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CONCEPTUALIZING AND MEASURING FOOD SECURITY AMONG RESETTLED
REFUGEES LIVING IN THE UNITED STATES

A Thesis Presented

by

Hannah Stokes

to

The Faculty of the Graduate College

of

The University of Vermont

In Partial Fulfillment of the Requirements
for the Degree of Master of Science
Specializing in Food Systems

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ABSTRACT

Food security research with resettled refugees in the United States and other Global North countries has found alarmingly high rates of food insecurity, up to 85% of surveyed households. This is well above the current US average of 12.7%. However, the most common survey tool used to measure food security status in the US, the US Household Food Security Survey Module (HFSSM), has not been sufficiently validated for resettled refugee populations, leading to the risk that the HFSSM may actually be *underestimating* the prevalence of food insecurity among resettled refugees in the US. Though research has attempted to establish validity of the HFSSM for resettled refugees through statistical associations with other risk factors for food insecurity, no efforts have been made to first explore and establish the *content validity* of the HFSSM for measuring food security among resettled refugees. Content validity is an essential component of construct validity. It first requires a qualitative *theoretical* foundation for demonstrating the relationships of the test contents to the underlying construct (ie food security) that the test intends to measure. Our research explores these theoretical relationships through a qualitative grounded study of food insecurity and food management experiences described by resettled refugees living in Vermont. Dr. Linda Berlin and I conducted 5 semi-structured focus groups in the summer and fall of 2015 with Bhutanese (2 groups), Somali Bantu (1 group), and Iraqi (2 groups) resettled refugees. During the focus groups, we inquired about food management practices under typical circumstances and under circumstances of limited household resources, as well as difficulties participants have faced in these processes. Additionally, I conducted 18 semi-structured interviews and 1 focus group in the same time frame with service providers who have worked with resettled refugees in capacities primarily related to food, health, and household resources. These interviews provided additional data about context, household food management practices among clients, and triangulating data for the focus groups.

A Grounded Theory analysis of the focus group data yielded 5 major emergent themes: 1) Past food insecurity experiences of resettled refugee participants exerted significant influence on the subjective perception of current food insecurity. 2) Barriers other than just financial resources restricted participants' food security, especially for recently resettled refugees. 3) Preferred foods differed significantly between generations within households. 4) Common elements of quality and quantity included in the definition and measurement of food security did not translate into the languages or experiences of food insecurity among participants. 5) Strategic and adaptive food management practices prevailed among participants, highlighting the temporality and ambiguity of food security concepts. These themes present potential problems of content validity for every HFSSM question. They also reveal the importance of food security concepts that are not covered by the HFSSM, including elements of nutritional adequacy of food, food safety, social acceptability of food and of means of acquiring food, short and long term certainty of food access, and food utilization. I conclude by discussing implications of our findings for service providers and local governments in Vermont who seek to better serve resettled refugee and other New American populations.

This thesis is dedicated to my father,

Luis Abner Ramos,

whose untimely passing while I was beginning this research cut through us with the painful reminder of how short life can be, how brief the beauty of our moments together.

Only afterwards did I learn the full extent of his immense pride in me. He reminds me to listen, to care, to feel thankful. I try to imbue my work with his lessons.

I can only hope to continue a life and work that would make him proud.

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CHAPTER 1: COMPREHENSIVE LITERATURE REVIEW

Introduction

Food insecurity is a chronic problem in the United States and around the world, and will continue to be a significant challenge in future food systems (Foresight, 2011). Globally, 795 million¹ people were chronically hungry and undernourished in 2015 (Food and Agriculture Organization (FAO), 2015). In the United States (US), as of 2015, 12.7 percent of households (15.8 million households) experienced food insecurity during at least part of the year (Coleman-Jensen, Rabbitt, Gregory, & Singh, 2016). Notably, food insecurity/undernourishment rates spiked in the US and globally during the Great Recession and the food price rises of 2007-2008 (Foresight, 2011). This indicates an underlying vulnerability to food price volatility throughout the global population, with the possibility of such volatility in the food system becoming more severe in the near future (2011).

Particularly concerning are the higher rates of food insecurity found among certain population groups. For example, in the US, food insecurity rates have been much higher among low-income Black (non-Hispanic), Hispanic, and single-parent households, than is reflected in the national average for the same income level (Coleman-Jensen, Rabbitt, Gregory, & Singh, 2016). Food insecurity studies among resettled refugee²

¹ This number does not exactly reflect everyone who is food insecure, as hunger and undernutrition overlap with food insecurity in different ways.

² It is commonly seen as respectful to use the term New American, but this term also includes non-refugee immigrants. In order to be more specific about our study population, throughout this paper I use the term “resettled refugee.”

populations in the US and other high-income resettlement countries have found food insecurity rates as high as 85 percent (Wang, Min, Harris, Khuri, & Anderson, 2016). These statistics suggest that resettled refugees are a particularly important population to focus on for food security and food access policies and programs at multiple scales. Refugees, both officially and unofficially recognized, will also continue to be an important population to monitor as the number of refugees is likely to increase due to climate and related global conflicts that displace large numbers of people (Foresight, 2011).

In the US, food insecurity is primarily measured using the US Household Food Security Survey Module (HFSSM). A potential problem with the use of the HFSSM for resettled refugees is that its creation and validation has rested upon studying food management behaviors characteristic to a few specific populations, particularly low-income women and elderly adults born in the US, and a limited sample of immigrant populations. Considering the concern about food insecurity among resettled refugee communities, it is important to question the extent to which the HFSSM is a valid measure of food security for these communities. Resettled refugees, coming from a diversity of backgrounds and life experiences, may manage food and think about food insecurity in ways that differ significantly from the populations with which the HFSSM has been validated. If the current HFSSM cannot be sufficiently validated to measure food security in US resettled refugee populations, one concern could be that existing statistics are underestimates of the prevalence of food insecurity among resettled refugee communities (NRC, 2006). Another concern is the potential problem of misunderstanding how food insecurity is experienced and managed by the particular community members.

This could signal that current efforts to mitigate food insecurity for resettled refugees are insufficient or misdirected (NRC, 2006).

This chapter represents a comprehensive review of the literature related to the subjects of inquiry of this thesis - namely, the conceptualization and measurement of food security in the US and internationally, and previous studies examining food security and food behaviors among resettled refugees in the US and other Global North countries. Previous research in cross-cultural settings presents evidence both supporting and challenging the validity of the HFSSM for measuring food security in diverse populations. In order to adequately explore the extent to which the HFSSM is a valid instrument for measuring food security among resettled refugees living in the US, I argue that content validity needs to be further demonstrated, which has been missing from previous food security studies with resettled refugees in the US. A research project proposed by Dr. Linda Berlin and conducted by her and myself investigates food insecurity experiences among resettled refugees in Vermont in order to address our main research question: **To what extent does the HFSSM validly measure food security among resettled refugees living in the US?** Phase 1 of our research project explores this question qualitatively through focus groups with resettled refugees, and is the main focus of this thesis. Our research project also continues in a second phase in which we address the research question through individual interviews with resettled refugees and use quantitative analysis, but this second phase is beyond the scope of this thesis. In thinking more holistically and contextually about factors that influence the experience of food insecurity and that contribute to the problem, I added a second research question to be addressed in this thesis, which asks: **Which social and structural qualities of the local**

environment influence resettled refugees' experiences of food insecurity in Vermont?

History of “Food Security” Conceptualization and Measurement - International and US Frameworks

Defining Food Security Internationally:

The term “food security” originated from international efforts to understand and address food insufficiencies primarily in low-income countries, though it has since also been adopted by US researchers and policymakers concerned with issues of hunger in the US. In the global arena, collection of data on the overall food supply of countries began after World War I in the form of national food balance sheets, with the League of Nations Mixed Committee on the Problem of Nutrition initiating a large systematic comparison of this data in 1936 (FAO, 2001; Jones et al., 2013). The food balance sheets calculated the total amount of food produced in or imported into a country, and considered the total number of calories available per capita for the national population (Jones et al., 2013). Food balance sheets gained greater importance during and after World War II as Allied nations began to examine requirements for post-war rebuilding, and as global food shortages emerged in the aftermath of the war (FAO, 2001).

The world food crisis in the early 1970s provided extra impetus for the United Nations Food and Agriculture Organization (FAO) to hold the World Food Conference in 1974 (FAO, n.d.). Member governments signed onto the Universal Declaration on the

Eradication of Hunger and Malnutrition, which established that “every man, woman and child has the inalienable right to be free from hunger and malnutrition in order to develop fully and maintain their physical and mental faculties,” and declared the goal of eradicating hunger and malnutrition within 10 years (OHCHR, n.d.). The 1974 conference was also the first time the term “food security” emerged in the official international discourse on hunger and malnutrition (Jones et al., 2013). The use of the word “security” referred to the potential politically destabilizing effects of world food shortages (Jones et al., 2013), and the responsibility of the international community to therefore “ensure the availability at all times of adequate world supplies of basic food-stuffs” (OHCHR, n.d.).

In the 1974 conceptualization of food security, the focus was still on overall food *availability*. However, scholars like Amartya Sen began responding with arguments that an overall sufficient food supply does not necessarily equate to people actually getting enough food at the household or individual level (Coates et al., 2006; Jones et al., 2013; Sen, 1981; Webb et al., 2006). Sen demonstrated that famines have occurred even when national food supplies were sufficient, because conditions like poverty and high food prices prevented people from *accessing* the food that was available (Jones et al., 2013; Sen, 1981). Thus, *access* emerged as a second dimension of food security, with *availability* being the first (Jones et al., 2013; Webb et al., 2006), and in 1983 the FAO updated its definition of food security to include “physical and economic access” (Renzaho & Mellor, 2010). Evidence also began to emerge that food is not always accessed equitably *within* households, making it important to address issues of intra-household food allocation (Jones et al., 2013; Pinstруп-Andersen, 2009). This intra-

household distribution fell under another dimension of food security, *utilization*; in other words, household-level access does not guarantee individual-level consumption (Jones et al., 2013; Pinstrup-Andersen, 2009). Utilization can also reflect insufficient consumption of micronutrients through poor diet quality, which nutrition research began to emphasize in the 1990s, or can reflect the inability to absorb certain micronutrients due to an illness or other cause (Jones et al., 2013). Finally, scholars argued that *stability* should be a fourth dimension of food security, because food insecurity can be either “transitory” or “chronic,” where temporary shocks can lead to the diminishment of assets in order to cope in the short term, but through positive feedback cycles this process can lead to long-term chronic insecurity (Jones et al., 2013; Maxwell & Smith, 1992).

Taken altogether, we can see how the expanded definition of food security from the 1996 World Food Summit (slightly modified in 2009) reflects the above four dimensions of food security, along with the added importance of the social acceptability of food or of the means of acquiring it:

Food security exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life (FAO, 1996; FAO, 2009; FAO, 2014).

This definition of food security is the most commonly used definition in international food security research and monitoring (Jones et al., 2013).

Defining Food Security in the US:

Conceptualization of food security by the US government, particularly by the USDA, has followed a parallel but independent trajectory to that of the international FAO framework (Webb et al., 2006). The issue of hunger gained national public attention in the 1960s after CBS aired its 1968 documentary “Hunger in America,” which documented the occurrence of hunger in the US; and after the Senate Subcommittee on Employment, Manpower and Poverty also documented evidence of hunger in the Mississippi Delta (National Research Council (NRC), 2006). Previously, the issue of hunger had primarily been conceptualized in the context of the developing world as an issue of food availability, but this new awareness of hunger in the US indicated a need to understand its manifestation in high-income nations (Coates et al., 2006; NRC, 2006). The numerous research studies in the US that soon followed failed to reach any consensus on the definition of hunger or how to measure it, leading instead to a wide diversity of approaches (NRC, 2006). The inconsistencies in defining and measuring hunger were confirmed by the national investigatory Task Force on Food Assistance in 1984, an effort initiated by President Reagan to investigate the state of hunger in the US (NRC, 2006). The task force found there to be little evidence of the prevalence of chronic hunger that can lead to clear detectable physiological effects, but did find there to be evidence of people in the US having trouble getting enough food at certain times (NRC, 2006). The task force noted that without a clear way to define and measure hunger, securing policies and programs to mitigate hunger would be politically difficult (NRC, 2006). This led to renewed efforts to study, define, and measure hunger in the US, including the foundational hunger research by a team at Cornell University and a study of

hunger among children in low-income families in the US by the Community Childhood Hunger Identification Project (CCHIP) (Jones, et al., 2013; NRC, 2006).

Working out of Cornell, Radimer, et al (1990; 1992) conducted in-depth interviews with low-income women in New York, exploring their experiences of hunger or being “near” hunger. Through a grounded analysis of interviews with women in New York experiencing hunger, Radimer et al. (1992) identified four “components” of hunger - quantitative, qualitative, psychological, and social. At the level of the *individual’s* experience of hunger, these translated into insufficient food intake, nutritional inadequacy, feelings of deprivation, and disrupted eating patterns; while at the *household* level, they translated into food depletion, unsuitable food, anxiety about food, and acquiring food in socially unacceptable ways (Radimer et al., 1992). The four components were a particularly useful way to conceptualize hunger because they highlighted important areas that should be included in the measurement of hunger. In other words, for example, failure to include questions about the social acceptability of the household’s food in a survey about food insecurity would miss an important aspect and indicator of food insecurity. Radimer et al. (1992) also identified two different ideas of hunger, one “broad” and one “narrow” (p. 37S). The narrow concept involved an insufficient quantity of food, often accompanying a feeling of being hungry, while the broad concept involved other processes that often happened before cutting quantity, such as cutting food quality or feeling worried (Radimer et al., 1992). Additionally, Radimer et al. (1992) found a “managed process” to hunger, recognizing that the participants exercised a degree of control over the processes by which different components of hunger were experienced, and that these processes tended to have a common pattern:

Although hunger is managed differently by various households, there is a general sequencing of the experiences of hunger. Household hunger, in particular the food anxiety component, is often experienced first; the quantity and quality of women's food intake are soon affected, and household food quality may be as well. The quantity and quality of children's intake are generally not affected until later, and a disruption to children's eating patterns is rare. At the individual level, intake quality is generally affected before intake quantity (pp. 39S).

Identifying this managed process helped to reveal iconic behaviors that signal the severity level of food stresses (Webb et al., 2006). This was important for the creation of a unidimensional scale of food security level, referred to as the Radimer-Cornell Hunger Scale (Table 3) (Kendall, Olson, & Frongillo, 1996).

By 1990, the US Department of Health and Human Services (DHHS) had partnered with the American Institution of Nutrition to create an expert panel to discuss the "Core Indicators of Nutritional State for Difficult-to-Sample Populations," from which the Life Sciences Research Office (LSRO) of the Federation of American Societies for Experimental Biology published an influential report (Anderson, 1990; NRC, 2006). This report reflected a growing consensus on how to define and measure hunger in the US, which strongly reflected the Cornell hunger research results as well as the CCHIP results (Coates et al., 2006; Wehler, Scott, & Anderson, 1992). The LSRO chose a narrow definition for "hunger" while referring to the broader experiences surrounding or preceding hunger as "food security" (and insecurity) (NRC, 2006). The resulting definitions from the report were adopted by the USDA:

Food security: Access by all people at all times to enough food for an active, healthy life. Food security includes at a minimum (1) the ready availability of nutritionally adequate and safe foods and (2) an assured ability to acquire acceptable foods in socially acceptable ways (e.g., without resorting to emergency food supplies, scavenging, stealing, or other coping strategies).

Food insecurity: Limited or uncertain availability of nutritionally adequate and safe foods or limited or uncertain ability to acquire acceptable foods in socially acceptable ways.

Hunger: The uneasy or painful sensation caused by a lack of food, the recurrent and involuntary lack of access to food. Hunger may produce malnutrition over time... Hunger... is a potential, although not necessary, consequence of food insecurity (NRC, 2006, pp. 26).

These LSRO/USDA definitions contain many similar elements of food security as the FAO definition, with a few differences, reflecting degrees of divergence and convergence between the histories and bodies of research that influenced each definition, and their conceptual relationship to each other. The four “components” of hunger from the Radimer et al. (1992) framework - *quantity, quality, psychological, social* - are distinct from the “dimensions” of food insecurity that the international framework initially tracked at the national level - *availability, access, utilization, and stability*. However, there are also key areas of overlap, caused by the partial convergence of the two frameworks beginning in the 1980s. As mentioned, international attention began to turn to the dimension of food *access* and how to measure it in the 1980s after Amartya Sen and other scholars demonstrated the limitations of using *availability* to predict and

target hunger (Jones et al., 2013; Webb et al., 2006). At the same time, the dimension of *access* also became the key focus of the Radimer/Cornell hunger research in the US, where availability was not seen to be a primary concern for the wealthy nation (Jones et al., 2013; Webb et al., 2006). Indeed, in high-income countries, income and wealth are perceived to be the primary determinants of household food security (Renzaho & Mellor, 2010). In effect, the four conceptual components of food insecurity from the Radimer/Cornell research (*quantity, quality, psychological, social*) are seen to be experiential “domains” of the *access* “dimension” of food security (Figure 1) (Coates et al., 2006; Webb et al., 2006).

Measuring Food Security Internationally:

A variety of tools have been used to measure food security and similar concepts internationally. The choice of measurement tool depends on what exactly is meant to be measured and the intended purpose of the measurement (Jones et al., 2013). With the changing conceptualization of food security at the international level, a number of measurement approaches have been developed over the course of time. Despite widespread debate over which approach to use in which context, there have also been certain trends over time, as described by Webb et al. (2006). First, evidence demonstrating significant differences between national measurements of food availability and food security estimates based on household-level measurements has shifted attention from *availability* to *access* (Jones et al., 2013; Webb et al., 2006). The national-level food supply and utilization data collected by the FAO to estimate undernutrition is therefore helpful for comparing countries to each other and observing macro-level trends, but not

for precisely estimating the prevalence of food insecurity in each country (Jones et al., 2013; FAO, 2013). Other national-level measures incorporate information like child mortality and hunger, as in the Global Hunger Index, or use indices of agriculture and climate as early warning systems to predict famines, as in the Famine Early Warning Systems Network (Jones et al., 2013). However, most food security measurement approaches have turned to household-level indicators in order to assess the *access* dimension of food security (Jones et al., 2013; Webb et al., 2006).

A second important trend in international food security monitoring has been a shift from indirect proxy measures to more direct or fundamental measures of food security (Webb et al., 2006). Examples of popular proxy measures have been household consumption and expenditure surveys (HCESs) used by the FAO, and dietary diversity proxies like the World Food Program's Food Consumption Score (FCS) and USAID's Household Dietary Diversity Score (HDDS) (Jones et al., 2013). However, the lack of context-specificity of the proxy measures can lead to erroneous estimates of food security in certain regions where the proxies do not reliably hold the expected relationship to food security (Jones et al., 2013; Webb et al., 2006). Often, qualitative research is needed in order to identify locally-appropriate indicators and their associations with food security status, as is the case in the popular Coping Strategies Index (CSI) (Jones et al., 2013).

Third, the move from proxy indicators to more direct measures has also entailed a change in emphasis on objective to subjective standards (Webb et al., 2006). This stems from the nature of the phenomenon at hand - that of food security. Food insecurity, like poverty, is not simply an objectively-defined status, but rather/also a subjective *experience* (Webb et al., 2006). Thus, when Radimer et al. (1992) interviewed low-

income women in New York about their *experience* of hunger, they were able to identify four common domains of that experience (*quantity, quality, psychological, social*) (Jones et al., 2013). Radimer et al. (1992) also identified a common management process to the food insecurity experience, revealed through iconic behaviors (discussed above).

However, the relationship of these behaviors to the subjective experiential domains, and the reliability of the behaviors as indicators of food insecurity in other contexts, continues to be investigated internationally (Jones et al., 2013) and is also a subject of inquiry of our research and this thesis. Several reviews of international studies using the USDA food insecurity measurement tool (discussed below) found that households across contexts did experience the four domains of food insecurity, but did not experience the same subdomains or display all the same behaviors (Coates et al., 2006; Coates, Wilde, Webb, Rogers, & Houser, 2006; Jones et al., 2013). The commonality of the four experiential domains has led to efforts to develop a universal food insecurity measurement tool that can be applied across contexts, notably the USAID's 3-question Household Hunger Scale (HHS) (Table 1), FAO's Food Insecurity Experience Scale (FIES) (Table 2), and the Latin American and Caribbean Household Food Security Scale (ELCSA), all of which are similar to the USDA tool (Jones et al., 2013; Swindale & Bilinsky, 2006; Webb et al., 2006).

Next I discuss the USDA tool in greater depth, and then consider its validity in cross-cultural contexts compared to other possibilities for cross-cultural food security measurement, in order to thoroughly demonstrate why our grounded research approach to examining food security among refugees resettled in the US is both important and necessary.

Table 1. International Household Hunger Scale Module.

Q#	Item
Q1	In the past [4 weeks/30 days], was there ever no food to eat of any kind in your house because of lack of resources to get food?
Q2	In the past [4 weeks/30 days], did you or any household member go to sleep at night hungry because there was not enough food?
Q3	In the past [4 weeks/30 days], did you or any household member go a whole day and night without eating anything at all because there was not enough food?

Source: Ballard, Coates, Swindale, & Deitchler (2011). Each question is followed by a question of frequency of the item (“How often did this happen in the past [4 weeks/30 days]?”).

Table 2. Questions from FAO’s Food Insecurity Experience Scale.

During the last 12 months, was there a time when, because of lack of money or other resources:

1. You were worried you would not have enough food to eat?
2. You were unable to eat healthy and nutritious food?
3. You ate only a few kinds of foods?
4. You had to skip a meal?
5. You ate less than you thought you should?
6. Your household ran out of food?
7. You were hungry but did not eat?
8. You went without eating for a whole day?

Source: FAO (2017).

Measuring Food Security in the US:

In 1990, the enactment of the National Nutrition Monitoring and Related Research Act (NNMRR) (Public Law 101-445) mandated that the USDA and DHHS undergo a 10-year process to assess the US population’s nutritional status, with the recommendation that they develop a standardized instrument to define and measure food security (NRC, 2006). In response, the USDA and DHHS formed a collaborative research initiative, the Federal Food Security Measurement Project, with scholars and

organizations to develop a food security survey instrument, scale, and classification system (NRC, 2006). They also held the First National Conference on Food Security Measurement and Research in 1994, to further explore measurement issues and find areas of consensus among researchers (NRC, 2006). Most conference participants agreed that national measurement should focus on food security rather than hunger, should measure food security related only to resource restraints and not to other causes, should focus on elements of food security that could be captured in a household-level survey, and should focus on experiential and behavioral aspects of food insecurity (NRC, 2006). After the conference, the interagency working group further resolved technical issues with the survey by consulting the Cornell research, and conducted cognitive testing and a pretest in the field with the final draft of the survey (NRC, 2006).

A Food Security Supplement (FSS) was first added to the Current Population Survey (CPS) in 1995 (and every year since), which included an 18-item food security questionnaire, the US Household Food Security Survey Module (HFSSM) (Table 4) (NRC, 2006). The HFSSM directly measures food security status at the household level for a representative sample of the US population. The remaining questions of the FSS ask about food expenditures, sources of food, use of food assistance programs, and related questions, along with job and demographic questions (USDA ERS, 2016). The HFSSM has also been included in other national surveys such as the National Health and Nutrition Examination Survey (NHANES), and in state and local surveys as well. The 18 questions of the HFSSM are designed to capture indicators of the food insecurity experience, using the direct language of the Radimer study participants (Table 4). As the questions proceed, they indicate more severe levels of food insecurity. A score of 3 affirmative responses or

higher leads to the participant being classified with low to very low food security, which had previously been termed “food insecure.” These low food security classifications signal reductions in the quality, variety, food preferences, or quantity of food, or disruptions in meal patterns (USDA, 2014).

Table 3. Radimer/Cornell Hunger Scale items.

