community-based enterprise (Peredo and Chrisman, 2006), the report did not include results of interviews with the store owners, nor the assessment among community members on the outcomes of the intervention - as this is being reported in a future publication. Given that corner store interventions are new to the public health toolkit, the limitations in the current, reported literature were anticipated and expected in the development and completion of this case study on corner stores' development as community-based enterprises for health promotion.

4. Community-Based Enterprises for Health Promotion

The concept of evolving small businesses into community-based enterprises for health promotion is a new approach that is not explicitly stated in the current public health and business literature. There are many studies, however, that discuss small businesses as ideal settings for implementation of various components of health promotion interventions (Linnan and Ferguson, 2013; Cumby et al., 2011; Meade et al., 2011). For example, several studies described the use of barbershops and beauty salons as settings to provide health education to consumers in the areas of cancer prevention (Hye-cheon Kim et al., 2007; Linnan and Ferguson 2013; Releford et al., 2010; Ford et al., 2009) and STI/HIV prevention (Neeta, 2005). Additionally, other studies noted the use of local businesses as a physical setting to encourage healthy behaviors and health education among participants. These include studies in which participants used a local business as a space for physical activity (Suminski and Ding, 2012; Suminski et al., 2009), a kitchen for healthy cooking and eating (Yancey et al., 2006) and a safe space to discuss HIV prevention (Woods et al., 2010). A more recent collaboration with small businesses, such as dental offices, have found success through the provision of oral health education by dental office staff for patients and other community members who are often lacking access to primary dental services (Alexander et al., 2008; Cumby et al., 2011).

Most often, however, small businesses are incorporated into intervention frameworks as secondary partners that may provide some aspects of health education (Meade et al., 2011; Irwin et al., 2012) or recruitment for program participants (Releford et al., 2010).

The studies presented above, while noting the use of small businesses in a number of health promotion interventions, do not account for the perspective of the business owner in their published reports. Such perspectives are integral to the success of health promotion

interventions, and would allow the public health community to better understand readiness, commitment and motivation of small business partners. Furthermore, it would enable research partners to work together more effectively to support small businesses as integral settings and potential change agents when improving community health. This study attempts to address this gap in the literature by discovering and unpacking the role corner store owners in a suburban county played in improving population health and institutionalizing health promoting activities among low-income residents.

5. Conclusions from Literature Review

Defining community-based healthy eating interventions as complex events occurring within community systems (Hawe et al., 2009; Trickett, 2009) is an important basis for understanding progression of healthy corner stores as CBEs and the role they may play in sustaining community-based health promotion activities (Peredo and Chrisman, 2006). Reporting on community-level, long-term healthy behaviors, as well as community development and capacity building - as a component of the institutionalization of change process - is reflective of an ecological perspective among community-based researchers and is a best practice for community-based public health (Schensul, 2009; Altman, 1995; Shiell and Hawe, 1996; Griffith et al., 2010). Most corner store and healthy eating interventions reported to date have not utilized these perspectives in the delivery and implementation of their programming. Therefore, reports of long-term, multi-level, sustainable change that also discuss corner stores' role as community-based enterprises were either not observed, or not reported in the peer reviewed literature. This study incorporates an ecological perspective and community-based public health principles in understanding the development of corner stores as community-based enterprises for health

promotion and how the enhancement of owners' CBE identities influences the institutionalization of community-based health promotion activities within local communities.

III. METHODOLOGY

A. Study Overview

To determine a locally relevant understanding of corner stores as community-based enterprises and understand how owners' CBE identities influenced the institutionalization of community-based health promotion activities, this study used a qualitative, exploratory case study design (Creswell, 2013; Charmaz, 2006; Flyvbjerg, 2011). The Healthy HotSpot project evaluation (historical study conducted from April – June 2012) concluded that all 21 corner stores were successful in increasing healthy food access within the eight collaborating communities (Block and Odoms-Young, 2012). The existing market basket (Zenk et al., 2012) assessment data (pre and post-intervention), which concluded all corner stores increased community availability and access to healthy foods, was coupled with HH project administrative data (e.g., type and amount of equipment, training, promotional events and funding received by CBOs and store owners) to determine a typology by which stores were placed along a gradient of healthy food access success (low-mid-high). The extent of success in the historical study's primary outcome – improving healthy food access – was assumed to have played a role in the owners' alignment with the CBE identity, and added to the rigor of the qualitative design, therefore, this data was included within the case study analysis.

Understanding the locally relevant characterization of corner stores as community-based enterprises (Peredo and Chrisman, 2006) and how this identity facilitates community health promotion for healthy eating was discovered and explicated through an iterative qualitative data analysis process that identified key social processes and actions, which led to constructs and categories related to the aims of this study (Charmaz, 2006; Charmaz, 2014). Existing store owners and CBO staff qualitative interview data and consumer focus groups (narratives) were

continuously reviewed and assessed to provide an enhanced understanding of the sensitizing concepts identified in the preliminary conceptual framework (Figure 1). These sensitizing concepts, which were used as a guide to inform the initial data analysis but did not drive the process, were further explicated through initial and focused coding to identify categories and constructs that reflected locally relevant understanding of corner stores as CBEs and owners' institutionalization of health promoting activities (Charmaz, 2014).

Sensitizing concepts that were considered in the analysis process included a greater understanding of the utilization and appreciation for HH intervention materials, trainings, technical assistance and other supports (External Rewards). Store owner characteristics were also assessed to explicate a valued appreciation of community health (Intrinsic Rewards). Consumer focus group data was assessed, in addition to the store owner and CBO interview data, to identify the value of healthy corner stores within each community (Intrinsic Rewards). Store owner characteristics for social entrepreneurship and valuing community health in addition to (or in place of) store profits (Intrinsic Motivators) were also reviewed via the interview data. Additionally, the interview and focus group data sets were used to report on institutionalization of store changes including, real and perceived consumer demand for healthy foods, likelihood of HH project continuation and perceived strength of the community–store owner relationship. Through analysis of these data sets as a single case study (suburban Cook County) in multiple settings, three key thematic categories and several summative categories were defined through common actions, processes and patterns within the respondent narratives. Further data mining and memoing verified if corner stores institutionalized health promotion activities, enhanced owners' CBE identities and influenced community healthy eating behaviors over the long-term (Charmaz, 2006; Charmaz, 2014).

B. Epistemological Approach

Using a grounded theory constructivist approach (Charmaz, 2006), the following case study (Creswell, 2013; Ragin and Becker, 1992) applied a qualitative exploratory design to discover and explicate key constructs, actions and processes related to the locally relevant understanding of healthy corner stores as community-based enterprises (Peredo and Chrisman, 2006). Additionally, this study assessed how owners' CBE identities influenced institutionalization of community-based health promotion activities for long-term impact on community health.

A grounded theory approach (Charmaz, 2006; Charmaz, 2014) was used to explore these phenomena as there are gaps in the public health and business literature that, if addressed, could provide a theoretical basis for utilization of corner stores in facilitating healthy eating among low-income communities. Qualitative exploration of this case study was needed to understand social processes and actions around a locally relevant understanding of healthy corner stores as community-based enterprises and how enhancements in owners' CBE identities (i.e., health promoting advocates) promote healthy eating behaviors within local communities. Existing data collected as a component of the Healthy HotSpot project (historical study) was included in this case study to discover and develop three key thematic categories that described key constructs and relationships among key constructs within participant narratives (i.e., corner store owners, CBO staff and community consumers). As noted in the preliminary conceptual framework (Figure 1), there are several sensitizing concepts (i.e., intrinsic motivators, external rewards, consumer demand, store owner relationships with CBOs and consumers) that were used to help shape the initial data analysis of this study, but did not command the data analysis process. The existing data available for this study, as well as the sensitizing concepts outlined, were

thoroughly reviewed via an iterative process of qualitative data analysis that included the identification of actions and processes, which ultimately lead to hidden constructs and thematic categories informed by the data (Charmaz, 2006; Charmaz, 2014). Additionally, outcomes from a previously conducted market basket assessment (pre and post-intervention), coupled with HH project administrative data (i.e., type and amount of equipment, training, promotional events and funding received by CBOs and store owners), was utilized as a data source to develop a typology (low-mid-high) of healthy food access improvements within the local stores, in order to align with enhancements in the CBE identity of store owners. As with the sensitizing concepts discussed in Figure 1, the market basket assessment data (from the HH historical study) served as a guiding concept to help shape the available data sources for this study; however, these concepts were further discovered and developed through an iterative process that also identified social processes, actions, constructs and the relationships among them within the existing narratives. These existing data sources served to explicate and discover the locally relevant understanding of corner stores as CBEs and health promoting agents within low-income communities.

C. Positionality of the Researcher

Positionality of the researcher is important to consider in qualitative studies because researcher experience and expertise in the field influences the "construction and interpretation of the data" (Charmaz, 2014). The conclusions derived from analysis and review of the data is a process that is constructed by the researcher, therefore positionality influences these outcomes (Charmaz, 2014). This section will briefly review positionality of the researcher for this study.

The HH project and evaluation (historical study) was developed with an ecological lens and community-based public health principals (Israel et al., 1998; Trickett et al., 2011; Richard et al., 2011). This development illustrated the importance of capturing narrative accounts from

community members and HH program participants in a setting that would allow for improvements to the overall program and, eventually, project sustainability. The design of the current study's aims, research questions and conceptual framework originated through previous experience with the HH project, via project administration and evaluation. Additionally, previous review of the existing HH project data, which took place in Fall 2012 (Dombrowski et al., 2012), facilitated the current inquiry of store owner perspectives for explication of the CBE construct and identity. The previous exposure to the existing data influenced the development of this study. However, in order to adhere to the iterative process outlined above (Charmaz, 2014), this exposure only served as a guide in the renewed analysis of the narratives and did not drive the development of new constructs and categories – which ultimately arose from the data.

As a community-based public health researcher, I am also aware of the power and privilege held as a white, female scholar researching low-income communities of color (Muhammad et al., 2014; McIntosh, 1988), which affords an advantage in knowledge around health promotion interventions and collaborations with local change agents. In order to ensure the constructs and categories arose from the data and were not due to inherent exposure or knowledge regarding the HH project participants, constant reflexivity was conducted when the narratives were analyzed (Charmaz, 2014). Through acknowledgement of this power and privilege, any pre-conceived notions or knowledge that one may have regarding narrative processes and actions were more likely to be identified and set apart from this study, so as not to influence the analysis process and allowed for renewed inquiry of this case study. However, it is also important to keep in mind the words of Laurel Richardson (2000), who illustrated the "influence of the author's subjectivity in the production of knowledge within research studies." This concept was attended to throughout the development and analysis of this case study.

D. Overall Study Design

Using an instrumental case study design, this study reviewed existing narratives from participants within the HH project (historical study) to explicate a locally relevant understanding of corner stores as CBEs, and how store owners' CBE identities influenced institutionalization of health promoting activities (Creswell, 2013; Ragin and Becker, 1992). This study is considered an instrumental case study design, as opposed to an intrinsic design, because of the utilization of the case (suburban Cook County HH corner stores) to theorize, develop and explicate a greater understanding of corner stores as community-based enterprises. The instrumental case study design allows for the results of this study to have potentially high impact for future interventions involving partnerships with health-promoting small businesses or agencies that advocate for health and function as health resources in low-income communities (Creswell, 2013; Ragin and Becker, 1992). As the HH project took place within suburban Cook County, IL, the entire county defines the case for this study, and several data sources (Table I) collected from January 2011 – June 2012 were reviewed using a qualitative, iterative process (Charmaz, 2006; Charmaz 2014). Given the focus of this case study on corner stores' CBE alignment and identity, the perspectives of the participating store owners served as the primary data source. Perceptions of CBO staff and consumers were used to verify categories and constructs discovered within the store owner data and assisted in answering the aims and research questions outlined in this study.

As stated previously, all intervention stores' market basket assessment outcomes (N=21) and completion of HH intervention activities (administrative data) were used to create a typology for healthy food access success (low-mid-high). The in-store market basket assessment data (Block and Odoms-Young, 2012) determined changes in the healthy food landscape within participating corner stores (availability, quality, pricing and placement) and also included a food

inventory of categories of foods regularly sold in corner stores (or promoted via healthy store interventions), including type, quality and price of fruits and vegetables (fresh, frozen, canned); dairy; protein; grains; drinks and snacks (Odoms-Young and Zenk, 2012; Odoms-Young et al., 2009). The market basket assessment data collected through the HH evaluation by CCDPH staff, Dr. Danny Block and Dr. Angela Odoms-Young (2012) was coupled with HH administrative data, which described the provision of HH equipment and store marketing events, CBO staff participation in HH trainings and technical assistance and utilization of HH marketing and promotional materials. Creating a typology of stores regarding their success within the HH intervention assisted in determining whether and how participation in the intervention played a role (if any) in the enhancement of owners' CBE identities and institutionalization of health promoting activities.

The primary data used for this study included store owner and CBO staff interviews and consumer focus groups, which was previously collected for the HH project (historical study) using qualitative inquiry (Charmaz, 2006; Bernard and Ryan, 2010). The existing qualitative data included semi-structured one-to-one interviews with 21 corner store owners, local community organization staff in eight participating communities and consumer focus groups within six of the eight communities (Jaskiewicz et al., 2013; Charmaz, 2006; Bernard and Ryan, 2010; Miles et al. 2013). Store owners and consumers also completed a short questionnaire regarding their racial and ethnic identity and community of residence which was also included in the qualitative analysis.

The store owner interview data was analyzed first to discover and explicate social actions and processes that began to define and describe the locally relevant understanding of CBEs, institutionalization of store changes and CBE identity enhancement. The sensitizing concepts

mentioned in the preliminary conceptual framework (Figure 1) (External Rewards, Intrinsic Rewards, Intrinsic Motivators and Institutionalization of Changes) were utilized to guide the start of data analysis, however these concepts and their definitions were ultimately explicated by the data analysis process (Charmaz, 2014). Through data mining and memoing of the store owner and CBO interviews, and constant comparisons with the consumer focus group narratives, constructs were refined into three key thematic categories in order to provide a greater understanding of the institutionalization of health promotion activities and locally relevant understanding of stores as community-based enterprises.

E. Setting

Suburban Cook County, IL, surrounds the City of Chicago and is a large, geopolitically complex area in the Midwestern United States with vast pockets of health and socioeconomic disparities focused in the south and west suburbs (Cook County Department of Public Health, 2011). Nearly 2.3 million people reside within SCC, which is comprised of 735 square miles, 125 municipalities, 21 acute care hospitals, 18,000 licensed physicians, 143 school districts, and 650 licensed daycare centers (Cook County Department of Public Health, 2011). This instrumental case study used existing data, which was collected in eight municipalities and 21 local corner stores located within SCC including: Blue Island, Calumet Park, Chicago Heights, Cicero, Ford Heights, Harvey, Mt Prospect and Riverdale. All corner stores (N=21) and local community based organizations (N=8) participated in the HH project (historical study), provided narrative responses or other HH administrative and market-basket data and were therefore included within this case. As the project was open to participants throughout the county and the spread of the communities is vast, the entire county was defined as the setting for this study (Creswell, 2013).

F. Sample

Given this was a case study within a suburban county using existing data sources, the sample was predetermined to 21 stores within eight suburban communities who completed the HH project (a primary inclusion criteria). Therefore, the entire universe of stores (N=21) was included in the sample. The qualitative notion of purposeful sampling was supported in this study because it was reasonable to assume that a single case study of suburban corner stores was able to reveal and clarify useful processes, actions and categories that began to inform an appreciation for the construct of community-based enterprises in health promotion interventions (Creswell, 2013; Palinkas et al., 2015). The sample provided in this study enabled the researcher, through an analytic process, to constantly refine and define the theory regarding locally relevant understanding of corner stores as community-based enterprises (Charmaz, 2014).

Participating corner stores within the HH intervention (historical study) were ideal candidates to offer rich exploration, and multiple rounds of analysis, in this inquiry of the community-based enterprise concept (Peredo and Chrisman, 2006). Purposeful sampling is important in grounded theory, qualitative studies as it allows for key constructs to be discovered, developed and saturated from a defined sample, prior to engaging in additional rounds of analysis for refinement and exploration of the primary aim(s) (Palinkas et al., 2015; Creswell, 2013). The sampling frame for this case study is further discussed below for each primary data source and is reflective of the sampling strategy for the HH project, as completion of the HH project was the principal inclusion criteria for this study.

Eligible corner stores for the HH project were selected and identified via an existing industry list of corner stores in suburban Cook County. Stores were selected based on size (1-2 registers) and location within potential intervention communities where a local CBO had been

identified. An original sample of 69 stores was developed. To initiate recruitment, an introductory letter from the Chief Operating Officer of CCDPH was sent to the sample of 69 stores in March 2011. The letter informed the stores of the HH project and asked for their participation. Staff from CCDPH also conducted follow up visits with the sample of stores to further inform them of the project and obtain their consent. Each store was visited up to three times in an effort to obtain their participation in the evaluation. Of the 69 stores in the initial sample, nine refused to allow the in-store market basket assessment to take place. An additional eight stores had managers who did not allow the assessment without specific permission from the owner. Staff made calls and repeated visits, but were unable to reach eight owners. An additional eight stores were no longer in business at the time of the CCDPH staff visit. A total of 44 stores (64% of the original sample) consented to participate in the project and completed a full baseline in-store market basket assessment.

Of the original 44 participating stores, 23 were recruited for the pilot phase of the HH intervention. Local CBO staff identified the relevant stores in their communities, starting from the list of 44 stores provided by CPPW. With support from CPPW staff and project materials, CBO staff recruited stores into the pilot phase of the project. At the end of the pilot phase, two stores did not continue, a third store closed, and a fourth store was sold to a new owner that was not interested in participating in the project. At this point, local CBO staff identified two new stores that were interested in participating, and they were enrolled in the intervention with an accelerated pilot time frame. A total of 15 of the 21 intervention stores were included in the baseline assessments. At the completion of the intervention, 16 of 21 stores completed a post-intervention market basket assessment, other HH administrative data and an interview with the store owner for an overall sample of 21 stores which were included in this case study (Table I).

Local partnering community-based organizations in communities surrounding corner stores were identified and selected through outreach by CPPW staff. Communities were chosen based on criteria related to rates of poverty, access to healthy foods and an expressed interest in food access within the community. A total of 16 CBOs were identified, and among these, seven CBOs were interested in and had the capacity to complete the HH project. Two additional organizations were recruited in high need communities. One of these organizations joined the project after the start of the pilot phase. Of the nine total identified CBOs, eight attended a mandatory workshop on the intervention model and one organization was unable to recruit stores into the project and was removed. A total of eight CBOs completed participation in the HH project, other HH administrative data and an interview, therefore eight CBOs were included in this case study (Table I).

A total of six focus groups, with an average of eight participants each, were held in six of the eight HH communities for a total of 51 consumer participants. All consumer participant narratives (N=6 focus group transcripts) were included in this case study (Table I). Participants were recruited from the following communities in which HH stores were located: Cicero, Calumet Park, Harvey, Chicago Heights, Mount Prospect and Riverdale. Focus group communities were selected to reflect the variation in HH project participation intensity between communities as well as regional demographics and racial and ethnic diversity of suburban Cook County.

G. Data Sources

In this section, existing data sources are described and their usage for this study is illustrated in Table I. There are seven types of data sources that define this case study and each type is summarized below within the following four categories: 1) Store Typology Data

(includes HH administrative data and market basket assessment data; 2) Community Context Data (includes HH participants' demographic questionnaires and US Census data); 3) In Depth Interview Data (includes store owner and CBO interviews); and 4) Focus Group Data (includes consumer focus groups in six communities).

1. Store Typology Data

The pre and post-intervention in-store market basket assessments were conducted within 15 of 21 (pre) and 16 of 21 (post) stores in suburban Cook County from Sept – Nov 2010 and March – June 2012 (Table I). Partners from CCDPH, Chicago State University and the University of Illinois at Chicago (Block and Odoms-Young, 2012) visited each store and obtained consent on-site from the store owner or store manager on duty prior to conducting the assessment.

The outcomes from the pre and post market basket assessments developed by Odoms-Young and Zenk (2012), and collected for the HH evaluation, were used with the HH administrative data to determine a typology of healthy food access (low-mid-high). The HH administrative data was collected by CPPW staff throughout the life of the project (January 2011 – June 2012) and provided documentation of store participation in HH intervention activities. These activities included: usage of resources and equipment, distribution of HH promotional materials and CBO staff participation in marketing events and trainings (Table I). The market basket assessment tool used in the HH project is included in Appendix K. As reviewed in the preliminary conceptual framework above (Figure 1), the type of success each store experienced in their participation of the HH project may have influenced their CBE identity and, therefore, was included as a sensitizing concept within this case study.