Household Level Food Anxiety Component	
1. I worry whether my food will run out before I get money to buy more.	
Household Level Quantitative Component	
2. The food that I bought just didn't last, and I didn't have money to get more.	
3. I ran out of the foods that I needed to put together a meal and I didn't have money to get more food.	
Household Level Qualitative Component	
4. We eat the same thing for several days in a row because we only have a few different kinds of food on hand and don't have money to buy more.	
Adult Level Qualitative Component	
5. I can't afford to eat properly.	
Adult Level Quantitative Component	
6. I am often hungry, but I don't eat because I can't afford enough food.	
7. I eat less than I think I should because I don't have enough money for food.	
Child Level Qualitative Component	
8. I cannot give my child(ren) a balanced meal because I can't afford that.	
Child Level Quantitative Component	
9. My child(ren) is/are not eating enough because I just can't afford enough food.	
10. I know my child(ren) is/are hungry sometimes, but I just can't afford more food.	

Source: Kendall, Olson, & Frongillo (1996).

Table 4. HFSSM survey questions and associated food access domains

Q#	Question	Domain
HH1*	Which of these statements best describes the food eaten in your household in the last 12 months: — enough of the kinds of food (I/we) want to eat; — enough, but not always the kinds of food (I/we) want; — sometimes not enough to eat; or, — often not enough to eat?	Quality, Social
HH2	“(I/We) worried whether (my/our) food would run out before (I/we) got money to buy more.” Was that often true, sometimes true, or never true for (you/your household) in the last 12 months?	Psychological, Quantity
HH3	“The food that (I/we) bought just didn’t last , and (I/we) didn’t have money to get more.” Was that often, sometimes, or never true for (you/your household) in the last 12 months?	Quantity

HH4	“(I/we) couldn’t afford to eat balanced meals .” Was that often, sometimes, or never true for (you/your household) in the last 12 months?	Quality
AD1	In the last 12 months, since last (name of current month), did (you/you or other adults in your household) ever cut the size of your meals or skip meals because there wasn't enough money for food?	Quantity, Social
AD2	In the last 12 months, did you ever eat less than you felt you should because there wasn't enough money for food?	Quantity, Social
AD3	In the last 12 months, were you ever hungry but didn't eat because there wasn't enough money for food?	Quantity
AD4	In the last 12 months, did you lose weight because there wasn't enough money for food?	Quantity
AD5	In the last 12 months, did (you/you or other adults in your household) ever not eat for a whole day because there wasn't enough money for food?	Quantity
CH1	“(I/we) relied on only a few kinds of low-cost food to feed (my/our) child/the children) because (I was/we were) running out of money to buy food.” Was that often, sometimes, or never true for (you/your household) in the last 12 months?	Quality
CH2	“(I/We) couldn’t feed (my/our) child/the children) a balanced meal , because (I/we) couldn’t afford that.” Was that often, sometimes, or never true for (you/your household) in the last 12 months?	Quality
CH3	"(My/Our child was/The children were) not eating enough because (I/we) just couldn't afford enough food." Was that often, sometimes, or never true for (you/your household) in the last 12 months?	Quantity
CH4	In the last 12 months, since (current month) of last year, did you ever cut the size of (your child's/any of the children's) meals because there wasn't enough money for food?	Quantity
CH5	In the last 12 months, did (CHILD’S NAME/any of the children) ever skip meals because there wasn't enough money for food?	Quantity, Social
CH6	In the last 12 months, (was your child/were the children) ever hungry but you just couldn't afford more food ?	Quantity
CH7	In the last 12 months, did (your child/any of the children) ever not eat for a whole day because there wasn't enough money for food?	Quantity

Source: USDA (2016).

After the HFSSM and FSS administration began in 1995, the USDA and DHHS contracted with researchers to review technical issues of the surveys and statistical issues with the Rasch model used to scale the survey responses to measure food security status (NRC, 2006). One issue flagged early on in this process was a concern about how well food security could be measured in subpopulations using the HFSSM. A group of Iowa

State University researchers argued that different households in different population groups may interpret the survey questions differently, which is inconsistent with the Rasch model assumption that all households will interpret the questions the same way (NRC, 2006). They also pointed out that food insecurity may be experienced differently by different population groups, particularly given the complexity of the concept of food security, which could lead to underestimates in certain population subgroups (NRC, 2006). This issue was not immediately resolved, but has continued to be a part of assessments of the HFSSM. A second conference was held in 1999, after which the Interagency Working Group on Food Security Measurement identified priorities for further research and refinement of the measure (NRC, 2006). One of the priorities identified was for further research about food insecurity in “high-risk” groups, such as children, elderly, and homeless, but there was no mention of culturally diverse populations that might be at higher risk, such as refugees and immigrants (NRC, 2006).

Given that international researchers have turned to exploring the possible application of the HFSSM in other national and cultural contexts, it is both timely and important to consider the validity of the HFSSM for measuring food insecurity among diverse populations, including resettled refugees. It is important to consider its validity specifically for resettled refugees for several reasons. First, refugees and asylum seekers represent particularly vulnerable populations in resettlement countries (Phillimore, 2010). Second, the international and cross-cultural research exploring the validity of the HFSSM through grounded qualitative approaches as we aim to do (e.g. Coates, Wilde, Webb, Rogers, & Houser, 2006) has not focused much on resettled refugees. Resettled refugees, asylum seekers, and other populations who have experienced traumatic violence or

extreme food deprivation, as well as the trauma of being forced to flee home, may experience food insecurity in particularly unique ways that may not be well represented by the experiences of food insecurity of other populations with whom the HFSSM or similar scales have been validated (Piwowarczyk, Keane, & Lincoln, 2008). Third, in the US specifically, the HFSSM is the tool most likely to be administered to resettled refugees in order to measure their food security status. Understanding the experiences of food insecurity and measuring its prevalence in different resettled refugee communities is essential for creating policies and programs that will effectively address food insecurity in those communities.

Next I review international efforts to measure household-level food insecurity that have explored the validity of the HFSSM in cross-cultural settings or argued for an alternative framework. This will help to establish a conceptual framework that I then use to review previous research that *has* attempted to measure food insecurity among refugees resettled in the US, and allow me to discuss the ways in which such research has not adequately explored food security measurement for these populations. My discussion raises the question of what is the best measurement approach for populations living in the US who were born outside of the US, particularly populations born in low-income countries. Can the HFSSM validly be used to measure food insecurity among these populations in the US? In which ways can food insecurity research with populations outside of the US help us to answer this question, and in which ways is such research less applicable to resettled refugees or to the US context? Our research, beginning with this thesis, aims to address these questions.

Cross-Cultural Household Food Security Measurement Research

Two key literature reviews (Coates et al., 2006; Renzaho & Mellor, 2010) look at food security measurement studies across cultural contexts. Because each article reviews multiple other studies, they can offer compelling evidence for their respective frameworks for conceptualizing food security across cultures. We can then ask to what extent the similarities and differences they identify in measuring food security across cultures might also apply to refugees resettled in the US.

Applying the Four Domains of “Access” Internationally

Coates et al. (2006) review research studies across different nations and cultures that have either used a version of the HFSSM or have directly qualitatively examined household experiences of food insecurity. They find confirming evidence in the majority of the studies that households across these cultural contexts experienced food insecurity through the four domains also found in the Radimer et al. (1992) research - *insufficient quantity, insufficient quality, uncertainty and worry* (“psychological” in Radimer et al. (1992)), and *social unacceptability* (Coates, et al., 2006). However, they also find several important inconsistencies between the cross-cultural research and the HFSSM. First, the specific ways in which each domain manifests - what Coates et al., (2006) call “subdomains” (e.g. disrupting typical meal patterns, in the *quantity* domain) - are more variable between cultures. This means that when measuring food insecurity in different

cultural contexts, some degree of qualitative research in each cultural context will need to inform which specific subdomains and behavioral indicators are included in the measurement scale (Coates, et al., 2006). In other words, the HFSSM cannot be assumed to be a valid measurement of the food insecurity experience when directly translated across cultures. The Coates et al. (2006) meta-analysis helped to demonstrate the limitations of previous studies that had found strong associations in several countries between the HFSSM and indicators thought to correspond to food insecurity, such as food expenditures, dietary diversity, and household income (Coates, Webb, & Houser, 2003; Frongillo & Nanama, 2006; Jones et al., 2013; Nord, Sathpathy, Raj, Webb, & Houser, 2002; NRC, 2006; Pérez-Escamilla, et al., 2004).

Second, Coates et al. (2006) found that the *order* in which the domains were experienced across cultures was also variable. In Radimer et al. (1992), and in many of the studies reviewed by Coates et al. (2006), *worry* tended to precede cutting *quality*, which tended to precede cutting *quantity* and experiencing hunger. When food insecurity is experienced consistently enough in a certain order, as with the Radimer et al. (1992) participants, then the food insecurity experience lends itself to a unidimensional measurement of severity. In other words, if a respondent answers affirmatively to having worried but not to cutting quality, they score less severely on the food insecurity scale than someone who responds affirmatively to having cut quality or quantity. However, across cultures the order is different (Coates et al., 2006). For example, in two Burkina Faso studies, worrying was more or as severe as cutting quality (Frongillo & Nanama, 2004; Melgar-Quinonez, 2004), while in a New Zealand study worrying was as severe as cutting quantity (Parnell, Reid, Wilson, McKenzie, & Russell, 2001) (Coates et al.,

2006). These variations in the order of experiences means that across cultures the experience of different domains indicates different severity levels of food insecurity. More research is needed to understand what explains such variations, but for now it cannot be assumed that the HFSSM severity scale will apply validly across cultures (Coates, et al., 2006).

Third, because research across cultures shows evidence for all four domains of the food security experience, caution should be taken in attempting to apply the HFSSM across cultures because the *HFSSM itself does not cover all four domains* (Coates, et al., 2006). In the process of development of the HFSSM, the social acceptability domain at the household level was removed because it did not meet the criteria of the Rasch statistical model used to validate the scale (Hamilton et al., 1997). Therefore, food security measurement across cultures would need to consider including domains and subdomains that the HFSSM has excluded based on the populations with whom it has been validated, primarily native-born US residents and several groups of immigrants (Coates et al., 2006; Kendall, Olson, & Frongillo, 1995; NRC, 2006).

Additional research since the Coates et al. (2006) review article supports their conclusion that the four *access* domains appear to be universal, but that qualitative research in each context is necessary in order to make a locally-adapted version of a scale measuring the four domains. A comparison of three countries (Bolivia, Burkina Faso, Philippines) found that a translated HFSSM short form corresponded well to measures associated with food security, like food expenditures, but also found that qualitative research should inform the design of specific items in the scale (Melgar-Quinonez, et al., 2006; Webb et al., 2006). A study in Bangladesh that generated a food security scale

through ethnographic research compared qualitative and quantitative methods for determining locally-valid scale items, and found that there were degrees of agreement and disagreement between the two approaches. This indicated that the strongest approach for designing a locally-valid measurement scale would combine both qualitative and quantitative approaches (Coates, Wilde, Webb, Rogers, & Houser, 2006).

A group of researchers and organizations came together in 2004 at the first Food Insecurity Measurement Workshop, guided by the goal of the USAID's FANTA project to create a "generic measure of access that will be valid, easy to use, and allow some degree of comparability across regions and countries" (Webb, et al., 2006, p. 1407S; Swindale & Bilinsky, 2006). Workshop participants agreed on the applicability of the four household experiential domains of access, and worked on developing survey items that could be easily adapted to local contexts, resulting in the 9-item Household Food Insecurity Access Scale (HFIAS) (Coates, Swindale & Bilinsky, 2006; Jones et al., 2013). However, a validation study of the HFIAS data by its authors found that the HFIAS did not meet criteria for cross-cultural validity or internal validity due to problems like differential responses between income levels, issues with translating the questions into different languages and maintaining the distinction between items, and inconsistencies in severity levels calculated (Deitchler, Ballard, Swindal, & Coates, 2010; Jones et al., 2013). They recommended instead using the Household Hunger Scale (HHS), which reduced the scale from 9 to 3 items that measured the more severe levels of food insecurity (Table 1). The HHS showed stronger evidence of cross-cultural validity. At the same time, reducing the scale to just 3 items limits the domains and severity levels assessed by the measure, making it more of a measure of hunger than food insecurity

(Jones et al., 2013). This suggests that while the more severe experiences of food insecurity may have strong cross-cultural relevance, the less severe manifestations of food security are more context-dependent and thus require additional qualitative examination in each context.

Previous research with resettled refugees in the US and other high-income countries seems to provide evidence in support of the argument of Coates et al. (2006) that the four domains of food security experiences (*quantity, quality, social, psychological*) can generally be found across cultures, but that how they manifest specifically will vary and may be different from the HFSSM in significant ways. For example, in terms of *quantity*, Gallegos, Ellies, and Wright (2008) concluded from research with resettled refugees in Australia that for refugees who have experienced long-term or extreme disruptions and food deprivation in their lives, the current state of quantity or “usual” patterns can seem better by comparison, though still not what others may consider sufficient. Another study in the US found that Hmong participants didn’t feel full unless their meal contained rice (Franzen & Smith, 2009), indicating that sufficient *quantity* may also be tied to *quality* and *social acceptability* in culturally dependent ways.

The unique life history experiences of refugees can also affect the *psychological* domain of food security. Several studies found that refugee participants had experienced past food deprivation or trauma that has impacted their psychological relationships to food (Gallegos, Ellies, & Wright, 2008; Peterman, Wilde, Silka, Bermudez, & Rogers, 2013; Patil, Hadley, & Nahayo, 2009). Evidence of other populations who have experienced traumatic events and episodic food access has shown associations with

disordered eating, leading to speculations about whether this may also apply to some resettled refugees (Polivy, Zeitlin, Herman, & Beal, 1994; Patil, McGown, Nahayo, & Hadley, 2010). At the very least, a plethora of examples demonstrate numerous ways that experiences in resettlement environments and societies can lead to high degrees of stress for resettled refugees and asylum seekers, and can impact mental health and well-being (Phillimore, 2010). Such challenging experiences can also impact processes of adaptation to the new resettlement country in multiple ways.

The subjective perception of food *quality* is also highly variable between cultures, including among resettled refugees. For example, in their study of Somali refugees in the US, Dharod, Croom, Sady, & Morrell (2011) found that it was not considered unusual or undesirable to eat the same types of foods every day, unlike the Radimer et al. (1992) results. At the same time, another study with multiple refugee groups in the US did find that as food stamps began to run out during the month, diets became more monotonous than the beginning of the month (Patil, McGown, Nahayo, & Hadley, 2010). Another example is a common tension found between nutritional quality and desirability of food in research with resettled refugees. In several studies, foods that were considered higher status, or foods that were considered more desirable because they were “American,” often coincided with foods high in saturated fats or other nutrients associated with weight gain and chronic disease (Hadley, Zodhiates, & Sellen, 2007; Harris & Story, 1989; Patil, Hadley, & Nahayo, 2009). Resettled refugees arrive with their own ideas of what is healthy and nutritious, and this may not coincide exactly with the US dietary guidelines (Trapp, 2010). For example, the perception that natural foods are healthier is common among some refugee groups, leading to perceptions that US milk or canned food is

unsafe or unhealthy (Trapp, 2010). Lack of familiarity with foods available in the US or how to prepare them can lead to more monotonous diets, lower consumption of fruits and vegetables, and higher consumption of convenience foods and sugary drinks, as one study found with Sudanese refugees (Willis & Buck, 2007). These complexities of sufficient food *quality* also cross conceptual territory with the domain of *social acceptability*, and with the dimension of *utilization* when we consider knowledge of locally-available food and food preparation to be an element of *utilization* (discussed more below).

Disruptive life events and a variety of cultural factors can shape the boundaries of *social acceptability* for resettled refugees in ways that differ from populations with whom household food security has been more closely explored. *Social acceptability* guides which foods are preferable or acceptable, which mediates the *access* dimension. For example, in a study with Liberian and Somali Bantu refugees, participants explained that *finding* the culturally appropriate foods that they liked wasn't an issue, but that cost as well as quality was a greater concern for those foods that were locally available (Patil, Hadley, & Nahayo, 2009). At the same time, because of the importance of social acceptability of food, meeting food needs is not simply a matter of switching one's diet to more affordable (but different) foods. Hence, *social acceptability* cannot be separated from the domains of *quantity* and *quality*, and is a lens through which both are mediated. This also applies to foods associated with status.

Several studies found that participants preferred to consume foods that they had associated with higher status in previous countries, such as rich meats and soft drinks, which also tended to lead to weight gain (Patil, Hadley, & Nahayo, 2009; Trapp, 2010; Harris & Story 1989). They also tended to consume these higher status foods due to their

perceived relative affordability compared to other (healthier) culturally appropriate foods (Patil, Hadley, & Nahayo, 2009). However, social acceptability, as well as status, is not static or uniform. Food carries meaning for people, including its association with status, but those meanings are dynamic and subject to change. Trapp (2010) explains that significant structural change can cause people to change their categories of meaning related to food. This can include experiences of food deprivation and food rations in refugee camps, and the resettlement process that can again involve significant social and environmental changes related to food. For example, refugee camps can make it difficult to maintain old social hierarchies due to everyone eating the same food and seeing each other do so (Trapp, 2010). Resettlement can also provide new opportunities for social status and wealth that were not previously available, especially for previously more marginalized groups or individuals. For example, one common finding is that power dynamics between parents and children often begin to be renegotiated in cases where children serve as language-translators for the parents (Patil, Hadley, & Nahayo, 2010; Trapp, 2010). Trapp (2010) astutely points out that “it is within these structures that refugees work out social meaning and organization” (p. 162). This also means that adaptation to new food environments is an unfolding and complex process.

The process of adaptation to a resettlement country is often discussed under the term “acculturation,” which has been the subject of many studies that examine dietary change in refugee populations, though not always studies that examine food security (Boyle & Ali, 2009; Dharod, Croom, Sady, & Morrell, 2011; Hadley, Zodiates, & Sellen, 2007; Patil, Hadley, Nahayo 2009; Patil, McGown, Nahayo, Hadley, 2010; Peterman, et al 2013; Phillimore, 2010; Trapp, 2010; Wang, Min, Harris, Khuri, & Anderson, 2016).

What acculturation *is* and what influences it are both subjects of theoretical debate. A simplistic definition of acculturation is the process by which a newcomer to a society comes to take on cultural habits of that host society, including diet (Hadley, Zodiates, Sellen 2007); but this notion of acculturation has been heavily criticized (Phillimore, 2010). For one, it relies on a simplistic and vague notion of what the “host culture” is (Patil, McGown, Nahayo, Hadley, 2010). Second, it implies adaptation in only one direction, which Phillimore (2010) argues is simply assimilation. Integration, on the other hand, involves a more mutual adaptation, while marginalization or separation can also happen (Phillimore, 2010). The cultural identity school of thought on acculturation, influenced by Hall (1990, 1997), and Bhatia and Ram (2001), views acculturation as a more complex “ongoing negotiation between past and present, and country of origin and country of refuge, wherein identity is contested and constantly moving,” and where identity is situated within historical and political contexts (Phillimore, 2010, p. 590). In epidemiological studies, proxies for acculturation are often used for the sake of statistical analysis, such as time since arrival to a host country and proficiency in the language of the host country. This use of proxies has also been critiqued because “divorce(s) food and well-being from the social and ecological contexts in which decision-making takes place” (Patil, McGown, Nahayo, Hadley, 2010).

I mention the acculturation debate in order to elucidate the complexity in trying to define or identify *social acceptability*, particularly since it is ever changing, multifaceted, and nonuniform. It is also a domain which certain people or communities will carry more social stigmas than others in openly discussing (Gallegos, Ellies, & Wright, 2008). It is perhaps for these reasons that the USDA removed the *social acceptability* domain from

the final HFSSM due to its inconsistent statistical performance (Kendall, Olson, & Frongillo, 1996). At the same time, by omitting this domain from food security measurement, we leave out a significant aspect of food security, especially when we are attempting to measure it in contexts of cultural plurality where numerous groups of people may experience food insecurity in unexpected ways, and where *social acceptability* also mediates the other domains of food security in significant and diverse ways. This complexity, and the cultural variability to each of the four *access* domains (as evidenced by the previous dietary research with resettled refugees), strongly suggests that it would be beneficial to conceptualize food insecurity among resettled refugees from the ground up, as we do with our research. Measuring food security among resettled refugees simply cannot rest on the assumption that every single nationality of resettled refugees in the United States experiences food insecurity in the same way as each other or as the populations with whom the HFSSM has been validated in the US. We must *also* consider whether simply measuring the *access* dimension is enough to capture the diversity of household or individual food insecurity experiences. Some scholars argue for including all four dimensions of food security (*availability, access, utilization, stability*) for measurement at the household or individual level, which I now discuss.

Applying the Four FAO Dimensions through the Livelihoods Framework

Renzaho and Mellor (2010) also review previous food insecurity studies across cultural contexts, but argue for a different “livelihoods framework” for conceptualizing food security. They discuss that the USDA food security definition and accompanying four domains are “inappropriate for many countries experiencing natural and human

made disasters, and whose population's livelihood relies on migration wages, kinship support, or wild animal and food hunting as part of its normal livelihood mechanism" (p. 3). Here the environmental and cultural contexts matter for how we think about food security, and both of them can differ dramatically between countries. In low-income countries, food insecurity related to armed conflict, agricultural failures, HIV, land ownership issues, or low access to markets, for example, might need to be conceptualized differently than food insecurity due to limited household income in a wealthier nation (2010). At the same time, even in high-income countries where *access* tends to be the predominant dimension of food insecurity, households can still experience problems along the other food security dimensions of *utilization* and *stability* (2010). Therefore, in any situation of food security measurement, it is problematic to only focus on the *access* dimension (2010). Especially when we extend the timeframe for which we are examining food security, we see other important considerations on the part of households come into play, which is key to the livelihoods framework approach (Maxwell, 1996). The livelihoods framework looks at long term resilience, not just short-term nutritional intake (Maxwell, 1996). In reviewing international changes in the conceptualization of food security, Maxwell (1996) writes:

Thus, de Waal (1989) found in the 1984/85 famine in Darfur, Sudan, that people chose to go hungry to preserve assets and future livelihood: 'people are quite prepared to put up with considerable degrees of hunger, in order to preserve seed for planting, cultivate their own fields or avoid having to sell an animal' (de Waal 1991, p. 68) ... In part, these findings reflect an issue of time preference: people going hungry now, in order to avoid going (more) hungry later. However, there is

a broader issue of livelihood at stake, in which objectives other than nutritional adequacy are pursued (p. 158).

This quotation suggests that broader household livelihood considerations are inextricably tied to how food insecurity is perceived and experienced by households. In a similar vein, Renzaho and Mellor (2010) argue that food security should be conceptualized and understood along all four of its dimensions - *food availability*, *food access*, *food utilization*, and *asset creation* (“stability” in the FAO framework).

With the livelihoods framework of food security, Renzaho & Mellor (2010) essentially advocate for applying each of the four FAO food security dimensions to the household level. They demonstrate why it is important to consider all four dimensions when looking at household food security. In terms of *availability*, for example, Renzaho & Burns (2006) found that food preferences among sub-Saharan immigrants in Australia were connected to pre-migration notions of high- and low-status foods as well as other cultural norms, and that “therefore it does not matter how many fruit and vegetable groceries are made available in suburbs with high concentrations of African migrants; buying and consuming these food is culturally bound” (Renzaho & Mellor, 2010, p. 6). Here Renzaho & Mellor argue that cultural appropriateness of available foods is an essential consideration for *availability*. In contexts of migration to new food environments and dietary habits, processes of adaptation are complex and multidimensional, depending on a range of social and environmental factors and different between individuals and groups (Renzaho & Mellor, 2010; see also above discussion).

Previous research with resettled refugees in the US and other high-income countries seems to also support the argument of Renzaho and Mellor (2010) that is it

important to include all four dimensions of food security (*availability, access, utilization, asset creation*) when conceptualizing and measuring food security in different cultural contexts. In terms of *availability*, several studies with resettled refugees found that some participants experienced difficulty in finding culturally appropriate foods in their local environment, while in other cases the foods were available but financially less accessible due to their higher cost (Hadley, Zodhiates, & Sellen, 2007; Harris & Story, 1989; Patil, Hadley, Nahayo 2009; Peterman, Wilde, Silka, Bermudez, & Rogers, 2013), or they were available but perceived to have low quality (Patil, Hadley, Nahayo 2009). Currently, issues of *availability* don't appear in the HFSSM. This makes sense, given that the questionnaire was developed in the context of a nation where food is typically available even if not accessible. However, in the case of refugees or immigrants, the availability of culturally appropriate foods may be a concern and therefore should possibly be included in a food security measure.