TABLE I: CASE STUDY DATA SOURCES

Data Source and Type	Purpose for this study	Duration of Data Collection	Description	Location	Number	Date Collected
HH Administrative Data QUAL and QUANT	These data were used with the market-basket data to create a typology (low-mid-high) of healthy food access success among 21 corner stores	15 months	Excel files that describe CBO and corner store participation in HH training activities and number of contacts with CPPW staff	All HH Communities	N/A	Jan 11-June 12
In-Store Market Basket Assessment QUANT	These data were used with the HH administrative data to create a typology (low-mid-high) of healthy food access success among 15 (pre) and 16 (post) corner stores	45 minutes	Corner store food and equipment inventory	All HH Communities	16	Nov-10 and Apr-12
Demographic Survey Data QUANT	These data were used to understand HH project participant identity (SES, residence) and how this influences healthy eating behaviors and institutionalization of store health promoting activities	10 minutes	Short questionnaire administered to Store Owners, CBO Staff and Consumers prior to interviews and focus groups	All HH Communities	Consumers (N=51); Store Owners (N=21); CBO Staff (N=8)	Apr-12 - June-12

TABLE I: CASE STUDY DATA SOURCES (continued)

Data Source and Type	Purpose for this study	Duration of Data Collection	Description	Location	Number	Date Collected
US Census Data QUANT	These data were used to understand socio-economic status of communities and how this influences healthy eating behaviors and institutionalization of store health promoting activities	N/A	Consumers	All HH Communities	N/A	2000-2010
Semi-structured Interviews QUAL	These data were used to understand factors related to healthy corner stores becoming community-based enterprises and the impact of the owners' CBE identity on community healthy eating behaviors	1.5 hours	Store Owners (Primary Data Source)	Blue Island	2	Apr-12 - May-12
				Calumet Park	1	
				Chicago Heights	2	
				Cicero	7	
				Ford Heights	2	
				Harvey	3	
				Mount Prospect	1	
				Riverdale	3	
				Total	**21**	
		1 hour	Community Organization key contact/staff member	All HH Communities	8	Apr-12
Consumer Focus Groups QUAL	These data were used to understand store owner relationships with community members and how this is related to institutionalization of store changes and impact of owner CBE identity on community healthy eating behaviors	1 hour	Groups of up to 10 consumers in six of eight HH communities	Calumet Park	1	Apr-12 - May-12
				Chicago Heights	1	
				Cicero	1	
				Harvey	1	
				Mount Prospect	1	
				Riverdale	1	
				Total	**6**	

2. Community Context Data

Existing data from demographic questionnaires collected among HH narrative participants (store owners, CBO staff and consumers) and county-level data from the US Census (2011) were combined to assess and explicate community context for this case study. Community context includes the socioeconomic environment around the participating corner stores as well as HH participant and community resident demographics. Community context was identified as a sensitizing concept within the preliminary conceptual framework (Figure 1) and influences the institutionalization of corner store health promoting activities, therefore these data sources were included in this study to define and reflect on this construct.

Questionnaires were completed by all interview and focus group participants (Corner Stores N=21; CBO Staff N=8; Consumers N=51) and included five short questions related to participant residence, racial and ethnic background, salary and education. The questionnaires were conducted prior to participation in the interviews and focus groups and were collected from April – June 2012 (Table I).

3. In Depth Interview Data

Store owners and local partner community-based organizations enrolled in the HH intervention, and conducting work within the eight communities, were contacted by phone to set up an interview by CPPW staff. Twenty-one store owners and eight CBO staff were interviewed by CPPW staff (trained in qualitative data collection methods) from March – June 2012 either within their work place or a community meeting location of their choice (Table I). Eight of the store owners, whose primary language is Spanish, were contacted by a Spanish speaking CPPW staff member to schedule and conduct the interview. Consent was obtained to record and

participate in the interviews by the store owners and CBO staff prior to the interview taking place.

The store owner interview guide used in the HH project had several questions that were used to assess store owner alignment with a community-based enterprise identity as well as institutionalization of health promoting activities (Appendix H). The questions were ordered to reflect store history and owner experience, product availability and placement, usage of the HH equipment, motivation to continue of the sale of healthy foods, their overall experience in the HH intervention and their perceptions of the value of the intervention on community health. The questions were derived from validated protocols used for studies conducted by D.C. Hunger Solutions, Johns Hopkins University, and the University of Arizona. The guide was translated into Spanish for eight store owners, whose primary language is Spanish and interviews were conducted by a Spanish speaking CPPW staff member. The transcripts were also translated into English by the same CPPW staff member at the conclusion of the interview.

The CBO staff interview guide also had several questions that were used to address the aims of this study (Appendix I) The questions were ordered to reflect organization history and experience, perceptions of the barriers and facilitators to continuing the HH project with store owners, perceptions of the barriers and facilitators in expanding the HH project to new stores, their overall experience in the HH intervention and their perceptions of the intervention on community health.

As stated above, the corner store owner interviews served as the primary data source for this case study, provided the focus on the locally relevant understanding of stores as CBEs and role as a health promoting agent within the community. The CBO staff interviews and consumer focus group data were utilized in combination with the store owner interviews to explicate and

define the sensitizing concepts discussed in the conceptual framework (Figure 1) and other hidden concepts which were revealed through an iterative data analysis process.

4. Consumer Focus Group Data

Consumers in six of the eight participating HH communities were recruited to attend a two-hour focus group session at a community facility within proximity to the HH store (Table I). Recruitment occurred within the HH corner stores by CPPW staff through dissemination of flyers and oral promotion. Participating consumers in one community, whose primary language is Spanish, was facilitated by a CPPW Spanish speaking staff member. Transcripts from this focus group were translated into English at the conclusion of the focus group collection by the same CPPW staff member. Participants in the focus groups were provided with a $50 gift card as an incentive for their participation.

The focus group guide had several questions to aid in the analysis of this study (Appendix J). Focus group questions were ordered to create discussion among participants in the areas of shopping behaviors, potential to purchase healthy foods, recognition of the HH project within local stores and overall perception of local corner stores.

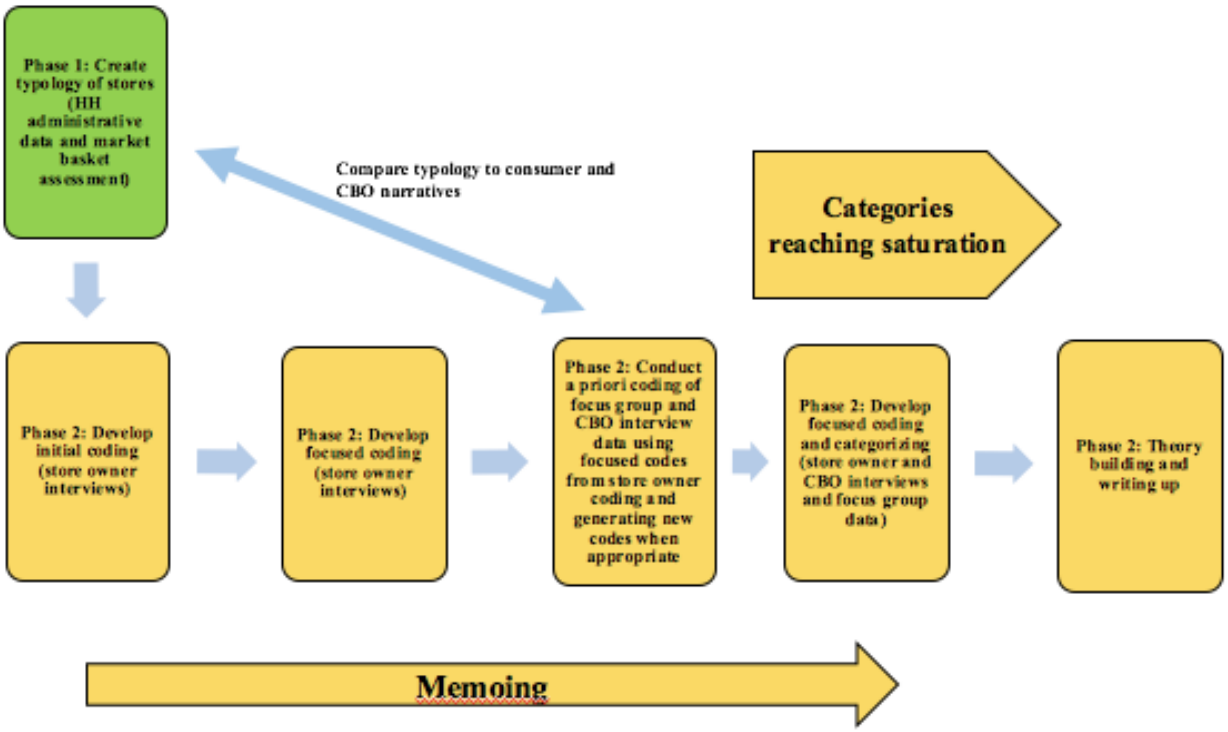
H. Data Analyses

The analyses of this case study was conducted in two phases in order to discover and explicate the locally relevant understanding of corner stores as community-based enterprises and the role of owners' CBE identities in the institutionalization of health promotion activities. In phase one, market basket assessment data (pre and post- intervention) was combined with the HH administrative data (training attendance) to develop a typology (high-medium-low) of stores' success in completing the HH project and increasing healthy food access (Figure 3). This was conducted for the 16 stores that completed the market basket assessments; the five stores that did

not complete the market basket assessment were not ranked or provided a typology. Results of corner store healthy food availability in seven healthy food categories (Fresh fruit and vegetables (F/V); Frozen F/V; Low sodium/no sugar canned F/V; low-fat milk; low-fat protein; whole wheat carbohydrates and 100% juice) at baseline and endpoint of the HH intervention were used to create this typology. The seven categories were selected to reflect required types of HH healthy food additions (Fresh F/V and two additional categories) and other healthy food additions that went above and beyond the HH requirements (e.g. low-fat protein, 100% juice). Stores were scored for offering products in each of the categories (1 point per category offered), and for working with CBOs that attended three or more HH trainings (1 point from administrative data) and provided at least one marketing or promotional event for the stores (1 additional point from administrative data). Cut-points were determined based on individual total scores to place stores into three distinct categories (high-mid-low) of success in completing the HH project (historical study).

The degree of success within which stores completed the HH intervention was thought to hold a significant role within the enhancement of their community-based enterprise identity and institutionalization of health promoting activities, and was included in these analyses. This typology was used as a sensitizing concept in the initial coding and memoing (analytic coding) of the store owner narratives and provided a starting point for data analysis, but did not drive phase two of the process (Figure 3). Additionally, store typologies were used in a priori coding of the CBO interviews and consumer focus group data to align community responses to implementation success (typology) within the HH store, as this was assumed to be associated with owners' CBE identities and institutionalization of health promotion activities.

Figure 3: Data Analysis Process



Adapted from Charmaz, 2014, p. 17

In phase two, Atlas Ti v7.5.10 (Scientific Software Development GmbH, 2015) was used to initially code the store owner narratives (Figure 3). An iterative process was used to conduct initial and focused coding (144 codes) of store owner actions and processes that best shaped and defined the community-based enterprise concept and institutionalization of health promotion activities (Appendix A). Sensitizing concepts identified in the conceptual framework (Figure 1) (Intrinsic Motivators, External Rewards, CBO-Store Relationships, Community Context) were included in the initial round of coding and memoing of narratives, as tools to guide the process and further explicate and define constructs and categories hidden within the data (Charmaz, 2014).

For example, in a narrative of a store owner, a participant might have stated, “My father died of diabetes so I am committed to this project to honor his name.” In line by line coding of this statement, one may have initially coded *emotional response to personal problems*, *lived experience with health issues* and *motivated to complete project*, as these are actions and processes identified within this statement. If more than one store owner described similar lived experiences with health issues or chronic disease, a memo may have been created which would reflect lived experience with health issues across all store owner interviews. Focused coding of the same statement may then create codes such as *community connectedness* or *translation of family values to community*. These focused codes were then compared with other codes and memos created a priori from the CBO staff interviews and consumer focus group data to define categories and key constructs that answered the aims and research questions of this study.

As illustrated in the example above, after the store owner narratives were saturated via initial and focused coding, categories outlined from the continued data analysis processes were compared to codes discovered and created a priori within the CBO interview and consumer focus group narratives, as well as the store typologies created in phase one (Figure 3). This comparison process was modeled on the constant comparative method for qualitative data analysis (Charmaz, 2006; Charmaz, 2014; Bernard and Ryan, 2010; Miles et al. 2013) and further defined key constructs that answered the aims and research questions identified in this study. The final codebook, describing the 14 summative categories (which included the 144 initial and focused codes), is included in Appendix A. The focused coding and data saturation process allowed for the initial codes to be assessed for conceptual strength and alignment in the creation of the three key thematic categories that arose from the analysis processes (Charmaz, 2014). Memo-writing

was used during and after the focused-coding process as an opportunity to frame the analyses of the data, as this is particularly important in grounded theory qualitative studies (Charmaz, 2014).

Memo-writing, the creation of the codebook (Appendix A) and usage of electronic qualitative data analysis software allowed for an audit trail of the methods followed in this study (Morse et al., 2002). This audit trail, housed within the Atlas TI software v7.5.10 (Scientific Software Development GmbH, 2015) enabled illustration and verification of the procedural steps taken (in initial and focused coding), the decision rules implemented and the analyses operations conducted within this study (Miles et al. 2013). Provided this was research conducted with existing data, maximizing validity and reliability was limited within the data analysis procedures. For example, member checking of the narratives was unable to be conducted among the store owners, consumers and CBO staff within the community; however, the results of this study were shared with CCDPH staff, as they are the public health entity working directly with the impacted communities.

I. Protections from Research Risk

Participation in the HH evaluation represented little to no harm or risk for participants and, therefore, was exempted from formal review by the Cook County Health and Hospitals System Institutional Review Board (#12-041x) in March 2012 (Appendix C). Study protocols and analysis materials for this study were also assessed and reviewed for approval by the University of Illinois at Chicago Institutional Review Board prior to the start of data analysis (#2016-0077, February 2016, Appendix D). Additionally, names and contact information of participating stores, store owners, community-based organizations and CBO staff were kept confidential throughout the analysis process so as not to identify the respondents' comments and to ensure their accounts were being reported with greatest comfort and honesty. Furthermore,

every effort was made to ensure public and community health researcher ethics were upheld throughout the duration of this study and also during the reporting of study outcomes.

IV. FINDINGS

A. Description of Store Owner and Community Demographics

The HH project took place in eight low-income, low healthy food access communities in SCC, which was a primary selection criteria of communities into the project (Table II). In five of the eight communities (Calumet Park, Chicago Heights, Ford Heights, Harvey and Riverdale), consumers served by the HH stores were primarily African American/Black, with the exception of Chicago Heights in which the stores also may have served Latino/Hispanic populations (33.9% of total population) (US Census Bureau, 2011). In the remaining three communities (Blue Island, Cicero and Mount Prospect) the primary consumers served by the HH stores were comprised of primarily Hispanic/Latino populations (US Census Bureau, 2011). In Mount Prospect, a northern suburb of SCC, the socioeconomic and racial/ethnic indicators skew towards middle-income, white families (Table II); however a large enclave of low-income, Hispanic/Latino populations live within close proximity of the HH store in this community, and were the primary consumers served at that store. Additionally, a large majority of consumers served by HH stores in all eight communities had obtained at least a high school diploma, however nearly a quarter to half of community families live in poverty (with the exception of Mount Prospect noted above) and comprise the target population the HH project attempted to address (US Census Bureau, 2011).

Store owner demographics were often opposite of the community demographics noted above, especially in relation to racial/ethnic composition and residence of store owners vs. the consumers they served (Table II). A large majority of HH store owners were male (N=16) and had some college or a college degree (N=10) (Figure 4). Within the African American serving communities (Calumet Park, Chicago Heights, Ford Heights, Harvey and Riverdale), store

TABLE II: COMMUNITY AND STORE OWNER DEMOGRAPHICS AND SOCIOECONOMIC STATUS

Municipality	Population	Percent White, not Hispanic/ Latino	Percent Black/ African American	Percent Latino/ Hispanic	Percent in Poverty[a]	Percent with HS Diploma	Number of Stores	Store Owner Race/ Ethnicity	Store Owners Living in Community
Blue Island	23706	21.0	30.8	47.0	21.8	77.7	2	Latino/ Hispanic (2)	2
Calumet Park	37042	13.3	70.6	15.0	22.0	85.6	1	Arab	0
Chicago Heights	30276	23.3	41.5	33.9	29.0	78.3	2	White (2)	0
Cicero	83891	9.2	3.8	86.6	22.0	61.5	7	Latino/ Hispanic (5); Arab (1); White (1)	6
Ford Heights	2782	1.4	95.4	1.5	46.2	78.6	2	Arab (1); Other (1)	0
Harvey	25282	3.6	75.8	19.0	35.0	75.7	3	Arab (2); Asian (1)	1
Mount Prospect	54167	69.0	2.4	15.5	4.3	88.3	1	Latino/ Hispanic	0
Riverdale	13549	3.8	93.7	1.7	25.3	88.4	3	Arab (1); Asian (2)	0

[a] Poverty threshold for a family of four in 2010 = $22,314

Figure 4: Store Owner Education

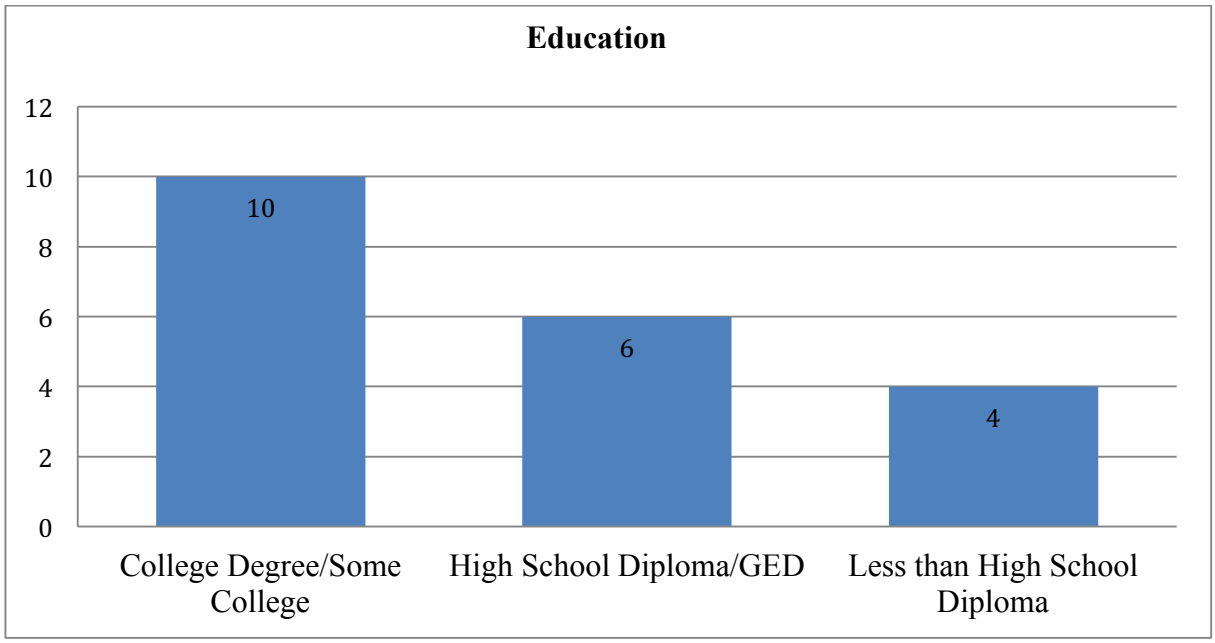
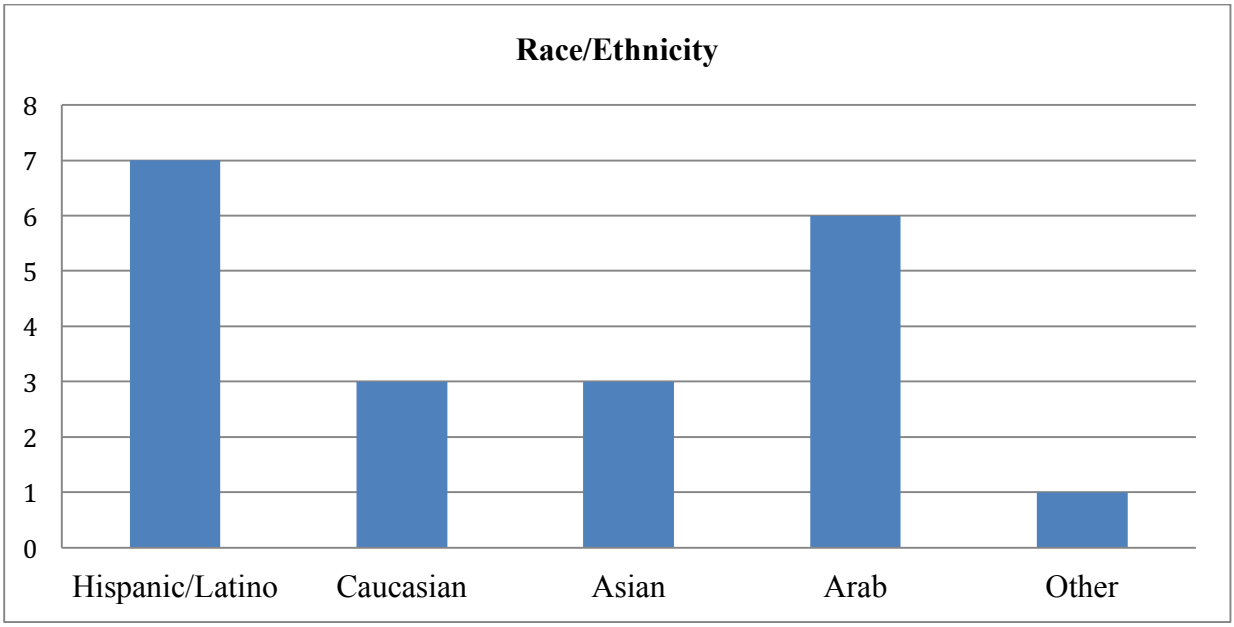


Figure 5: Store Owner Race/Ethnicity



owners did not reside within the community they served (N=10), except for Harvey in which one store owner resided. Within the Latino/Hispanic serving communities (Blue Island, Cicero, Mount Prospect), most store owners resided in the communities they served (N=8); only two store owners, one in Mount Prospect and one in Cicero, lived outside their consumers' communities (Table II). Additionally, store owners in primarily African American serving communities were not from the same racial/ethnic background of their consumers ([N=5] Arab; [N=3] Asian; [N=2] White; [N=1] Other), while store owners in primarily Latino/Hispanic serving communities) were mostly of the same racial/ethnic background of their consumers ([N=8] Latino/Hispanic; [N=1] Arab; [N=1] White). Overall, a large majority of store owners in this study identified as Latino/Hispanic or Arab (Figure 5).