In considering food security in the context of overall household resources and local community, I suggest that we might also consider including a resources element in *availability*, in addition to the availability of food. This distinguishes the problem of not being able to access resources from the problem of those resources not even *existing* in the local environment to be able to be accessed. As Kibria (1994) points out, the ability of households to access a diversity of resources only extends as far as which resources are actually available and facilitated through the local environment. In some sense, what this consideration contributes to our conceptualization is to recognize that there is always inherently a *geographic* component to food security. The *availability* dimension seems to be the dimension most conceptually tied to physical geography, and therefore without

this dimension in our considerations of food security we are missing important aspects of geographic variation in short and long-term access to food.

Access refers to the factors that mediate one's ability to acquire available foods. The HFSSM captures only *financial* access by asking whether the household had enough money to acquire sufficient food. Access can also be mediated by physical barriers. For example, challenges with transportation to food stores have been well documented in American populations in the food access literature centered around the concept of food deserts (Bitto, Morton, Oakland, & Sand, 2003; Caspi, Sorensen, Subramanian, & Kawachi, 2012; Lake & Townshend, 2006; Yeager & Gatrell, 2014). Limited means of transportation can impact which stores people patronize, which foods they buy, and the frequency of purchases and preparation. In studies with resettled refugees, participants expressed struggling with such issues of transportation in ways that shaped their dietary patterns (Gallegos, Ellies, & Wright, 2008; Patil, Hadley, & Nahayo, 2009). With public transportation, participants couldn't do multiple shopping trips at once due to the inconvenience of extra wait time, transfers, limitations in service hours, and the difficulty of carrying heavy loads (Patil, McGown, Nahayo, & Hadley, 2010). Those participants who were among the first of their nationality to arrive to an area had even greater difficulties navigating public transportation and finding food stores (2010). Additionally, participants had safety concerns when taking public transportation or even leaving their houses at certain hours; many lived in low-income areas and also experienced being targeted and harassed for being foreigners, suggesting that personal *safety* is also an important aspect of *access* (2010). For these reasons, access to a car was a priority for most participants. Those who didn't own cars often shared rides with those who did

(Patil, Hadley, & Nahayo, 2009; Patil, McGown, Nahayo, & Hadley, 2010). However, one concern about the infrequent shared shopping trips is the possibility of it resulting in more convenience shopping in between, resulting in consumption of less healthy foods (Patil, Hadley, & Nahayo, 2009).

Access can also be mediated by culture and forms of knowledge. For example, a number of resettled refugee participants struggled with linguistic accessibility related to English proficiency and literacy, which led to difficulties reading signage and food labels and being able to ask for help, among others (Hadley, Zodhiates, & Sellen, 2007; Harris & Story, 1989; Peterman, Wilde, Silka, Bermudez, & Rogers, 2013). Similarly, some participants experienced “surprise and confusion” when shopping in large grocery stores shortly after arrival, a shopping environment they had not previously experienced (Patil, McGown, Nahayo, & Hadley, 2010). US shopping environments, the types of foods contained in stores, and systems of pricing and purchasing can be more or less familiar to recent arrivals depending on previous experiences (2010). For example, participants in Harris and Story (1989) had previously been accustomed to shopping daily at open markets or growing their own food, not once per week at large grocery stores. How quickly new arrivals become acquainted with the new environment and where to find affordable and culturally appropriate foods can depend on the extensiveness and cohesiveness of social networks already established in that place, and on the orientation process provided by caseworkers and resettlement agencies (Patil, Hadley, & Nahayo, 2009).

I suggest that we might also consider that access to resources may be an element of *access* to food. Even if food-related community services and programs are available in

a city, resettled refugees can still face barriers in accessing and utilizing those services. Again, this can be related to language barriers, cultural appropriateness or familiarity, transportation, or other barriers. Bose (2014), for example, demonstrated that in Chittenden County, Vermont, difficulties with mobility significantly impacted refugee's employment, healthcare, and educational opportunities, key aspects of the self-sufficiency and socialization needed for successful integration into refugees' new communities - which are also key elements needed for food security. Additionally, whether those resources are socially acceptable or not can be highly variable. Renzaho & Mellor (2010) argue that the norms surrounding what is socially acceptable and also what is considered an "emergency" measure (such as acquiring food from a local food shelf) can change over time and vary between households and communities (2010).

When considering the various kinds of *access* besides financial access, we can see even more ways in which the complexities of *social acceptability* can complicate our notions of *access* and how to measure it. This point is illustrated by Willis' & Buck's (2007) research with Dinka and Nuer Sudanese refugees. Participants in this study came from pastoralist communities, in which a more collectivist culture facilitated access to resources and food through kinship networks (2007). Not only did the participants face many of the barriers mentioned above after arrival, but they also had to adapt to the US State Department's expectation that they become economically "self-sufficient" within six months of arrival, in an environment where economic and food systems and notions of "self-sufficiency" functioned extremely differently than they were accustomed to (2007). It is difficult to measure these kind of culturally-mediated access barriers, and yet we cannot ignore them when considering diverse food insecurity experiences.

Utilization means that food is not only accessed but also actually *used* by *all* people in the household. One component of utilization is the nature of food distribution *within* the household. Inequitable food distribution, particularly in times of resource shortages, has been shown to occur in households that prioritize children or male breadwinners for feeding (Pinstrup-Anderson, 2009; Renzaho & Mellor, 2010). Different cultural expectations and dynamics of power mediate how equally household resources are shared and who is responsible for managing that process. Kibria (1994) found that the strength or weakness of collectivist family ideologies impacted whether resources were pooled and distributed evenly within the household. Patil, Hadley, and Nahayo (2009) also demonstrated that social expectations can shape the sharing of resources with friends and guests, which suggests that *utilization* may also need to include the sharing of household food with non-household members. Another valuable consideration in the case of some refugee and immigrant groups is that the “household” may consist of non-traditional family arrangements, which can lead to a renegotiation of roles and sharing behaviors (Kibria, 1994). The HFSSM incorporates *utilization* only in that it considers child hunger to be an indicator of more severe food insecurity than adult hunger, because of its expectation that all households prioritize feeding of children over caretakers. It may be problematic to assume that the same is true across all cultures; to the contrary, studies suggest that this is not the same across cultures (Pinstrup-Anderson, 2009; Renzaho & Mellor, 2010). The intra-household distribution component of *utilization* makes the measurement of food security at the household level problematic. Accounting for inequitable distribution within households is still a significant challenge for food insecurity measurement efforts, partly because it implies the less-feasible option of

having to measure food security at the *individual* level for every household member (Webb, et al., 2006).

At the household level, *utilization* also requires adequate facilities and equipment to prepare and store food, knowledge of nutrition and cooking, time to prepare foods, adequate housing, clean water, and adequate healthcare and sanitation services (Renzaho & Mellor, 2010). For example, in Renzaho's and Mellor's study with sub-Saharan immigrants to Australia, 33% said that they ate fast food at least once a week, which was due to not having enough time to cook (25%), not having the right cooking facilities or air conditioning for the kitchen in the summer (9.2%), or lack of cooking knowledge (0.8%) (Renzaho & Mellor, 2010). Several participants in Australia in Gallegos, Ellies, and Wright (2008) didn't have working stoves or fridges, or didn't know their rights to ask their landlords to fix them. Others couldn't prepare foods because their electricity had been cut off, or because lack of air conditioning in the summer made the kitchen unbearable (Gallegos, Ellies, & Wright, 2008). Participants in another study had off-shift and low-paying jobs and relied on public transportation, which greatly reduced the time they had to cook or even eat (Patil, Hadley, & Nahayo, 2009). This affected the quality, quantity, and social acceptability of their food intake.

Knowledge of nutrition and cooking also emerged as a problem in previous studies, with reference to "American" foods (Hadley, Zodhiates, & Sellen, 2007; Harris & Story, 1989; Peterman, Wilde, Silka, Bermudez, & Rogers, 2013). In many cases, participants expressed wanting to know more about cooking American foods because participants' children preferred American foods, while in other cases it was because American foods were perceived to be cheaper (Harris & Story, 1989; Patil, Hadley,

Nahayo 2009; Patil, McGown, Nahayo, & Hadley, 2010; Trapp, 2010). Children were found to be significant agents of household dietary change in several studies, which in some cases led to generational conflicts within the households or led to weight gain in the children (Patil, McGown, Nahayo, & Hadley, 2010; Trapp, 2010). These differences in dietary preferences *within* households raises questions about how we should define *social acceptability* for a household and whether we should look at individual household members. Either way, if we account for participants' expressed desire to cook American foods in their households, knowledge of nutrition and cooking of these foods then becomes an important component of *utilization*. Here it then also becomes important to consider *how* resettled refugees become familiar with the nutrition and cooking of certain foods available in the US. Several studies found that caseworkers were a significant mediator in this knowledge, as the introduction to the new environment by the caseworker was often the primary source of this knowledge for participants (Trapp, 2010). Patil, Hadley, and Nahayo (2009) suggest that "refugees themselves often view their caseworkers as experts on life in America and therefore, regardless of their training, rely on them for expert advice even in areas in which they may have no expertise, such as nutrition" (p. 344). In other cases, participants consulted caseworkers for advice on what to feed their children and how to budget in the US (Patil, McGown, Nahayo, & Hadley, 2010). In turn, the orientation and advice offered by the caseworkers was dependent on the caseworker's own priorities, beliefs, and time constraints. Some caseworkers described introducing new arrivals to the cheapest stores in the area, while others brought them to fast-food establishments for a quick meal, thus introducing them to food environments and behaviors that influenced the dietary choices of new arrivals (Patil,

McGown, Nahayo, & Hadley, 2010; Trapp, 2010). When this kind of nutrition education wasn't framed in culturally appropriate ways, it could lead to unhealthy dietary habits (Patil, McGown, Nahayo, & Hadley, 2010; Trapp, 2010). This advice from caseworkers might be especially influential for resettled refugees who had not previously learned to prepare foods, such as single men raised in cultures where women typically prepare the food (Willis & Buck, 2007).

Though not often discussed in the literature, *utilization* would also require the food to be culturally appropriate in order to be consumed by members of the household. In most cases cultural appropriateness registers under the *access* or *availability* dimensions, but in cases where households receive culturally inappropriate foods, such as through WIC or other food programs, the lack of cultural appropriateness of the food can prevent the foods from actually being consumed in the household.

Utilization also includes biological utilization, such that individuals' bodies actually absorb the nutrients from the food consumed (Renzaho & Mellor, 2010). Micronutrient deficiencies, disease, unhygienic conditions, or lack of access to clean water can affect biological utilization. For this reason, some methods of food security and vulnerability measurement include access to sanitation facilities in food security assessments (Jones, Ngure, Pelto, & Young, 2013). This may apply more in low-income country contexts than high-income.

Finally, *asset creation* is a missing dimension of the food security definitions, unless we consider it to be included by implication in "at all times." Assets refer to resources with longer term investments that can help buffer shocks, as opposed to the ability to acquire food in the immediate term. Assets are important when considering a

household's vulnerability to becoming food insecure. Simply asking about "anxiety" or "uncertainty" may not fully capture such vulnerability. When looking at food security, Renzaho & Mellor (2010) emphasize that it is important to consider whether households are depleting, maintaining, or building their assets. In other words, food insecurity must be understood in the larger resource management contexts of the household, and in the longer term. This would also mean that when looking at a household's food security status, it is important to also consider which tradeoffs are involved in either meeting or not meeting the household's food needs. For example, if a family has enough to eat but it comes at the cost of depleting savings or having inadequate housing, perhaps we should not consider them to be food secure, as Renzaho and Mellor (2010) argue. It would indicate an overall level of resource insecurity in the household. As another example of tradeoffs, two households may have similar levels of resources and expenses, but may prioritize spending differently in terms of food versus other expenses. This could result in one family being measured as food secure, and the other as food insecure. However, both are working with similar levels of limitations and barriers. A third tradeoff example that applies to some resettled refugees is the difficult negotiation between receiving SNAP benefits versus gaining employment (often part-time and temporary) and losing benefits.

Studies with resettled refugees have shown a strong link between food security and household resources and distribution. In previous studies, many of the expressed reasons for food insecurity relate to, or are correlated to, economic resources and other household expenses. These included having low income, large household and utility bills, late welfare payments, monetary remittances to family in their country of origin, resource allocation decisions, unemployment, participation in government food assistance

programs, household size, higher cost of culturally-familiar foods, lack of budgeting skills, lack of insurance, large medical bills, large medication bills, and school fees (Gallegos, Ellies, & Wright, 2008; Hadley, Zodhiates, & Sellen, 2007; Patil, Hadley, Nahayo 2009; Peterman, Wilde, Silka, Bermudez, & Rogers, 2013).

One way to conceptualize assets is in terms of the five capitals - human, natural, financial, social, and physical capitals (Renzaho & Mellor, 2010). Social capital might be one way to conceptualize the various factors mediating *access* and *utilization*, including the levels of cohesion among different resettled refugee communities and how long the communities have been established. For example, Peterman, Wilde, Silka, Bermudez, & Rogers (2013) found that food insecurity was less likely for recent refugee arrivals among communities that had stronger group cohesion. Refugees may experience lower levels of support in some communities, particularly from nations like Liberia that have experienced civil wars (Patil, McGown, Nahayo, & Hadley, 2010). Additionally, refugee communities that have been established for longer periods of time in a location may have more assets in the different types of capitals. This would also help newly-arrived refugees in finding culturally appropriate foods, gaining familiarity with the local environment, sharing rides to stores, finding service providers more culturally prepared to assist them, and in other ways.

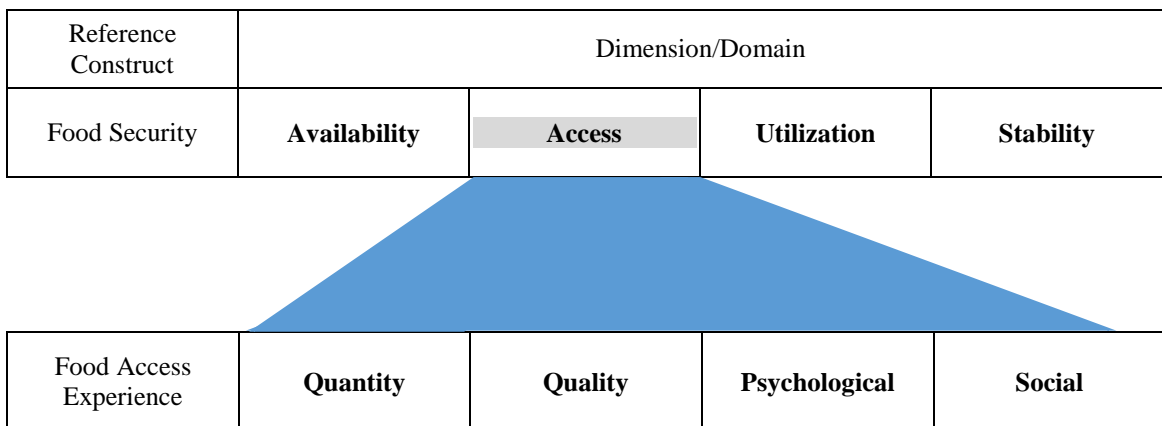
Kibria (1994) also found that households more diverse in composition by age and gender had greater economic stability due to accessing a greater variety of resources. These included institutional resources like education assistance and educational loans, job training, health care, housing, English language classes, income support; and social resources and ethnic community resources like personal loans, information about jobs

and job referrals, involvement in informal economy, educational opportunities, language and cultural skills of children, and relationships to teachers or various community leaders.

Combining the USDA and livelihood frameworks:

Based on the two literature reviews of food security research across cultures and places by Coates et al. (2006) and Renzaho and Mellor (2010), we see evidence in support of both the USDA and livelihood conceptualizations of food security for studying food security in diverse populations. This makes sense, given that the two conceptualizations are not mutually exclusive, and that they both attempt to capture the construct of food security at the household level. As a basis for comparison between the two conceptualizations, it is helpful to plot both together in a combined conceptual framework based on what I have already discussed (Figure 1). Such a combined framework illuminates some of the differences and similarities already discussed between the FAO and USDA food security conceptualizations.

Figure 1. Combined conceptual framework – four dimensions of food security and four domains of access.



It may be apparent by now that there are social acceptability aspects to every dimension, making *social acceptability* a particularly challenging domain to clearly define and measure, and yet it becomes that much more important because it indicates that there is cultural variability to every dimension and thus is especially important to consider for resettled refugees. For example, Coates, et al. (2006) place a number of behaviors under the *social acceptability* domain that would fall within the *utilization* or *asset* dimensions in the livelihood framework. They identified within *social acceptability* a “general typology” of strategies people used to augment resources or cope with shortages, which are often referred to as “coping behaviors” (Coates et al., 2006). The coping behaviors vary in their relative order and social acceptability, but tend to include borrowing, accepting external transfers, reducing consumption, redistributing consumption, divestment of savings or assets, and scavenging or stealing. However, Renzaho and Mellor (2010) observe from previous studies that using coping strategies as food security indicators fails to be reliable in contexts of cultural pluralism, because strategies vary between groups of people and environments. Renzaho and Mellor (2010) argue that using coping strategies as indicators of food security requires using culturally-appropriate indicators that have been sufficiently tested.

I present this combined conceptual framework here for several reasons. First, as discussed above, the question remains as to which conceptualization of food security may be most applicable to resettled refugees living in the US. Second, our Grounded Theory research approach (see Chapter 2) discourages the privileging of one theoretical conceptualization over another *a priori*, given that both have merit through their validation in diverse contexts. Third, all of the eight domains together are necessary to

adequately address the *definitions* of food security. Logically, a measurement tool that doesn't capture every aspect of at least one of the definitions would be an incomplete assessment of food security. It would not be measuring the full theoretical construct.

Fourth, given the exploratory nature of our research with resettled refugees living in Vermont and our grounded analytical approach, starting with a more expansive rather than restrictive conceptual framework opens the possibilities of applicable sensitizing concepts for approaching the data. From the outset, it also provides a more comprehensive framework for reviewing the literature on food security in resettled refugee populations, and reduces the chances of missing important elements of the food security experience in our focus group questions. Limiting the framework to fewer dimensions or domains would limit the types of questions we ask, thereby discouraging the emergence of possibly relevant and important data.

Fifth, since a primary question of our research is to explore the extent to which the HFSSM is valid for measuring food security among resettled refugees living in the US, having a more expansive conceptual framework to begin can help us to identify which aspects of food security among resettled refugees the HFSSM may be *missing*. We would want to find ways in which participants' experiences align with the HFSSM, as well as ways in which their experiences *diverge* from the tool. In order to look for divergence, we would want to seek the maximum variability in food insecurity experiences among our sampled population. This is another reason why it is more important for the conceptual framework to be comprehensive than to be perfectly categorized. Including as many *possible* relevant domains and dimensions in our framework and questions to participants helped to elicit variability. Put another way, it is

a systematic attempt to find out what we don't know that we don't know. It is also a method that can be replicated in future studies across cultures.

I should note, as a caveat to this goal of variability, that the second phase of this research project (beyond the scope of this thesis) aims to develop a set of alternative survey questions or supplementary questions to administer to resettled refugees. In order to create valid questions, it would need to find *commonalities* from the focus group data. However, the conceptual framework I have presented wouldn't necessarily discourage commonalities from emerging either. While it attempts to include a variety of possible domains and dimensions, the participant *responses* to each element may be similar to each other. This similarity is partly encouraged through our sampling criteria, which strives for homogeneity in a small group of resettled refugees (see Chapter 2).

In summary, looking at these two frameworks together raises two important research questions about cross-cultural food security measurement (in our case, for resettled refugees). One, how do we validly measure the *access* dimension of food security for resettled refugees - in other words, is the HFSSM valid for measuring food security among resettled refugees, or does it require changes in order to be more valid? Two, is measuring the *access* dimension of food security sufficient for measuring food security among resettled refugees, or is it equally important to consider the other dimensions? Yet, can validity be achieved if all dimensions are included? The two goals of achieving comprehensiveness of a food security measure and achieving validity have been exceedingly difficult to achieve simultaneously in previous food security measurement research (Jones et al., 2013).

Previous Validation of the HFSSM for Resettled Refugees in the US - What is the Research Missing?

Above I described what previous research has revealed about the experiences and causes of food insecurity for resettled refugees in the US, according to the eight components of food security in my combined conceptual framework. How, then, does this apply to *measuring* food security for resettled refugees? Answering this question is partly the subject and argument of this thesis. Our research team collected original data through focus groups with resettled refugees about food behaviors and perceptions. Much of what participants told us about their experiences is also reflected in the previous literature, and in Chapter 3 I point out where these overlaps occur. This adds confidence to the evidence we found in our research. However - and precisely *because* this previous literature provides supporting evidence for our findings about the HFSSM - I assert that these previous studies left unexamined some of their own evidence that could have challenged the validity of the HFSSM for resettled refugees. Again, I discuss this in further detail in Chapter 3. It is worth reviewing here the ways in which the previous studies *did* attempt to validate the HFSSM for measuring food security among resettled refugees. I then use the combined conceptual framework already discussed to illustrate the limitations of these previous studies and the research gap our research aims to fill.

Nearly all studies that have examined food security among populations of resettled refugees in the US have used a version of the HFSSM or the scales from which the HFSSM was created (Tables 3 and 4). This makes sense, given that the HFSSM was

specifically designed to be used in the US, and that resettled refugees living in the US are most likely to be administered the HFSSM by government agencies or nonprofit organizations seeking to assess the needs of their resettled refugee constituents. For these reasons, examining the appropriateness of the HFSSM to resettled refugees in the US is one of our primary research objectives.

A recent systematic review of research on food behaviors of resettled refugees in the US identified 8 studies that explicitly looked at food security among their participants (Wang, Min, Harris, Khuri, & Anderson, 2016). Based on further searching and a review of references from each article, I identified 5 more studies to add to this list (Table 5), and subtracted 2 articles from the systematic review which did not actually measure food security (Haley, Walsh, Maung, Savage, & Cashman, 2014; Rondinelli, et al., 2011), for a total of 11 articles measuring food security among refugees resettled in the US (far more studies have examined food practices and challenges for resettled refugees in the US, but have not measured food security - see Wang, Min, Harris, Khuri, & Anderson, 2016). Table 5 summarizes the measurement scales used by each of these studies to measure food security among their participants, their attempts to validate their measurement scales, and any modifications they made to the measurement scales.

Table 5. Summary of resettled refugee food security studies in the US.