B. Narrative Descriptions of the CBE Construct

In this study, CBEs, or Community-Based Enterprises, are defined as a community-lead or community-oriented small business with a common goal to improve population health (Peredo and Chrisman, 2006). The absence or presence of the CBE identity by local corner store owners in eight low-income communities is one of the primary aims of this study and is explicated and discussed throughout the following sections through four key research questions, provided on page 12 and below:

1) How do typologies (low vs. high) of HH intervention completion relate to the corner store owners' CBE identity?
2) What aspects (e.g., training, equipment, financial incentives, healthy food marketing events and materials, consumer feedback) of the HH intervention were perceived as useful for corner store owners in their role as health promoting agents, and is this perception related to their CBE identity?

3) To what degree are community health goals valued and prioritized among corner store owners?
4) To what degree did contextual factors (e.g., local economy, community demographic changes, community preferences and influence, store owner relations with the community) facilitate or impede the functioning of corner stores as a community-based enterprise, and health promoting agent?

Assessment of the previous research questions could not be obtained without first unpacking the narratives of the local store owners, participating CBO staff and consumers to illustrate their perspectives of the CBE construct, especially as this relates to the CBE identity of the store owners. Table III outlines the three thematic categories that best captured the discussions of the CBE construct within each of the narratives. The categories include: *Prioritizes Community Health; Positive Community Engagement and Health Resource for the Community*. Quotes from the narratives that best captured the meaning of the thematic categories within each of the participant groups are also illustrated in Table III and discussed further below.

The first thematic category, *Prioritizes Community Health*, was discussed similarly within each of the participant narratives and encompassed a general sense of store owners valuing the health of their community consumers. Among the store owner narratives, this was often illustrated through descriptions of the importance of providing healthy foods and improving the health of their consumers (Table III). Store owners also discussed prioritizing selling healthy foods over making a profit and extended their healthy food offerings even when a financial loss might be expected. For example one store owner from Cicero described:

> *No---I will bring healthier options….doesn't matter the cost. If the customers ask for it, I will bring it, no matter what.*

TABLE III: NARRATIVE DESCRIPTORS OF THE CBE IDENTITY[a]

CBE Identity Descriptor Categories	Store Owners	CBOs	Consumers
Prioritizes Community Health	*I have been selling fresh fruits and vegetables since we opened, I believe it's important to value health and I want to be part of helping people eat healthier.*	*Honestly I would say that with everyone except* [Cicero Unranked (UR) Owner and Cicero High Owner]*, I think the incentives had a lot to do with it. I think that* [Cicero UR Owner] *and* [Cicero High Owner] *were doing it with I think better intentions of really helping the community.*	*If item sells, the owner will offer it more. Looks like owners listen and try to accommodate requests. For ex, at* [Cicero Mid Store] *I asked him why don't you sell wheat bread?…and he responded well if you want it I will bring it here for you.*
Positive Community Engagement	*What I like to feed my kids, I like to feed the community.*	[Chicago Heights High] *was very engaged. They added over 40 new frozen and fresh food items to their store. And they only had to add 6. I would definitely say they were signed on and fully engaged. They supported everything we were doing. Well they saw a benefit for them to move on to the next phase. It was beneficial for them to continue on. We never had any issues with them.*	*The owner of* [Cicero Mid Store] *is very attentive, he put vegetables and added a lot of other healthy products, tortillas are cheaper (4 for $1) and I can send my children unaccompanied to the corner stores because they are close and convenient.*

TABLE III: NARRATIVE DESCRIPTORS OF THE CBE IDENTITY[a] (continued)

CBE Identity Descriptor Categories	Store Owners	CBOs	Consumers
Health Resource for the Community	*I would like to try and sell healthier snacks like granola bars and/or nuts, but they are too expensive for me to purchase…..the unhealthy snacks are what sells so unfortunately I cannot get rid of them, but I do try to encourage kids when they come in and purchase the junk food to try a healthier option, like a piece of fruit…..I also try and display the healthier options better so they are more visible to the customer.*	*I think* [Harvey Low Store]*, at the corner. He's just really pro-community. He was doing a lot of the things that we wanted him to do even before. He was working with WIC. And some of the things that we wanted him to have, WIC wanted him to also have. He's more enlightened and committed. Probably richer too. So he was the easiest one I think.*	*They cool with the community. If you don't have enough* (money)*, they'll let you go. Or they'll say give it back next time but most of the time they won't ask for it. They speak to you if they see you. Like if they standing outside they shop and you on your way and you not going to their store, they speak. They um, they real polite to the kids, to everybody. They pretty much try to keep a personal one on one relationship.*

[a] This table illustrates CBE identity definitions provided in the store owner, CBO and consumer narratives.

The *Prioritizes Community Health* thematic category was also illustrated in the CBO and consumer narratives and complemented the discussions within the store owner reports. Staff narratives from CBOs often discussed store owners actions in caring for the community and offering healthy foods despite incentives offered by the HH project or other positive components of participating in the intervention. Consumers discussed store owners' attentiveness to their requests for healthy foods and the owners' initiative to add or replace products with healthier items, as well as culturally-relevant healthy foods within the stores (Table III). The more a store owner prioritized consumer needs for healthy foods, the more they were perceived to embody the CBE identity by local customers.

The second thematic category, *Positive Community Engagement*, was also discussed similarly within the three participant narratives. Store owners often described their consumers as neighbors, friends or family (Table III) and readily participated in community-based events and activities (e.g., taste tests of smoothies with the local school students and staff) in addition to selling healthy foods in the community. Community-based organization staff often discussed store owners as able and willing partners within the HH project and noted their positive relationships with their consumers. Consumer narratives served as a significant descriptor for this category. Several consumers described the importance of the store owners' presence and history within the community (i.e., time spent as owners), their racial/ethnic background, place of residence and overall interactions with the consumers in their community as evidence of having rapport with the communities they served and encompassing the CBE identity.

The final thematic category, *Health Resource for the Community*, comprised discussions in the narratives of stores serving as more than a food resource within the community. Store owners described meeting the needs of low-income, senior and youth consumers through

participation in programs such as SNAP/LINK (Supplemental Nutrition Assistance Program) and WIC (Women, Infants and Children), as well as offering on-site health education/promotion to youth consumers (Table III). Owners also discussed offering healthy, convenient foods for their consumers and in Latino/Hispanic serving communities this included offering culturally-relevant healthy foods.

CBO staff often illustrated the benefits HH stores obtained through participation in the HH project, and this enabled stores to provide more than healthy foods to the community (i.e., could participate in more activities/events like health education). Consumer narratives also discussed the benefits stores provided to the community, such as participating in SNAP/LINK and WIC. However, consumers also described a unique aspect among local, small stores such as the provision of store credit when consumers did not have enough funds to complete their purchases (Table III). By offering additional benefits to the community, stores were viewed as resources for health and owners were more encompassing of the CBE identity.

C. Research Question 1: Corner Store Typologies

Pre and post-intervention market basket data from the HH project (historical study) was assessed to create a typology of stores as low, mid or high implementers. Seven intervention market basket assessment categories (fresh fruit and vegetable (F/V); frozen F/V; Low sodium/no sugar canned F/V; low-fat milk/dairy; low-fat protein; whole wheat carbohydrates and 100% juice) were assessed to determine store completion of the required additions of healthy food store offerings (fresh fruit and vegetables and at least two other categories) and additional categories in which HH stores may have gone above and beyond the project requirements (e.g., adding more than four categories or adding 100% juice or lean proteins). Stores that added a food group from pre to post-assessment received a score of two within the relevant market basket

category (Table IV). Participation in the project among CBOs was also assessed to create the typologies and included assessments of staff participation in required trainings (i.e., attended at least three) and provision of at least one marketing event for each store.

The completion of the pre and post-intervention market basket assessment was a requirement for all HH stores, however only 16 of the 21 stores completed the assessment. Therefore, the stores that did not complete the assessment (N=5) were not ranked or provided a typology. Stores with scores of 7-6 (N=6) were ranked as *low implementers*, as these scores indicate just meeting the HH project requirements (healthy food additions in at least three categories). Stores with scores of 8 (N=4) were ranked as mid implementers and stores with scores of 10-9 (N=6) were ranked as *high implementers* (Table IV).

Low implementing stores (N=5) added the required minimum of healthy food offerings in their stores. Four of the low implementing stores did not have an active CBO partner organization who attended at least three HH trainings although, all stores received a CBO-sponsored marketing event (Table IV). Mid implementers fulfilled the requirements of the HH project (3 categories) and added at least one or more healthy food categories beyond the HH project requirement. Three of the mid implementing stores had a partnering CBO that attended at least three HH trainings and all received a CBO-sponsored marketing event for their store (Table IV). High implementers added healthy foods in almost all of the seven categories and half (N=3) had partnering CBOs that attended at least three HH trainings. All high implementing stores also received a CBO-sponsored event for their store. One of the high implementing stores (05 Chicago Heights) added all seven categories of healthy foods in their store and three stores added six of the seven categories of healthy foods (Table IV).

TABLE IV: HEALTH PROMOTING STORE RANKINGS

	Market Basket and HH Program Implementation Categories[a]									
Store Ranking[b]	Fresh F/V	Frozen F/V	Low Sod/ No Sug Canned F/V	LF Milk	LF Protein	Whole Wheat Carb (2+)	100% OJ	Store affiliated CBO attended Trainings at least 3	CBO Provided at least 1 marketing event	Total Categories
01 Blue Island Mid	1		1	1	1	1	1	1	1	8
02 Blue Island Unranked								1	1	2
03 Calumet Park Low	1	1	1	1	1		1		1	7
04 Chicago Heights Unranked									1	1
05 Chicago Heights High	1	1	1	1	1	2	2		1	10
06 Cicero High	2		1	1		2	1	1	1	9
07 Cicero High	1	2	2	1		1	1	1	1	10
08 Cicero Mid	2			1	1	1	1	1	1	8
09 Cicero Low	1		1	1			1	1	1	6
10 Cicero High	1	2	1	1		2	1	1	1	10
11 Cicero Low	2		1	1				1	1	6
12 Cicero Unranked								1	1	2

TABLE IV: HEALTH PROMOTING STORE RANKINGS (continued)

	Market Basket and HH Program Implementation Categories[a]									
Store Ranking[b]	Fresh F/V	Frozen F/V	Low Sod/ No Sug Canned F/V	LF Milk	LF Protein	Whole Wheat Carb (2+)	100% OJ	Store affiliated CBO attended Trainings at least 3	CBO Provided at least 1 marketing event	Total Categories
13 Ford Heights Unranked									1	1
14 Ford Heights Unranked									1	1
15 Harvey High	2	2	1	2			1		1	9
16 Harvey Low	1	1	1	1			1		1	6
17 Harvey Low	1	1	1	1	1		1		1	7
18 Mount Prospect Mid	1		1	1	1	1	1	1	1	8
19 Riverdale High	2	1	2	1		2	1		1	10
20 Riverdale Low	1	2	1	1			1		1	7
21 Riverdale Mid	1	1	1	1	1	1	1		1	8

[a]If stores added a category from pre to post-intervention 2 points were provided within the category

[b]Grey= Unranked stores (did not complete market basket assessment); Red = Low HH Implementers; Yellow = Mid HH Implementers; Green = High HH Implementers

After aligning the store typologies with the qualitative data analysis, store rankings did not consistently predict greater or lesser association with the CBE identity. For example, some stores that were categorized as high implementers were found to have several discussions in the narratives of holding negative relationships with community members. However, other stores that were also high implementers were found to align more with the CBE identity. Narrative descriptions of these stores had at least one or more associations with the three thematic categories identified above (Table III). Additionally, some low implementing and several unranked stores were also found to more closely align with the CBE identity – through narrative alignment with the CBE thematic categories - and some low and unranked stores were even more described in the narratives as associating with the CBE identity than several mid implementing stores. The store rankings did appear to show a relationship between a participating CBO and higher classifications of rankings, however this did not translate to alignment with the CBE identity. Further descriptions of alignment with the CBE identity, and trends in store characteristics are described further below.

D. Research Question 2: Impact of Healthy HotSpot Participation on CBE Identity

Narrative descriptions of the usefulness of the Healthy HotSpot project were well-represented among the participants (store owners, CBO staff and consumers), as this was the primary purpose for conducting the HH evaluation (historical study). Store owner narratives were reviewed to assess the various components of usefulness, or non-usefulness, of the HH intervention. These components were sorted into the following descriptive categories: ability to offer new healthy foods (e.g., new equipment availability), usefulness of HH promotional materials and events (e.g., posters, tags, signage and healthy food marketing events hosted by CBOs), increase in the number of customers and store profits (e.g., new customer base) and

usefulness of HH training materials and events (e.g., fact sheets, on-site technical assistance). The descriptive categories were also coupled with the corner store typologies (via the market basket assessment) and the CBE thematic categories (Table III) to assess whether or not HH participation had an impact on the owners' CBE identity (Table V).

CBO staff participation in the HH project was also assessed through review of the narratives and additional descriptive categories were identified. These categories included the following: attending trainings, marketing events held for stores and noting whether or not the HH materials (e.g., fact sheets, marketing materials) were helpful to the store owners. Community-based organization staff readily discussed their role in the HH required trainings (e.g., participated or not) as well as their provision of HH required marketing and promotional events, which were to be held for each participating store. Healthy HotSpot administrative documents (e.g., excel files) that outlined the number of events held for each of the stores by the CBOs were also assessed and coupled with the descriptive categories to determine CBO involvement in the HH project (Table V). Additionally, consumer narratives were reviewed to verify customer awareness of changes made (e.g., signage, healthy foods) within each of the HH stores; this was also included in the review of HH impact on store owners' CBE Identities.

While store typologies (based on the market basket assessment) did not impact owners' alignment with the CBE identity, there were associative patterns discovered among owners who found HH more useful and were also collaborating with a highly-engaged CBO. For example, the seven store owners in Cicero all noted several benefits of participating in the HH project, including increased sales, helpfulness of the materials and satisfaction with the new equipment/incentives. These seven stores were the only stores (out of all 21) to have consumers

TABLE V: IMPACT OF HH ON CBE IDENTITY

Ranked Stores	Owner descriptions align with CBE thematic categories[a]	HH Helpful (Store Owners)	HH Not Helpful (Store Owners)	Consumers Notice HH Changes	CBO HH Role
01 Blue Island Mid	1, 3	Can offer new healthy foods; New customers; Customers notice HH changes; Promotional materials helped; Training materials helped	Customers do not purchase healthy foods	N/A	Did not attend all trainings; Noted materials helped; Limited marketing events held for stores
02 Blue Island Unranked	1, 3	Can offer new healthy foods; Promotional materials helped; Training materials helped	Customers do not purchase healthy foods; Customers do not notice HH changes		
03 Calumet Park Low	3	Can offer new healthy foods	Customers do not notice HH changes	No	Did not attend all trainings; Noted materials helped; Limited marketing events held for stores
04 Chicago Heights Unranked	3	Customers notice HH changes; Training materials helped	More promotion of healthy foods needed	No	Attended all trainings; Noted materials helped; A few marketing events held for stores
05 Chicago Heights High	2, 3	Customers notice HH changes; Can offer new healthy foods	Did not use HH promotional materials		

TABLE V: IMPACT OF HH ON CBE IDENTITY (continued)

Ranked Stores	Owner descriptions align with CBE thematic categories[a]	HH Helpful (Store Owners)	HH Not Helpful (Store Owners)	Consumers Notice HH Changes	CBO HH Role
06 Cicero High	1, 2, 3	Selling more healthy foods; Customers notice HH changes; Promotional materials helped; Training materials helped		Yes	Attended all trainings; Noted materials helped; Several marketing events held for stores
07 Cicero High	2, 3	Selling more healthy foods; New customers; Customers notice HH changes; Promotional materials helped; Training materials helped			
08 Cicero Mid	1, 2, 3	Selling more healthy foods; Customers notice HH changes; Promotional materials helped; Training materials helped			
09 Cicero Low	1, 2	Can offer new healthy foods; Selling more healthy foods; Customers notice HH changes; Promotional materials helped; Training materials helped	Customers do not purchase healthy foods		

TABLE V: IMPACT OF HH ON CBE IDENTITY (continued)

Ranked Stores	Owner descriptions align with CBE thematic categories[a]	HH Helpful (Store Owners)	HH Not Helpful (Store Owners)	Consumers Notice HH Changes	CBO HH Role
10 Cicero High	1, 2, 3	Can offer new healthy foods; Selling more healthy foods; Customers notice HH changes; Promotional materials helped; Training materials helped	Customers do not purchase healthy foods	Yes	Attended all trainings; Noted materials helped; Several marketing events held for stores
11 Cicero Low	1, 2, 3	Can offer new healthy foods; Selling more healthy foods; Customers notice HH changes; Promotional materials helped; Training materials helped			
12 Cicero Unranked	1, 2, 3	New customers; Selling more healthy foods; Customers notice HH changes; Promotional materials helped; Training materials helped	More promotion of healthy foods needed		
13 Ford Heights Unranked	2, 3	Can offer new healthy foods; New customers; Customers notice HH changes; Promotional materials helped; Training materials helped		N/A	Did not participate in trainings; Limited marketing events held for stores

TABLE V: IMPACT OF HH ON CBE IDENTITY (continued)

Ranked Stores	Owner descriptions align with CBE thematic categories[a]	HH Helpful (Store Owners)	HH Not Helpful (Store Owners)	Consumers Notice HH Changes	CBO HH Role
14 Ford Heights Unranked	1, 3	Selling more healthy foods; Customers notice HH changes; Promotional materials helped; Training materials helped	Customers do not purchase healthy foods	N/A	Did not participate in trainings; Limited marketing events held for stores
15 Harvey High	1, 3	Selling more healthy foods; Customers notice HH changes; Promotional materials helped; Training materials helped		No	Did not attend all trainings; Noted materials helped; Limited marketing events held for stores
16 Harvey Low	1, 2, 3	Selling more healthy foods; Customers notice HH changes; Promotional materials helped; Training materials helped			
17 Harvey Low	3	Selling more healthy foods; Customers notice HH changes; Promotional materials helped; Training materials helped			

TABLE V: IMPACT OF HH ON CBE IDENTITY (continued)

Ranked Stores	Owner descriptions align with CBE thematic categories[a]	HH Helpful (Store Owners)	HH Not Helpful (Store Owners)	Consumers Notice HH Changes	CBO HH Role
18 Mount Prospect Mid	1, 2, 3	Selling more healthy foods; Customers notice HH changes; Promotional materials helped; Training materials helped	Customers do not purchase healthy foods; More promotion of healthy foods needed (culturally appropriate)	No	Did not attend all trainings; Noted materials helped; Limited marketing events held for stores
19 Riverdale High	1, 2, 3	Selling more healthy foods; New customers; Customers notice HH changes; Promotional materials helped; Training materials helped		No	Did not attend all trainings; Noted materials helped; Limited marketing events held for stores
20 Riverdale Low	3	Selling more healthy foods; Promotional materials helped	Customers do not notice HH changes; Did not add new healthy foods		
21 Riverdale Mid	1, 2, 3	Selling new healthy foods; Selling more healthy foods; New customers; Customers notice HH changes; Training materials helped	Customers do not purchase healthy foods; Promotional materials did not help		

[a]CBE Thematic Categories: 1= Prioritizes Community Health; 2=Positive Community Engagement; 3=Health Resource for the Community

notice the changes made within their stores due to the HH project (via the focus group narratives) and were also partnered with a highly-engaged CBO. This can best be explicated through the description from one Cicero store owner in discussing the benefits of participation in HH:

> *No not really other than I am grateful to be part of this program and have had a good experience…the residents of this community are very happy to see fresh fruits and vegetables sold in my store….I would like to try and work closer with* [Cicero CBO] *to do some community education classes and tie in free taste tests and samples from the food I offer at my store. Since I have a full kitchen, I would also like to start cooking and offering "healthy plates" to my customers.*

Another Cicero owner also described the usefulness of the HH materials (fact sheets):

> *Yes definitely…they were helpful in giving me ideas and options on how to sell the products.*

The CBO staff from Cicero also commented on the enthusiasm with which the stores participated in the project, which often went beyond the provided financial and equipment incentives:

> *Well I guess that would be the same answer. While* [Cicero UR and Cicero High Store Owners] *I mean they were pretty set with the items that they had. Like the refrigerators and all that stuff. So I think it was really a desire to do something for the community rather than the incentives. I think with the other store owners, while they want to help the community, I think the incentives pushed them to do it*.

In addition to participation in the HH project being helpful and the CBO being highly-engaged, all seven store owners discussed greater associations with the CBE identity, as evidenced by alignment with at least two of the three thematic categories (Table V). It appears that for the Cicero stores, the positive effects of the HH project influenced stronger associations with owners' CBE identities and more positive responses from the community.

The other community in which stores worked with a highly-engaged CBO was Chicago Heights. While the participating CBO staff attended all required HH trainings, they were not as active in holding marketing and promotional events for their participating stores (as compared to the Cicero CBO). This is most likely reflected in the lack of consumer awareness of the HH store

changes – as reviewed in the consumer narratives. The store owners also mentioned a need for additional promotional activities within their discussions of the unhelpfulness of participating in the HH project (Table V). While the Chicago Heights High store discussed two CBE thematic categories within their narratives, the Chicago Heights Unranked (UR) store only discussed one category (offering SNAP/LINK: Health Resource for the Community), therefore influence of the HH project participation on the Chicago Heights stores is unclear within this community, despite the support of a highly-engaged CBO.