Study	Participants; Place	Scale Used	Validation Methods	Scale Changes Made	Validity Type
Dharod, Croom, Sady, & Morrell (2011)	Somali; Lewiston, ME (n=35)	10-item Radimer/Cornell Hunger Scale	a) Questions reviewed by Somali health workers for language, clarity, and cultural relevance. Back translated before administering b) Compared against sociodemographic factors and dietary intake c) Cronbach's alpha to assess internal consistency of scale d) Fewer respondents affirmed more severe questions	a) Provided culturally specific examples of "few kinds of low-cost foods" and "balanced meal"	a) "face validity" b) criterion validity c) internal consistency (reliability) d) construct validity
Dharod & Croom (2010)	Somali; Lewiston, ME (n=195)	10-item Radimer/Cornell Hunger scale	a) Used adapted scale from Dharod, Croom, Sady, & Morrell (2011), with larger sample size	(see Dharod, Croom, Sady, & Morrell (2011))	(see Dharod, Croom, Sady, & Morrell (2011))
Dharod, Croom, & Sady (2013)*	Somali; Lewiston, ME (n=195)	10-item Radimer/Cornell Hunger scale	a) Used adapted scale from Dharod, Croom, Sady, & Morrell (2011) with larger sample size	(see Dharod, Croom, Sady, & Morrell (2011))	(see Dharod, Croom, Sady, & Morrell (2011))
Nunnery, Haldemen, Morrison, & Dharod (2015)	Liberian; SE US (n=33)	18-item USDA HFSSM	a) Pre-tested with interviewers b) Compared against indicators of social support	a) Provided culturally specific examples of foods for food security questions (unspecified)	a) face validity b) criterion validity
Hadley & Sellen (2006)*	Liberian; refugee or asylee; large city in NE US (n=33)	10-item Radimer/Cornell Hunger scale	a) Participant observation at health meetings, and in-depth interviews on food security and diet b) Pre-tested on 3 subjects c) Compared against sociodemographic factors and dietary intake d) Cronbach's alpha to assess internal consistency of scale	No changes mentioned	a) "face validity" b) "face validity" c) criterion validity d) internal consistency (reliability)

Hadley, Zodhiates, & Sellen (2007)	Liberian; mid-size city in the US (n=101)	USDA scale, over previous 6 months	<p>a) Based on pilot study research (Hadley & Sellen, 2006).</p> <p>b) Compared against sociodemographic factors</p> <p>c) Cronbach's alpha to assess internal consistency of scale</p> <p>d) Fewer respondents affirmed more severe questions</p>	<p>"Balanced meals" to "meals with many different foods, like meat, fish, fruits and vegetables." "Afford" to "because you didn't have enough money." Removed three frequency of occurrence questions. Statements asked as questions</p>	<p>a) (see Hadley & Sellen, 2006)</p> <p>b) criterion validity</p> <p>c) internal consistency (reliability)</p> <p>d) construct validity</p>
Hadley, Patil, & Nahayo (2010)*	Sierra Leone, Liberia, Ghana, Somalia, Togo, Meskhetian Turk; mid-sized city in midwestern US (n=281)	7-item scale based on USDA scale, over previous 6 months	<p>a) Discussed instrument in interviews and focus groups with refugees, community leaders, and agency staff. Created and pretested questionnaire.</p> <p>b) Compared against sociodemographic factors</p> <p>c) Cronbach's alpha to assess internal consistency of scale</p> <p>d) Fewer respondents affirmed more severe questions</p> <p>e) Relied on face validity suggested by Hadley & Sellen (2006)</p>	<p>a) used short form because longer form sounded redundant to respondents when translated</p>	<p>a) "face validity"</p> <p>b) criterion validity</p> <p>c) internal consistency (reliability)</p> <p>d) construct validity (see Hadley & Sellen, 2006)</p>
Anderson, Hadzibegovic, Moseley, & Sellen (2014)*	Sudanese; Atlanta, GA (N=49)	10-item Radimer/Cornell Hunger scale	<p>a) Pretested</p> <p>b) Cronbach's alpha to assess internal consistency of scale</p> <p>c) Compared against sociodemographic factors, dietary intake, and indicators of social support</p> <p>d) Fewer respondents affirmed more severe questions</p>	<p>No changes mentioned</p>	<p>a) unclear from published text</p> <p>b) internal consistency (reliability)</p> <p>c) criterion validity</p> <p>d) construct validity</p>

Peterman et al. (2010)*	Cambodian; Lowell, MA (n=133)	Self-designed measure of pre-resettlement food deprivation	Validated through correlation to coping strategies and signs of malnutrition	N/A	criterion validity
Peterman, Wilde, Silka, Bermudez, & Rogers (2013)*	Cambodian; Lowell, MA (n=150)	USDA 6-item short form	a) Focus groups with general questions on food difficulties, helped to “contextualize” survey responses. b) Specific FG question about “balanced meals” c) Compared against sociodemographic factors	b) “balanced meals” to “nutritious meals”	a) “face validity” b) “face validity” c) criterion validity
Piwowarczyk, Keane, & Lincoln (2008)	Diverse origins, refugee and asylee; Boston, MA (n=95)	Wehler food security questionnaire, ^a adapted time frame	No validation mentioned	No changes mentioned, except changing time period to pre-resettlement	None mentioned

Notes: a) Wehler (1987). b) Sources with (*) were identified in review article by Wang, Min, Harris, Khuri, & Anderson (2016)

Of 11 studies, 10 used a version of the HFSSM or the food security scales on which the HFSSM is based, including the Radimer/Cornell Hunger Scale and the scale used for the Community Childhood Hunger Identification Project. Overall, the changes made to the food security survey instruments in order to be more “culturally appropriate” generally involved slightly rewording survey items with synonyms that could be more easily translated, or providing culturally-appropriate examples of foods to illustrate the concepts being asked in a few of the questions. In many cases, no changes were made to the survey instruments at all except the translation into another language. None of the studies attempted to conceptualize food security among their participants through a grounded analysis of the food insecurity experiences described by participants, nor did they attempt to build an original measurement tool from that analysis. In other words, every study entered into qualitative data collection with an *a priori* set of theoretical constructs and assumptions in mind, which limited the types of validity that the studies were able to support or challenge for the HFSSM among resettled refugees.

In order to assess the adequacy of the validation methods of the 10 studies that used scales related to the HFSSM, it is necessary to first address the concepts of validity and reliability and what it means to validate a survey instrument for a certain purpose. The subject of validity of measurement tools in the social sciences has evolved over time and is still debated among researchers, with different researchers using different approaches to validity and reliability when judging the quality of their measurement tools (Newton & Shaw, 2013). Newton and Shaw (2013) identified 122 types of validity of *measurement* (distinct from validity of *research*) referred to in literature on educational

and psychological measurement standards. Nonetheless, the most recent trends in the literature on validation of psychometric assessments have tended to point towards one overarching framework for the validity of measurement tools: that of construct validity (Higgins & Straub, 2006; Sireci, 1998).

A very general way to define validity is “truth,” while reliability is “trustworthiness;” in other words, validity refers to how close something is to true “reality” (Higgins & Straub, 2006). Of course, this definition is too general to be particularly useful, and does not work for non-positivist epistemologies. In qualitative social science methodologies, the word “validity” is often rejected altogether in favor of concepts of quality, persuasiveness, soundness, understanding, and others (Miles, Huberman, & Saldaña, 2014). However, in reference to measurement instruments specifically, the concept of validity is more specific, referring to how well an instrument measures what it was meant to measure (Higgins & Straub, 2006). When it comes to the measurement of food security at the household level, we are most interested in validity for psychometric instruments specifically. These are “instruments such as scales, questionnaires, education tests, and observer ratings that attempt to measure factors such as symptoms, attitudes, knowledge, or skills in various settings;” hence, the HFSSM qualifies as a psychometric instrument (Cook & Beckman, 2006, p.166.e7). Much of the theorization and progress of validating psychometric instruments has occurred in the fields of education and psychology. The standards developed in these fields refer to validity for psychometric instruments as “the degree to which evidence and theory support the interpretations of test scores entailed by the proposed uses of tests” (American Educational Research Association, 1999, as cited in Cook & Beckman, 2006,

p.166.e8). In other words, validity for psychometric instruments is how well someone can expect that the scores of the instrument and their interpretation tell us about the concept they were meant to measure (Cook & Beckman, 2006). This concept that the instruments are intended to measure is often referred to as the “construct;” hence, “construct validity” (Cook & Beckman, 2006; Higgins & Straub, 2006). It is important to keep in mind here that the instrument itself doesn’t have validity, but rather its scores and their interpretation, and only for a specific purpose (construct) (Cook & Beckman, 2006). The importance of these caveats will be seen when I discuss the validity of the HFSSM for measuring food security among resettled refugees. First, I need to discuss how validity is typically established. Henceforth, “validity” will be in reference to psychometric instruments.

Historically, “construct validity” was conceptually separated from other types of validity, but today, in the tradition of Cook & Campbell (1979), construct validity is often considered to be an overarching validity with several parts needed to support construct validity (Cook & Beckman, 2006; Higgins & Straub, 2006). One part of construct validity is “content validity.” This refers to the “adequacy of the items (questions) of an instrument to assess the concepts, or domains of interest” (Higgins & Straub, 2006). At an initial glance, the definition for content validity appears to be nearly the same as that for construct validity, which has historically led to confusion and conflation of the two terms in literature on psychometric measurement (Sireci, 1998). One way to conceptualize the difference between the two is that constructs are less tangible and unobservable, whereas the content domains are “observable and (operationally) definable in the form of test specifications” (Sireci, 1998, p. 104). In other words, it is how the

construct is thought of in an operationally-definable way, i.e., how the construct translates into test items that ask about it (Sireci, 1998). For example, Radimer et al. (1992) found four content domains (*quality, quantity, etc.*) for the construct “hunger.” Essential to this meaning of content domains, therefore, is the *process* involved in going from the construct to the test (Higgins & Straub, 2006). I will return to the concept of content validity after reviewing other forms of validity, as content validity is essential to understanding the contribution of our research to the literature on food security measurement among refugees resettled in the US.

A second form of construct validity is known as criterion-related validity, or criterion validity (Higgins & Straub, 2006). Criterion validity is a statistical relationship between the instrument and other criteria known or believed to be associated with the construct of interest (Higgins & Straub, 2006). This can be an association between variables within the instrument, between the instrument and another instrument that measures the same or a similar construct, or between the instrument and other measured variables. When the two measures are administered simultaneously, it is a type of criterion validity typically referred to as concurrent validity (Higgins & Straub, 2006). Other kinds of criterion validity include convergent or divergent validity, predictive validity, and factor analysis validity (Higgins & Straub, 2006). In the previous food security research with resettled refugees in the US (Table 5), a form of criterion validity was tested in almost every study. For example, the studies found positive associations between food insecurity and low income, large family size, SNAP and WIC participation, low intake of fruits and vegetables, low BMI for children and high BMI for adults, low English proficiency, less education, and less time spent in the US (Dharod, Croom, Sady,

& Morrell, 2011; Hadley, Zodhiates, & Sellen, 2007). The results of these statistical comparisons helped support the studies' conclusion that the HFSSM is a valid tool to measure food insecurity among refugees resettled in the US.

Another form of validity that is often referred to in the literature is “face validity.” However, validity theorists often reject the use of this term because it is used inconsistently such that it encompasses multiple meanings (Cook & Beckman, 2006; Sireci, 1998). The term “face validity” has often been used to indicate that the instrument, at face value, makes sense in an obvious, common sense way (Sireci, 1998). This kind of validity involves neither empirically testing statistical relationships between the instrument and construct, nor drawing theoretical connections between the two based on previous research (Cook & Beckman, 2006). As such, it has been heavily critiqued as the “appearance of validity” rather than actual validity (Cook & Beckman, 2006, p. 166e12). Cook & Beckman (2006) argue, “The concepts of content evidence and face validity bear superficial resemblance but are in fact quite different. Whereas content evidence represents a systematic and documented approach to ensure that the instrument assesses the desired construct, face validity bases judgment on the appearance of the instrument” (p. 166e12). These differences between “face validity” and other types of validity are important to keep in mind when reviewing the food security literature with resettled refugees in the US. Steps to ensure some kind of “face validity” of the HFSSM (or similar scale) was common to most of the studies (Table 5). Typically, this involved consulting interpreters or community members about the language and cultural relevance of the scale items based on the intended purpose of the scale, or holding focus groups and interviews in which general topics related to food were discussed but no rigorous

systematic analysis of the focus groups for demonstrating content validity was mentioned (Table 5). Based on the general critiques of the concept of “face validity,” I argue that the steps taken to establish “face validity” of the HFSSM for resettled refugees in the US are insufficient to demonstrate construct or content validity. It is certainly an important step to consult interpreters and other cultural experts, but the “face validity” judged by interpreters cannot entirely replace the role of researchers in rigorously exploring how the theoretical construct applies to resettled refugees or how well the instrument content measures that construct for resettled refugees.

Besides validity (and sometimes included within the larger concept of validity), it is also necessary to consider the reliability of an instrument for measuring the intended construct. Reliability essentially refers to the consistency of an instrument’s results through repeated testing (Higgins & Straub, 2006). It is also often a measure of random error, while validity addresses systematic errors. Like validity, reliability is considered to have multiple dimensions; and reliability of one dimension doesn’t necessarily mean reliability of another (Higgins & Straub, 2006). One dimension is stability - the consistency of results when administered to the same participants in repeated trials (Higgins & Straub, 2006). So, for example, if a patient were to be weighed at a doctor’s office every 10 minutes, and each time the same weight was registered, this would indicate reliability of the scale (Higgins & Straub, 2006). This form of reliability was not tested in any of the studies that administered the HFSSM to resettled refugee participants, with the instrument only being administered once to each participant (or, if the same participants were measured between pilot studies and their larger follow-up studies, the comparative results were not published).

Another dimension of reliability is internal consistency; in other words, how closely related all the items of a scale are to each other, or how likely they are to be measuring the same concept (Higgins & Straub, 2006). One way of calculating this degree of similarity is through Cronbach's alpha, which calculates the degree of correlation between the scores of all the items in the instrument (Cook & Beckman, 2006; Higgins & Straub, 2006). There are several assumptions required about the instrument in order for Cronbach's alpha to work as a measure of consistency. First, the instrument is assumed to be measuring the same construct throughout. Second, all the items in the instrument are assumed to be weighted equivalently (Cook & Beckman, 2006). In the case of food security measurement using experience-based scales like the HFSSM, Cronbach's alpha works because food security is assumed to function along a single continuum of increasing severity, with certain behaviors and experiences (elicited through the scale questions) assumed to indicate certain severity levels (Cafiero, Melgar-Quinonez, Ballard, & Kepple, 2014). These assumptions of the HFSSM and other similar scales are supported by the Radimer/Cornell qualitative research, USDA statistical testing of the Radimer/Cornell scale, and other research around the world that has statistically tested the scale, despite some studies presenting results that conflict with the indicator/severity assumptions (Coates et al., 2006; Coates, Wilde, Webb, Rogers, & Houser, 2006). Thus, it makes sense that many of the studies with resettled refugees in the US tested for Cronbach's alpha after administering the HFSSM, with each study finding a fairly high Cronbach's alpha score (Table 5).

Reliability must be demonstrated in order to support the validity of an instrument. However, reliability alone is not enough to demonstrate validity (Cook & Beckman,

2006; Higgins & Straub, 2006). For example, if a scale to measure body weight has been calibrated off by 1 lb., it may reliably measure the same weight every time, but it will always be off by 1 lb. (Higgins & Straub, 2006). Even though previous research studies with resettled refugees in the US have taken measures to demonstrate *reliability*, this alone cannot demonstrate the *validity* of the HFSSM for measuring food security in these populations. On top of this, I argue, the steps taken to demonstrate *validity* have been insufficient, or at the very least could take further *and necessary* steps in sufficiently demonstrating validity. I have already argued that “face validity” is insufficient to demonstrate validity. The second type of validity test conducted in the previous studies was criterion validity, showing strong statistical associations between food insecurity and sociodemographic and dietary variables. However, a key validation process is missing from all of these studies - they have not theoretically examined the applicability to refugees of the most important aspect of the food security instrument, the construct itself. This is necessary to then assess how well the contents measure the construct (content validity). In other words, *statistical associations alone are not enough to demonstrate validity* (Sireci, 1998), as has been the case in the majority of studies that attempt to validate the HFSSM (or similar scale) for cross-cultural uses. Sireci (1998) aptly writes:

As Ebel (1956) noted four decades ago: ‘The fundamental fact is that one cannot escape from the problem of content validity. If we dodge it in constructing the test, it raises its troublesome head when we seek a criterion. For when one attempts to evaluate the validity of a test indirectly, via some quantified criterion measure, he must use the very process he is trying to avoid in order to obtain the

criterion measure (p. 274).’ *Thus tests cannot be defended purely on statistical grounds* (emphasis added) (pp. 106).

One problem pointed out in this quotation is the need to demonstrate the validity of the criteria themselves for measuring the construct, which essentially leads back to the problem of content validity (Sireci, 1998). In the case of food security measurement, this is particularly problematic. Cafiero, Melgar-Quiñonez, Ballard, and Kepple (2014) argue that with the diversity of indicators and methods used to measure food security around the world, there are no objective “gold standard” criteria against which to compare a given instrument in order to determine its validity for measuring food security; therefore, it isn’t sufficient to rely primarily on criterion validity. We must demonstrate content validity (2014). Another problem with relying on statistical associations alone is the possibility of confounding variables explaining the associations (Sireci, 1998). Again, content validity can help rule out this possibility (Sireci, 1998).

Attempting to address content validity has often resulted in conceptual confusion or lack of clarity between measurement construct and measurement technique, particularly in the case of food security measurement (Cafiero, Melgar-Quiñonez, Ballard, & Kepple (2014). Partly, this is a result of a common problem in measuring constructs in social sciences - that the construct of interest is *unobservable* i.e. “latent” (2014). Therefore, the content of any instrument meant to measure the construct cannot be directly compared. Instead, *evidence* and *theory* must establish the relationship between construct and content. Partly, this evidence can be statistical in nature, if it agrees with the theoretical association of the construct and content. For example, when a change occurs in the construct (e.g. increased severity of food insecurity), we would

expect to see an associated change in the results from measurement (e.g. fewer respondents in a representative sample affirm those items) (2014). Indeed, one way of determining that certain items indicate more severe states of food insecurity is based on evidence of fewer people experiencing those items (2014). However, this only works if the *theoretical* model supports this assumption (2014). This means that even before demonstrating validity of a severity scale for measuring severity of food insecurity based on response frequencies, we need to demonstrate evidence that the theoretical model of the association between the content and the latent construct is appropriate under the particular measurement context (i.e. the food insecurity experiences of resettled refugees). The previous studies that measured food security among resettled refugees in the US (Table 5) demonstrated validity through the former method but not the latter. That is, several of the studies took as evidence of validity the result that fewer respondents answered affirmatively to the more severe indicators on the scale (Table 5). They did not, however, first demonstrate that the construct and content were being conceived appropriately for those populations of respondents. Besides this, a few of the studies found evidence inconsistent with idea of fewer respondents for more severe indicators (Hadley & Sellen, 2006; Nunnery, Haldemen, Morrison, & Dharod, 2015; Peterman, Wilde, Silka, Burmudez, & Rogers, 2013).

The arguments I have presented thus far bring us to the importance of *theoretically* demonstrating the content validity of experience-based household scales like the HFSSM for measuring food insecurity among resettled refugees in the US, rather than simply statistically. There is already reason to doubt the relationship between content and construct of the HFSSM based on research in other countries that have found

inconsistent results in terms of the severity of food insecurity that is indicated by worry, reductions in quality, and reductions in quantity (Coates, et al., 2006). In other words, in some cases worry represented a less severe state of food insecurity than cutting quality, but in other cases it represented a more severe state (Coates, et al., 2006). Additionally, even though qualitative and quantitative food security research around the world has suggested the universality of the four domains of the food insecurity experience (*quantity, quality, psychological, social*) in the *access* dimension, there are disagreements about whether it is sufficient to only measure *access* (discussed above). Finally, the previous studies of dietary behavior among resettled refugees in the US *themselves* present enough evidence (discussed above) that resettled refugee populations may experience the dimensions of food insecurity and domains of *access* in some key ways that differ from the populations with whom the HFSSM has been sufficiently validated.

Content validity is established in part through the steps that are taken to produce the instrument (Cook & Beckman, 2006). First, the construct itself must be clearly defined, in order to then be able to compare the content to the construct (Cook & Beckman, 2006). Second, concept analysis of the construct is needed, in order to identify all the domains of the construct that will then be represented in the instrument (Higgins & Straub, 2006). Next, instrument items are developed based on the conception of the construct and the intended purpose of the test (Higgins & Straub, 2006; Sireci, 1998). The process proceeds iteratively rather than linearly, with instrument interpretation often informing an understanding and definition of the construct itself (Higgins & Straub, 2006).

We can see this iterative process in the case of the food security definitions and the HFSSM, both in the sense that at the global scale, the definition of food security was changed based on progress in building theoretical and empirical evidence, and in the sense of how the Radimer et al. (1992) research process led to the development of a scale and to changing the definition of hunger in the US. Radimer et al. (1992) conducted interviews with low-income women in the US about their experiences with hunger. Based on the qualitative results of the interviews, Radimer et al. (1992) identified the four *domains* of the hunger experience, which were used to create scale items to represent the four domains (with the *social acceptability* domain later being dropped by the USDA). At the same time, based on the qualitative analysis of the “hunger” concept, the term “hunger” was found to be insufficient to capture the full experience described in the interviews, in which case the construct being tested was reconceived as “food security” (NRC, 2006). At the same time, I argue that this last change of redefining the construct was particularly problematic. The Radimer/Cornell hunger scale and HFSSM (aside from the deletion of the *social* domain) have been shown to be highly valid *for the construct that it measures and among the populations for which it has been validated*. The construct that is being measured in the HFSSM and similar experience-based scales is *not* “food security” per se in its *entirety*, but only a small part of food security, namely the experience of *financial access* to food.

According to validity theorists, content validity is seriously challenged when the instrument does not represent all the domains of the construct of interest, also known as construct underrepresentation (Cook & Beckman, 2006; Higgins & Straub, 2006; Messick, 1989; Sireci, 1998). If we consider the HFSSM to be a measure of financial

access to food, then the instrument appears to validly measure the construct (aside from the omission of *social*), among the populations with whom the instrument has been sufficiently validated. If we are to assume that financial access to food is a sufficient construct to represent food security for refugees resettled in the US, I argue that at the very least in order to demonstrate content validity we need to conduct cognitive interviewing with resettled refugees to qualitatively assess their response processes to the HFSSM items (Cook & Beckman, 2006). Cognitive interviewing can be an efficient way to verify if respondents are interpreting test items as intended by the test administrators (Miller, Chepp, Wilson, & Padilla, 2014). We engage in such cognitive interview methods in Phase 2 of our research (beyond the scope of this thesis).

However, once we claim that the HFSSM is a measure of the construct “food security,” we begin to run into problems when we consult the *definitions* of food security (see above) that the instrument administrators (USDA, FAO, etc) support, and when we consider the arguments of Renzaho & Mellor (2010) and other livelihoods approach proponents that all *dimensions (availability, access, utilization, asset creation)* of the food security construct must be accounted for in its measurement. Maxwell, Coates, and Vaitla (2013) similarly argue that “relying on only one measure of food security in analysis and program design runs the risk of serious misclassification by relying on a measure that captures some, but not all, of the dimensions of food insecurity inherent in the definition” (p. 20). At the very least, I argue that the experience of food insecurity among resettled refugees in the US *cannot be assumed to not* significantly cross over with the other three dimensions, or that resettled refugees do not face significant *access* barriers that are not financial in nature. In order to be able to validly make these

assumptions, as all previous food security measurement with resettled refugees in the US has done, we need to conduct an in-depth grounded qualitative analysis of the experiences of food insecurity among resettled refugees in the US, much in the same vein as the Radimer et al. (1992) research with native-born Americans. This is exactly what we have done in the Phase 1 of our research with refugees resettled in Vermont, and which I detail in this thesis.

Conclusion

In this introductory literature review, I have discussed several different approaches to defining and measuring food security, including the US food security measurement tool, the HFSSM. The HFSSM or similar instruments have recently been used to measure food security in cross-cultural settings, with widespread interest in developing valid experience-based household food security measurement tools around the world. With such widespread interest, the stakes are high when supporting or challenging the use of tools like the HFSSM for measuring food security in different countries. At the same time, such a conversation can be brought to bear when also thinking about food security measurement among diverse populations living in the US itself, with high rates of food insecurity and other kinds of vulnerability being experienced by resettled refugees in the US. This makes it important to thoroughly investigate the extent to which the HFSSM is a valid measurement tool for measuring food security among resettled refugees in the US. I have demonstrated that previous food security research with resettled refugees in the US is missing the critical step of

establishing content validity, which our research investigates through a grounded study of food insecurity experiences among resettled refugees in Vermont. I discuss our methodological approach to this research in the next chapter. In light of the literature reviewed here, we can see several more specific questions that the research can address. First, to what extent is specifically the HFSSM valid for measuring food security among resettled refugees in US? Second, is a similar tool, but not the HFSSM precisely, more valid (eg the FIES)? Third, are there aspects of the food insecurity experiences of resettled refugees that are not included in any of these kinds of scales that are critical to also measure (availability, utilization, asset creation)? Finally, how does all of this help to mitigate food insecurity among resettled refugees? In the next chapter, I discuss our methodological approach to this research.