The additional six communities (Blue Island, Calumet Park, Ford Heights, Harvey, Mt. Prospect and Riverdale) all noted similar satisfactions with the HH project (helpfulness of the materials, equipment and financial incentives) as well as dissatisfactions – a need for more promotional events/activities to sell healthy foods to consumers. All six communities worked with CBOs that were limited in their engagement in the project. Community-based organization staff either attended a few or none of the required trainings and/or held very few promotional activities for their stores (Table V). In four of these communities (Calumet Park, Harvey, Mt. Prospect and Riverdale) consumers also were unaware of the changes in the HH stores – likely due to a lack of CBO involvement in store promotions. Additionally, alignment with the CBE thematic categories varied widely within and between stores in these communities, as some stores discussed all three categories while others discussed only one (offering SNAP/LINK: Health Resource for the Community). Therefore, influence of the HH project on owners' CBE identities varied in these communities and appeared to be more influenced by their lack of partnership with a highly-engaged CBO (Table V).

E. Research Question 3: Prioritizing Community Health

Valuing and prioritizing community health was found to be a key indicator of alignment with the CBE identity within the store owner narratives. While this is one of three CBE thematic categories identified in the narratives, it appears that owners who expressed their desire to improve the health of their consumers were more likely to embrace the CBE identity. For example, many store owners discussed their role in being a *Health Resource for the Community* (Thematic Category 3), however for most, especially those that only aligned with this category in their narratives, primarily illustrated offering SNAP/LINK or WIC to meet the needs of low-income customers (Table V). Additionally, owners that discussed prioritizing community health (Thematic Category 1) also usually offered SNAP/LINK or WIC and participated in some form of health education with their consumers (Thematic Category 3). Taking on this role of an in-store health educator for youth, senior or low-income customers truly encompasses the CBE concept and further illustrates the valuing of community health.

Store owner, CBO staff and consumer narratives were reviewed for the 14 stores that discussed *Prioritizing Community Health* within their descriptions. Descriptive text, when present, within the participant narratives was aligned with the stores' CBE category descriptors as well as store rankings (Table VI). Consumer descriptions were not captured in Blue Island and Ford Heights as no focus groups were collected in these communities. Additionally, the narratives of CBO staff from Blue Island and Ford Heights did not accurately represent store owners' valuing the health of their consumers so quotes were not included in the table.

Nine of the 14 stores who discussed *Prioritizing Community Health* also illustrated their alignment with the other two CBE thematic categories (2= Positive Community Engagement and 3=Health Resource for the Community). Additionally, store owners consistently described a duty

to uphold the health of their communities, in addition to selling foods, and despite potential profit losses when newly available healthy foods did not sell immediately. Continuing to offer healthy options despite a lack of consumer demand illustrates owners' values for community health, sometimes above their own businesses (Table VI).

CBO staff in four of the communities also consistently discussed the motivations of store owners, which were due to participating in the HH project, as well as improving the lives of their consumers and the community at large (Table VI). Consumers were less likely to discuss this concept in their narratives, but in the few narratives in which this took place, illustrations included a greater appreciation for the store and the new product offerings (e.g., culturally-relevant healthy foods).

F. Research Question 4: Contextual Factors and the CBE Identity

1. Negative Contextual Influences on the CBE Identity

Valuing and prioritizing community health as well as working with a highly-engaged CBO did not always translate to store owners encompassing the CBE identity. Several contextual factors, such as owner and consumer racial and ethnic backgrounds, place of residence, history and recent interactions also greatly influenced alignment with the CBE identity. This was especially relevant in African American serving communities (Calumet Park, Chicago Heights, Ford Heights, Harvey and Riverdale) where a majority of owners did not reside within the communities they served and were of different racial and ethnic backgrounds than their consumers. In these communities, contextual differences had a negative effect on owner associations with their CBE identities, as evidenced in the narratives. One discussion on the role of the corner store in providing healthy food for the community illustrates:

TABLE VI: NARRATIVE DESCRIPTORS OF PRIORITIZING COMMUNITY HEALTH

Ranked Stores	Owner descriptions align with CBE thematic categories[a]	Store Owner descriptions	CBO descriptions	Consumer descriptions
01 Blue Island Mid	1, 3	*Because I think that's the right path for people to take care of themselves and myself as well. I am here all day.*		N/A
02 Blue Island Unranked	1, 3	*It's good for the community*		
06 Cicero High	1, 2, 3	*I have been selling fresh fruits and vegetables since we opened, I believe it's important to value health and I want to be part of helping people eat healthier.*	*I think it was really a desire* [on the part of the store owners] *to do something for the community rather than the incentives.*	*You go with more confidence and trust and WANT to shop at the stores…..because now there are healthier choices and options. It makes one feel better about the store.*
08 Cicero Mid	1, 2, 3	*…the unhealthy snacks are what sells so unfortunately I cannot get rid of them, but I do try to encourage kids when they come in and purchase the junk food to try a healthier option, like a piece of fruit. I also try and display the healthier options better so they are more visible to the customer.*		
09 Cicero Low	1, 2	*I already offer low fat, low sodium and low sugar products. Many of my customers have Diabetes so I need to be conscientious of this in what I am selling to them.*		

TABLE VI: NARRATIVE DESCRIPTORS OF PRIORITIZING COMMUNITY HEALTH (continued)

Ranked Stores	Owner descriptions align with CBE thematic categories[a]	Store Owner descriptions	CBO descriptions	Consumer descriptions
10 Cicero High	1, 2, 3	*You can make a difference. You really can even if it's with that one kid out of ten. It's not just a job you know you have to care.*	*I think it was really a desire* [on the part of the store owners] *to do something for the community rather than the incentives.*	*You go with more confidence and trust and WANT to shop at the stores…..because now there are healthier choices and options. It makes one feel better about the store.*
11 Cicero Low	1, 2, 3	*Because it's good for the people…even though it doesn't sell well I believe over time it will start selling better…with time and education.*		
12 Cicero Unranked	1, 2, 3	*I value health and value the health of our community….many of my customers have been coming here for years, they are like family to me. It's important for me to support improving their health and quality of life.*		
14 Ford Heights Unranked	1, 3	*It brings more customers to the business. To make more money. We need to make more money over here. We need more customer, different types of customers. I'm willing to try anything. It's good for customers and good for business at the same time. It's good for the community at the same time.*		N/A

TABLE VI: NARRATIVE DESCRIPTORS OF PRIORITIZING COMMUNITY HEALTH (continued)

Ranked Stores	Owner descriptions align with CBE thematic categories[a]	Store Owner descriptions	CBO descriptions	Consumer descriptions
15 Harvey High	1, 3	*The community asks for it, we bring it. When you eat everything you have once a day, like one banana, one orange, one apple, it's healthy, it's good.*	*I think [*Harvey Owner], *at the corner. He's just really pro-community. He was doing a lot of the things that we wanted him to do even before. He was working with WIC. And some of the things that we wanted him to have, WIC wanted him to also have. He's more enlightened and committed. Probably richer too (laughs). So he was the easiest one I think.*	*Yes I do because a lot of the people who go to these stores, they come there every day. If not every day, every other day so they do make some type of rapport with their customers so they continue to come back.*
16 Harvey Low	1, 2, 3	*What I like to feed my kids, I like to feed the community.*		
18 Mount Prospect Mid	1, 2, 3	*On one hand we have to sell what the customers buy and request and on the other hand we have to offer what's healthy. Unfortunately customers don't request a lot of the healthy items, although they are buying them. If it were up to me, if we didn't sell chips, I would be delighted. I know how bad they are, and that's mainly because I think of my kids, I don't want this for my kids, so I also don't want it for my customers.*	*Well I think they were different for the different groups that were involved. So for [*Mt Prospect Owner] *I think it was just a way to pursue a goal for him. He said that personally he was interested in making his own life healthy and he knew that other people in his same neighborhood were also looking to make their lives healthier.*	*They offer Mexican products, we look for what we would eat in Mexico, then store owners bring these products to attract people. They are convenient and close as well*

TABLE VI: NARRATIVE DESCRIPTORS OF PRIORITIZING COMMUNITY HEALTH (continued)

Ranked Stores	Owner descriptions align with CBE thematic categories[a]	Store Owner descriptions	CBO descriptions	Consumer descriptions
19 Riverdale High	1, 2, 3	*To the advantage of the elderly, and for those people who look for healthier stuff.*	*I think because they saw the, the, uh, interaction they were going to have with, uh, the residents. And being, um, you know, I think they also wanted to service the community in a healthier way.*	
21 Riverdale Mid	1, 2, 3	*Because we carry almost everything here, which is convenience. We carry also nowadays a lot of healthy food. We are very close to the seniors. A lot of people come here who don't have major transportation. Walking. A lot of walking folks. Mostly, I participate in every event they have through the Village.*		

[a]CBE Thematic Categories: 1= Prioritizes Community Health; 2=Positive Community Engagement; 3=Health Resource for the Community

Participant 6: *That should be one of the procedures for holding a store down. This is some of the things you need to provide for the community. You know, instead of it killing us, but if you provided it would slow the rate of us dying.*

Participant 7: *Is that why they have some potatoes and some onions?* (Laughing)

Participant 7: *I mean like very limited* (Laughing)

Participant 2: *Yeah they do*

Participant 4a: *right*

Participant 3: *right, right*

Participant 7: *Cause one day I saw vegetables and the next day I went back and I said didn't they have vegetables here? But then they had 4 bananas*

Participant 6: *They keep a stock of what people drink and smoke right, but they don't keep a stock on what we need.*

Participant 1: *Right*

Participant 4: *Right*

Participant 7: *Ok, now I didn't know that*

Participant 3: *Yeah cause a whole lot of them don't sell pork*

Participant 5: *yeah*

Participant 3: *uh huh. I mean the Village do. There are a whole lot of Arab stores that don't. they don't sell pork at all.* (laughing, indistinct muttering)

Another discussion noted the importance of previous owners of the HH store who were from the community:

Participant 1: *Real good. Very well. By first name.* [HH High Store Owner] *cool.* [HH Store Owner worker] *is cool.*

Participant 2: *I like* [HH Unranked Store].

Participant 3: [HH Unranked Store]*., the owner has a nasty attitude. I don't know his name, but he got a Napoleon complex. Have they been in the neighborhood a while? Do you think they contribute to the neighborhood? No.* [HH Unranked Store] *ain't going to*

> *let you go with a penny* [they won't help you out if you come up short at the register]. [HH High Store]. *will let you go. You can be $5 short.*

When asked about changes in stores among long-time residents participant four stated:

> *Big change. The owners before lived in the neighborhood. They cared about the neighborhood. If you needed something and didn't have the money, come on in. Yeah we know you gonna make good on it.*

Consumers were more descriptive than store owners in their discussions of negative relationships among the stores and the community. Store owners may have been unaware of these perceptions among their customers or did not want to provide that information during their HH project interview. One consumer clearly illustrated a negative perception about a particular store owner:

> Participant 2: *Cause they mean. I never go in there. He come out and if you got pennies he tell you he don't want them. To me, pennies is money. To me any color of money, it spends money. He don't like pennies. Sometimes that's all I have is pennies. So I want to spend them, but he don't want to take them, but* [competitor store] *no matter what you've got, they gonna take it. As long it's money, they gonna take it. When I do get stuff from there, a friend of mine go in there and get it. I give him the money. I don't go in there. I know he gone have something smart to say to me, 'what you doing in here? You better have correct change.'*

Consumers also described dirty conditions and low quality food in another HH store:

> Participant 1: *I won't participate at* [HH Low Store] *because they ain't nothing but a liquor store. I wouldn't eat nothing they cook because they smell and they dirty. His hands* (owner) *are very dirty.*
>
> Participant 2: *Yeah with no smell, fresh. They need to paint because it looked condemned.*
>
> Participant 3: *Some need to take care of their personal hygiene. Some of them don't even believe in soap. They have bars and stuff all over the windows. The floor and the walls and the paint. Everything be covered. It's too dark and dingy.*

Another consumer clearly states the store's lack of compassion for low income customers and motivations for profits:

> *If you saw them marketing healthier items, would you go in and see what they were? Yeah, I would go and check it out but they got to lower the price. Cause you go to the grocery store, the stuff they (corner store) selling is $10 and there (grocery store) it's like $2. What they do is basically go to the grocery store, buy their pops and put it in their freezer and selling it to us. They buy 6 packs of the bottled pop and the whole pack cost a dollar then they take the price tag out and sell them each for a dollar. A $1.39, not just a dollar plus the tax. We know that's why they all retiring because that's supposed to be for our convenience, but it really ain't convenience. It's more of a hindrance because they actually basically robbing us. They like vampires in the black community.*

Differences in racial/ethnic backgrounds, place of residence and negative interactions with customers greatly influenced owners' alignment with the CBE identity within these communities. Although owners may have discussed one or all three CBE thematic categories within their narratives, the lack of support for these stores by their consumers would, eventually, greatly reduce demand for health promoting changes made in the stores and depreciate owners' efforts to provide a CBE within these communities. Fortunately, in the Latino/Hispanic serving communities more positive influences on the CBE identity were present in the narratives, and are discussed further below.

2. Positive Contextual Influences on the CBE Identity

In the Hispanic/Latino serving communities (Blue Island, Cicero and Mt Prospect) similarities among owners and consumers contextual factors produced a positive or enhancing effect on owners' CBE identities. Store owners often described their role in the community with a historical, family-oriented lens. The roles of their stores in the community were described as community hubs, places for education, conversation and nurturing as compared to strictly a place of food retail. One store owner from Cicero, who is also Latino/Hispanic stated:

> *I have been selling fresh fruits and vegetables since we opened, I believe it's important to value health and I want to be part of helping people eat healthier.*

Another store owner from Mount Prospect, who is also Latino/Hispanic related her consumers to her own family:

> *Yes, it's difficult. On one hand we have to sell what the customers buy and request and on the other hand we have to offer what's healthy. Unfortunately customers don't request a lot of the healthy items….although they are buying them. If it were up to me….if we didn't sell chips, I would be delighted…..I know how bad they are. and that's mainly because I think of my kids, I don't want this for my kids, so I also don't want it for my customers.*

The appreciation for the store owners' background, however was more apparent in the consumer narratives, as many consumers cited their personal relationship with the store owner, noted the stores' history within the community or described the stores' role in providing culturally-relevant foods for the community. Consumer responses about the Cicero stores included the following:

> Participant 1: *The owner of* [Cicero Mid Store] *is very attentive, he put vegetables and added a lot of other healthy products, tortillas are cheaper (4 for $1) and I can send my children unaccompanied to the corner stores because they are close and convenient.*

> Participant 2: *The owners of* [Cicero Mid Store] *are wonderful and very friendly and caring.*

> Participant 3: [Cicero Store Owner] *is nice and kind with people. As time goes by we get to know the people at stores. If we are treated* [well] *we'll keep going back, on the other hand, if not treated nice we don't go back.*

> Participant 4: [Cicero Store Owner] *helps with security and safety in the community.*

A consumer also described the Mount Prospect store in a similar way:

> *They offer Mexican products, we look for what we would eat in Mexico, then store owners bring these products to attract people. They are convenient and close as well.*

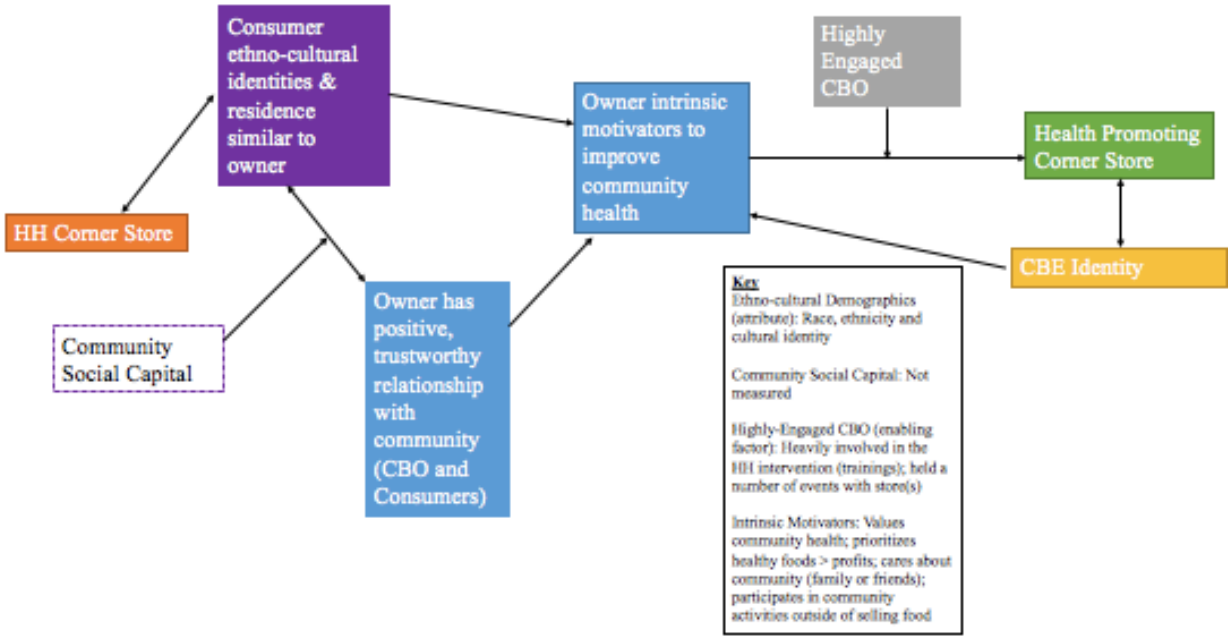
The previous narratives clearly describe the inherent relationship and similar understanding of life within these communities among store owners and consumers when their racial and ethnic backgrounds and residencies are shared. These natural connections between store owners and consumers helped to shape the role of the store as a health promoting agent and strengthened the store owners' alignment with the CBE identity.

V. DISCUSSION AND CONCLUSIONS

A. Refined Conceptual Framework

There were several key factors influencing the strength of store owners' CBE identities within this study. They included the following: 1) similar ethno-cultural identities and residence among store owners and the community; 2) positive, trustworthy relations among store owners and the community; 3) store owners' descriptions of valuing and prioritizing community health, often over profits; 4) collaboration with a highly-engaged CBO in the HH project (historical study); and 5) community social capital, which was an unmeasured but emerging concept in this study. These key factors are illustrated in a revised conceptual framework (Figure 6) and are described further below.

Figure 6: Factors Influencing Store Owners' CBE Identities



As discussed, in the previous section, the store owners' CBE identity was thought to be influenced by the Organizational Change: Stage Theory (Glanz et al., 2008), with a focus on the final two stages of change: Implementation of Change and Institutionalization of Change. In the previous model, store owners' CBE identities was thought to be enhanced by the corner stores' typology (low, mid or high), consumer demand, sustainability and external and intrinsic rewards and motivators (Figure 1). After reviewing the narratives and market basket assessment results, it appears that a number of these factors are not as influential on the strength of store owners' CBE identities, in particular typology, consumer demand and sustainability. For example, corner store typologies, when aligned with the CBE identity, illustrated no clear patterns among a high, mid or low categorized store. Typologies alone did not predict stronger or weaker associations with the CBE identity, therefore, enhanced participation by a store owner in the HH project (historical study) also did not predict strengthened CBE identities. Additionally, all store owners discussed a need for consumer demand for healthy foods, especially as it related to marketing healthy foods within their stores and keeping the products on their shelves (sustainability). However, most store owners also discussed a plan to continue to sell healthy foods regardless of profit obtained or sales lost (e.g., rotting food).

As stated in the Findings section, store owners who held stronger associations with the CBE identity had positive narrative accounts (within participant narratives: store owners, CBOs and consumers) across one or more of the three CBE thematic categories: *Prioritizes Community Health*, *Positive Community Engagement* and *Health Resource for the Community*. When these thematic matches were assessed across the four research questions, five key factors influencing store owners' CBE identities were illustrated. These included store owners holding similar ethno-cultural identities and place of residence as their consumers, positive, trustworthy

relationships among store owners and the community (CBO staff and consumers), store owners prioritizing community health over store profits, collaborations with a CBO that was highly-engaged in the HH project and an unmeasured concept of community social capital and cohesion (Kawachi, 1999), which appeared to be present in communities where owners' held strong associations with the CBE identity (Figure 6). While some of these key factors overlap with a few of the previous framework concepts (e.g., intrinsic motivators and external rewards), they were found to influence the CBE identity in a more purposeful way after reviewing the data. For example, it appears among store owners who displayed positive relationships with the community, resided in the same communities as their consumers and held the same ethno-cultural identities as their consumers more readily discussed *Prioritizing Community Health* (intrinsic motivators) in the narratives. When these owners were then coupled with a highly-engaged CBO in the HH project (historical study) their CBE identities were even more enhanced and strengthened. Additionally, promotion activities would likely continue within this store, regardless of future funding or influence from outside agencies (health promoting store functions).

It appears, from the participant narratives, that when all five factors align (Figure 6), store owners embodied the greatest associations with their CBE identities and provided a community-based enterprise within their communities (e.g, Cicero). It is also evident from the narratives that even if owners illustrated the CBE thematic categories within their narratives, their CBE identity was negatively impacted when dissimilar ethno-cultural identities, diminished community social capital and negative contextual factors were present within the community and/or when they were partnered with a CBO that was less engaged in the HH project (e.g., Harvey, Riverdale).

These findings will be discussed and explicated further in the following sections, especially as they relate to future analysis of this topic and impact on public health practice.

B. Implications of the Findings

The findings illustrated in this study provide for an increased understanding of the connection between local entrepreneurs' CBE identities in formulating and maintaining a health promoting community-based enterprise within low-income, high need communities. The following paragraphs present the analysis of these concepts in relation to each of the research questions presented and discussed in this study.

1. Research Question 1: Corner Store Typologies

As stated in the previous sections, corner store typologies were found to not predict store owners' alignment with the CBE identity. The analysis of the market basket assessment and HH administrative data (CBO participation excel sheets) and categorization of stores into typologies was conducted to determine stores level of participation within the HH project (historical study). While some stores were quite engaged in the project (e.g., adding two or more categories from pre to post- intervention), these same stores had a number of negative descriptions within the consumer narratives that overshadowed their enthusiasm for offering healthy foods. Consumers even went so far as to state they "would not shop there" due to their negative perceptions of the store owners. Additionally, a few stores who did not complete the market basket assessments and were unranked or ranked low as a typology had very positive descriptions in the consumer narratives. Consumers often described the store and store owner in a thoughtful and caring way and expressed their desire to continue to shop at that store. Given these limitations in patterns and trends, typologies were found to have no influence on store owners' CBE identities. The assessment of typologies did appear, however, to have an influence on the CBO partnered with

the stores and their levels of engagement within the HH project. This was displayed by a majority of high or mid-level stores within the three communities in which the CBO attended at least 3 trainings (Mt. Prospect, Blue Island and Cicero).

Corner store participation in the HH project could have been influenced by a number of factors, including but not limited to the engagement of the CBO. For example, a number of the HH stores (especially those ranked low) were small scale stores with limited space and resources to offer additional healthy foods. Additionally, those stores that tended to rank as mid or high implementers already offered a number of food categories within their stores and could almost be considered small-format grocery stores, given their product mix and size. The difference between the pre and post-collections of the market basket assessment could have also influenced the typologies, provided the post-assessments were collected by a team of experienced researchers vs. the pre-assessments, which were collected by CCDPH staff. If the collections would have been conducted in a more standardized format, the typologies may have displayed greater influence on owners' CBE identities.

2. Research Question 2: Impact of HH Participation on CBE Identity

As discussed in the findings, the impact of the HH project on store owners' CBE identities was illustrated within the narratives by engagement of the CBO among their group of community stores. Engagement of CBO staff was determined via review of the store owner and CBO narratives as well as review of the consumer reports to conclude if the HH store changes (materials and products) were noticed by the community. All store owners and CBOs described the benefits of the HH materials, incentives and trainings, therefore these components of the HH project, while helpful, were not shown to influence owners' CBE identities. Only one community, Cicero, had consumers describe, vividly, the store changes present within their HH

stores (N=7). Additionally, several consumers also described marketing events (e.g., smoothie tastings) they participated in within some of the Cicero stores. Cicero was also one of two CBOs to attend all HH required trainings and this appeared to enhance their stores' participation in the HH project and ultimately the owners' CBE identities.

The other HH community in which the CBO attended all of the required trainings, Chicago Heights, there appeared to be some lack of involvement in marketing and promotional events within the stores. This was confirmed through review of both the store owner narratives (N=2) and lack of recognition of the HH changes among Chicago Heights consumers. Even though the CBO attended all trainings and conducted some marketing events within the stores, this did not translate to enhancements of the owners' CBE identities.

The other six communities (Blue Island, Calumet Park, Ford Heights, Harvey, Mt. Prospect, Riverdale) included stores that were partnered with CBOs that were less engaged in the HH project. While some of the CBOs may have attended some of the trainings and conducted some marketing events within the stores, these activities were not enough to influence the owners' CBE identities and institutionalize health promoting changes within their stores. The approach that was utilized by the Cicero CBO included hiring full-time staff specifically to work on the HH project, which allowed for time to engage with the stores and find the best methods to promote healthy store changes within the community. The other CBOs were not able to take that approach and had volunteers or part-time staff working on the HH project in addition to their other duties and responsibilities within the organization. Additionally, a few of the CBOs had very little incoming capacity to engage in this project (no additional staffing or resources) and others were dealing with extenuating circumstances (personal emergencies) that prevented them from fully engaging in this project. Furthermore, the limitations of the timeline of the HH project

(historical study) prevented from assisting these CBOs in increasing their capacity to effectively manage a healthy corner store effort within their communities. These and other limitations among the CBO staff, which go beyond the scope of this study, are reported and discussed further in the literature (Jaskiewicz et al., 2015).

3. Research Question 3: Prioritizing Community Health

As one of the three key CBE thematic categories, *Prioritizing Community Health* was found to be a key indicator of store owner alignment with the CBE identity. Of the store owners (N=14; 5 communities) who illustrated this concept in their narratives, all showed strengthened alignment with the CBE identity and greater intrinsic motivation to conduct health promoting work, despite profit loss. In a majority of these communities (N=4) CBO and consumer narratives complimented the store owner prioritization of community health through their own descriptions of owners caring for and serving the community. It should be noted that half of these stores (N=7) were from Cicero, where engagement with a strong CBO was also taking place and consumer and store owner relationships were positive and demographics were similar.

Store owners that did not describe this prioritization in their narratives did not appear to have a strengthened alignment with the CBE identity. This could have been due to a partnership with a less engaged CBO, which would have limited their exposure to health promoting activities and understanding of community health education (Loza, 2004). It could have also been due to the store owners' perception of their role in the community as a commerce-based resource (vs. a health promoting resource) and a limited association with other attributes outside of that role. Ultimately, all store owners cared about their community, given their participation in the HH project, however, a few store owners more adequately discussed and represented their role in the

community as a health promoting resource and community-based enterprise within the narratives.

4. Research Question 4: Contextual Factors and the CBE Identity

As described in the Findings, contextual factors such as consumer and store owner ethno-cultural identities (race/ethnicity, cultural identity), place of residence and relationships (positive or negative) were found to be highly influential on store owners' CBE identities. The ethno-cultural factors are placed first in the revised conceptual framework (Figure 6) due to their impact on consumer-owner relationships and trustworthiness as well as owners' intrinsic motivations and CBE identities. An emerging, but unmeasured concept of community social capital (Kawachi, 1999) was also found to be an influential factor in determining store owner alignment with the CBE identity. For example, in one community, Cicero, where store owner alignment with the CBE identity was high, there were several descriptions in the narratives that appeared to be aligned with community cohesion and social capital, including discussions of store owners acting as health advocates being an expected action, or a social norm (Kawachi, 1999). The similar socio-cultural identities of the consumers and store owners and related experiences among these two groups increased mutual understanding and trustworthiness and was likely influenced by increased social capital present within a few HH communities (Blue Island, Cicero and Mt. Prospect) (Figure 6). Store owners from these communities also discussed intrinsic motivations of valuing community health (often over store profits) within their narratives and consumer narratives, which were collected in two of these communities (Cicero and Mt. Prospect), illustrated positive, trustworthy relationships among consumers and store owners. These positive interactions were also represented in the CBO narratives within the three communities.

Consumer reports were a key indicator of positive (or negative) contextual factors within the HH communities. In communities where reports were positive, consumers described the stores as health resources (e.g., by offering culturally-appropriate, affordable healthy foods) for their community and displayed a sense of compassion and appreciation for the store owners (e.g., friendly, like family, community business owners). In communities where reports were negative, consumers described a great sense of dislike and disapproval for the store and the owners within their community. Some consumers even discussed "never shopping there" or a hope for "new owners" that were from the community and understood their needs. These underlying tensions within the community were greatly influenced by the dissimilar ethno-cultural identities of the owners and consumers, as well as diminished social capital and cohesion within the community (Kawachi, 1999). These factors often overshadowed owners' alignment with the CBE identity and engagement in the HH project. As with other community-based projects, insider-outsider tensions and the perceptions of power and privilege within low-income communities, if not handled properly, can diminish health promoting activities and positive health outcomes (Israel, 2005). In terms of enhancing store owners' CBE identities, these factors appear to have negatively impacted that trajectory and alignment.

C. Implications for Research and Practice

Collaborations with small, locally-owned businesses is not a new phenomenon within public health practice, as a number of studies have partnered with barbershops and beauty salons to provide health education (Hye-cheon Kim et al., 2007; Linnan and Ferguson 2013; Releford et al., 2010; Ford et al., 2009; Neeta, 2005), as well as other local businesses to provide space to be physically active (Suminski and Ding, 2012; Suminski et al., 2009) and to participate in healthy cooking and eating (Yancey et al., 2006). Most often, however, small businesses have been

incorporated within public health interventions as secondary partners that may provide some aspects of health education (Meade et al., 2011; Irwin et al., 2012) or recruitment for program participants (Releford et al., 2010), as opposed to being a central partner that promotes healthy behaviors and elicits change within communities.

Expansion of the small business role in public health programming, to become leaders in the provision of health promotion activities and provide communities with a health promotion resource, or community-based enterprise, is a new concept in public health practice and to date, has not been reported in the literature. National recognition of the role of local businesses in promoting community health, and serving as a central point of intervention work, has been more recently proclaimed by the Robert Wood Johnson Foundation, through their *Engaging Businesses in Health* initiative (Paloma, 2015). As more national and state-level funding streams recognize the role businesses can take in promoting and sustaining healthy community behaviors, public health practitioners must also align programming to support and include these important collaborators as leaders of change in low-income communities and key resources for health promotion. In addition, projects that incorporate small businesses as health promoting agents should also incorporate assessments of community ethno-cultural identities and the presence or absence of community social capital (Kawachi, 1999); as this proved to be a key factor in determining store owner alignment with the CBE identity, but was not measured within this study.

A few projects that have been reported in the literature and media (but do not explicitly discuss the small business role as a community-based enterprise) include a healthy corner store and youth engagement project in East Los Angeles (LA) (Ortega et al., 2014) and a barbershop effort in Ypsilanti, Michigan (National Public Radio, 2016). In East LA, Ortega et al. (2014)

have successfully integrated community development for local corner store owners into a healthy eating access and youth engagement project. Through their efforts, youth from local high schools serve as community education advocates promoting the healthy products added to the stores to their classmates, family and friends. Additionally, these youth also participate in brick and mortar improvements to the stores (e.g., painting, fixing lights, cleaning) to assist in consumer attraction to the store and to improve profits from additional healthy food sales. While Ortega and colleagues (2014) discussed a community-engaged, multilevel approach, the role of the store owner in conducting health promotion activities (such as health education to consumers) was not discussed in the literature. This presents a missed opportunity to develop inquiry into local business owners' inherent motivations to improve their communities' health, despite of or in conjunction with store profits.

The second project, which was reported as a national news story (National Public Radio, 2016), included a local barbershop owner in Michigan engaging in the promotion of youth education and literacy during non-school months (i.e., summer months). The barbershop owner had heard of a similar project in Harlem, and decided to implement the literacy program within his shop this past summer when he noticed local youth declining in their reading skills over the summer months. The owner provided a $2.00 discount to youth for their haircut when a book was read aloud to the barber during the services. Parents and youth greatly enjoyed the project, and expressed their appreciation to the local business owner in assisting their children in developing and expanding their literacy skills when school wasn't in session (National Public Radio, 2016). There are likely many more projects such as this occurring in local community businesses, which illustrate their role as community-based enterprises that initiate and promote community change. As public health practitioners, we have a duel role in community settings to

serve as participant conceptualizers and praxis explicators and to raise awareness of CBE processes taking place in communities in order to adequately study their impact on health behaviors (Elias, 1994). Additionally, projects that display CBE characteristics, such as the barbershop, should be explicated and reported on in the public health literature for further understanding of owner motivations and intentions to improve community health and wellness.

D. Limitations and Challenges

This qualitative case study had a number of limitations and challenges related to the use of existing data, the author's limited experience in qualitative research and familiarity with business related concepts, the author's previous role within the HH project and assurances of reliability and validity. Additionally, the HH project (historical study), of which the existing data was reviewed and analyzed also had limitations, including: a lack of clear methods for market basket assessment data collection, incomplete CBO reports within the administrative data, a lack of consumer information from all communities and incomplete inquiries within the store owner and CBO interview guides. These limitations are discussed further below.

This study used existing data from the HH project evaluation (historical study) to conduct qualitative inquiry that explicated and realized store owners' alignment with the CBE identity. While the data proved to be rich with information from a variety of sources (store owners, CBOs and consumers), it was not collected with the intentions and aims of this study in mind. Therefore, careful review of implied meanings within the participant narratives had to be considered, through multiple rounds of analysis and data mining, before thematic categories and responses to the research questions could be proposed. Further studies in which data collection tools are created with the community-based enterprise concept as a focal point would assist in confirming the findings of this study and the role of businesses in improving community health.

The author of this study is also a new qualitative researcher in the public health community and had never reviewed business-related concepts (e.g., social entrepreneurship) prior to conducting work on this study. These limitations caused for greater time to be taken on the development of the literature review (to include business literature) and analysis of the data. The author carefully reviewed qualitative researcher methodologies (Charmaz, 2006, 2014; Miles et al., 2013) to ensure the analysis and presentation of the data was aligned with effective qualitative inquiry and practice. Additionally, the author sought feedback on reporting the findings from experienced, qualitative researchers on her committee and others located within her current workplace. In order to grasp a better understanding of business related literature, the author inquired with several leaders and former students at the University of Michigan School of Business to ensure the top journals and authors were being reviewed for concepts such as social entrepreneurship.

In addition, the author of this study was previously involved in the HH project (historical study) as both an implementer and evaluator. This involvement may have caused some personal bias in the review of the participant narratives, due to knowledge gained about the store owners CBOs, and consumers involved in the HH project evaluation. The author conducted data analysis with these inherent biases in mind and often had to review the data for a second or third time to understand the underlying meanings behind the participant narratives vs. previously obtained knowledge about the project and/or the participants.

The procedural methods and data analysis decisions were illustrated and verified through utilization of an audit trail – including a codebook and qualitative data analysis software (Morse et al., 2002). As with any qualitative analysis, especially studies in which existing data is utilized, it is difficult to assure reliability and validity of methods, in particular within data

collection tools (interview guides) and sampling of the population. The consistent checking of internal bias and multiple, thorough reviews of the data and analysis procedures by the author and the dissertation committee enhanced and verified the methods described within this study (Miles et al., 2013).

The data reviewed for this study was collected for the purpose of understanding the impact and effectiveness of a healthy food access project within corner stores. Given this, a number of limitations existed within the data collection procedures and tools. First, the collection of the market basket assessment data was not conducted similarly from pre to post-intervention and was not completed for all 21 stores. The pre-intervention assessment was conducted by non-research staff who were not trained in market basket assessment procedures and may have missed or misrepresented some categories of foods. Additionally, five stores did not complete the pre and/or post-market basket assessment, and therefore could not be included in the review of corner store typologies and CBE identity within this study.

Second, the HH administrative files that included CBO participation in trainings and marketing events did not always provide a clear description of all the marketing events conducted by the CBOs. For example, in store vs. out of store events could not be articulated, therefore, analysis of marketing events had to include both within and outside stores to account for this discrepancy in the data. This resulted in all CBOs being marked as "completing" marketing activities, but store owner narrative descriptions clearly indicated more were needed.

Third, the consumer focus groups did not take place within two HH communities (Ford Heights and Blue Island). Although store owners from these communities appeared to align more with the CBE identity, as discussed within their narrative accounts, this alignment could not be compared to relations with community members due to a lack of consumer feedback about the

stores. Finally, the interview guides for the store owners and CBO staff were not created with the CBE concept in mind, therefore responses to other questions had to be carefully reviewed for alignment with this concept and the CBE identity. To address these limitations, future research with small business owners that includes CBE concepts as a focal point will be conducted.

E. Conclusions

Engaging small business owners in health promotion and other public health activities and programming is an essential, yet unrecognized, component of community-based public health (Israel, 2005; Israel et al., 1998). Similar to approaches taken with faith and community-based organizational leaders (Griffith et al., 2010) and other multi-sectoral partners (Woulfe, et al., 2010), small business owners should also be included in discussions and development around community-based interventions that address community health and raise their capacities for health promotion. This study attempts to document small business owner engagement in health promotion activities, as a health resource within their communities, or rather a community-based enterprise for health (Peredo and Chrisman, 2006). To this author's knowledge at the time of this writing, no other reports exist of this nature within the public health and business literature.

Existing participant narratives and market basket assessment data from a healthy corner store project within Cook County, IL was utilized to explicate and understand store owners' alignment with the CBE identity and their role in institutionalizing health promoting activities within their stores. Participant narratives were reviewed and data mining was completed through an iterative qualitative process to identify three key thematic categories of the CBE identity: *Prioritizes Community Health*, *Positive Community Engagement* and *Health Resource for the Community*. Findings indicated that the CBE identity was present within a number of store owner narratives, and when coupled with positive consumer relationships, similar community

demographics and a highly-engaged CBO, store owners' CBE identities were strengthened and stores appeared to become health promoting resources within a few low-income communities.

These findings are important for future public health practice and research to implement programming and interventions that include small business owners as key partners and advocates for community health. As additional national, state and local agencies and funding institutions begin to recognize the role that small business owners can play, as multi-sectoral partners to improve community health and socioeconomic conditions (Woulfe et al., 2010; Paloma, 2015), public health practitioners will need to shift their program design and implementation strategies to include community-based enterprise concepts and enhancement of business owners' CBE identities. Increasing community business owner capacity to engage in health promotion activities will likely improve and sustain health outcomes achieved through community-based interventions and will ensure the economic vitality of low-income communities.

APPENDICES

APPENDIX A

TABLE VII: CODEBOOK

Summative Categories	Number of initial/focused codes included (not mutually exclusive)	Description
Benefits_selling healthy foods	29	Included descriptions of store owners discussing the ease in selling healthy foods for profits within their communities and their motivations to continue to sell healthy foods; consumers wanted healthy, quality foods provided in the stores.
CBE Descriptors	12	Included descriptions of store owners prioritizing community health over store profits, being a health resource for their community and having positive interaction with consumers. Also included descriptions of store owners providing culturally-relevant foods to consumers.
Costs_selling healthy foods	18	Included descriptions of the difficulties in selling healthy foods to consumers who did not purchase the items; store owners also discussed profit losses due to healthy foods.
Distribution_Inventory	9	Included descriptions of store owner methods for obtaining foods in their stores, number and names of vendors and the barriers and facilitators to using vendors to stock healthy foods.
Health_Community Role	39	Included descriptions of stores serving a health-facilitating role in communities, such as by providing on-site health education or participating in community events.
HH Helped	60	Included descriptions of the components of the Healthy Hotspot intervention (training, materials, incentives, staff) that assisted store owners and CBO staff in selling healthy foods to consumers.
HH No Help	39	Included descriptions of the components of the Healthy Hotspot intervention (training, materials, incentives, staff) that did not assist store owners and CBO staff in selling healthy foods to consumers.
Negative_Community Interaction	46	Included descriptions of store owner and consumers having negative interactions. Consumers described store owners as untrustworthy, non-caring and not-understanding of the communities' needs.

APPENDIX A (continued)

TABLE VII: CODEBOOK (continued)

Summative Categories	Number of initial/focused codes included (not mutually exclusive)	Description
No support low income customers	9	Included descriptions of store owners not participating in SNAP/LINK or WIC programs.
NON CBE Descriptors	9	Included descriptions of store owners not motivated to continue to sell healthy foods, not participating in health-promoting activities within their stores and not participating in SNAP/LINK or WIC programs. Consumers described stores as run-down, dirty and selling low-quality food.
Positive_Community Interaction	66	Included descriptions of store owner and consumers having positive interactions. Store owners talked about their consumers like family, friends or neighbors; consumers described store owners as caring, kind and trustworthy.
Sales_Community Role	28	Included descriptions of stores serving a retail role in communities, by providing sales of food and beverages to consumers.
Store_Community History	19	Included descriptions of store owner experience (years of ownership) and change in retail offerings (*butcher shop added*, for example); consumers described change in store ownership.
Supports low income customers	10	Included descriptions of store owners participating in SNAP/LINK and WIC programs.
Total Initial and Focused Codes	144	

APPENDIX B

DATA USE APPROVAL LETTER

December 15, 2015

Ms. Rachael D. Dombrowski, MPH
University of Illinois at Chicago School of Public Health
Community Health Sciences
1603 W Taylor St
Chicago, IL 60612

Dear Ms. Dombrowski:

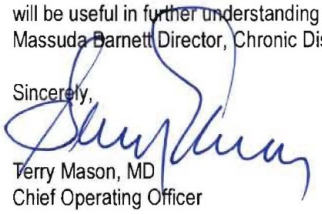
The Cook County Department of Public Health (CCDPH) is writing to express support for your dissertation, titled "Corner stores as Community-Based Enterprises for health promotion: A qualitative case study." This case study will use existing data collected and owned by the Cook County Department of Public Health for the Healthy HotSpot Corner Store pilot project evaluation, which took place from January 2011 – June 2012.

Ms. Dombrowski has the approval of CCDPH to utilize the existing data for additional analyses and to answer the aims and research questions outlined in her dissertation. Specifically, the existing data to be reviewed in this study includes the following:

- Outcomes data from in store market basket assessments, completed in April 2012;
- Healthy HotSpot administrative data (excel files of training completion and technical assistance provided to corner store owners and community-based organization staff participating in the project) collected from January 2011- June 2012;
- Observation checklist outcomes data of store external physical environments completed in April 2012;
- Demographic survey data collected from corner store consumers (N=51), corner store owners (N=21) and community-based organization staff (N=8) who completed interviews or participated in focus groups for the Healthy HotSpot evaluation from April – June 2012;
- Interview data collected from corner store owners (N=21) [primary data source for this study] and community organization staff (N=8) for the Healthy HotSpot evaluation collected from April – May 2012;
- Focus group data collected among corner store consumers (N=51) for the Healthy HotSpot evaluation from April – May 2012.

CCDPH looks forward to reviewing findings based on the outcomes of this study. We are certain this renewed analysis of existing data will be useful in further understanding the Healthy HotSpot initiative. If you have any questions, please do not hesitate to contact Gina Massuda-Barnett Director, Chronic Disease Prevention & Health Promotion, at gmbarnett@cookcountyhhs.org or 708-633-8325.