CHAPTER 2: METHODOLOGY

Here I describe my research methodology, including epistemological orientation, specific methods used to collect data, methods of analysis of the data, and the theoretical foundations for the steps taken along the way to ensure quality and trustworthiness in our research. In general, we were guided by a Grounded Theory approach to data collection and analysis.

Grounded Theory Methodology

I initially planned to use Grounded Theory Methodology (GTM) primarily to drive my qualitative data analysis, as proposed in the research grant for this research project. In practice, the principles behind GTM guided multiple phases of my research, from data collection to research implications, while I also incorporated additional analytic approaches into my data analysis to meet my multiple research objectives.

GTM has become one of the most widely-cited methodological approaches within the qualitative social science literature (Bryant & Charmaz, 2007b). On the one hand, the recognition value of the approach helps legitimize research proposals and papers (Bryant & Charmaz, 2007b). On the other hand, the broad use of GTM has led to what some GTM scholars see as a watering down of the methodology (Bryant & Charmaz, 2007a). Thus, it is worth reviewing here the history and transformation of the methodology(ies) over time, to help contextualize and place my own GTM approach within the spectrum of GTM approaches.

GTM was first explicitly introduced by Glaser and Strauss (1967) in their book *Discovery of Grounded Theory*, but arguably didn't become a popular methodology in the qualitative social sciences until the late 1980s with the publication of several books by Strauss (Strauss, 1987; Strauss & Corbin, 1990) (Bryant & Charmaz, 2007a). Glaser and Strauss' GTM contributed to qualitative research a new kind of positivist rigor meant to legitimize qualitative research in the eyes of academic institutions that at the time privileged more quantitative approaches (Bryant & Charmaz, 2007b). They took issue with the non-empirical "grand theorizing" or "theoretical flights of fancy" that had dominated the qualitative social sciences up to that point, with most empirical data collection being conducted in a deductive hypothesis-driven format to "test" these theories (Bryant & Charmaz, 2007b; Kelle, 2007). At the same time, Glaser and Strauss' attempt to add a positivist rigor to qualitative research came at a somewhat inopportune time within the qualitative social sciences. Thomas Kuhn had popularized Ludwik Fleck's argument that scientific observation and "facts" were constructed by scientists, while other influential social scientists had begun emphasizing the socially constructed and enacted nature of social reality (Bryant & Charmaz, 2007b). While Glaser and Strauss recognized the socially constructed nature of research participants' social reality, they fell short of critiquing the researcher's own construction of reality (Bryant & Charmaz, 2007b). Instead, they privileged the knowledge and perspective of the researcher, asserting that GTM would allow the data to "speak for themselves" (Bryant & Charmaz, 2007b). This would lead to later criticisms and revisions of GTM as described below.

While Glaser and Strauss' (1967) book laid out much of theoretical foundation for GTM, it was also seen as overly ambiguous on practical matters of how to apply GTM to research (Kelle, 2007). In attempting to clarify these original ambiguities, Glaser and Strauss landed on a number of disagreements that caused them to split theoretical directions (Kelle, 2007). This led to a fission in the field of GTM into two schools, commonly called the Glaserian school or "Classic"/ "Traditional" GTM, and the Strauss and Corbin school (Bryant & Charmaz, 2007a). Later, Kathy Charmaz, a student of Glaser and Strauss, pioneered what has been accepted as a third school of GTM, the Constructivist School (Bryant & Charmaz, 2007a). Charmaz' significant contribution to GTM was to problematize the idea of "data;" arguing that "data" is not an objective observable reality but rather socially constructed by both participants *and researchers* (Bryant & Charmaz, 2007b). In doing so, Charmaz distanced her Constructivist GTM away from the outdated objectivist elements of her predecessors, while keeping what she saw as the still-current "essences" of the methodology (Bryant & Charmaz, 2007b). Finally, after Charmaz, some GTM scholars argue (as Clarke (2005) herself argues) that there is a fourth school of GTM, the Postmodern school introduced in Adele Clarke's *Situational Analysis* (2005) (Kearney, 2007). As I will discuss further, I place my own methodological approach in between the Constructivist and Postmodern schools of GTM, with different approaches from each school being better suited to address different research goals. I follow Charmaz' approach to coding, which Clarke also uses. Where Clarke differs is more after the initial coding - what to *do* with the codes and categories. In my ontological and epistemological approaches, I stand with Charmaz in her positioning of GTM between realist and postmodern versions of reality and knowledge

(Bryant & Charmaz, 2007b). That is, there *is* a reality, but it is experienced and known through a multitude of subjective perspectives. As researchers, we try to “represent the studied phenomenon as faithfully as possible, representing the ‘realities’ of those in the studied situation in all their diversity and complexity,” while also recognizing that all data is interpreted and then represented by the subjective researcher (Bryant & Charmaz, 2007b).

Amidst the three or four different schools of GTM, there remains a common core foundation of methodological elements that have been generally agreed upon (albeit still with some debate) by GTM researchers as a baseline for claiming the GTM label, and which guided my research (Bryant & Charmaz, 2007b). Kathy Charmaz refers this as “theoretical agnosticism” in GTM: carrying out the essential elements of “coding for actions and theory construction, successive comparative analysis, inductive-abductive logic, memo-writing, theoretical sampling, and theoretical integration” (Bryant & Charmaz, 2007b, p. 51). I discuss each of these elements more specifically below, in conjunction with how I applied them to my research methods. For the remainder of this section, I address the general logic of GTM and how it relates to my analytic processes and products.

As mentioned, Glaser and Strauss (1967) contributed to the qualitative social sciences an alternative process to the popular deductive hypothesis-driven social research. In the deductive approach (also known as subsumption), researchers would “submit” empirical evidence to preformed theoretical rules, with *a priori* categories of analysis (Reichert, 2007). Understandably, Glaser and Strauss criticized this approach as forcing theoretical notions *onto* the empirical world, without the opportunity to

systematically discover *new* theories strictly *from* empirical data (Kelle, 2007). Instead, Glaser & Strauss (1967) proposed a more inductive approach, of letting codes and categories “emerge” from the data. In this inductive process, also called generalizing, properties of the data sample are generalized into larger rules (Reichertz, 2007).

Several issues arise with the process of inductive reasoning, especially in qualitative research. First, with a sample being only a subset of a greater population, there is the danger of inferences being particularly idiosyncratic to the sample, and not generalizable. This would have been viewed more as a problem in the 1960s, but contemporary qualitative research tends more to avoid “grand theories,” instead recognizing the localized and dynamic nature of “social order” (Reichertz, 2007). Second, most notably, it is impossible not to have *some* theoretical ideas going into a research project. The idea of looking at data *tabula rasa* has become outmoded, sometimes called “naive inductivism” (Kelle, 2007). Even if a researcher does not perform a literature review prior to collecting or analyzing data (a debated topic within GTM), they still enter into the research with some theoretical background, as well as with the “lenses” of language, identity, and other schemas for perception of reality (Kelle, 2007).

GTM scholars point out that neither Glaser nor Strauss advocated for pure inductivism (Kelle, 2007). Instead, they incorporated differing degrees of a third kind of logic known as abduction. Reichertz (2007) describes abduction as “assembling or discovering, on the basis of an interpretation of collected data, such combinations of features for which there is no appropriate explanation or rule in the store of knowledge that already exists,” then leading to the creative process of building a new explanation (p.

219). Thus, abduction lies somewhere in between deduction and induction, or what I conceive of as deduction to the extreme. Instead of holding the data up against a single theoretical framework, and to work around the impossibility of having no preconceived notions, the researcher essentially throws at the data every single possible (or known to the researcher) theoretical explanation in existence. Glaser & Strauss (1967) referred to this as “theoretical sensitivity,” or having a large “armamentarium” of theories and categories in mind while also looking for emergent ones in the data (Kelle, 2007). In practice, this idea seems also rather impossible, particularly for novice researchers, and thus Glaser, Strauss, and later researchers offer more achievable suggestions. Glaser offers suggestions of preset “theoretical coding families,” while Strauss centers analysis on “coding paradigms,” both of which have been critiqued (Charmaz, 2014; Kelle, 2015). Kelle (2007) suggests keeping in mind multiple theoretical approaches that contradict one another in order to expand one’s view of the data, or at the very least not being attached to one’s “pet” theory and not forcing theory onto the data. Furthermore, abstract “sensitizing concepts” can serve as heuristics for ways to look at the data, rather than “prescriptions” for exactly what to see (Kelle, 2015). Charmaz (2014) also pushes for reflexivity and memo-writing to keep track of the evolution of the researcher’s analytic thought process. I follow Kelle’s (2007) and Charmaz’s (2014) suggestions in my own approach to coding and category building, described below in “Analytic Approaches.”

According to Glaser and other GTM scholars, very few Formal Grounded Theories (FGT) tend to be published, with most researchers opting instead for the more contextually-conditioned Substantive Grounded Theories (SGT) (Glaser, 2007; Kearney, 2007). A SGT refers to a theory that emerges from a particular study after following the

steps of GTM. Glaser explains that an FGT, on the other hand, arises when the core conceptual category from a particular SGT can be generalized to some level of abstraction beyond just that study by testing the closeness of its fit to other data from other studies (Glaser, 2007). The process for arriving at a FGT is still unclear, according to Glaser himself, which may be one reason for the paucity of FGTs in the GTM literature. Another reason to avoid FGT and to opt instead for SGT is the postmodern discomfort with putting strong theoretical claims “out there” in the literature (Kearney, 2007). Researchers now are “acutely sensitized to issues of locality and partiality, power and control, and voicing and narratives,” and thus tend towards more limited SGT claims heavily supported by data (Kearney, 2007, p.144).

I highlight these differences and trends in FGT and SGT in order to clarify that by no means do I attempt to produce a FGT with my thesis research, but rather intend for my work to be judged according to other common standards of validity or quality in GTM and general qualitative research. First, I will consider my research successful if I can meet a few key standards of SGT - to contribute conceptual insights that are grounded in my research data, have practical “workability” (Glaser, 2007) for my subject matter, and that move and infer beyond mere description while still striking the reader as being about “real people” (Stern, 2007). Second, my work should have a certain common sense factor to it, sometimes referred to as face validity (Sireci, 1998). That is, the concepts I derive from my data should be “meaningful ways of interpreting the data” (Dey, 2007, p. 177). Third, GTM research should be judged according to how practically applicable it is to the field of study (Dey, 2007). GTM originally arose within an applied social science field (nursing) and remains popular because of its practical applications (Bryant & Charmaz,

2007b). I take this one step further in aiming for my research to make practical sense to *participants* within my field of study, which I compare to the process of member checking employed to add rigor to qualitative research (Carlson, 2010; Harvey, 2015; Sandelowski, 1993). While I do not anticipate that many of the refugee service providers involved in my research will necessarily read my thesis in full, I do aim for my thesis to result in some practical insights that can be distilled into a usable executive summary or recommendations for service providers (including the participants I interviewed). My second research question is particularly geared for meeting this standard of GTM quality.

Methods

To investigate our research questions, we conducted 5 focus groups consisting of women from Bhutanese, Somali Bantu, and Iraqi communities in Chittenden County, Vermont. In collaboration with trained interpreters, we asked participants about their household food management practices when faced with sufficient versus limited resources, and about their thoughts on specific concepts shown by the literature to be related to food insecurity. Additionally, I conducted 18 interviews and 1 focus group with service providers working with resettled refugees in various capacities. I asked about their experiences and knowledge regarding food practices and food security barriers of their resettled refugee clients.

1. Focus Groups

Focus groups can be an effective and efficient way to learn new information from participants, particularly for exploratory research. They can also assist participants in generating ideas, as participants can build on each other's comments. We recruited gender and age-homogenous participants for each focus group in order to enhance the synergistic qualities of focus groups. Consulting the literature, advisors to the research project,³ and interpreters helped us to further design methods most appropriate to the research topic and study participants.

Location. Focus groups took place in Burlington, Vermont, at a neutral service-provider location familiar and accessible to most of the participants. When needed, we assisted with transportation to the focus group site. The participants came from Burlington and surrounding towns in Chittenden County. Burlington is a small city of roughly 42,000 people, with the largest foreign-born population in Vermont, followed by towns surrounding Burlington (Table 6), and has been a designated refugee resettlement site since the late 1980s (Bose, 2014). Since 1987, Vermont has received over 7,000 refugees, with just over 4,100 having arrived since 2002 (Refugee Processing Center, 2017).

³ Pablo Bose (UVM), Teresa Mares (UVM), Alisha Laramee (AALV), and Naomi Wolcott-MacCausland (UVM Extension)

Table 6. Foreign born populations in Chittenden County, Vermont towns.

Town	Total Population	Foreign Born Population
Burlington	42,417	4,824
Winooski	7,267	1,044
South Burlington	17,904	1,854
Colchester	17,076	804
Essex Town	19,587	1,679
Essex Junction	9,271	763
Shelburne (CDP and town)	7,736	352
Williston	8,698	621
St. George	674	21
Charlotte	3,754	218
Hinesburg (CDP and town)	5,054	290
Richmond (CDP and town)	4,804	159
Jericho (village and town)	6338	151
Milton (CDP and town)	12,213	343
Westford	2,029	56
Underhill	3,016	64
Bolton	1,182	48
Huntington	1,938	83
Total Chittenden County	156,545	12,498

Notes: Towns listed in general geographic proximity to Burlington, radiating outward from Burlington.
Source: US Census Bureau. (2000).

Participants. Our primary criterion required that each focus group participant be either the main food manager in their household, or at least be involved in the food management to the degree that the participants were aware of which decisions were being made about food and resources in the household and why. At the suggestion of interpreters for meeting this criterion, we recruited exclusively women for the five focus groups. While this did not allow for comparison between genders, it did target those most likely to be able to provide a rich level of detail that could deepen our understandings of food management in the households.

From pilot study interviews with refugee service providers in the spring of 2015, I learned that resettled refugees may be particularly vulnerable to food insecurity after

they stop receiving their initial resettlement government benefits, which typically occurs around 8 months after arrival. With this in mind, we wanted to capture groups that had been in Vermont long enough to have passed this cutoff point, but also who had been resettled recently enough that the experience of resettlement and of losing the initial benefits might still be fresh in their memories. We further focused on seeking participants who had been in the US between 1-3 years. The Iraqi and later wave of Bhutanese resettled refugees fit these criteria, while the Somali Bantu community arrived a bit earlier but has continued to struggle financially relative to some other groups. Importantly, these three communities were also large enough for us to be able to find enough participants. While the research broadly addresses measurement of food security among resettled refugees, we limited the focus groups to these three cultural groups in order to allow for some comparability between focus groups of similar nationality.

Also, while Vermont is home to a diversity of smaller cultural groups of resettled refugees who are also likely vulnerable to being food insecure, non-selected groups were too small to be feasible to recruit enough participants. This happened in the case of our attempts to recruit Burmese participants, for example. Therefore, instead of recruiting a different cultural group for each focus group, we conducted second focus groups with Bhutanese and Iraqi participants. This allowed us a basis of comparison to assess which concepts or areas of focus may have resulted from idiosyncrasies of each focus groups. The first three focus groups of Bhutanese, Somali Bantu, and Iraqi participants consisted of women ages 25-50, while the second Iraqi and Bhutanese focus groups consisted of women ages 50 and greater. These age cut-offs were determined in consultation with the interpreters. Within the age ranges, we specified that the 25-50

groups should consist of younger-generation adults in the household, while the 50+ group should consist of older-generation adults, most likely having adult children. In a multi-generational household, for example, this would represent the parents of children and the grandparents of those children.

Finally, we recruited participants who had experienced some level of resource hardship in their households, in order to identify individuals most likely to be able to speak to experiences of food insecurity. The level at which each participant met this criterion was assessed by each interpreter in conversation with potential participants during recruitment.

Sampling and data collection. We worked with Association of Africans Living in Vermont (AALV), a key local service provider for resettled refugees, to recruit 3 interpreters representing the 3 languages of the focus groups. After being carefully trained on the participant criteria and approaches to recruitment, the interpreters recruited the participants through a criterion-based convenience sampling design. Interpreters and our research team worked with AALV, other local service providers, and personal contacts to identify potential participants. Interpreters then contacted each participant to verify suitability and interest, and administered a brief demographic survey prior to the focus groups. Demographic information included the following: town of residence, years and months in the US, country of origin, age, number of adults and youth in household and ages of the youth, employment status of household members, annual income (ranges of \$0 - \$5,000; \$5,001 - \$10,000; \$10,001 - \$15,000; \$20,001 - \$30,000; \$40,001 - \$50,000; \$50,001 - \$75,000; and >\$75,000), number of vehicles in the household,

participation of household members in government-sponsored food programs, and self-assessed level of English proficiency.

For focus groups we recruited 8 Bhutanese, 6 Somali Bantu, and 9 Iraqi participants for the groups age 25-50; and 11 Iraqi and 6 Bhutanese participants for the groups above age 50. Each focus group lasted approximately 90-120 minutes. In appreciation for their time, we gave each participant a \$25 gift card to a local grocery store (location based on interpreter suggestions), regardless of how long they stayed. Altogether, only 1 participant needed to leave a focus group early for an appointment. Finally, based on consultation with the interpreters, we also offered appropriate refreshments to help make participants feel more welcomed and comfortable. Linda Berlin acted as the facilitator for each focus group, while I took notes and also spoke up occasionally to ask follow-up questions or offer observations.

Several times during the focus groups, participants gave unprompted positive feedback that indicated their enjoyment or comfort in the experiences of the focus groups. For example, in every focus group, participants thanked us for taking the time to ask them questions about their food management practices and/or experiences in the refugee camps. Several participants expressed relief at being able to share some of their experiences of hardship, and gratitude and hope that our results will lead to an improved situation for refugees resettled in Vermont. In one focus group, after the facilitator began the last question by reminding participants that they do not have to answer the question if they feel uncomfortable, one Bhutanese participant spoke up and said (translated) “So far we are so comfortable sharing information.” In every focus group, most participants began with more solemn facial expressions and quiet behavior, while they left with more

laughter and chatter. Finally, the participants appeared to interact amiably and loquaciously with the interpreters, many appearing to be already familiar with the interpreters. These qualitative observations, often missing from journal accounts of focus groups, are important because they offer clues about data quality, and thus they are mentioned here. Participants who feel comfortable are more likely to offer honest responses and divulge more details, which increases the trustworthiness of the data. Facilitating focus groups of this type of quality was one of the strengths of our qualitative approach, rather than conducting a higher quantity of focus groups.

Interpreters. The interpreters we worked with had an active role in the research process, and thus warrant attention in this methods section for the invaluable part they played. Not only did they serve as language translators and interpreters during each focus group, but they were also key-informants, cultural consultants, and recruiters. Each interpreter had worked extensively with their respective communities in various capacities as interpreter and service provider, while also maintaining social relationships within the communities. These experiences and relationships were key for our research, as each interpreter was able to offer insightful commentary about the focus group questions and research process. We encouraged them to speak openly about any thoughts or critiques they had during the process, which they expressed comfort with doing, and we also frequently asked them direct questions about details of the focus group guides. Together with the interpreters, we reviewed the entire contents of the focus group guide from introduction to conclusion, and made changes to wording, sequence, or concepts covered, according to interpreter suggestions. This led to slightly modified focus group

guides for each cultural group. I also took notes on interpreters' opinions and participant responses that they anticipated based on their experiences working in the communities, to further provide context for our data.

From our consultations with interpreters, we learned about some unanticipated aspects of our research process. For example, interpreters expressed the importance of needing to recruit participants face-to-face rather than over the telephone due to the sensitivity of the research topic and the likelihood of them agreeing to participate when they could look the interpreter in the eyes, which increased our anticipated recruitment costs. We also discovered that it was difficult for some participants to arrange childcare during the focus group, and some participants ended up bringing their children with them. In-home interviews would have been more convenient for childcare.

The roles that language interpreters and cultural informants play can have a significant impact on research that involves language translation. Literature on interpretation in research points to certain methods to ensure higher data reliability, such as matching interpreters to participants in gender, ethnicity, age, class, and other aspects of identity, and making sure that the translator is sufficiently qualified in the two languages being translated. For example, previous research with Somali Bantu refugees found that resettled Somali Bantu participants in some cases felt tensions with their Somali (ethnically different from Somali Bantu) caseworkers (Patil, Hadley, & Nahayo, 2009). However, even with matching and qualifications, there are still complexities and nuances to the process of interpretation that can impact the results, as demonstrated by Ingvarsdotter, Johnsdotter, and Ostman (2010) in their study of mental health in a multicultural neighborhood in Sweden. In the case of a Pashto-speaking translator,

researchers discovered that there were times during interviews that the interpreter would slightly change what the researcher or participant had said, like changing a more vaguely worded question into a leading question (as if to imply a correct answer), having dialogue with the participant that excludes the researcher and remains untranslated, omitting certain details from the researcher, misunderstanding the researcher's question, and subtle ways in which the interpreter looked down on the participant due to the participant speaking a different lower-status dialect of their shared language (2010). Some of their participants seemed more comfortable speaking with Swedish people about mental health than someone sharing their own cultural background due to cultural stigmas about mental health (2010). The authors argue that there is no "right" or "wrong" translation, and that technical fixes to interpretation problems will only address part of the issue, because like researchers, interpreters are humans involved in the research process, not mere "instruments" of translation (2010). Interpreters are influenced by their own background and identity, and the language that they (and anyone) use is dynamic (2010). Researchers in this study recommend having a second interpreter review the audio record and/or English transcript in order to catch things that may have been missed or understood differently by the first interpreter (2010). We employed this process in our own research. Another recommendation for research about sensitive topics like mental health is to find an interpreter who has previously established relationships of trust and report in the participant community, which we were also fortunate to find for our research (2010). In fact, when we first attempted to work with an interpreter who had not established such connections, it was more difficult to find willing participants. Thus, the interpreters we worked with were essential to the research process and data quality.

Focus Group Questions. I drafted our initial focus group guide (FGG) by including food security elements from the sources mentioned in Chapter 1 - the HFSSM, the predominant definitions and conceptualizations of food security in the literature, as well as additional elements discovered through pilot study interviews that I conducted with service providers in the spring of 2015. We then went through a lengthy process of seeking detailed feedback on the FGG within our research team, from researcher and service-provider consultants, and from the interpreters who would be helping conduct each focus group. Our goal with the FGG was to generate questions that encouraged participants to share how they think about food management in their households, as well as their perspectives on elements of food security.

My first step in drafting the questions was to include at minimum the elements captured by the HFSSM. I then rephrased these elements as questions. For example, one HFSSM question refers to the idea of “balanced meals.” I then asked in the FGG what a “balanced meal” means to participants, and offered several specific prompts for participants to expand on and explain their response. This first step to the FGG design is strongly akin to Cognitive Interviewing Methodology (CIM), which also fits well within GTM approaches (Miller et al., 2014). CIM is particularly well suited for testing survey validity, which is relevant for our assessment of the HFSSM. The basic premise of CIM is to find the cognitive constructs captured by each survey question for different participant groups. It does this by asking participants to narrate their thought process for answering a question, after they have answered it. While we did not do this directly for the HFSSM questions, we did ask them to describe in detail how they thought about the

different elements captured by the HFSSM, with the benefit of a focus group setting to build conversation around these ideas. CIM is also particularly useful for translated surveys. It can help pick up potential problems in the translated survey, which can arise not only from translation wording choices but also from cultural differences that influence interpretations of questions or problems in overlap of constructs between the two languages (Miller et al., 2014). For these reasons, surveys cannot be assumed to work adequately when translated into other languages, and should therefore be tested for possible alternative interpretations by participants.

My second step in drafting the FGG questions was to review all of the food security barriers to access discussed in the literature and then organize them by domain. I then compared these to the first set of FGG questions to identify which barriers were still missing from the FGG, and formulated them as questions or probes to questions. An important consideration at this point was feasibility. It is difficult to capture in a two-hour focus groups *all* of the elements of food security, let alone all of the culturally-specific examples from the literature of *each* of those elements. At the same time, not all of the elements will necessarily apply to each set of participants. In order to deal with this feasibility issue, I designed questions with probes that I hoped would capture several elements at once, and attempted to at least include each food security domain and dimension, with the assets dimension captured mainly through indirect questions.