Sincerely,



Terry Mason, MD
Chief Operating Officer

cc: Steven Seweryn, EdD, MPH, CCDPH
Kiran Joshi, MD, MPH, CCDPH

APPENDIX C

IRB APPROVAL LETTER FOR HEALTHY HOTSPOT PROJECT 2012

Cook County Health & Hospitals System
1900 W. Polk Street, Room 123
Chicago, Illinois 60612

627 South Wood Street, Rm..218 Chicago, Illinois 60612
312-864-0716

Terry A. Mason, MD
Chief Medical Officer

Lynda Brodsky
Director, Research Affairs

March 25, 2012

Gina L. Massuda MPH
15900 S. Cicero Avenue.
Oak Forest Hospital Campus Bldg E. 3rd floor
Oak Forest IL. 60452

RE: Our Study #12-041x

Dear Ms. Massuda:
Protocol Title:
Healthy HotStop Corner Store Evaluation

This is to inform you that the above referenced Study was examined by the Chair on March 22, 2012 and meets the criteria for exemption form IRB review. Protocols that are exempt from review have no expiration date.

Expiration Date: Exempt

If you plan to continue change your study on any way, please submit your changes to the IRB office *prior* to initiated them.

If you have any questions, please call Funeka Sihlali, Quality Assurance Officer, at 312 864-4821.

Sincerely,

Lynda Brodsky
Director, Research Affairs

APPENDIX D

IRB APPROVAL LETTER 2016

UNIVERSITY OF ILLINOIS
AT CHICAGO

Office for the Protection of Research Subjects (OPRS)
Office of the Vice Chancellor for Research (MC 672)
203 Administrative Office Building
1737 West Polk Street
Chicago, Illinois 60612-7227

Determination Notice
Research Activity Does Not Involve "Human Subjects" at UIC

February 3, 2016

Rachel Dombrowski, MPH
Community Health Sciences
500 N Center St
Royal Oak, MI 48067
Phone: (312) 577-9326

RE: Research Protocol # 2016-0077
"Corner Stores as Community-Based Enterprises for health"

Sponsor(s): None

Please be reminded of the need to address IRB and/or institutional approval requirements at the Cook County Department of Public Health prior to transferring the de-identified data to UIC.

Dear Rachel Dombrowski:

The above proposal was reviewed on February 3, 2016 by OPRS staff/members of IRB #7. From the information you have provided, the proposal does not appear to involve "human subjects" as defined in 45 CFR 46. 102(f) at UIC.

The specific definition of human subject under 45 CFR 46.102(f) is:

> *Human subject* means a living individual about whom an investigator (whether professional or student) conducting research obtains
>
> (1) data through intervention or interaction with the individual, or
> (2) identifiable private information.

APPENDIX D (continued)

> *Intervention* includes both physical procedures by which data are gathered (for example, venipuncture) and manipulations of the subject or the subject's environment that are performed for research purposes. *Interaction* includes communication or interpersonal contact between investigator and subject. *Private information* includes information about behavior that occurs in a context in which an individual can reasonably expect that no observation or recording is taking place, and information which has been provided for specific purposes by an individual and which the individual can reasonably expect will not be made public (for example, a medical record). Private information must be individually identifiable (i.e., the identity of the subject is or may readily be ascertained by the investigator or associated with the information) in order for obtaining the information to constitute research involving human subjects.

It is understood that the research-related activities to be conducted at UIC are limited to the analysis of de-identified data initially collected under an exemption granted by the Cook County Health and Hospitals System IRB office on March 25, 2012. As noted in the March 25, 2012 exemption determination, "If you plan to change your study in any way, please submit your changes to the IRB office prior to initiating them." Transferring the research to UIC represents a change in the study (see related text box).

All the documents associated with this proposal will be kept on file in the OPRS and a copy of this letter is being provided to your Department Head for the department's research files.

If you have any questions or need further help, please contact the OPRS office at (312) 996-1711 or me at (312) 355-2908. Please send any correspondence about this protocol to OPRS at 203 AOB, M/C 672.

Sincerely,

Charles W. Hoehne
Assistant Director, IRB #7
Office for the Protection of Research Subjects

cc: Jesus Ramirez-Valles, Community Health Sciences, M/C 923
Michele Kelley, Community Health Sciences, M/C 923

APPENDIX E

HEALTHY HOTSPOT FOCUS GROUP RECRUITMENT SCRIPT AND ELIGIBILITY

Healthy Hotspot Focus Group Recruitment Script and Eligibility

Hi, my name is _____. You contacted me about participating in a discussion about shopping in small grocery stores. We are recruiting people who shop at certain small grocery stores, or corner stores, in suburban Cook County to talk about their experiences shopping in the stores. The group discussion will last between 1-2 hours, but likely no more than 90 minutes. All responses will be kept confidential and participants will receive a $50 gift card to Target. Before I can schedule you for a group, I need to ask some questions to find out if you are eligible.

Question	Eligible if
How old are you?	18+ years
In what suburbs do you shop for groceries?	One of our 8 (Harvey, Cicero, Mt Prospect, Chicago Heights, Riverdale, Blue Island, Calumet Park, Ford Heights)
At what corner stores/small grocers do you shop?	One of our 21 (May clarify name/location, but NOT volunteer info)
Are you available on X date in the late afternoon?	Available for 1-2 hours

If meets all eligibility criteria:
You do meet our eligibility requirements. The date of the group discussion will be April X in the late afternoon. Are you available then?

> If Yes: Great. I will contact you a couple of days before the group to give you the location.
>
> If No: I'm sorry. That is the only date we will have for a discussion in your area. Thank you for being willing to talk with us about your experiences.

If does not meet all eligibility criteria:
I'm sorry, but we need to talk with people who have certain characteristics or shop in certain stores. Thank you for being willing to share your experiences.

APPENDIX E (continued)

List of Participating Stores:

La Unica	12824 Mozart Street	Blue Island
Hidalgo's Meat	2801 Broadway	Blue Island
H and M Grocery	15308 Center Ave.	Harvey
Harvey Food Inc	102 West 154th Street	Harvey
One Stop Grocery	15401 Center Ave	Harvey
MJ's Fast Food	2311 S. 49th Ave	Cicero
Carniceria Los Jarritos	5612 W. 35th St.	Cicero
Felipe's Dollar Plus	5941 W. 35th St.	Cicero
La Alegria	5108 W. 14th St.	Cicero
Rudy's Grocery	2446 S. 57th Ave.	Cicero
Star Food	1246 S. 50th St.	Cicero
Rosie's Food Mart	5029 W. 29th St.	Cicero
George's Food and Liquor	1258 W 127th Street	Calumet Park
Center Food and Liquor	223 E 14th St	Chicago Heights
Millenium Food Market	11 W 16th Street	Chicago Heights
Mi Mexico Grocery	1760 W Algonquin Rd	Mount Prospect
Herman's Food and Deli	20 West 138th St.	Riverdale
Kwik Mart	169 West 144th Street	Riverdale
Village Food and Liquors	325 East 138th St.	Riverdale
New Way Food	1307 E 14th St	Ford Heights
Shop and Save	926 E Lincoln Hwy	Ford Heights

APPENDIX F

HEALTHY HOTSPOT FOCUS GROUP CONSENT FORM

Healthy HotSpot Corner Store Evaluation Focus Group
Participant Consent Form

You have been invited to participate in a focus group because you shop at a store that is participating in the Healthy Hotspot Corner Store Pilot Program.

WHY THIS FOCUS GROUP IS BEING HELD: The purpose of this project is to evaluate the impact of the Healthy HotSpot Corner Store Pilot Program.

PROCEDURES: You were invited to participate in this focus group because you shop at a store that is participating in the Healthy Hotspot Corner Store Pilot Program. The focus group should take about an hour and a half. We will discuss questions like "Why do you choose to shop at a corner store instead of a larger store?"

RISKS: As a participant, you may be uncomfortable about some questions. You do not have to answer any question that makes you uncomfortable. You may stop answering questions or leave at any time you choose.

BENEFITS: You will receive a gift card for your participation.

CONFIDENTIALITY: Your name or any other identifying information will not appear in any report. However, the confidentiality of information shared during focus groups cannot be assured. Someone within the group may disclose personal information about you to someone outside the group. We ask that you and other focus group participants actively protect each others' privacy. Please respect other focus group participants' privacy by not talking about what is said outside of the group.

RIGHT TO WITHDRAW: Your participation in the focus group is voluntary and you have the right not to answer any questions asked in the focus group. You have the right to refuse to participate and to leave at any time you choose.

DO YOU HAVE ANY QUESTIONS ABOUT THIS STUDY NOW? If you have any questions about the Healthy HotSpot Corner Store Pilot Project or its evaluation, contact Dr. Lara Jaskiewicz, by calling (312) 805-8468 on weekdays between 9am and 5pm.

SIGNATURES: Please check all that apply:

I have read this consent form, and I agree to take part in this study as explained in this consent form.

_____ _____

Date ***Signature of Participant***

I certify that I have explained the above to _____ and believe that the signature(s) was affixed freely. I also agree to answer any questions that may arise.

_____ _____

Date ***Signature of the Principal Investigator or person presenting information***

_____

Printed Name of Principal Investigator
or person presenting information

APPENDIX G

DEMOGRAPHIC QUESTIONNAIRE

Interview Demographic Form

1. In what year were you born?..... _____

2. What is your home zip code?..... _____

3. What is your gender?

   Male……..…..…... 1

   Female.……....…. 2

4. Which of the following best describes your race/ethnicity? *(Circle all that apply.)*

   Black or African American ……..…... 1

   Hispanic or Latino.……....…. 2

   Asian…….……..…. 3

   Native Hawaiian or Other Pacific Islander.. 4

   Caucasian.……..……..…. 5

   Arabic…… 6

   Other (**Please specify**)

   _____ 7

5. Which of the following is the highest level of education you have completed?

   Less than High School Diploma…….…..... 1

   High School Diploma/GED ……..…... 2

   College Graduate.…….……....….. 3

   Post Graduate Degree …….…..….. 4

APPENDIX H

HEALTHY HOTSPOT STORE OWNER INTERVIEW GUIDE

Corner Store Evaluation – Store Owner Interview Guide

Introduction: *The purpose of this interview is to learn about your experiences with the **Healthy HotSpot (HH)** corner store project. I will also be interviewing the community organization that worked with you. I will be recording the interview only so I don't miss anything you say. Your individual answers will not be shared beyond this conversation and anything you share will not influence your ability to continue in future projects. The information you provide will help me to learn about what worked well and what we can improve for future corner store projects. This interview should take no longer than 60 minutes of your time today.*

I'd like to begin with a brief history of the organization.

Store History

1. When did _____ [INSERT CORNER STORE NAME] first open?

2. Have you been the owner or manager of this store since it opened? If NO, when did you become the owner/manager?

3. Has the store changed much since it opened? [PROBE]: How has it changed? [LISTEN FOR OWNERSHIP, PRODUCT OFFERINGS, ETC.]

4. How many employees do you have working at the store now?

5. Are there times of the day when you have more or less employees working? [PROBE]: For example, before or after school?

6. What are your store hours?

7. Do you own or rent the space?

8. How many years have you been operating food stores?

Now I'm going to ask you a few questions about the store customers.

APPENDIX H (continued)

Customers

1. What types of customers shop at the store most frequently? [PROBE]: For example, seniors, youth, workmen, etc?

2. What types of customers spend the most money at the store?

3. Do many of your customers use LINK?

4. Do students shop here on their way to and from school?

5. If so, approximately how many students come in on an average day?

6. What stores are your biggest competitors? _____[OBTAIN STREET ADDRESS OF STORE]

7. I see that you accept WIC – do many of your customers use WIC coupons? OR I see that you DO NOT accept WIC – Has the store ever considered accepting the coupons?

8. If yes, what have been the barriers (to accepting WIC)?

9. If no, what issues have factored into the decision NOT to accept WIC?

Now I have some questions for you about the products you carry.

Product Offerings/Inventory Systems

1. How do you determine the items offered for sale at the store? [PROBE WITH ITEMS BELOW]
    a. Store or Shelf space
    b. Customer recommendations/ requests
    c. How well an item has sold
    d. Promotion price
    e. High profit margin
    f. Other_____

APPENDIX H (continued)

2. How do you track your inventory?

3. Approximately how many vendors does the store rely on to maintain inventory?

4. Thinking about the majority of what is sold here, where does that inventory come from?

5. What items do you sell most of?

6. What items do you sell least of?

7. What do kids/youth usually buy?

8. How about dollar store non-food items – do you sell a lot of these?

9. When you opened your store, how did you decide which products to carry? [PROBE WITH ITEMS BELOW]
    a. Store size or Shelf space

    b. Previous owner's recommendations

    c. Other merchant's recommendation

    d. other_____

10. How do you promote the sale of certain foods? [CHECK ALL THAT APPLY AND ASK EACH OF THE STORE OWNER]

    ___ a. Regular clearance sales on some items
    ___ b. Lowering prices compared to competitive stores
    ___ c. Set-up of merchandise/placing items strategically on shelves, in high traffic areas
    ___ d. Other: Mostly in my windows I put the signs.
    ___ e. None

11. Which foods are the most profitable in your store?.

12. Why are the foods you just described the most profitable? [CIRCLE ONE ANSWER BELOW]

13. Which foods are the least profitable in your store?

14. Why are the foods you just described the least profitable? [CIRCLE ONE ANSWER BELOW]

Fresh Food Sales

APPENDIX H (continued)

1. What would you say are the advantages and disadvantages of offering fresh fruits and vegetables?

2. What about other healthy foods [PROBE]: For example, whole grains, lean meats, etc.?

    [FOR Q1 and Q2 LISTEN FOR]:
    Conscious or unconscious decision
    Infrastructure limitations
    Supply limitations
    Customer demand issues
    Cost (but be careful to clarify why it is costly)

3. What foods did you add when you joined the Healthy HotSpot corner store project?

4. Do you have any problems when it comes to selling these foods?

5. What similar foods did you sell before joining the Healthy HotSpot project?

6. Is that something the store has sold for a long time?

7. Do they sell well?

8. Do neighborhood residents or customers ever comment about the items you added for sale here (from the Healthy Hotspot project)?

    a. [IF YES]: Which items? What do they say?

9. What foods, if any, did you add after the Healthy HotSpot project was completed (after June 2012)?

    a. [If added]: Did they sell well?

    b. Do you still have these for sale?

Healthy Food Offering

1. Are there any healthier foods with which you want to stock in your store but are hard for you to find? (Y/N)

APPENDIX H (continued)

a. [IF YES]: Which type of food is it?

[NOTE TYPE HERE FOR EACH ITEM]
Low fat product (dairy and meats)
Low sugar (fresh/frozen/canned fruits)
Low sodium (fresh/frozen/canned vegetables)
Healthy beverages
Healthy breads/grains
other_____

2. Are there any healthier foods with which you want to stock in your store but are hard to afford? (Y/N)

a. [IF YES]: Which type of food is it?

[NOTE TYPE HERE FOR EACH ITEM]
Low fat product (dairy and meats)
Low sugar (fresh/frozen/canned fruits)
Low sodium (fresh/frozen/canned vegetables)
Healthy beverages
Healthy breads/grains
other_____

3. Why do you want to stock healthier foods in you store? [READ FROM LIST ABOVE]

4. How have sales of your healthy foods been over the past two years? [PROBE]: Have sales been going up, down, staying about the same?

5. Have you noticed changes in the types of foods people are buying? Such as?

Snack Food Offering

1. I see that you sell a number of different types/sizes of chips. Which variety tends to be the most popular?

2. Do you have a contract with Frito Lay or another chip vendor to stock the store? [IF NO ASK]: Where do you purchase those items?

3. Are there any other vendors that come to the store to stock snack foods, like snack cakes? [IF YES, PROVIDE LIST] [IF NO ASK]: Where do you purchase those items?

APPENDIX H (continued)

4. Is there anything about the types of snack foods you sell that you would like to change?

5. Have you added healthier snack foods after Healthy HotSpot concluded?
   a. [If YES]: What were they? Did they sell well?
   b. [If NO]: Would you have liked to? What prevented you from not adding?

I am now going to ask you about the resources provided by the Healthy HotSpot project and how you feel the effect Healthy HotSpot resources had on overall store food sales.

Healthy HotSpot Resources

1. Which, if any, Healthy HotSpot resources made an impact on the amount of healthy foods sold in your store (over the past two years)?

   a. Equipment [PROVIDE LIST]

   b. Marketing materials [PROVIDE LIST]

   c. Trainings by CBO

   d. Events by CBO

   e. Funding (Any additional funding received and stipends from HH project)

2. Have you received any feedback from customers about the Healthy Hotspot project or the materials, shelf tags, etc.? Such as?

3. Were the materials provided, such as trainings, resources, tip sheets, etc., helpful to your participation in the project?

4. Have you received any additional materials or marketing/promotional events from the CBO?

5. What changes would help improve the project for the future? [PROBE]: You may want to consider changes you'd like to make to the project for your store and changes that would be helpful to other stores.

6. Do you expect to continue to obtain and sell the healthy foods currently in your store?

   a. [IF YES]: Please describe how you will continue to sell these items.

   b. [IF NO]: Please describe the barriers to your continuation of sales.

APPENDIX H (continued)

7. Do you plan to expand your healthy food inventory?

    a. [IF YES]: Please describe what you will expand.

    b. [IF NO]: Please describe the barriers to expansion.

Now I'm going to ask you a few questions about how the store relates to the local community.

Belief about Role of Store in Community and Relationship with CBO

1. How do you believe the store supports the community? [PROBE]: For example, does your store support healthy eating in the community, provide a space for community meetups?

2. Has your store experienced any problems with the community or with crime? [PROBE]: For example, with shoplifting, drugs, violence?
    a. [IF YES]: How have you addressed the issue?

3. Do you still keep in touch with [INSERT NAME OF CBO STAFF]?
    a. [PROBE]: How often have you spoken with [NAME of CBO STAFF] over the past 2.5 years (weekly, monthly, quarterly, annually)?
    b. How do you primarily communicate with them (in-person, phone, email)?

4. Why do you think [INSERT CBO NAME HERE], still holds/does not hold a relationship with you?

5. What resources, knowledge/skills, or shared understanding assisted your store in continuing a relationship with [INSERT CBO NAME HERE]? OR What prevented your store from continuing a relationship with [INSERT CBO NAME HERE]?

6. What else would you like to share with me today regarding your experience with the Healthy Hotspot project?

That concludes our interview, thank you for your time today. [END]

APPENDIX I

HEALTHY HOTSPOT CBO INTERVIEW GUIDE

Corner Store Evaluation – Community Organization Interview Tool

Introduction: *The purpose of this interview is to better understand sustainability of the **Healthy HotSpot (HH)** corner store project. I will also interview the store owner(s) involved in the project within the _____ community. Your individual answers will not be shared beyond this conversation and anything you share will not influence your ability to continue in the project or any future projects. I will be recording the interview only so I don't miss anything you say. Please keep in mind that there are no right or wrong answers – I am interested in understanding your opinions and views. The information you provide will help CCDPH improve this project and any future corner store efforts. This interview should take no longer than an hour to complete.*

I'd like to begin with a brief history of the organization.

Organizational History

1. How long have you worked (did you work) with [INSERT COMMUNITY ORGANIZATION]?

2. What is (was) your role with the organization?

3. Who within your organization first became interested in working on the Healthy HotSpot project?

4. How did your organization make the decision to participate in the Healthy HotSpot project? [PROBE]: For example was it a board decision, committee decision, staff decision, or something else?

5. Before this project, how did your organization interact with the stores that were part of the project? [PROBE]: This can include personal interactions or no interactions.

Now I'd like to discuss the structure of your organization.

Organizational Capacity

1. What challenges did your organization face in working on the Healthy HotSpot corner store project?
    a. [PROBE]: Why do you think these were challenges for your organization?
    b. [PROBE]: What do you think could have been done differently by CCDPH, the stores, or your organization to overcome these challenges?

2. What made participating in the Healthy HotSpot corner store project easier?

    a. [PROBE]: For example did you have an existing relationship with the store, the store owner understood the project, or the store owner was more interested in payment or equipment? Did you already understand the corner store project process?
    b. [IF NO]: How was the process with the stores in general?

APPENDIX I (continued)

3. The project offered different types of training to community organizations about small food store and using promotional techniques, in which trainings did you participate? [PROBE]: For example did you participate in the in-person training, webinars, or use the tip-sheets (provide list of trainings to jog memory)?

4. [IF PARTICIPATED] How useful was [INSERT TRAINING SESSION IN WHICH PARTICIPATED] in recruiting stores? [REPEAT FOR EACH TRAINING/MATERIAL USED]

5. What material/training session was most useful? Least?

6. How would you describe the helpfulness of the project materials, such as the product menu, project flyer or tip sheets in recruiting stores? [HAVE COPIES ON HAND TO REMIND PARTICIPANT]

7. Of all the training, assistance and materials offered what was most useful to you in the project?

8. What was the least useful?

9. Overall, how would you describe your knowledge gained of working with corner stores or other small retail outlets?

Now I'd like to discuss your work with the corner stores that completed the project.[Provide list of stores to jog memory]

CBO-Store Relationship

1. How many stores did you work with that completed the project with you?

2. How many of these stores do you still keep in touch with? [CREATE LIST]

    a. [PROBE]: How often have you spoken with this store owner over the past 2.5 years (weekly, monthly, quarterly, annually)?
    b. How do you primarily communicate with them (in-person, phone, email)?
    c. Do you think the store is still a Healthy HotSpot store?

3. Why do you think [INSERT STORE NAME HERE], still holds a relationship with you/your organization? [REPEAT FOR EACH STORE LISTED IN Q2]

4. What resources, knowledge/skills, or shared understanding assisted your organization in continuing a relationship with [INSERT STORE OWNER NAME HERE]? [REPEAT FOR EACH STORE LISTED IN Q2]

Now I'd like to discuss your continued work on this project or a project like Healthy HotSpot

Continued work on Healthy HotSpot

1. Over the past two years, was your organization able to expand the project [HH Model] with any new stores? Please describe your organization's ability to continue this work and recruit new stores into the project? [LISTEN FOR]: Confidence/ability

APPENDIX I (continued)

   a. [PROBE]: If yes, please describe how you were able to continue/expand the project with the new stores.
   b. [PROBE]: If no, please describe what prevented you from being able to continue/expand the project with the new stores.

2. If your organization has not been able to expand the project to new stores what would it take to be able to do so? What is needed? [LISTEN FOR]: Confidence/ability and motivation to do so

3. If your organization wanted to do a different small store intervention [Other than HH Model], please describe:

   a. Your organization's ability to recruit stores into such a project? AND
   b. Your organization's ability to successfully implement such a project?

4. What are your organization's plans, if any, for future work with small grocers/corner stores?

5. In your opinion, what was the overall impact of the Healthy HotSpot corner store project within the community at this time?

6. What feedback, if any, have you received from stores?

7. What feedback, if any, have you received from customers?

8. What else would you like to share with us about your experience with the Healthy Hotspot project?

This concludes our interview. Thank you for your time today.

[END]

APPENDIX J

HEALTHY HOTSPOT FOCUS GROUP GUIDE

Corner Store Evaluation – Focus Group Discussion Guide
Adult Consumers

A. Opening (10 mins) [INTRODUCE FOCUS GROUP TEAM]

- *My name is _____. I am working on a project, called Healthy Hotspot, which aims to increase the healthy choices that are available in corner stores, especially in communities where a supermarket is a long distance away. I am here today to get feedback from members of the community on the impact of the project.*

- *We are interested in your ideas to help make the project more successful.*

- *My job is to make sure we cover all the discussion topics, to listen objectively to what you say, and to write a report about what I hear from you.*

- *In our findings reporting, we will not use your name or quote anyone by their real name.*

- [IF THERE IS A NOTE TAKER] *I would like to introduce _____ to you. _____is here with me to listen carefully to you and take notes. We will use the notes ____ takes in the report-writing process. _____ and I want to make sure we accurately capture and represent the things you have to say. These notes are for evaluation purposes only, and will not be shown to anyone outside the evaluation team.*

- *Our session will last no longer than 75 minutes, and we will not be taking a break so that we finish on time. You can feel free to stand up to stretch during the session. If we have a good conversation going, the session could run a few minutes over. Would that be a problem for anyone?*

- *Because we appreciate your time and ideas, each person will receive a $50 gift card at the end of this session.*

1. Purpose of the Session [DESCRIBE THE PURPOSE]

   - *The purpose of this session is to discuss your experiences and opinions regarding corner stores in your neighborhood.*
   - *During the session we will:*
     - *Discuss purchases you make at corners stores in your neighborhood.*
     - *Explore what options you would like to see in your local corner store.*

2. Ground Rules #1[DESCRIBE THE GROUND RULES]

   - *To help our session go smoothly, there are a few things you need to know:*
     - *In addition to note-taking, we also are digitally recording. Again, this is to support our ability to write a report, and accurately describe your experiences and thoughts. Only our evaluation team will hear these tapes.*

APPENDIX J (continued)

- *To make sure you can be heard on the recordings, we ask that you speak at the same volume I am speaking, and only speak one at a time.*

- *While it may be tempting to turn to your neighbor to share a thought, sometimes those are the very best (and funniest) comments. I'm going to ask you to resist the temptation to have separate or side conversations, and instead to share your thoughts with the entire group.*

3. Respondent Introductions [HAVE PARTICIPANTS INTRODUCE THEMSELVES]

   - *To get started, I would like to go around and introduce ourselves. Why don't we go around the table, and please tell us your first name and your favorite thing about the community in which you live.*

4. Ground Rules #2 [DESCRIBE GROUND RULES 2]

   - *Now, there are just a few more things I need to share with you before we really get started:*
     - *I always say that everyone has a right to "equal air time," so if you are the kind of person who jumps in to answer questions or share ideas, that is wonderful! However, if you find yourself always answering before everyone else, I'm going to ask you to watch that a little bit and make sure everyone gets a chance to go first from time to time. I will help you manage that, too.*

     - *On the other hand, if you are the kind of person who likes to sit back and let others speak first, I absolutely respect that AND, at the same time, I'm going to ask you from time to time to lead off the discussion!*

     - *It is important for you to know that we are not trying to reach any kind of agreement in this discussion. Differences in opinion or experience are as valuable as similarities. Remember, since there are only a few of you here today, each of your opinions are important.*

     - *There are no tests, no trick questions and no right or wrong answers. What you are sharing is your opinion – it's right, because it's yours!*

     - *You don't need to direct your comments to me. Please respond to each other, build on what one another says or discuss differences of opinion.*

     - *We have many topics to cover. Occasionally, I will move the discussion ahead in the interest of time. Please know that I do not mean to interrupt you or cut you off in any way. I value what you have to say, AND we have limited time together.*

     - *Does anyone have any questions before we begin?*

B. "CORNER STORE" AND PURCHASING PATTERNS (20 MINS) [BEGIN DISCUSSION]

1. To start with a definition, so that we all have the same understanding: When I talk about a "corner store," what I mean is one of the small, neighborhood stores that sell food and sometimes other items, specifically [LIST STORES IN FOCUS GROUP COMMUNITY].

APPENDIX J (continued)

2. First, how often do you shop at one of these stores [PROBE]: About how many times per week?

3. At what stores in this area do you shop most frequently? [BUILD LIST]

4. Why do you shop more often at these stores? [PROBE]: Location? Selection? Safety? [WRITE REASONS NEXT TO STORE NAME]

5. What about stores where you never shop? [BUILD LIST] [PROBE]: Which ones are those? What are your reasons for never shopping there? [WRITE REASONS NEXT TO STORE NAME]

6. Now, going back to the list of stores where you do shop, what types of things do you usually buy at these store(s)? [BUILD LIST] [PROBE]: Snacks, candy, soda, juice, milk, water, bread, fruits, vegetables, meat, cleaning supplies, etc? [WRITE ITEMS NEXT TO STORE NAME]

7. Let's go through this list. Tell me how frequently you buy X item at one of these stores and whether you usually buy X just for yourself, for your kids, for household use or someone else. [WRITE FREQUENCEY NEXT TO STORE NAME AND ITEM]

8. Let's talk about the reasons why you would go to one of the corner stores instead of one of the larger stores. What are some of the reasons why?

9. Some stores take Link but others do not. How important is it to you that these corner stores take Link? [REFERENCE LIST FROM Q3] What about WIC?

10. With small stores, sometimes the owner or managers are around a lot and the community gets to know them. How well do you know the owners or managers of the stores at which you shop? [PROBE]: Nature of the relationship, role in community?

C. ACCESS TO HEALTHIER CHOICES (30 MINS)

1. [SHOW HH MENU] I want to take a moment to talk about our healthier food and beverage menu. Some examples of what I mean by "healthy" are: fruits and vegetables, low-fat dairy (or lactose-free) products, lean proteins like fish or beans, and whole grain bread or tortillas.

2. Now, thinking about the corner stores in this community at which you shop, what healthier food and beverage choices are available?

3. [PROVIDE HANDOUT] Now I'm going to show you a list of items and I'd like you to rank them in terms of how much you would like to see more of that item available at corner stores in your community. Please rank each item from 1 to 10, where 1 is the highest priority item and 10 is the lowest priority item that you want to see available at your corner store. Please use each number ONLY ONCE: [NOTETAKER SHOULD NOTE RESPONSES]
   a. Fresh fruits and vegetables
   b. Frozen fruits and vegetables
   c. Canned fruits and vegetables
   d. Whole grain bread
   e. Healthier packaged snacks (lowfat granola bars, baked chips, nuts, dried fruit)
   f. Lowfat milk

APPENDIX J (continued)

g. Lactose-free milk
h. Water
i. 100% juice
j. Diet sodas, seltzer, flavored, sugar-free water

4. Now I'd like to discuss the items on the list a bit more. If they were available, which of these items would you buy from these corner stores? [NOTETAKER SHOULD NOTE RESPONSES]

5. Which items would you NOT buy at these corner stores? [NOTETAKER SHOULD NOTE RESPONSES]

6. Often it is hard to find healthy foods and drinks in corner stores. Why do you think it is hard to find healthier choices in corner stores?
   [PROBE]: Is it lack of demand, price, poor quality, poor marketing, resistance from store owners? Other reasons?

7. What do you think you can do to increase the healthier choice items available in these corner stores?
   [PROBE]: Who would you work with to help create the change?

8. Customer demand often helps determine what items a business sells. What approaches do you think could show corner store owners that there is a customer demand for healthier food available in corner stores?
   [PROBE]: How important are posters, location in the store, discounts, recipes, taste tests?

9. Now think about the last time you were in one of the stores I listed. Did you see any signs that pointed out healthy foods? What did they look like? Did you ask the store staff about them? What did they say?

10. [IF PARTICIPANTS RECALL THE MATERIALS AT A HEALTHY HOTSPOT STORE] What do you think about the store with the signs and products? Have your thoughts about that store changed over time?

D. Thank Participants and Close

1. We have talked about a lot of things related to your neighborhood corner store, what you purchase there and why or why not, and what to do to increase healthier choices. What have I missed that I should have asked you about?

2. Thank you for your time today. [DISTRIBUTE PARTING THANK YOU GIFT.]

APPENDIX K

IN STORE MARKET BASKET ASSESSMENT

Cook County Department of Public Health
Communities Putting Prevention to Work

Store ID (From Assignment):	**Date (mm/dd/yyyy):**
Observer Name (1):	**Observer Name (2):**
Store Name (From Assignment):	
Corrections in Store Name:	
Store Address (From Assignment):	
Corrections in Address:	
Store Operating Hours: **Weekdays** _____**AM** **to** _____**PM** **Saturdays** _____**AM** **to** _____**PM** **Sundays** _____**AM** **to** _____**PM**	
Start Time: **Circle One: AM PM**	**End Time:** **Circle One: AM PM**

APPENDIX K (continued)

AVAILABILITY: FRESH FRUITS AND VEGETABLES					
Does the store sell fresh fruit? _____ **Yes** _____ **No** **Does the store sell fresh vegetables?** _____ **Yes** _____ **No**					
	Available?		**Available?**		**Available?**
Apples		Greens, collard		Pineapple	
Avocado		Greens, kale		Plaintain	
Bananas		Greens, mustard		Plums	
Beets		Greens, turnip		Rutabaga	
Blueberries		Guava (Guayaba)		Spinach	
Broccoli		Guanabana (Soursop)		Squash, acorn	
Cabbage, green or red		Honeydew Melon		Squash, buttercup	
Cactus (nopales, prickly pear)		Jicama		Squash, butternut	
Cantaloupe		Kiwi		Squash, chayote	
Carambola (Star fruit)		Lettuce, iceberg		Squash, Mexican	
Carrots		Lettuce, romaine		Squash, spaghetti	
Cassava (yucca, manioc)		Lettuce, other		Squash, yellow	
Cauliflower		Mamey (Sapote mamey)		Squash, zucchini	
Celery		Mango		Strawberries	
Chard		Okra		Sweet potatoes or Yams	
Cherimoya		Onion, yellow or white		Tomatillos	
Coconut		Oranges		Tomatoes	
Corn		Papaya		Watermelon	
Cucumber		Passion fruit		Zapote (Sapodilla)	
Grapefruit		Peaches		Other:	
Grapes, green or red		Pears		Other:	
Green beans		Pepper, hot		Other:	
Green peas, sugar snap or snow		Peppers, bell (any color)		Other:	

APPENDIX K (continued)

ITEM	QUALITY (Circle one)		FORM	UNIT/ WEIGHT (Circle One)	SHRINK WRAP? (Circle one)	QTY	PRICE (LOWEST COST)
Apples	Poor	Ok	Not-bagged	Per pound Per item	☐ Yes ☐ No		$☐.☐☐
Bananas	Poor	Ok	Not-bagged	Per pound Per item	☐ Yes ☐ No		$☐.☐☐
Broccoli	Poor	Ok	Bunch, not crown	Per pound Per item	☐ Yes ☐ No		$☐.☐☐
Cabbage, green			Head	Per pound Per item	☐ Yes ☐ No		$☐.☐☐
Cantaloupe			Whole	Per pound Per item	☐ Yes ☐ No		$☐.☐☐
Carrots	Poor	Ok	Bag, not baby	Per pound Per item	☐ Yes ☐ No		$☐.☐☐
Collard greens				Per pound Per item	☐ Yes ☐ No		$☐.☐☐
Grapes	Poor	Ok	Bunch	Per pound Per item	☐ Yes ☐ No		$☐.☐☐
Grapefruit			Not-bagged	Per pound Per item	☐ Yes ☐ No		$☐.☐☐
Green bell pepper	Poor	Ok	Not-bagged	Per pound Per item	☐ Yes ☐ No		$☐.☐☐
Iceberg lettuce	Poor	Ok	Head	Per pound Per item	☐ Yes ☐ No		$☐.☐☐
Mango			Not-bagged	Per pound Per item	☐ Yes ☐ No		$☐.☐☐
Oranges, navel	Poor	Ok	Not-bagged	Per pound Per item	☐ Yes ☐ No		$☐.☐☐
Strawberries	Poor	Ok	Package	Per pound Per item	☐ Yes ☐ No		$☐.☐☐
Sweet potatoes or yams			Not-bagged	Per pound Per item	☐ Yes ☐ No		$☐.☐☐
Tomatoes, slicing/beefsteak/ Hot House/regular	Poor	Ok	Not-bagged	Per pound Per item	☐ Yes ☐ No		$☐.☐☐

APPENDIX K (continued)

AVAILABILITY AND PRICE: CANNED FRUITS WITH SUGAR

Does the store sell canned fruit **with added sugar**? _____ Yes _____ No

How many varieties of canned fruit **with added sugar**? 1-5 6-10 11+

	AVAILABLE?		FORM, SIZE (For Price)	PRICE (LOWEST COST)
	YES	NO		
Fruit Cocktail	☐	☐	14-16 oz can	$ ☐.☐☐
Mangos	☐	☐	14-16 oz can	$ ☐.☐☐
Oranges, mandarin	☐	☐	14-16 oz can	$ ☐.☐☐
Peaches	☐	☐	14-16 oz can Halves, sliced	$ ☐.☐☐
Pear	☐	☐	14-16 oz can	$ ☐.☐☐
Pineapple	☐	☐	20 oz can Chunks	$ ☐.☐☐

AVAILABILITY AND PRICE: NO SUGAR ADDED CANNED FRUITS

Does the store sell canned fruit with **no sugar added** (juice/water)? _____Yes _____ No

How many varieties of canned fruit with **no sugar added** (juice/water)? 1-5 6-10 11+

	AVAILABLE?		FORM, SIZE (For Price)	PRICE (LOWEST COST)
	YES	NO		
Fruit Cocktail	☐	☐	14-16 oz can	$ ☐.☐☐
Mangos	☐	☐	14-16 oz can	$ ☐.☐☐
Oranges, mandarin	☐	☐	14-16 oz can	$ ☐.☐☐
Peaches	☐	☐	14-16 oz can Halves, sliced	$ ☐.☐☐
Pear	☐	☐	14-16 oz can	$ ☐.☐☐
Pineapple	☐	☐	20 oz can Chunks	$ ☐.☐☐

APPENDIX K (continued)

AVAILABILITY AND PRICE: REGULAR CANNED VEGETABLES				
Does the store sell **regular (>200 mg sodium)** canned vegetables? _____ Yes _____ No How many varieties of **regular** canned vegetables? 1-5 6-10 11+				
	AVAILABLE?		**FORM,SIZE (For Price)**	**PRICE (LOWEST COST)**
	YES	**NO**		
Carrots	☐	☐	14-16 oz can	$ ☐.☐☐
Corn, sweet	☐	☐	14-16 oz can Whole kernel	$ ☐.☐☐
Green beans	☐	☐	14-16 oz can Cut	$ ☐.☐☐
Sweet peas	☐	☐	14-16 oz can	$ ☐.☐☐
Spinach	☐	☐	14-16 oz can	$ ☐.☐☐
Tomatoes	☐	☐	14-16 oz can Diced	$ ☐.☐☐

AVAILABILITY AND PRICE: REDUCED/LOW SODIUM CANNED VEGETABLES				
Does the store sell **low sodium (≤200 milligrams)** canned vegetables? ___ Yes ___ No How many varieties of **low sodium** canned vegetables? 1-5 6-10 11+				
	AVAILABLE?		**FORM, SIZE (For Price)**	**PRICE (LOWEST COST)**
	YES	**NO**		
Carrots	☐	☐	14-16 oz can	$ ☐.☐☐
Corn, sweet	☐	☐	14-16 oz can Whole kernel	$ ☐.☐☐
Green beans	☐	☐	14-16 oz can Cut	$ ☐.☐☐
Sweet peas	☐	☐	14-16 oz can	$ ☐.☐☐
Spinach	☐	☐	14-16 oz can	$ ☐.☐☐
Tomatoes	☐	☐	14-16 oz can Diced	$ ☐.☐☐

APPENDIX K (continued)

AVAILABILITY AND PRICE: REGULAR CANNED BEANS				
Does the store sell **regular (>200 mg sodium)** canned beans?_____ Yes_____ No				
	AVAILABLE?		**SIZE (For Price)**	**PRICE (LOWEST COST)**
	YES	**NO**		
Black beans	☐	☐	14-16 oz can	$ ☐.☐☐
Black-eyed peas	☐	☐	14-16 oz can	$ ☐.☐☐
Garbanzo beans (chickpeas)	☐	☐	14-16 oz can	$ ☐.☐☐
Red kidney beans	☐	☐	14-16 oz can	$ ☐.☐☐
Pinto beans	☐	☐	14-16 oz can	$ ☐.☐☐
Red beans	☐	☐	14-16 oz can	$ ☐.☐☐

AVAILABILITY AND PRICE: REDUCED/LOW SODIUM CANNED BEANS				
Does the store sell **low sodium (≤200 mg)** canned beans?_____ Yes _____ No				
	AVAILABLE?		**SIZE (For Price)**	**PRICE (LOWEST COST)**
	YES	**NO**		
Black beans	☐	☐	14-16 oz can	$ ☐.☐☐
Black-eyed peas	☐	☐	14-16 oz can	$ ☐.☐☐
Garbanzo beans (chickpeas)	☐	☐	14-16 oz can	$ ☐.☐☐
Red kidney beans	☐	☐	14-16 oz can	$ ☐.☐☐
Pinto beans	☐	☐	14-16 oz can	$ ☐.☐☐
Red beans	☐	☐	14-16 oz can	$ ☐.☐☐

APPENDIX K (continued)

AVAILABILITY AND PRICE: DRIED BEANS

	AVAILABLE?		PRICE (LOWEST COST)
	YES	NO	*1 lb. (16 oz) bag*
Black beans	☐	☐	$ ☐☐.☐☐
Black-eyed peas	☐	☐	$ ☐☐.☐☐
Garbanzo beans (chickpeas)	☐	☐	$ ☐☐.☐☐
Red kidney beans	☐	☐	$ ☐☐.☐☐
Pinto beans	☐	☐	$ ☐☐.☐☐
Red beans	☐	☐	$ ☐☐.☐☐

APPENDIX K (continued)

AVAILABILITY: SNACKS AND DRINKS					
	AVAILABLE?		BRAND (For Price)	SIZE (For Price)	PRICE
ITEM	YES	NO	Circle one	Circle one	
Regular soda	☐	☐	Coca-Cola Pepsi	20 oz 12 oz	$☐.☐☐
Diet soda	☐	☐	Coca-Cola Pepsi	20 oz 12 oz	$☐.☐☐
Little Hugs (8 oz)	☐	☐			$☐.☐☐
Big Hugs (16 oz)	☐	☐			$☐.☐☐
Gallon Juice Drink *(<10% juice)*	☐	☐	Tampico Other:	Gallon	$☐.☐☐
Regular snack chips (potato, tortilla, Doritos, Fritos), NOT pretzels *(>3 g fat per serv.)*	☐	☐	Lay's Ruffles	1.75-1.88 oz 2.5 oz	$☐.☐☐
Low fat snack chips *(0-3 g fat per serv.)*	☐	☐	Lay's Baked Chips	1 oz	$☐.☐☐
Low sodium baked snack chips (potato, tortilla, etc) *(≤200 mg sodium)*	☐	☐			
Flamin' Hot Cheetos	☐	☐	Frito Lay	1.00-1.25 oz 2.35-2.40 oz	$☐.☐☐
Regular breakfast bars, cereal bars, or granola bars *(>3 g fat per serv.)*	☐	☐			
Low fat breakfast bars, cereal bars, or granola bars *(0-3 g fat per serv.)*	☐	☐			
Snack Cakes (Ho Hos, Cupcakes, or Swiss Rolls)	☐	☐	2 pack Hostess Chocolate Cupcakes	2-3.5 oz	$☐.☐☐
Cookies	☐	☐	Oreos Chips Ahoy	18 oz 14-16 oz 5-6 oz	$☐.☐☐

APPENDIX K (continued)

AVAILABILITY AND PRICE: GRAINS				
	AVAILABLE?		Size (For Price)	PRICE (LOWEST COST)
ITEM	YES	NO		
White bread	☐	☐	Circle one 24-oz loaf 20-oz loaf	$☐.☐☐
100% whole wheat bread	☐	☐	Circle one 24-oz loaf 20-oz loaf	$☐.☐☐
High fiber bread (not 100% whole wheat) *(3+ g fiber per serv.)*	☐	☐	Circle one 24-oz loaf 20-oz loaf	$☐.☐☐
White rice, long grain, enriched	☐	☐	1 lb. bag or box	$☐.☐☐
Brown rice, long grain	☐	☐	1 lb. bag or box	$☐.☐☐
White pasta	☐	☐	Spaghetti 1-lb box	$☐.☐☐
100% whole wheat pasta	☐	☐	Spaghetti 13-16 ounce box	$☐.☐☐
High fiber pasta (not 100% whole wheat) *(3+ g fiber per serv.)*	☐	☐	Spaghetti 13-16 ounce box	$☐.☐☐
Flour tortilla	☐	☐	10-14 ounce Size:	$☐.☐☐
100% whole wheat tortilla	☐	☐	10-14 ounce Size:	$☐.☐☐
Corn tortilla	☐	☐	10-14 ounce Size:	$☐.☐☐
Sweetened cereal *(6+ g sugar)*	☐	☐	Frosted flakes 17-18 oz box 15-16 oz box	$☐.☐☐
Lower sugar cereal *(<6 g sugar, <3 g fiber)*	☐	☐	Cheerios 17-18 oz box 15-16 oz box	$☐.☐☐
High fiber cereal *(<6 g sugar, 3+ g fiber)*	☐	☐	Wheaties 17-18 oz box 15-16 oz box	$☐.☐☐