I then presented the FGG to our research team, and through collaboration made edits to the FGG. The edits mainly included some changes to wording and specific elements and ideas expressed, but no significant changes to the conceptual framework. The final version of the FGG represented an iterative process for me in which discussions

with the team, reexaminations of the literature and FGG, and articulating my thoughts through memo writing repeatedly informed and reshaped each other. Finally, we held in-depth consultations with each interpreter about the questions, resulting in FGGs that were modified slightly to be culturally appropriate for each focus group.

The focus groups emphasized participants' perceptions of the content. That being said, considering the sensitivity of the topic of food insecurity, I tried to take a non-threatening approach to the FGG questions. One tactic for this was to ask participants what they generally thought about an idea or concept, or to tell us about what "other" people might think or experience with it, rather than requiring participants to directly tell us their personal experiences. Another tactic was to start by asking directly about less threatening parts of the elements, such as the idea of a "balanced meal," before moving into more sensitive topics. We also did our best to establish confidentiality and create an environment that felt safe. We made sure to emphasize to participants that we were not connected to the government. Consultation with the interpreter helped us to do this more effectively, such as by understanding which participants to avoid grouping together and which questions to avoid.

Finally, after each focus group our research team discussed challenges and successes from the focus group. This led to us to modify the FGG slightly as we proceeded, but not so much as to sacrifice comparability.

Verifying Language Interpretation. Because Linda Berlin and I do not speak the languages of the focus group participants, and because we relied heavily on the English translations for our analysis, the quality of the language interpretation was crucial. In the

course of a focus group involving multiple languages, it is possible for certain participant statements or nuances of them to go untranslated. In order to ensure the reliability of our translations, we hired a second interpreter for four out of the five focus groups (a suitable translator could not be found for the fifth) to review the English transcripts along with the audio recordings. I instructed each translator to listen to the audio recording and follow along with the English transcript. They wrote down any spoken language that had not been translated, and made note of anything they would have translated differently than was done in the focus group. Altogether, while the translation reviewers were able to contribute some additional or more fine-tuned pieces of data, the corrections did not significantly change the outcome of the analyses.

2. Interviews

Interviews with service providers helped contextualize the focus group data, as well offered a means to triangulate some of that data, though the focus group data remained primary for answering the first research question. Interview data also served to address my second research question about the social and structural factors that shape food insecurity for refugees in Vermont.

I first conducted five interviews as a part a pilot study to orient my research in Spring 2015. I sought professional service providers who work with refugees in some capacity related to food, health, or household resources. I used a convenience sampling approach for these five interviews, which led me to interviewing people with a variety of professional or volunteer roles. This variety proved to be helpful for me in my exploratory research, offering me perspectives ranging from an overview of issues being

addressed by the state government, to experiences socializing with a single refugee family. It helped me to gain a better sense of which types of information I could expect from different professional and organizational roles.

Based on what I learned from the first five interviews, I was able to seek additional perspectives that seemed important for forming a more complete picture of key food security dynamics among refugees resettled in Vermont. I interviewed caseworkers, health and nutrition workers, community leaders, and professionals who conduct home visits. Through interviewing these types of participants who work closely with resettled refugees, I accessed a first-hand witness perspective of dynamics of food security for their clients. Simultaneously they offered a broader perspective that came from working with multiple families and organizations. Speaking with these types of participants was also preferred because linguistic barriers placed constraints on my ability to speak directly in-depth and one-on-one with the resettled refugees most likely to be food insecure, as well as because these professional participants had spent significant time forming relationships and gaining more of the trust and rapport needed to speak with families about sensitive topics like food insecurity.

Sampling method. After my first five interviews, I used a snowball sampling method, combined with the loose set of criteria described above. Every person I interviewed suggested other people I may want to interview and in most cases gave me their contact information. In most cases, I composed an email introducing myself to potential participants, the purpose of my research, and what they could expect from the interview. In one case, the person I contacted suggested I conduct a focus group with all of the

relevant service providers in that organization, rather than me interviewing each of them individually, and offered to recruit the participants for the focus group.

I initially did not have an exact number of interviews in mind, for several reasons. First, because snowball sampling is an opportunistic approach to finding participants, I couldn't know who participants would suggest. Second, my approach to answering the second research question was fairly exploratory and flexible. I wanted to remain open to new participants that would be suggested to me, and new types of information that I would gain, within the bounds of addressing the research question. Third, my goal was to conduct a sufficient number of interviews for the data to become fairly saturated. This is consistent with the GTM approach to data collection and analysis, whereby data collection stops when theoretical saturation is achieved (Stern, 2007). I couldn't know exactly how many people I would need to speak with in order to achieve that saturation. In the end I conducted 18 interviews and 1 focus group consisting of 7 service providers (with Dr. Linda Berlin taking notes and contributing occasionally with comments), at which point I felt that I had achieved a point of saturation whereby I was encountering many of the same kinds of ideas and information related to my research questions.

Interview questions. My interviews were semi-structured in nature. A semi-structured interview format was the most appropriate for my research for several reason. First, my loose criteria and snowball sampling methods resulted in interviewing people with diverse sets of backgrounds and experiences. This meant that I needed to ask each person slightly different questions, in order to elicit information specifically relevant to them. Second, because my research question was fairly exploratory in nature, a semi-structured

format allowed me to remain flexible to learning and responding to new information that came up during the interviews. Some structure was required, as there were specific types of information I had hoped to gain from the interviews. The generic set of interview questions that I started with is provided in the Appendix.

In each interview, I disclosed the general topic of my research (food insecurity of resettled refugees living in Vermont), and asked the participant to tell me about what challenges they were aware of that some resettled refugees in Vermont face related to food. The types of challenges that the interviewee was aware often related closely to that person's professional position. In places where I suspected that the interviewee's experiences corresponded to specific elements of food security from the literature (or from previous interviews), I offered those elements as prompts and asked whether they thought the elements apply to refugees resettled in Vermont. Information offered in the interviews also helped me formulate specific questions to verify this information in later interviews. In taking these steps, my approach to interviewing was iterative as is encouraged in GTM methodology, whereby analysis of each interview helped me to formulate provisional working hypotheses or hunches to be explored more in later interviews, and also showed me missing pieces of information that needed to be addressed in later interviews.

IRB. All research procedures were reviewed for adherence to ethical guidelines by the University of Vermont Committees on Human Subjects, in the Research Protections Office. Permission to proceed was granted for each stage of the research. Procedures were written into the IRB proposal for training the interpreters in how to convey the

purpose of our research and how to abide by rules of confidentiality. The interpreters were qualified for language translation through their employer, and were also held to a non-disclosure agreement through the employer. In our focus group procedures (see Appendix A), we explained to participants that their information would be kept confidential, and asked participants not to share details of the focus group with anyone.

Analytic Approaches

After transcribing the focus group and interview audio recordings using HyperTRANSCRIBE software, I proceeded to code the transcripts using several rounds of coding and code categorization. Coding transcripts is a common method used in qualitative research, whether using GTM or another methodological approach (Saldaña, 2016). The specifics of *which kinds* of codes are applied and *how* they are applied is guided by the methodological approach. Eventually the process results in higher-level categories or themes that can be used to support inferences about the data.

1. Focus Groups

First-Round Analysis: Initial Coding

I entered into my analysis of the focus group transcripts with the plan of conducting coding strictly consistent with GTM, but found that a hybrid approach that combined multiple coding strategies provided for a more comprehensive analysis. I realized that the first research question implies multiple sub-questions that together call for multiple coding approaches. First, our question calls for coding that assists us in

comparing the HFSSM to the focus group data to see how well the concepts from the HFSSM fit the data. This approach to coding is most consistent with Hypothesis Coding, where a list of codes is generated beforehand based on a prediction of what will appear in the data (Saldaña, 2016). In my case, the hypothesis being tested is that the data will demonstrate concepts consistent with the HFSSM - that is, the concepts in the HFSSM pertaining to what food insecurity *is*, how it is perceived and experienced, and how it is managed. I derived these HFSSM “concepts” by first coding the HFSSM itself through HyperResearch analysis software, and assigning descriptive codes based on the key concepts related to food security contained within the questions. I added these codes to my codebook (under a code group “HFSSM Codes”) (see Appendix) for applying to the focus group transcripts. I then read through the focus group transcripts and marked text relevant to each HFSSM code. I applied the hypothesis codes extensively, making sure to apply every code everywhere that it could possibly be applied. In other words, rather than opting *out* of a hypothesis code *in favor of* an alternative code, I made sure to mark the relevant hypothesis codes *in addition to* any other codes that seemed better suited to the text. This way, I did not limit my analysis to *only* the hypothesis codes, but having the hypothesis codes was important in allowing me to later compare all the text for each hypothesis code side-by-side in order to comprehensively examine how well the focus group data met the conceptual parameters of the HFSSM. While coding the transcripts, my unit of analysis for assigning codes was an “incident,” which can be a small piece of text that expresses a thought, such as a single utterance (Charmaz, 2014; Kelle, 2007). My incidents ranged from single words to entire paragraphs, which usually corresponded to the length of single translated quotations from each participant.

Second, our research question calls for coding that compares the concepts contained within the aforementioned definitions and conceptualizations of “food security” to the focus group data (see Chapter 1). This could help pick up important food security concepts that were expressed by participants but are missing from the HFSSM. For example, “food safety” is a food security element not included in the HFSSM. This approach lends itself well to Elaborative Coding, which uses categories or themes from previous studies to compare to the current study (Saldaña, 2016). I interpreted this approach to allow the inclusion of previous research other than my own. For this coding process, I created codes based on concepts found within the definitions of food security, the four domains and four dimensions of food security, and specific food security elements described by Coates, et al. (2006) (see Chapter 1), excluding the ones already covered by the HFSSM Codes, under a code group “Food Security Elements Codes.” In this second coding process, I also included additional elements discovered through my pilot research interviews, hence also drawing elaborative codes from my own previous research. The elaborative codes did not need to be applied as extensively as the hypothesis codes. Because the elaborative codes are drawn from previous research about the experience of food insecurity in cross-cultural contexts, rather than from the HFSSM, they were more provisional than the hypothesis codes. While they were likely to be relevant to the focus group data, the elaborative codes weren’t the direct subject of my research as the hypothesis codes were. In this way, I used the elaborative codes operationally much more like sensitizing concepts, allowing me to see aspects of the data related to food security without narrowing my view to just those concepts.

Third, in order to fully address our project's main research question and grant proposal, I needed to also create a substantive grounded theory of household food management and perceived level of food security for our particular populations of participants, strictly originated from and grounded in the data. This would also provide us a basis from which to develop new alternative food security measurement survey questions that are specifically appropriate for our focus group populations. In accordance with Constructivist GTM, I conducted a third coding approach that included Initial and Focused Coding phases (Charmaz, 2014; Saldaña, 2016). First, I created initial codes (under a code group "New Elements Grounded Codes"), which incorporated Process (coding for action), In Vivo (uses participants' own words), and Descriptive (summarizes the incident) Coding (Charmaz, 2014; Saldaña, 2016). Initial Coding in GTM allows for this type of flexible approach, understanding that initial codes are provisional and likely to change (Charmaz, 2014). Process, In Vivo and other methods like Descriptive Coding are commonly used for Initial Coding because they encourage the researcher to stick "close" to the data and minimize premature abstraction and interpretation based on researcher preconceptions (Charmaz, 2014).

In my GTM Initial Coding, I created new codes for incidents that weren't quite adequately captured by my first two coding groups described above (HFSSM Codes, Food Security Elements Codes). A reviewer might see some of my distinct codes as "splitting hairs," but within the context of the views expressed by participants, small conceptual distinctions can have significant implications for food security and its measurement, and thus I tried to capture an adequate level of detail and nuance. An example of this is the separate codes "running out" (of food) vs having "nothing in the

house.” The HFSSM uses the term “running out,” an indicator of perceived food insufficiency, while our focus group participants rarely described their household food situation in those terms. Our participants (or specifically, their interpreters) chose instead to use terms like having “nothing in the house,” while in the same breath stating that there was rice and lentils in the house that they could still make a good meal with. This suggests that having “nothing in the house” refers to having *less* food in the house, but not necessarily to having *insufficient* food. Perceiving one’s household to have less food rather than insufficient food may carry significantly different implications for perceived food security level and how it is measured through a survey, and thus worth coding separately.

Consistent with GTM, I also followed a constant comparative approach to coding. After I added new grounded codes, I went back and revisited earlier transcripts for the grounded codes I added later. I also changed some code names, modified some code definitions, or deleted or combined certain codes as my understandings of the data grew in complexity and I discovered codes that fit the data more closely. Additionally, again consistent with GTM, I maintained a list of reflective and analytic memos while I conducted coding and further analysis. Writing memos is encouraged in GTM because it keeps a record of the researcher’s evolving thought process about the research. This helps the researcher be not only more thorough but also more transparent and accountable throughout the research process. Writing memos is also a way to capture many of the sudden moments of insight that often end up composing a bulk of the analysis and interpretation of the research (Charmaz, 2014). They provide the “mortar” to the data “bricks” (Stern, 2007).

I deliberately performed all three forms of coding simultaneously, as a systematic way for myself to consider certain codes as well as to consider what might be missing or juxtaposed in those codes. This was a more abductive rather than strictly inductive approach. In order to systematically and transparently grapple with my own inevitable bias as a human researcher, my abductive approach deliberately started with the explicit preconceived notions of the hypothesis and elaborative codes. At the same time, in addition to operationalizing the hypothesis and elaborative codes both as sensitizing concepts to help me “see relevant data” and their relationships (Glaser & Strauss, 1967; Kelle, 2007, p. 197), I also treated them concurrently as preconceived notions that I should position myself *against* in seeking alternative perspectives of the data (I will call this my “antagonistic” approach). Kelle (2007) suggests a similar approach to avoiding attachment to one’s “pet theory” by looking for opposing theoretical perspectives to apply simultaneously to data analysis (p. 198).

My antagonistic approach was an effort to more systematically trace my process of creating new grounded codes than is typically detailed in a published GTM study (for example, see Charmaz, 2014). It occurred to me that such systematic tracing can make the research process more transparent, and also make it more rigorous due to the more detailed level of accountability to the researcher’s thought processes. Transparency and rigor are already achieved to an extent in typical GTM coding through using the types of codes that tend to stick “close” to the data (Process coding, In Vivo coding), as well as through careful reflective memo writing about one’s own positionality and potential biases (Charmaz, 2014). Constructivist GTM does recognize that codes don’t simply and

unproblematically “emerge from” the data; that coding is an active process of meaning-making engaged in by the researcher (as is the process of collecting the data) (Bryant & Charmaz, 2007b). Yet, even this level of transparency and rigor described and emulated by Charmaz (2014) began to strike me as not transparent and rigorous *enough* for my own orientation as a researcher towards transparency. It doesn’t systematically detail the preconceived notions a researcher may be working with, and it still doesn’t fully detail their mental process of new code creation. It doesn’t explain *how* two researchers will come up with different grounded codes for the same specific incident. Of course, it would be challenging to precisely say where a particular word or notion comes from in a researcher’s mind. The processes by which thoughts occur are infinitely complex and would be impossible to completely describe through the current language available to describe them. Even if we could hypothetically entirely explain how thoughts are generated (for example, how precisely my choice of words in this paragraph describing thought processes is generated moment to moment), it still would not eliminate the question of bias. In the Constructivist epistemology, there is no objective or pure way of perceiving or describing anything, especially not of the perspectives of others (Crotty, 1998). In a more postmodern sense, one may not even be able to directly/objectively know one’s own process of coming to know, as the process of describing a thought process is itself an analysis of an analysis, and is therefore still an inescapably inexact representation of reality (Bandak & Kuzmanovic, 2015). This doesn’t mean we should entirely give up on research altogether, but it does leave room for rethinking methods for representing and reporting research processes.

Using and describing my antagonistic coding approach seemed to me to provide a slightly more transparent processual representation of how I came up with grounded codes, as follows. By having the preconceived hypothesis and elaborative codes (and later the growing list of grounded codes) as a starting point, for each incident I was able to look at those preconceived codes and ask, “What about this incident can the codes NOT capture? In which ways are the codes close to the incident? In which ways are the codes different?” In other words, instead of only looking at each incident and asking, “What is this piece of text saying/doing?” as is typical in GTM (Charmaz, 2014), I *also* looked at each incident and asked, “What is this piece of text saying/doing *differently* than my preconceived codes?” Having a launching pad *on* which and *against* which to locate my inevitable bias gave me a slightly more systematic way to trace my creative thought process. Adding the grounded codes over time to my list of codes against which to position myself also gradually increased the size of this launching pad. Of course, I also followed the typical GTM initial coding processes of attempting to approach the data with an open mind, remaining attentive and reflexive of the personal biases I may be bringing to the process, and using types of codes that tend to stick “closer” to the data (Charmaz, 2014); but the antagonistic approach also helped me to build upon what I see as some of the limitations of the typical GTM approach.

The antagonistic and sensitizing approaches also explain why I did not perform one kind of coding at a time (hypothesis, elaborative, grounded). I needed to see all the codes together in order to juxtapose them in order to then open my mind to other possible grounded codes. Performing all three coding processes simultaneously did result in a time-consuming process of going through the transcripts very slowly and diligently. For

each incident, I went through my full list of codes, comparing them to my growing creative mental log of codes for that incident. Erring on the side of too much coding, I chose to code each incident for every single code that might apply to it.

Finally, I also included a process for inter-coder reliability in my initial coding. After I transcribed the first focus group, Linda Berlin and I each coded the transcript separately, and then met to compare and discuss our codes. From that meeting, I created a list of codes that seemed to best represent the similarities and also important differences in our initial codes. I set this list aside for some time until after I had consulted more literature and designed my systematic and multifaceted approach to coding (described above), with which I began re-coding the first focus group. After I coded all five focus groups with my new approach, including constant comparison, I *then* looked back at the list of codes that had resulted from my meeting with Linda Berlin and compared that to the latest list of codes. From this comparison, I was able to add a few grounded codes, or rename some codes, and to eventually help me think about my code categories (described below). Once again, I went back and compared any changed codes to the data. I eventually built a list of 66 distinct codes (see Appendix).

Second-Round Analysis: Focused Coding and Categorizing Data

The conceptual boundary between Initial Coding and the next phase of GTM, Focused Coding (also known as “selective coding”), is somewhat porous. Some initial codes may turn out to be compelling categories for other codes or may point to potential theoretical insights. The goals for each phase of coding, however, are fairly distinct. While Initial Coding attempts to stick “close” to the data and describe what they data are

“saying,” Focused Coding starts to analytically organize data and look at their relationships (Charmaz, 2014). In the Focused Coding phase, the researcher compares all the initial codes in order to determine which codes are the most “salient,” or have the most “analytic power” (Charmaz, 2014). During this process, new analytic codes may also emerge that help to capture the initial codes. These new or salient focused codes are used to organize the initial codes into categories. The process of categorizing isn’t a simple mechanical process, but requires decision-making on the part of the researcher about which codes and categories seem important (Charmaz, 2014). It also means that this part of the analytic process moves beyond simple analyses as conceived as “data processing” and more into the realm of interpretation (Wolcott, 1994). This is not an unproblematic process, and as such at minimum reflexivity and memoing are also critical parts of the Focused Coding phase (Charmaz, 2014). In organizing codes into categories, not all initial codes will necessarily be used, nor are the categories necessarily mutually exclusive, but each category should signify something distinct and significant to the data (Saldaña, 2016).

Most approaches to GTM include a final coding phase called Theoretical Coding, though what it entails and whether it is deemed necessary varies greatly (Saldaña, 2016). In some GTM publications, it is discussed as a distinct phase of analysis, while in other cases it is discussed more as a part or continuation of the Focused Coding phase (Saldaña, 2016). For reason of the latter, and also because of how I myself applied it, I include Theoretical Coding here with my discussion of Focused Coding. Some authors describe a theoretical code as a central or core category that encapsulates all other categories and captures the central issue of concern in the data (Saldaña, 2016). Glaser (2005), however,

suggests that finding a theoretical code for the research may not be necessary. Clarke (2007) argues, through a postmodern lens, that research leaves out important tensions and contradictions within the data by requiring theories to be such a perfect fit of the data, and that therefore we should not seek for such a neat packaging of the data. While Charmaz (2014) does use Theoretical Coding, she recognizes that GTM has been quite ambiguous and contentious about the criteria or process for determining the best theoretical code to use. Charmaz (2014) emphasizes that the purpose of Theoretical Coding is to help the researcher see the data in a more abstract way, to help theorize the data by showing key relationships among them. At the same time, some authors discuss the idea of category building under similar terms, preferring to form categories based on theoretical concepts, and recognize that the definition or process of category building also isn't entirely agreed upon in GTM (Dey, 2007). Whether as a part of category building or theoretical coding, the Constructivist GTM literature is surprisingly quiet and vague about *how* exactly to identify the most salient codes in a researcher's dataset for focused coding, and *how* to assess the relationships among them.

These tensions and ambiguities within GTM demonstrate why GTM is referred to as a *heuristic* rather than a step-by-step guide to analysis (Kelle, 2007). Because a major emphasis of our food insecurity research was to look for diversity and difference from previous research, and because of my own post-structuralist leanings, I found myself methodologically more in agreement with Clarke (2005), Dey (2007), and others (see Saldaña, 2016) when it came to the idea of Theoretical Coding. I kept Charmaz's (2014) emphasis on looking for key relationships in the data while going through my Focused Coding process, while also following Clarke's (2005) emphasis on complexity and Dey's

(1999) emphasis on the multi-dimensionality of data. With the ambiguities in mind, I took several distinct passes at this second round of analysis (the first round being Initial Coding) in order to then compare my results of each pass. These passes entailed organizing the codes and concepts contained within the codes in different ways to allow me to “see” different relationships among them (Charmaz, 2014). This approach helped broaden my perspective of the data, reduce bias from my preconceived conceptual notions of food security, and increase the transparency of my process. As a novice researcher, this seemed like the most rigorous way for me to produce credible insights.

For the first pass, after reading transcripts multiple times and finishing my iterative Initial Coding process, I used HyperResearch to generate a lengthy report of each code and its associated data. I reviewed the full code report, making a separate list of each code with a summary of the distinct elements contained within the incidents for that code. This essentially produced a very condensed code report, allowing me greater ease to quickly but thoroughly compare and contrast the codes with one another. It also allowed me a second method (after coding) to ensure reliability that no distinct elements would be missed in the final analysis. The process itself of summarizing distinct elements for each first-round code was like another descriptive coding process, summarizing or shortening into fewer words the main topic of each incident for each code (Saldaña, 2016). Through this process, I realized that some codes I had created initially were more like categories, harboring similar elements to other codes. In other cases, I was able to see that certain codes seemed to be describing different aspects of a similar concept, in which case I grouped those codes together and created a new category to house them. The final result was a list of categories and the codes that fit under those categories. Some codes fit

under several categories, and some codes didn't seem to fit under any category, but such an imperfect organization is to be expected with real data (Clarke, 2007). The important outcome of this category-building process was to help me see unexpected trends in the data that might play into my final interpretations of the research. This process was also more akin to a pure GTM approach to analysis.

Second, I reviewed my condensed code report for potential larger conceptual categories, sometimes referred to as themes or theoretical codes (Charmaz, 2014; Stern, 2007). This step was slightly different from my first category-building step. My first category-building step was more like putting together a puzzle, comparing each piece with one another and grouping similar pieces, withholding any idea of what the final outcome may be. This led to categories that touched on some of the broader contexts and complex processes at play in participant household food management, which related more to my second research question than our first question and contributed significantly to my analysis in for the second research question. With my second theming step, I deliberately kept my first research question in mind while reviewing the condensed code report, thinking about possible categories or themes that might directly relate to the research question, as is advocated by many qualitative methodologists (Saldaña, 2016). Furthermore, with my first pass at categorizing leading to larger concepts arguably beyond survey measurement, I decided for my second pass to refocus on identifying themes directly relevant to measurement.

As part of my second pass, I reviewed the HFSSM survey questions in light of this measurement focus, and identified two major components to the questions - "indicators" and "causes." The first component, "indicators," constitutes the major

cognitive constructs being tested in each question. These “indicators” are behaviors or perspectives that signal the occurrence of an element of food insecurity. “Causes” are the explanations provided for *why* or *how* the indicator occurred. In the case of the HFSSM, these “causes” are exclusively about financial access. With the framework of “indicators” and “causes” in mind, I reviewed my condensed code report for anything that might relate to these aspects of food security measurement. From the condensed report elements, I compiled a list of “indicators” and “causes”, grouping together similar concepts for easier comparison. I then renamed the groups into “potential indicators” and “barriers” for each concept to be cognitively and statistically validated in Phase 2 of our research. Finally, I formulated these “potential indicators” and “barriers” into potential alternative food security survey questions to be tested in Phase 2. Linda Berlin and I together reviewed and discussed these questions. While this Phase 2 survey design is beyond the scope of my thesis, I mention it because my second pass at categorizing helped both with my analysis for this thesis and for our new survey design, and our discussion of these new survey questions helped shape some of my interpretations of my results while in the process of writing this thesis. Having this list of “potential indicators” and “barriers” provided one way to compare our data to the HFSSM and assess the appropriateness and comprehensiveness of the HFSSM. The “barriers” also fed into my analysis for my second research question.

For a third organizational method to facilitate additional analytic perspectives, I created a table of concepts covered by each HFSSM survey question (similar to Table 4). Next to each question, I listed the “HFSSM” codes assigned to them, and then reviewed the remainder of the condensed code report to find “Food Security Elements” and “New

Emergent” codes that were possibly conceptually similar to “HFSSM” codes. Organizing the codes in this way by HFSSM question, along with the summarized concepts contained in each code, allowed me to see relationships between concepts as they pertain directly to the HFSSM. I was then able to assess the appropriateness of each specific HFSSM question to our study populations based on a close look at all relevant data for each question. This third categorizing step was important because while my first research question addresses food security measurement generally (targeted in categorizing step two), it also addresses the HFSSM survey specifically.

By experimenting with the organizational structure of codes, concepts, and categories, as described above, I was able to examine relationships between codes from multiple perspectives. This helped me meet my goal of assessing how well the HFSSM survey concepts fit the focus group concepts. From this, I could then make recommendations about HFSSM questions to be eliminated or reframed for our target audience. I could also identify distinct concepts relevant to the measurement of food security that are not included in the HFSSM but may be significant for our target audience, which could then be included in new survey questions.

Finally, after these three passes at data organization, I attempted a more intuitive theming approach. Linda Berlin and I each reviewed and analyzed the full initial code report independently, and met several times to discuss key concepts from the data that might have bearing on our understandings of food security and its measurement. After these discussions and each of my organizational approaches described above, with my mind immersed in multiple possible analytic frames, I felt I had reached a point of “theoretical saturation,” where I was no longer seeing any new relationships among the

data (Stern, 2007). At that point, I felt prepared to identify the major themes related to our research question. Glaser and Strauss described this process as letting the “cream” of the data and analysis rise and stick in your mind (Stern, 2007). Before undergoing my above three organizational steps, I would have been uncomfortable relying on such an abstract process as identifying the “cream” of the data due to all the possibilities for unknown bias in this process. But after undergoing my various systematic analytic steps, I arrived at my particular analytic perspective in a way that seemed more rigorous and transparent. At that time, in a meeting with Linda Berlin, she asked me suddenly, “without looking at any of your notes, what would you tell me are the five most important themes in the data?” I wrestled at first with my discomfort with such a non-systematic process of theming. However, being forced to immediately name the main themes made me realize that in fact some “cream” had risen to the top of my mind after all my detailed and systematic thinking. It was a kind of a heavily-informed intuition. These themes were the most important things I saw happening in the data that I wanted to take away from the research. These themes also provided me with a structure for organizing and describing my results in Chapter 3. They represent a synergy between an pure GTM approach to theming and a theming based on needing to address the research question.

2. Interviews

Interviews Initial Coding

For the interview data, I began with the 5 themes that I had landed on at the end of my focus group analysis. This made sense because the focus groups comprise the heart

of the research, the most direct content about food management and perception, while the interviews are more supplemental and contextualizing. I did not go back and recode the focus group transcripts based on new interview transcript codes because the interviews were not meant to speak over or replace the content of the focus groups. The interviews were instead partly intended to inform (though not determine) my interpretations of the focus group data. In order to do this, I marked places in the interview transcripts where service providers mentioned aspects of food security management that supported focus group data, ran counter to some of the focus group narratives, or had not been mentioned in the focus groups. Within the interview data themselves, I gave different weight to different incidents, bearing in mind whether the interviewee was describing a first-hand account of seeing evidence of client food insecurity, recalling conversations he/she had had with resettled refugee clients about food management, or offering conjectures about food security elements relevant for resettled refugees based on other things they knew about their clients.

Second-Round Analysis of Interviews

As mentioned above, my multiple passes at second-round analysis of the focus groups led unintentionally to some of those passes being helpful for my second research question. Having discovered this, I had some initial guidance for analyzing the data for my second research question. As described above, my first pass led to a list of categories and associated codes that touched on some of the broader contexts and complex processes at play in participant household food management and interaction with local environment. With these categories and codes already laid out for the focus group data, I

was then able to look at the interview codes and data and compare them to the focus group categories. I noted places where the interview data supplemented the categories and codes, contradicted them, or added other forms of complexity or nuance. These categories and their relationships guided my analysis of my second research question, where I discuss the bigger picture of household food management and its implications for how we think about food security in Chapter 4.

CHAPTER 3: RESULTS

Introduction

This chapter addresses my first thesis research question: **“To what extent is the HFSSM a valid tool to assess food insecurity experienced by refugees resettled in the US?”** Addressing this question translates largely into a qualitative analysis of the content validity of the HFSSM for refugees resettled in Vermont. In this chapter I describe the results of my analysis - the essential features of my data and key relationships among them (Wolcott, 1994). In examining the data with respect to our research question, I drew out five major themes: 1) Past food experiences of participants influenced the subjective perception of food security; 2) A number of barriers to food access other than financial resources restricted resettled refugees’ food security, especially for new arrivals; 3) Preferred foods differed between generations of household members, complicating the notion of a single household diet; 4) Concepts of quality and quantity from the HFSSM and food security definitions did not translate into the languages or experiential understandings of participants; and 5) Strategic and adaptive food management practices prevailed among participants, highlighting the temporality and ambiguity of food security concepts. These themes capture the most significant emergent ideas from analysis of the data. They do not attempt to provide a grand unifying formal theory of all the data, nor are they entirely mutually exclusive, but they do help to highlight and conceptually organize my major findings. The following results emphasize the focus group data according to the five analytically-derived themes, while I also describe the interview data relating to these themes.

Participant Characteristics

Altogether we conducted five focus groups – two Bhutanese groups (n=14), two Iraqi groups (n=20), and one Somali Bantu group (n=6). For the Bhutanese and Iraqi groups, the methodological distinction between the first and second group was age. The average ages of the Bhutanese groups were 42 and 55 years; the Iraqi groups were 34 and 55; and the Somali Bantu group was 36. Average household sizes for the Bhutanese, Iraqi, and Somali Bantu groups were 3.5, 2.5, and 2.2 adults, respectively; and 1.4, 3.1, and 5.0 children, respectively, for the households with children; 4 out of 15, 11 of 19, and 1 of 5 households, respectively, had no children. The Bhutanese participants had lived in Vermont for an average of 3 years; reported an average income of \$24,231; and had an average self-rated English proficiency of 1.7 out of 5. The Iraqi participants had lived in Vermont for an average of 2 years 3 months; reported an average income of \$9,500; and had an average self-rated English proficiency of 1.5 out of 5. The Somali Bantu participants had lived in Vermont for an average of 9 years 2 months; reported an average income of \$22,000; and had an average self-rated English proficiency of 2.4 out of 5. Of 36 respondents, 32 received some form of government aid like SNAP or SSI. Most respondents lived in Burlington and Winooski, and a few in South Burlington, Colchester, and Essex Junction.

Table 7. Participant Demographics.

Focus Group	Mean Age (years)	Mean HH Adults	Mean HH Youth	Mean Time in US	Mean HH Income	English Proficiency (out of 5)
1 (Bhutanese)	42					
5 (Bhutanese)	55	3.5	1.4	3 years	\$24,231	1.7
3 (Iraqi)	34					
4 (Iraqi)	55	2.5	3.1	2 years 3 months	\$9,500	1.5
2 (Somali Bantu)	36	2.2	5.0	9 years 2 months	\$22,000	2.4

Theme 1: Past food experiences of participants⁴ influenced the subjective perception of food security.

The subjective nature of perceived food security emerged during each focus group, as participants described aspects of their experiences with food in the US compared to places they had previously lived. These places included refugee camps as well as their home countries prior to displacement. In some cases, we directly asked participants to compare their experiences in the US to previous countries, while in other cases participants offered their comparisons unprompted.

Within each focus group, participants tended to agree with each other on their comparative food experiences. Between cultural groups, however, while some comparisons were similar, others differed notably. Participants in the two Bhutanese and one Iraqi focus groups described **previous experiences of food deprivation or difficulty**

⁴ Unless specifically referred to otherwise, “participants” in this chapter refers to focus group participants

accessing food, though not the Somali Bantu group. The Bhutanese participants had experienced this in their refugee camp in Nepal, while Iraqi participants experienced food hardships during wartime:

*“Yes, we should be **very careful with the foods in the refugee camp** because they would give like food once or twice a month, and usually for two weeks they would give one time. And then, in some of the family, like two weeks would last only for a week, and then they would **run out** of food for a week.” (FG1)⁵*

*[Refugee camp]: “Rice, mixed with stone, not good rice. And then lentils, and then like, few vegetables...They would give us rotten vegetables, and then **we had to last that food for two weeks, which is impossible, so it was tough.**” (FG5)*

*“...during the war [in Iraq], they have shortage of food, electricity, there is no gas to cook the food, you know, there is no lights in the house, during war.” [And now compared to here:] “**There is food shelf!! No, it’s completely different.**” (FG3)*

*“Ok, so during war, it’s very difficult somebody to go outside to buy food or to get food. So, we need to always have a safe place that we keep, during war. **I’m not gonna send, you know, my son when there is rockets shooting everywhere. So they learned how to save stuff.**” (FG3)*

These past experiences of food deprivation were generally corroborated by service providers’ understandings of their clients’ previous experiences. One service

⁵ Note: FG1 = Bhutanese; FG2 = Somali Bantu; FG3 = Iraqi; FG4 = Iraqi; FG5 = Bhutanese.

provider working with primarily with Bhutanese clients expressed that her clients had experienced significant problems with insufficient food and housing, and with malnutrition and disease, in their refugee camps. One family volunteer working closely with a Bhutanese family explained that that family had been living in the refugee camp in Nepal for 18 years, with their teen children having been born and raised in the camp under the conditions of malnutrition. The outcome of malnutrition is extremely common among incoming refugees, according to the medical service providers interviewed who examine a large percentage of the new arrivals in Vermont. One doctor explained that she generally immediately starts her new patients on a multivitamin because so many of her incoming patients arrive with nutritional deficiencies.

Focus group participants within and between cultural groups **differed in how they felt their experiences in the US compared to experiences in previous countries.** Some expressed feeling like the US was better, while others expressed it being much worse. This played into how their previous experiences with food have impacted how they think about food management and the degree of stress or worry they experience now:

*“Yeah, it’s way different [here], because here, like everybody is where they can work or not, [but] they eat the same kind of food and same quality of food of like the people who work can eat here. But there [in the refugee camp] people [who] cannot work, use to eat like poor food, and they swear they never got enough food to eat. **Here, they doesn’t have to go through that way because there is government agency that helps.**” (FG1)*

“We are here, and we have lots of things. And in Iraq [during the war] people are looking in the garbage for something to eat, so whatever is here, is very good, you know, even if we don’t like it, it is better than-, people [were] just, you know, ... Mhmm, it’s a very bad situation.” (FG3)

*“She says there is no comparison. In Iraq, was more more, more. This was before the war; was more than here. Nobody was hungry; **in Iraq, nobody was hungry.** Yes, quantity and quality.” (FG4)*

*“They’re saying that back home in the refugee camp [Kenya], they used to get food every 15 days, like **oil, flours, corn, the thing that they cook with,** you know. And so, **they didn’t have to worry about food...**paying bills, and you know, just a lot of things that you manage in the US right now.” (FG2)*

A few service providers interviewed also offered their perspectives on the comparisons between previous countries of residence for refugees and the US, drawing from their own experiences as immigrants to the US. Two caseworkers noted that the comparison very much depends on the individual circumstances, but they also tended to agree that experiences with food were relatively better in the US. One provider working primarily with Bhutanese refugees reiterated the opinions expressed in the Bhutanese focus groups, that compared to the malnutrition and hunger in the refugee camps, the US was far better because of the services and social protections offered. Another provider

who was himself African (country unspecified) suggested a nuanced perspective more in line with the Somali Bantu focus group:

Compared to where I am from, right, there is no hunger here. People eat well, but like what we said, the appropriateness of it maybe that's what's missing ...I've seen people begging in the street to eat and stuff. But here, no. There are a lot of support services out there [in Vermont], I've never heard of, "you stay home, you get food, money to buy food, food shelves are here," you know communities helping each other around food, I never heard of all of that [where I am from] ...In terms of, food, I think what I've been hearing is, it's just better. It's better. But now in order, you look at it in terms of stress, in terms of those paperwork coming to your house, you don't even know where this letter coming from. In terms of, the weather, you know, in terms of discrimination, in terms of, lack of you know, equity or, racism, you know, in terms of all of those, in terms of, you know, "you're not part of here." ...In terms of, you know, just making sure you have food, for you for your family, you have shelter... It exists here. And sometimes, for some people, they[re] really educated, they've been doctors or lawyers, and they now doing cleaning at UVM. You know, we think it's better, in some cases, but in other cases, it's not. Just security, safety, some sorts of people. Because they live in neighborhoods where, it's hard, you know, it's tough... Drunks going on, and needles on the street, where their kids are playing outside. That exists.

Participants reflected on how their previous experiences with food have impacted how they think about food management and the **degree of stress or worry** they experience now:

*“So they are saying that we do work really hard, and then we do buy food. The experiences that we had in the refugee camp keep us very, like sense-, give us a sense that we should not spend our money like randomly, and **we should be very careful** on the amount, whatever we are eating, and **we should be very protective.**” (FG5)*

*“If we compare our experience back home [Nepal camp], **then we don’t worry here.**” (FG1)*

“It’s [more worry] over here. Because over there [Kenya camp] they used to get food twice a month. Over here, it’s once. And the benefit depends.” (FG2)

*“**EVERYTHING in Iraq was completely better** than here before the war started. They have an open budget, you know, you can with \$100, you can go and buy lots of things. Here, you go \$400, you have little things.” (FG4)*

For Somali Bantu participants, the comparative experience also related to degree of worry about other expenses besides food:

*“When they were back home [Kenya camp], **all of this stress wasn’t there** because you’re in your house; you’re not paying for rent, you’re not paying for*

*electric... You're not paying for gas, or like car insurance. So nobody's asking what came in and what goes out so you can get benefits. And so, the UNHCR was still giving them food, every two weeks, so they had no stress. And so she says, there was a time that I think, it was better for them to live back home than to come here, because **there so much stress here when it comes to house expense.**"*

(FG2)

"The main concern here is health insurance and other things they need to worry about. Back home [Kenya camp], health insurance, health, was free for them... But over here, [she] says that there are times that she's sick and she can't go to the hospital because of the bills that she would get, because she doesn't qualify for health insurance. So, it's health and other house expense that worries them the most, because over here your credit gets ruined if you're not on time."

(FG2)

Participants between focus groups also expressed different expectations for the role government plays or should play in ensuring access to food or other resources, often framed in relationship to previous experiences. They also expressed these expectations in relation to the degree or worry they experienced. In the case of the Bhutanese participants, many expressed feeling **comforted by the presence of the government and local food shelf to help them acquire food, and were less worried about food because of it.** It was unclear whether participants believed that the food shelf was a government-provided service (it is mostly funded through community, non-profit, and corporate

support), though it was clear that participants found comfort from its presence. **This sense of comfort did not apply in the same ways to the Iraqi participants**, some of whom expressed dissatisfaction with the amount of food stamps they received, especially compared to the level of government aid they had received in Iraq. This sense of “being provided for” (one of my codes), seemed to carry significant influence in participants’ perceptions of whether or not they felt food insecure, and was often framed by comparative experiences between countries:

“We don’t have to worry because if we are able to work, then it’s not a problem; we can work, earn money, and buy food. If we cannot work, then there is government [help].” (FG1)

“They said that all of them agree that food stamps here, and government, are not giving them enough, either money or food stamps, that they can survive. Sometimes, by the 10th day of the month or the 15th day of the month, it’s gone. And they have to work hard to figure out what they gonna do for the rest of the month.” (FG4)

Additionally, some participants in the Iraqi focus groups expressed a **spiritual context for their degree of worry**. They explained that they didn’t worry, despite earlier in those focus groups also describing food hardships they were facing:

“You know what, they are not afraid, because we really, as an Arabic community, believe in God and he’s the only one who give us. So we know he give ...So, he’s create, and he’s give us what we need. So there is not worry.” (FG4)

While this quotation could on one hand be taken at face value, it is also important to note the interpreter's post-focus-group suggestion that Iraqi participants **may not feel comfortable opening up in front of one another about certain hardships**. Perhaps one of these unspoken hardships included the experience of worry. Yet, it is still significant that the lack of worry, in connection to religion, was something participants did wish to voice.

Several of the service providers suggested ways in which receiving food and other services in refugee camps had normalized their clients' relationship to government programs. For example, a volunteer familiar with Bhutanese families noted that there didn't seem to be a sense of cultural taboo among the families about visiting the local food shelf or receiving other food from government programs, a sentiment also expressed in our Bhutanese focus groups. One nutrition provider reasoned with dismay, though, that being accustomed to receiving supplies in refugee camps also seemed to lead, at least initially, to several of her clients expecting the food they received in the US to provide for their entire diet rather than being supplemental, resulting in their surprise when their food from WIC or SNAP ran out before the end of the month.

Another potential impact of previous experiences with food, particularly with food deprivation, was on the subjective perception of what qualifies as sufficient food for participants. Participants expressed a **wide range of flexibility in describing what "good" food and sufficient food is, down to a minimum of rice and legumes to qualify as sufficient**:

*“So, the way they manage is, let’s say they were eating rice and chicken and pasta, and beef; instead of that, if there’s nothing to eat, if there’s rice at home, should make **rice and beans**.” (FG2)*

*“So, if we ever have to skip like meal, then we usually like cut meat, and fruits. Like regular food we do have to eat, because we are used to eat that, **like rice and lentils**, we eat that, but fruits and meat, it’s not **compulsory**, so.” (FG1)*

It seemed that for most participants, as long as these minimum foods were present, they did not perceive themselves as food insecure or experiencing deprivation. Interestingly, rice and legumes also constituted part of many participants’ favorite foods and regularly consumed foods. I discuss this idea of minimum foods further below, but I mention it briefly under Theme 1 because of the possible impact that previous experiences with food have had on this subjective perception of food sufficiency.

Service providers suggested a number of ways in which previous experiences with food, particularly in refugee camps, have impacted food management practices and perspectives of their clients now. For example, one doctor mentioned that many of her new patients were previously used to eating only one or two meals per day. As a result, they were still not eating enough in the US or feeding their children enough because they would only eat when they felt hungry, and they rarely felt hungry. She explained that circumstances of food deprivation can affect the ability to respond to the body’s hunger signals. Some focus group participants also discussed being accustomed to eating two meals per day, while others ate three, and others regularly fasted according to social customs.

Another significant impact of previous experiences noted by medical and nutrition providers was on **parents' perceptions of their children's body weight**. One doctor described that many of his child refugee patients are underweight upon arrival, and that parents are highly concerned about their children being underweight. Several nutrition providers noted that even when the children are considered a normal or healthy weight, their parents sometimes still express concern that that is too little. The medical and nutrition providers noticed a common trend of parents appearing to be less concerned about their children being overweight, preferring instead for their children to be slightly "plump." However, they mentioned also that among certain cultural groups there are cultural preferences for being overweight, with larger children being seen as a sign of good parenting and larger women being seen as more attractive. Such cultural perceptions of weight make it difficult to know to what extent parents' anxieties about low child weight are related to their previous experiences of food deprivation. At the same time, a couple interviewees flagged a possible contrasting trend among resettled teenagers, noting a greater degree of self-consciousness about weight gain among the few teenagers mentioned. Determining the extent to which such self-perceptions may be related to previous experiences with food or to current social experiences living in the US is difficult. It may possibly relate to another significant issue flagged by multiple service providers – mental health.

Refugees comprise diverse social groups who have been through diverse experiences, and the impacts of these experiences on mental health are also diverse. There is a significant number of refugees struggling with **mental health impacts of trauma**, as reflected by several service providers. One nutrition provider who used to

conduct home visits described with sadness cases where PTSD caused significant difficulties for her clients in maintaining jobs or maintaining their households. One volunteer expressed concern for a teen she had befriended who sometimes casually mentioned troubling experiences from the refugee camp, including witnessing women hanging themselves in order to escape marriages. The volunteer pondered whether these kinds of experiences, or previous food deprivation, had any relation to the teen being an extremely “picky” eater. Several service providers suggested links between previous trauma, the stress of resettlement, financial hardship, and domestic abuse. Domestic abuse appeared to be more common in some communities than others, and related to the cultural acceptability of abusive behaviors and discouragement from discussing the problem and reaching out for help. These service providers told me of a several cases where abusive husbands, often struggling with their own mental health problems, prohibited their wives from eating or leaving the house to buy more food. Another observed that in family situations with multiple stressors including domestic abuse, food is not always the first priority. Service providers also pointed out that impacts of trauma have made it difficult for some of their clients to apply for jobs or government supports, and that the process for applying for disability benefits itself can therefore be challenging. More closely related to food security, a few service providers described how some of their clients found it overwhelming to go to grocery stores or the local food shelf to obtain food due to the impacts of trauma, and how one client felt overwhelmed by the process of cooking.

Finally, in all groups, participants described being used to eating more fresh foods in their home countries, often from local markets or by growing it themselves.

*“Africa was way cheaper. And the other thing is, you know, anything we buy from the local stores here, is like a chemical thing, you know, all the food is processed food. But **back in Africa, the food we ate, you know every morning we go to the grocery, like all the vegetables are fresh from the garden, and the meat, it just got slaughtered that morning, so everything is fresh,** but there's no way that you can get some fresh vegetables and fruits and all the meat itself, because everything is processed food. And sometimes, you know, we go to the gardens- not the garden, but the Ethan Allen or these other places. People go there like to slaughter goat. But it's really expensive.” (FG2)*

*“Yes, yes, it's completely different, taste very different. **In their country [Iraq], they always buy fresh. They go to the market, and the farmer, like farmers market,** you know all the shopping there is farmers markets, everything fresh. And the meat also, they cut the meat the same day.... The problem here is that you know, the food doesn't taste fresh like home.” (FG3)*

*“So she saying that the reason I think that **the taste is different is because we used to eat there [Bhutan] fresh, and we used to go to the garden just pick and then eat,** but here, by the time we get here, it's like long time from the garden.” (FG5)*

At the same time, one service provider noted how the poor quality of food accessed in refugee camps seemed to lead in some cases to an appreciation for the

freshness of some foods in the US. Specifically, she mentioned some clients appreciating the milk they received through WIC, in comparison to the milk they would sometimes have in the refugee camps that would “wobble” from being mixed with water from a local stream. However, another service provider specifically mentioned several cultural groups feeling distrustful of milk from the US because they were previously accustomed to getting the milk fresh from the animal or at least being familiar with the animals and their caretakers.

Theme 2: A number of barriers to food access other than financial resources restricted resettled refugees’ food security, especially for new arrivals.

Table 7 lists barriers to food access discussed by focus group participants, which emerged through all three forms of data coding. It demonstrates that for our participants, there were many more potential barriers to accessing sufficient acceptable food than simply not having enough money for food.