APPENDIX K (continued)

AVAILABILITY AND PRICE: FROZEN FRUITS WITH ADDED SUGAR				
Does the store sell frozen fruit **with added sugar**? _____ Yes _____ No				
How many varieties of frozen fruit **with added sugar**? 1-5 6-10 11+				
	AVAILABLE?		**SIZE (For Price)**	**PRICE (LOWEST COST)**
	YES	**NO**		
Blueberries	☐	☐	14-16 oz	$ ☐☐.☐☐
Mangos	☐	☐	14-16 oz	$ ☐☐.☐☐
Peaches	☐	☐	14-16 oz	$ ☐☐.☐☐
Mixed berries	☐	☐	14-16 oz	$ ☐☐.☐☐
Raspberries	☐	☐	14-16 oz	$ ☐☐.☐☐
Strawberries	☐	☐	14-16 oz	$ ☐☐.☐☐

AVAILABILITY AND PRICE: FROZEN FRUITS WITHOUT ADDED SUGAR				
Does the store sell frozen fruit **(no added sugar)**? _____ Yes _____ No				
How many varieties of frozen fruit **(no added sugar)**? 1-5 6-10 11+				
	AVAILABLE?		**SIZE (For Price)**	**PRICE (LOWEST COST)**
	YES	**NO**		
Blueberries	☐	☐	14-16 oz	$ ☐☐.☐☐
Mangos	☐	☐	14-16 oz	$ ☐☐.☐☐
Peaches	☐	☐	14-16 oz	$ ☐☐.☐☐
Mixed berries	☐	☐	14-16 oz	$ ☐☐.☐☐
Raspberries	☐	☐	14-16 oz	$ ☐☐.☐☐
Strawberries	☐	☐	14-16 oz	$ ☐☐.☐☐

APPENDIX K (continued)

AVAILABILITY AND PRICE: FROZEN VEGETABLES WITHOUT ADDED INGREDIENTS

Does the store sell frozen vegetables **(without added ingredients)?** __ Yes __ No
(No cream, butter, meat or cheese sauce)

How many varieties of frozen vegetables **(without added ingredients)?** 1-5 6-10 11+

	AVAILABLE?		FORM, SIZE (For Price)	PRICE (LOWEST COST)
	YES	NO		
Broccoli, cut	☐	☐	14-16 oz	$ ☐.☐☐
Carrots	☐	☐	14-16 oz	$ ☐.☐☐
Collard greens	☐	☐	14-16 oz	$ ☐.☐☐
Corn, sweet	☐	☐	14-16 oz Whole kernel	$ ☐.☐☐
Green beans	☐	☐	14-16 oz Cut	$ ☐.☐☐
Spinach	☐	☐	14-16 oz	$ ☐.☐☐
Sweet peas	☐	☐	14-16 oz	$ ☐.☐☐

AVAILABILITY AND PRICE: FROZEN VEGETABLES WITH ADDED INGREDIENTS

Does the store sell frozen vegetables **(with added ingredients)?** ____ Yes ____ No
(With cream, butter, meat or cheese sauce)

How many varieties of frozen vegetables? 1-5 6-10 11+

	AVAILABLE?		FORM, SIZE (For Price)	PRICE (LOWEST COST)
	YES	NO		
Broccoli, cut	☐	☐	14-16 oz	$ ☐.☐☐
Carrots	☐	☐	14-16 oz	$ ☐.☐☐
Collard greens	☐	☐	14-16 oz	$ ☐.☐☐
Corn, sweet	☐	☐	14-16 oz Whole kernel	$ ☐.☐☐
Green beans	☐	☐	14-16 oz Cut	$ ☐.☐☐
Spinach	☐	☐	14-16 oz	$ ☐.☐☐
Sweet peas	☐	☐	14-16 oz	$ ☐.☐☐

APPENDIX K (continued)

AVAILABILITY AND PRICE: FRESH AND LUNCH MEATS				
Does the store sell **fresh** meat or fish?			_____ Yes	_____ No
	AVAILABLE?		**PRICE (LOWEST COST)**	**OUTDATED?**
ITEM	**YES**	**NO**	***Per pound***	
Split chicken breast with skin	☐	☐	$☐.☐☐	☐ Yes ☐ No
Boneless, skinless chicken breast	☐	☐	$☐.☐☐	☐ Yes ☐ No
Chicken, thighs	☐	☐	$☐.☐☐	☐ Yes ☐ No
Regular ground beef (80% lean, 20% fat)	☐	☐	$☐.☐☐	☐ Yes ☐ No
Lean ground beef (90-94% lean, 6-10% fat)	☐	☐	$☐.☐☐	☐ Yes ☐ No
Extra lean ground beef (95-100% lean, 0-5% fat)	☐	☐	$☐.☐☐	☐ Yes ☐ No
Ground turkey (80% lean, 20% fat)	☐	☐	$☐.☐☐	☐ Yes ☐ No
Lean ground turkey (90-94% lean, 6-10% fat)	☐	☐	$☐.☐☐	☐ Yes ☐ No
Extra lean ground turkey (95-100% lean, 0-5% fat)	☐	☐	$☐.☐☐	☐ Yes ☐ No
Fish	☐	☐	**Names of fish:**	
Regular hot dogs (>3 g fat)	☐	☐		
Low fat hot dogs *(0-3 g fat per serv.)*	☐	☐		
Regular lunch meats (>3 g fat)	☐	☐		
Low fat lunch meats *(0-3 g fat per serv.)*	☐	☐		

APPENDIX K (continued)

AVAILABILITY AND PRICE: DAIRY AND REFRIGERATED

ITEM	AVAILABLE? YES	AVAILABLE? NO	SIZE (For Price)	PRICE (LOWEST COST)	DATED?
Whole milk	☐	☐	Gallon	$☐.☐☐	☐ Yes ☐ No
2% milk	☐	☐	Gallon	$☐.☐☐	☐ Yes ☐ No
Low fat milk (1%)	☐	☐	Gallon	$☐.☐☐	☐ Yes ☐ No
Fat free milk (skim)	☐	☐	Gallon	$☐.☐☐	☐ Yes ☐ No
Regular yogurt *(>3 g fat per serv.)*	☐	☐	6 oz	$☐.☐☐	☐ Yes ☐ No
Low fat yogurt *(0-3 g fat per serv.)*	☐	☐	6 oz	$☐.☐☐	☐ Yes ☐ No
Regular cheese *(>3 g fat per serv.)*	☐	☐	Shredded cheddar, 8 oz bag	$☐.☐☐	☐ Yes ☐ No
Low fat cheese *(0-3 g fat per serv.)*	☐	☐	Shredded cheddar, 8 oz bag	$☐.☐☐	☐ Yes ☐ No
100% orange juice	☐	☐	64 oz	$☐.☐☐	☐ Yes ☐ No
Regular soy milk (>3 g fat)	☐	☐			☐ Yes ☐ No
Low fat soy milk *(0-3 g fat per serv.)*	☐	☐			☐ Yes ☐ No
Regular Lactaid/ Lactose Free *(>3 g fat per serv.)*	☐	☐			☐ Yes ☐ No
Low fat Lactaid/ Lactose Free with added calcium, Vitamin D *(0-3 g fat per serv.)*	☐	☐			☐ Yes ☐ No

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VITA

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Education

- **PhD, 2017, University of Illinois at Chicago School of Public Health, Community Health Sciences, Chicago, IL**
  - Dissertation focus includes explicating and understanding the role of healthy corner stores as health promoting agents and community-based enterprises within low-income communities in suburban Cook County, IL.
- **Master of Public Health, 2006, University of Michigan School of Public Health, Department of Health Behavior Health Education, Ann Arbor, MI**
  - Academic focus in program planning and evaluation, reproductive health, health policy, and epidemiology
- **Bachelor of Science in Psychology, 2004, University of Michigan, Ann Arbor, MI**
  - Academic Focus in the natural sciences, social sciences, mathematics and humanities

Teaching Experience

- **University of Michigan, School of Social Work, Ann Arbor, MI**
  - SW 634: Health Care Policies and Services, Winter 2017
    - Lead instruction of graduate social work course focused on assessment and understanding of health care policies and services; co-developed syllabus, weekly lessons and provide direction for the course
- **Wayne State University, College of Education, Detroit, MI**
  - HE 3344 – Materials and Methods in Community Health Education, Fall 2016
    - Lead instruction of undergraduate public health course focused on implementation of community health programs and interventions; developed syllabus, weekly course lessons and provide direction for the course
  - HE 6420 – Introduction to Health Promotion Program Design, Fall 2016
    - Lead instruction of graduate public health course focused on planning community health programs and interventions; developed syllabus, weekly course lessons and provide direction for the course
  - HE 2320 – Dynamics of Community and Environmental Health, Winter 2016
    - Led instruction of undergraduate public health course focused on healthy policy and advocacy from an urban health lens; developed curriculum, syllabus, weekly course lessons and overall direction of the course**.**
  - HE 6501 – Measurement and Evaluation in Community Health Education, Fall 2015
    - Led instruction of mixed undergraduate and graduate public health course focused on evaluation methods in health education and health promotion interventions; developed syllabus, weekly course lessons and provide direction for the course
- **University of Illinois at Chicago School of Public Health, Chicago, IL**
  - PUBH 360 – Local Citizenship and Community Health Initiatives, Instructor, Spring 2014
    - Led instruction of undergraduate public health course focused on community-based public health; coordinated and organized community-based practicum, developed syllabus, weekly course lessons and provided direction for the course

- PUBH 360 – Local Citizenship and Community Health Initiatives, Teaching Scholar/Teaching Assistantship, Spring 2013
  - Co-led teaching of undergraduate public health course focused on community-based public health; coordinated development of community-based practicum, syllabus, weekly course lessons and grading of student assignments
- CHSC 401 – Behavioral Sciences in Public Health, Teaching Assistantship, Spring 2015 [online], Spring 2013 [online], Spring 2012 [online], Spring 2011, Fall 2010
  - Co-led teaching of graduate public health course focused on the social determinants of health and behavioral health sciences; coordinated development of syllabus, weekly course lessons and grading of student assignments
- CHSC 400 – Public Health Concepts and Practice, Teaching Assistantship, Fall 2013, Fall 2012, Fall 2011
  - Co-led teaching of graduate public health course focused on public health systems and governmental public health; coordinated weekly course lessons and grading of student assignments
- CHSC 431 – Community Assessment in Public Health, Teaching Assistantship, Spring 2010, Fall 2009 [online]
  - Co-led teaching of graduate public health course focused on community-based public health assessment; coordinated development of syllabus, weekly course lessons and grading of student assignments

Research Experience

- **Wayne State University, Detroit, MI, August 2015 – Present**
  - Primary Investigator of evaluation efforts for the Michigan Double Up Food Bucks program in collaboration with Gretchen Swanson Center for Nutrition
  - Research faculty for the Wayne State University Center for School Health
- **Chicago Public Schools, Chicago, IL, January 2013-August 2015**
  - Co-led the Healthy Chicago Public Schools (CPS) program evaluation in coordination with Chapin Hall at the University of Chicago
  - Evaluation aimed to show an impact among CPS students in five primary health outcomes (weight, healthy eating, physical activity, tobacco use reduction and social-emotional wellness)
  - Evaluation found significant improvements in healthy eating, physical activity and tobacco use reduction among a subset of CPS students in participating schools
  - Designed student-level survey and created outcomes assessment plan
- **Public Health Institute of Metropolitan Chicago, Chicago, IL, June 2010-January 2013**
  - Led the program evaluation of the Healthy HotSpot Corner Store Pilot project
  - Evaluation design used a community-based public health research framework and qualitative methodology
  - Evaluation improved healthy food access in terms of fresh produce among consumers of 21 corner stores in eight suburban communities
  - Co-led the process evaluation of the Model Communities mini-grant program. Process evaluation used administrative data and qualitative analysis to determine grantee trajectory at the mid-point of the project. Staff technical assistance was adjusted to ensure grantee success.
- **American Academy of HIV Medicine, Washington, DC, January 2008-January 2009**
  - Used qualitative methodology to assess State Medicaid Director perspectives on implementation of routine HIV testing in health care settings
  - Findings were provided to Centers for Disease Control and Prevention (CDC) for national implementation of routine HIV testing

- **AIDS Alliance for Children, Youth and Families, Washington, DC, September 2006-January 2008**
    - Used qualitative methodology to assess and report on HIV-positive youth perspectives of abstinence-only sexuality education
- **University of Michigan School of Social Work, Ann Arbor, MI, May 2005-August 2006**
    - Managed ongoing *Photovoice* study of parental concerns of environmental influences on preschoolers' health in Detroit
    - Analyzed and compiled qualitative data for use in presentations and academic journal articles
- **ACCESS, Arab Community Center for Economic and Social Services, Dearborn, MI, March 2005-January 2006**
    - Developed and aided in analysis of HIV/AIDS Knowledge, Attitudes, and Beliefs Survey that was administered to local Arab American population to improve HIV prevention services at ACCESS
- **City of Cape Town Health Services, Cape Town, South Africa July 2005-September 2005**
    - Developed and managed focus group discussions with female youth and interviewed HIV test counselors at reproductive health clinics in Khayelitsha township
    - Analyzed and presented youth perspectives to the Cape Town City and District Directors for purposes of internal improvement of health services

Other Professional Experience

- **Chicago Public Schools, Healthy Chicago Public Schools (CPS) Project Manger, Chicago, IL, January 2013-Present**
    - Directs a national health and wellness initiative across the Chicago Public Schools District, funded through a grant with the CDC
    - Directs Health Education for the district
    - Oversees a staff of six who work within local schools to implement health and wellness policies and support healthier school environments
    - Directs the policy agenda of the overall project, which includes a focus on increasing access to tobacco free school zones, decreasing access to unhealthy foods, increasing access to physically active school environments and promoting safe and supportive schools
- **Public Health Institute of Metropolitan Chicago, Assistant Program Director, Chicago, IL, June 2010-January 2013**
    - Co-Directed a national obesity prevention initiative with the Cook County Department of Public Health, funded through a cooperative agreement with the CDC
    - Supervised a staff of 13 who work with suburban Cook County communities and schools in changing policies and environments to prevent obesity
    - Directed the policy agenda of the overall project, which includes a focus on increasing access to healthy foods, decreasing access to unhealthy foods, increasing access to physically active environments and promoting breastfeeding
- **Society for Public Health Education, Project Director, Washington, DC, September 2008-August 2009**
    - Directed SOPHE's cooperative agreement with the CDC regarding educating State Policymakers on chronic disease prevention and promotion
    - Facilitated training institute for health educators to assist in their education of state policymakers and understanding of effective advocacy methods
    - Directed coalition work with the National REACH Coalition (NRC) and facilitated development of the NRC as a viable and sustainable 501(c) 3

- **American Academy of HIV Medicine, Policy Director, Washington, DC, January 2008-January 2009**
    - Directed AAHIVM's cooperative agreement with the CDC regarding implementation of routine HIV testing in health care settings
    - Facilitated advocacy efforts for national non-profit membership that includes frontline HIV care providers and advocated for issues related to the care and treatment needs of HIV-positive individuals through the Ryan White CARE Act
- **AIDS Alliance for Children, Youth and Families, Government Affairs Associate, Washington, DC, September 2006-January 2008**
    - Advocated on Capitol Hill and facilitated advocacy efforts for issues related to the prevention, care and treatment needs of HIV-positive women, children and youth, including Title IV of the Ryan White CARE Act
    - Coordinated work around the Positive Youth Project including report writing, grant writing, conducting interviews with youth and event planning
- **ACCESS, Arab Community Center for Economic and Social Services, Americorps Intern, Dearborn, MI, March 2005-January 2006**
    - Served as HIV test counselor in clinical and outreach environments
    - Developed and provided HIV/AIDS education to teens in local schools through the Teen Health Clinic

Awards and Honors

- Active Living Research Translating Research to Policy Award, 2013 *Model Communities Initiative of Suburban Cook County*
- Society for Public Health Education State Health Policy Institute II (Advanced) Graduate – Illinois 2010-2011
- University of Michigan Moody Fellowship, 2005

Memberships and Committees

- University of Illinois at Chicago Senate, Student Representative, 2012-2013; 2011-2012
- Society for Public Health Education Student Trustee, 2010-2011; 2011-2012
- American Public Health Association Member, 2010, 2011, 2012, 2013, 2014

Presentations

- Presenter at American Public Health Association Conference
    - Presented findings on the *Comprehensive and Coordinated Health Education* pilot project, November 2015, November 2016
    - Presented findings on the *Healthy CPS* initiative, November 2013, November 2014
    - Presented findings on the *Model Communities* project, October 2012
    - Presented findings on the *Suburban Cook County Communities Putting Prevention to Work* project, November 2011, November 2013
    - Presented findings on the *Community Centered Health Network,* November 2010
    - Presented findings on Positive Youth Project report *In a Position to Know: Youth and Parents Living with HIV Speak Out on Sexuality Education*, October 2008

- Presenter at the Society for Public Health Education Annual Meeting
    - Presented findings on the *Comprehensive and Coordinated Health Education* pilot project evaluation, March 2016
    - Presented findings on the *Model Communities* project, October 2012
    - Presented findings on the *Suburban Cook County Communities Putting Prevention to Work* project, November 2011

- Co-Presenter at CDC's National HIV Prevention Conference, December 2007 and US Conference on AIDS, November 2007
    - Presented findings on the Positive Youth Project report *In a Position to Know: Youth and Parents Living with HIV Speak Out on Sexuality Education*
- Chair and Co-Presenter at Head Start's 8th Research Conference in Washington, DC, June 2006
    - Presented findings on the *Environmental Justice and Children's Well-Being* project
- Co-Presenter at the 33rd National Head Start Training Conference in Detroit, MI, May 2006
    - Presented findings of *The Impact of Environmental Injustice and Children's Well-Being in Detroit Head Start*

Publications

1. Dombrowski R, Mason M, Welch SB, Welter C, Massuda Barnett G, and Cedano A. (2013). Model Communities as a strategy for achieving policy, systems and environmental change for obesity control and reduction. *International Public Health Journal.* 5(3):225-240.

2. Dombrowski R, Mason M, Welch SB, Welter C, Massuda Barnett G, and Cedano A. (2013). Model Communities as a strategy for achieving policy, systems and environmental change for obesity control and reduction. In Caron R.M. and Merrick J. (Eds.). *Building Community Capacity: Case Examples from Around the World* (pp 1-18). New York: Nova Science Publishers.

3. Dombrowski R, Massuda Barnett G, Geraci M, Mason M, Fagen M, Welter C, Gilmet K, and Kapadia, D. (2013). Model Communities: A Vital Strategy to Implementing Policy and Environmental Change for Active Living and Addressing Health Equity in Suburban Cook County, Illinois. *Active Living Research Annual Conference Award Winner Case Study*. San Diego, CA.

4. Jaskiewicz L, Dombrowski RD, Barnett GM, Mason M, and Welter C. (2015). Training local organizations to support healthy food access: results from a year-long project. *Community Development Journal*. DOI: 10.1093/cdj/bsv022.

5. Massuda Barnett GL, Dombrowski RD, Welter CR, Mason M, Geraci MV, Gilmet KA, Fagen MC, and Kapadia DA. (2014) Model Communities: A Vital Strategy to Implementing Policy and Environmental Change for Active Living and Addressing Health Equity in Suburban Cook County, Illinois. *American Journal of Health Promotion:* January/February 2014, Vol. 28, No. sp3, pp. S122-S124.doi: http://dx.doi.org/10.4278/ajhp.28.3s.S122

6. Jaskiewicz L, Dombrowski RD, Drummond HM, Barnett GM, Mason M, Welter C. (2013). Partnering With Community Institutions to Increase Access to Healthful Foods Across Municipalities. *Preventing Chronic Disease*. 10:130011. DOI: http://dx.doi.org/10.5888/pcd10.130011

7. Fagen MC, Asada Y, Welch S, Dombrowski R, Gilmet K, Welter C, Stern L, Massuda Barnett G, and Mason M. (2014). Policy, Systems, and Environmentally Oriented School-Based Obesity Prevention: Opportunities and Challenges. *Journal of Prevention and Intervention in the Community*. 42(2): 95-111.

8. Spencer M, Kohn-Wood L, Dombrowski RD, Keeles O, and Birichi D. (2012). Environmental Justice and the Well Being of Poor Children of Color: Building Capacity in Head Start Parents Through Photovoice. In D.K. Nagata, L. Kohn-Wood and L.A. Suzuki (Eds.), *Qualitative Strategies for Ethnocultural Research*. Washington, DC: APA.
9. Dombrowski RD and Bruce D. (2008) *In a Position to Know: Youth and Parents Living with HIV Speak Out on Sexuality Education*. Washington, DC: AIDS Alliance for Children, Youth and Families.

10. Kohn-Wood LP, Spencer MS, Teller S, McCall J, and Jankowski [Dombrowski] R. (2007). Parental Perceptions of preschoolers' emotional and behavioral problems: Implications for Service utilization. In B.A. Arrighi and D.J. Maume (Eds.), *Child Poverty in America Today: Health and Medical Care Volume 2.* Santa Barbara, CA: Greenwood Publishing Group, Incorporated.