Table 8. Barriers to food access expressed by focus group and interview participants.

Barriers to Food Access for Refugees Resettled in Vermont	
<p>Financial Access: Not having enough money and/or food stamps Culturally appropriate foods being less affordable Child food preferences being less affordable Unpredictable sources of affordable foods A disability that affected work opportunities Challenges applying for food assistance Unexpected loss of government benefits Low wages, insufficient work hours and benefits Low opportunity to make livelihood from farming Excessive housing costs</p> <p>Physical and Temporal Access: Unreliable transportation to food markets Challenges with carrying heavy groceries on public transit Bad weather that prevents travel to food markets (i.e. snow) Difficulty walking to food markets (i.e. physical disability, lack of sidewalks, or snow) Inconvenient bus schedules or routes Inability to garden in certain seasons Insufficient time to shop for food</p>	<p>Linguistic and Cultural Access: Challenges interpreting bus schedules and routes Lacking knowledge about how to find food markets for culturally appropriate foods Lacking access to culturally appropriate foods Challenges interpreting whether ingredients are acceptable and navigating supermarkets Communication challenges in food markets Unfamiliarity with systems of food pricing Challenges budgeting for cost of food and competing costs in U.S. compared to previous country Having to save money for special events Language skills hindering employment opportunities</p> <p>Other Access Issues: Limitations imposed on using the Food Shelf Lack of access to sufficient garden space, cost of maintaining garden space Domestic abuse restricting access to food Mental health impacting food management Discrimination in hiring refugees</p>

Financial Barriers

There were some barriers discussed that are financial in nature, though may not all necessarily be interpreted as insufficient money (as the HFSSM asks). Indeed, several service providers discussed that resettled refugees in Vermont often have access only to **low-paying, part-time or temporary jobs**. This is sometimes related to low English proficiency, other times to low-qualifications or to qualifications from other countries being discounted, and other times to discriminatory hiring practices. Having these kinds of non-livable wage jobs necessitates the use of food stamps, but can also lead to complications in the application process for SNAP (discussed below), or can lead to

families living at the benefits cliff of earning slightly too much to receive SNAP. While this also happens to other American families, it is worth at least noting the reasons for insufficient financial resources that apply specifically to resettled refugees or to refugees and other immigrants. In the case of asylum seekers or other immigrants, impermanent visa status or specific bans on applying for jobs can make it even more difficult for them to earn sufficient money to be food secure.

Another financially-related barrier discussed by both focus group and interview participants was the insufficiency of food stamps and other public supports. Commonly, participants and clients **ran out of food stamps before the end of the month**, causing many to regularly turn to the local food shelf for support. **Competing costs**, especially unexpected costs, fed into this shortage of money and food stamps. **Housing** was cited by focus group and interview participants as being one of the most significant costs, with rents in Chittenden County, Vermont, being rather high, and with costs even greater to pay for heat during the cold Vermont winter. Medical costs could also significantly compete with food. One service provider told me about a client who chose not to fulfill her chemotherapy prescription in order to buy food.

Physical and Temporal Barriers

Other than issues of economic access, participants also faced barriers to physical access like **transportation challenges**, and to temporal access like schedules incompatible with other means of access. Some of the barriers to access reflected barriers faced by other low-income populations in the United States, as seen in one participant's reflection:

“...Sometimes we won’t have enough money to buy what we want to eat, and then sometimes transportation is also the main problem, because the store is very far from where I live, and then I can’t go to the store.” (FG5)

At the same time, Vermont weather presented a special challenge to physical access for newer arrivals who were unaccustomed to such a climate:

“When I came here... because of the snow, we could not go to the grocery store to buy food. It makes hard, and like, for like one meal, we had to break that like three times. We went into that place, and it was hard for us to recognize like which place is where. We didn’t know where to go, it was really snowy, so we didn’t even know how to walk in the snow. It was difficult time.” (FG1)

Even during our recruitment process for focus groups, we had to drop our efforts to put together a Burmese focus group (a much smaller population in Vermont) during late autumn after the Burmese interpreter explained that people she spoke with were less willing to leave their houses for a focus group because of the cold. This suggested that Vermont weather presented at least somewhat of a physical barrier to this population.

A common strategy for physical access to food described nearly unanimously in focus groups and interviews was the sharing of vehicles or rides to grocery stores and other places. Car ownership was also described as a top priority after resettlement. For resettled refugees not owning a vehicle, access to food sources could be difficult when a friend with a car was unavailable, according to interviewees. Turning to public transportation for food access presented a number of potential barriers. For people living further from bus lines, and further from Burlington where most services are located, public transportation was difficult to use. One food provider who helps run a home

delivery program for elderly or disabled clients recalled to me that she has had a number of people (refugee and non-refugee) request the delivery service because getting to the food provider's physical location was too much of a challenge for them, but such service requests stretched beyond the organizational capacity of the provider. Another nutrition provider recounted several of her clients who would sometimes spend money on a cab ride to the grocery store because a ride was unavailable, while another provider told me of a family that shops at the corner store due to lack of transportation to a larger grocery store. For families not within walking distance of a larger grocery store, food access was more challenging. At the same time, while a common resettlement location in northern Burlington lacks a large grocery store within walking distance, smaller "ethnic" grocery stores have appeared, making culturally appropriate foods more physically accessible for families resettled there. However, a common concern expressed by service providers was the relatively high cost of food from these stores. Stores with cheaper foods were further away. Costco, one of the most popular sources of affordable foods according to focus group and interview participants, lacked both a bus line⁶ and a sidewalk to access it. A recent report from University of Vermont researchers estimates that "over 47% of Burlington residences are located within 0.5 to 1 mile of a supermarket or food coop and 33.8% are located within 1 to 5 miles," suggesting the need for cars or public transportation within Burlington, let alone within towns further from the city that have even fewer bus lines and grocery stores (Becot & Kolodinsky, 2014).

Even for families near bus lines, relying on public transportation can be challenging. Some resettled refugees have large family sizes, and carrying enough

⁶ There is a commuter bus line that passes near the store, but hours are extremely limited and the bus stop is still some distance from the physical store, with no sidewalk in between the store and bus stop.

groceries for a family of eight or nine on the bus is difficult, as one provider explained to me. Service providers also described some of the same obstacles to using public transportation for resettled refugees that other Vermont residents face, as described in a recent Burlington town plan and Chittenden regional plan. These include limited service hours, limited buses on weekends, and infrequent buses at certain times (Burlington City Council, 2014; CCRCP, 2013). Other challenges with public transportation are more unique to resettled refugees and other New Americans. One service provider, himself a New American, described how New Americans can sometimes struggle with **reading and understanding bus schedules**, particularly for new arrivals and those with low literacy and English proficiency levels. This raises the issue of potential linguistic and cultural barriers to food access that may be more unique to New Americans than other American populations.

Linguistic and Cultural Barriers

One of the most common potential barriers to food security cited by service providers was **problems with paperwork, especially with paperwork to receive food from the Supplemental Nutrition Assistance Program** (SNAP, or, Three Squares Vermont in Vermont). Service providers attributed these paperwork problems primarily to linguistic and cultural challenges, and also to the complexities of work and family in some New American households. In terms of employment, they explained to me that many resettled refugees find work that is part time or temporary (as well as low paying), making it no simple task to provide all the employment documentation required for SNAP, especially when the employers themselves may not know how to provide it and

when resettled refugees may have language difficulties in communicating about documents needed. This gets even more complicated when multiple members of the household work part time or temporary jobs. If even one piece of documentation is missing, it can provide grounds for denying benefits. When it is time to renew SNAP benefits or provide an interim report, recipients have only 10 days after receiving the notice to provide all the required documentation. Resettled refugees are signed up for SNAP initially after arrival through the help of their caseworkers, but it is at the interim or renewal point that many resettled refugees tend to lose those benefits due to incomplete documentation. Several service providers told me that their clients were initially unaware of needing to renew their benefits, and that many didn't understand the intricacies of how food benefits are calculated based on household income and other costs.

The **language barrier** was cited as the primary reason for incomplete documentation and loss of food benefits. Multiple service providers mentioned how their clients would often show up with “piles of mail” needing to be translated. Sometimes older children in the households were able to translate the mail for their parents, but other times the content of the mail was difficult to translate or understand. Mail received wasn't always able to be translated immediately, and thus the 10-day window quickly closed on many clients who later came to the service provider for help after losing their SNAP benefits. One food provider told me that some of his clients simply didn't want to bother with applying for SNAP at all because the whole process felt like “too much” for them. Other service providers, as well as several focus group recipients, recalled the shock of some resettled refugees receiving notices in the mail requiring them to pay back

hundreds of dollars in overpayments. This experience clearly stuck sharply in the memories of the focus group participants and the service providers. The focus group participants expressed shock at having to repay the government for receiving too much money from them, while the service providers expressed frustration that there was no forgiveness for a population that clearly faced language and cultural barriers in this paperwork process.

In addition to affecting SNAP benefits, the language barrier affects the ability to access other services and benefits, to find employment, and other important matters like court or medical documents. For example, a few service providers mentioned that language barriers prevented some of their clients from signing up for school lunch or other programs for the children through the school. Resettled refugee elders are also required to become American citizens after seven years in order to continue receiving Social Security Income (SSI), but taking the citizenship test requires first learning English (as well as being able to pay the high fees for the test), which is particularly challenging for elders. Another service provider mentioned that he sometimes needs to be a facilitator between New Americans and employers due to misunderstandings that occur in the workplace, misunderstandings that sometimes lead to job loss.

Resettled refugees can also struggle in face-to-face meetings when an appropriate interpreter cannot be provided by the service provider, or even sometimes when an interpreter is available by phone, which reduces the chances of the client being able to benefit from those services. One service provider told me an example of a family that lost their SNAP benefits after a face-to-face meeting with state employees because of the way that the family member answered a question, when in fact the person hadn't

understood the question, even though the state employees had judged the person's English proficiency to be sufficient enough to not require an interpreter. Another nutrition provider recounted how they had discovered that some eligible New Americans were deterred from using the service because they didn't speak English and no interpretation was provided. The New American clients who *had* come to use the service generally had a child with them who could speak English, or were from the same family that had already signed up and had been instructions on how to use the service, or spoke the same language as one of the employees at the service.

In addition to difficulties using services due to language barriers, service providers also noted that **many resettled refugees aren't even aware that certain services exist, while service providers struggle with reaching the New American populations that their services try to target.** Even during one of our Bhutanese focus groups, a few participants were unaware of the existence of the local food shelf, until a few other participants mentioned it. This may have been due to the former living in a town further from Burlington, indicating a possible underserving of resettled refugees living in more peripheral towns. Service providers also recalled meeting many clients who were unaware of the existence of the food shelf, and others who knew nothing about SNAP, about school lunch or free meals through the school during the summer, or about smaller programs that provide food or gardens space like VNA Family Room or Vermont Youth Conservation Corps. The general image I got from talking to service providers was a kind of piecemeal process of resettled refugees finding out about various programs through various friends or service providers, and service providers needing to educate their clients about a variety of services that exist other than their own. There appears to

be a need for more effective communication of programs and services to New Americans. At the request of our Iraqi group interpreter, we shared a list of local free food sources that had been assembled by WIC staff, which our Iraqi group participants expressed interest in and gratitude for. This was yet another indication that there is a general under-communicating of services to New Americans in the area.

One service provider explained that part of the language challenge is that the populations of New Americans speaking each language are too small to meet the threshold for the federal requirements to translate any of the notices or forms that go through the state. This adds to challenges related to the **cultural competencies of the service providers**. In speaking to service providers, it was clear that in many cases the providers weren't absolutely sure of which language some of their clients spoke, and had some difficulties distinguishing between the norms of different cultures. One service provider informed me that there are now efforts to try to address the cultural competency at the state level, because many state agencies are underprepared for working with New American populations and for understanding the different kinds of citizenship/visa statuses and their eligibility for programs, as well as the cultural needs of different populations. Another service provider discussed the need for sensitivity to resettled refugees in particular who have previously experienced persecution from their governments. These populations might experience fear and distrust of government, and may have a difficult time interacting with government administrators as a result. In turn, there is also a need to educate resettled refugees about their rights and responsibilities *vis-à-vis* government. Another service provider expressed concern for the cultural appropriateness of the requirements to participate in certain programs that will help them

acquire jobs or resources. For example, she mentioned that in many cultures parents are unaccustomed to or unaccepting of the idea of putting their children in day cares. This makes it particularly problematic especially for mothers to participate in programs that prohibit the presence of their children, and especially for single mothers. She said to me, “Imagine that you’ve never had a job, you still don’t speak English, and you’re being abused by your husband, so you want to be on your own, but the system does not support you to be on your own.” Her expectation that Vermont could soon be receiving even more single women with children was a source for concern. Adding financial and mental stress to single refugee mothers trickles down to affecting the food security and stress levels of their children. She argued that all these things need to be considered when trying to enroll New Americans, or anyone for that matter, in conditional benefits programs that are good in intent but prohibitive in practice. This sentiment reflected a more widespread concern among service providers about the State’s expectation that populations of resettled refugees, who face many of the obstacles discussed in this thesis, somehow become “self-sufficient” within 6-9 months of arrival, meaning that at that point in time they lose the initial government supports that they received upon arrival. Evidence from talking to service providers suggests that resettled refugees can struggle with linguistic, cultural, and financial adjustments well after a year, and in many cases beyond five years.

Another cultural competency piece described by service providers was the **cultural appropriateness of foods or food education provided by programs and services**. The largest complaints regarded food distributed through the local food shelf, WIC, and senior programs like Meals on Wheels, and to less extent through schools. Most agreed that the foods distributed through these programs are primarily geared

towards “American” diets, or are culturally more familiar to residents born in the US. For example, they told me of resettled refugees who would not eat food distributed in cans because of a common distrust in canned food among some cultural groups, or because it could not be guaranteed that food in cans or other forms fit the exact specifications of the clients’ religious requirements. Several providers recounted that many of their clients wanted to make use of the local food shelf when they were experiencing food shortages but felt that they could not eat many of the foods provided. This sentiment was also partly expressed by focus group participants, though the larger complaint about the food shelf was that foods tended to be expired. One solution on the part of the food shelf was to start supplying at least the more affordable and easily-sourced staples that more resettled refugees would use, such as potatoes. In terms of WIC, multiple service providers described how their clients would take all the WIC foods but then not eat all of them, leaving, for example, cabinets full of uneaten cereal boxes. They often would also not eat the milk, cheese, bread, peanut butter, or even brown rice provided by WIC. In other cases where clients were willing to try certain foods, there was less familiarity with how to prepare the foods. Other service providers, however, argued that WIC does give a fair amount of choice with different kinds of foods, which might indicate instead a degree of linguistic difficulty in the process. At the time of discussing these dynamics with service providers, they described clients receiving WIC through a food delivery system. It warrants further research to explore how these problems may have changed since transitioning WIC to an EBT card system in Vermont. Another common tendency with WIC was for families to take baby formula even though they could receive more food for exclusively breastfeeding (which many families were doing anyway). This choice seemed

to baffle some of the service providers. They speculated that in some cases the choice of formula could be related to the clients receiving formula previously in refugee camps, or that perhaps having the formula provided an extra source of security or convenience.

Several service providers argued that Burlington School District has made a lot of progress in providing culturally appropriate foods for children, including the essential step of hiring a culturally diverse dining staff familiar with different dietary practices, but that surrounding towns still struggle more with this. School meals are an important source of additional food for children from food insecure families, making it essential to find the right foods for the children. At the same time, according to service providers and focus group participants, many seem to agree that children's diets have tended to become more Americanized as they live in the US for longer anyway. One suggested that when the children first arrive, they tend less to eat the school food, but that over time their diets start to become Americanized to the point that they will even refuse the parents' diets. This seems consistent with what focus group participants told us about their own children. Despite the schools apparently having culturally appropriate foods, parents in the focus groups almost unanimously blamed the schools for the change in their children's diets. Even while many resettled refugee children started to eat the more American foods in the schools, subsets of them seemed to never touch the school food, which service providers often referenced as primarily "Asian" children, indicating possibly the continued cultural inappropriateness of the food for some cultural groups or a continued distrust of the school food by some parents or children. Furthermore, one service provider expressed concern that sources of free food given additionally to food insecure families was neither culturally appropriate nor healthy. This added to another

concern expressed by several service providers about the healthiness of free food available for children or families, such as the juice included in WIC packages. One argued that resettled refugee children don't always understand some of the healthier American food options in schools, resulting in them eating primarily less-healthy foods like pizza, though this could also apply to many children born in the US. Several doctors observed that few refugee children arrive overweight, but that quickly over time they see high rates of obesity. Other service providers additionally argued that even though culturally appropriate foods could be found locally at specialty "ethnic" stores, those foods weren't necessarily the freshest or healthiest. My personal participant observations at one store confirmed that there were few vegetables available, and the ones that were available seemed not fresh and yet somewhat expensive.

Despite the possibly high price and low freshness of some foods available at these specialty stores, service providers explained that some of their clients preferred to shop primarily at those stores because not only did they find familiar foods, but they could also find it *in their own language*. Again, the language barrier can manifest in the shopping environment. Several service providers described clients who seemed too wary of larger grocery stores to want to attempt shopping there, even though their benefits could be used more efficiently at such establishments, though the smaller stores do at least tend to accept SNAP. A couple service providers observed that over time after resettlement more people tended to feel comfortable venturing to the larger stores where they could save money. The larger grocery stores carry items that in some cases were unfamiliar to new arrivals, and in other cases clients couldn't read the labels to know whether the foods adhered to their cultural dietary requirements. In some cases, they would buy the foods,

but then be unfamiliar with preservation techniques like refrigeration or freezing, potentially exposing those clients to food safety hazards.

In other cases, the **format of the shopping environment itself was unfamiliar** to resettled refugee clients. Service providers described how many clients had previously been accustomed to shopping for food in open-air markets or buying affordable meals prepared on the street, as well as making purchases through more of a bartering system. The organization and format of large grocery stores was unfamiliar to those clients after arrival, as well as the system of unit pricing for foods. Other clients had previously been more accustomed to growing and subsisting on their own foods, but without access to affordable large plots of land in Vermont they were unable to continue their familiar lifestyle. Some clients were also unfamiliar with the concept or danger of environmental toxins, and so would grow food directly in contaminated soils or fish in local contaminated waterways. Clients previously accustomed to a more subsistence lifestyle also struggled initially with appropriate budgeting practices, especially having to purchase everything while somehow managing household resources with minimum wage jobs and low English proficiency. One service provider told me of a family that had run out of money soon after arrival because they had been purchasing all of their meals at restaurants, unaware of how relatively costly it was to do so.

Along the lines of health concerns, several service providers expressed concern about the **cultural appropriateness of nutrition programs** designed to help clientele eat healthy on a budget, such as nutrition education geared towards use of the WIC package or food pyramid examples based on American dietary practices. One medical provider noted that he got a sense from his patients that it can be hard for them to receive nutrition

advice from a white American nutritionist who isn't very familiar with their diets. At the same time, many of the service providers I spoke with (mostly white Americans) expressed strong sentiments that nutrition advice should be centered around resettled refugees' own dietary customs rather than encouraging unfamiliar foods and practices, and that many of their "traditional" diets tend to be quite healthy anyway. A complicating factor within this dynamic is the changing diets of New American children, with several providers describing how their clients wanted to learn to cook healthy "American" foods for their children.

New Arrival Barriers

An important notable sub-theme within discussions about barriers to access was **the difficulties faced by newly or recently arrived refugees**. Participants commonly expressed that they faced a number of difficulties when they first arrived that they now no longer struggle with:

"Before, it was really challenging to find the stores, because of the transportation, plus we were new and we didn't know anybody. But now, we are very familiar with the places, and we have car at home so we can ride." (FG5)

Service providers also noted that certain barriers seemed to apply more to recently arrived refugees than to those who had been living in the US for longer. These include many of the barriers already mentioned, especially the linguistic and cultural barriers. These kinds of barriers depended on resettled refugees' previous living experiences, such as whether they had previously lived in a big city or a small rural town,

social status and education level in their previous place of residence, and other factors. The extent to which new arrivals experience different barriers also depends on the processes by which they become familiar with and embedded into their new place of residence in the US. One of the first and formative processes of familiarizing is the **orientation provided by caseworkers** from the Vermont Refugee Resettlement Program (VRRP), as well as host family volunteers through VRRP. Several service providers expressed concern about how new arrivals are being oriented to their new food environment by VRRP, and the potentially missed subtleties of how the things being communicated may be understood (or misunderstood) by new arrivals. One host family volunteer I spoke with described how she had been given a shopping list for the new family that included many items that the family didn't eat, and that despite attempting to make a culturally appropriate meal for her family the food still went uneaten. Another service provider argued that, yes, a good orientation process is critical, but that it is also important for service providers to communicate and coordinate more effectively to support resettled refugees and ensure that no one slips through the cracks.

Aside from institutional mechanisms of orientation, though, the experiences described by many service providers and focus group participants suggests the **high importance of community processes of orientation**. They indicated that new arrivals commonly learn from other community members about the existence of certain establishments and services, and how to use them. They suggested that orientation is much smoother for new arrivals who belong to a community that has been established in Vermont for a longer period of time, as well to communities that are larger and therefore have more culturally appropriate services and goods available. It also seems to be easier

for new arrivals who already have family or close friends living in Vermont. A few service providers explained that for communities that are smaller or newer to Vermont, it is much harder for them to learn about services or be able to utilize those services. One argued that it is even less reasonable to expect resettled refugees from such communities to achieve complete self-sufficiency in less than a year than it is to expect it from new arrivals who have already-established social networks in Vermont. An additional factor is also the level of cohesiveness or tension within certain communities. One service provider recalled how an interpreter was needed in order to communicate with a family present one day, but that despite being able to translate between their language and English another person present that day refused to help translate because of an existing tension within their community. The provider mentioned a common tension between Somali and Somali Bantu resettled refugees, though there are also other nationalities of resettled refugees in Vermont with internal tensions as well. The Bhutanese community, on the other hand, was commonly referenced by service providers as being particularly tight-knit and supportive, often helping other community members with orientation, rides, and other needs. One service provider gave the example of a Bhutanese family that had arrived from out of state and hadn't yet been signed up for SNAP. She had sent out word to other Bhutanese community members that the family needed food. "So, I bring one stack of rice, somebody bring vegetables, somebody bring meal, you know, and that way they are supporting [each other]. And after two weeks they get Three Squares Vermont."

Theme 3: Preferred foods differed between generations of household members, complicating the notion of a single household diet.

Focus group participants and interviewed service providers most often expressed **that dietary preferences of refugee youth were diverging from those of their parents**, rather than remaining parallel. While food preferences and choices of parents had somewhat changed over time since moving to the US (often by the influence of their children), food preferences and choices of children were expressed as having changed dramatically, sometimes as far as explicitly rejecting the diets of their parents when given the choice. This often resulted in the purchasing of two or more sets of food to meet the two or more different household diets.

*“My kids they like American food. They are used to eat American food so they eat everything... I have two kids, and me and my husband, so it seems like **me and my husband loves Nepali food, and my kids like American food.**” (FG1)*

“Sometimes it does happen, like if I cooking, like my kids come to me and say ‘mommy you guys are always eating this food, why don’t you try something new, let’s go outside.’ And then we do take our kids outside.” (FG1)

“When the benefit comes in on the first of the month, she and her husband will go to Costco and buy, you know, a sack of rice, like the big ones, you know, rice, flours, oil, sugar, you know, the big ones so that it could last them longer. And beef. And she would go to the farms to slaughter goat, put it in the fridge. She also

*go to the Somali local stores to buy a box of chicken, store it in the fridge. She she got everything that will back them up [for the month]. **And she would take the kids to the store to get the snacks that they like, like hamburgers, chicken nugget, noodles, you know, all that, and if all of that is done - because that's the kind of food they [the children] like to eat- if all of that is finished before the month ends, and the kids would have to eat the rice, whatever the mom makes with the rice and the flour and the oil, and so on.** (FG2)*

Service providers also expressed a sense that children's diets were diverging from those of their parents and becoming more "Americanized." There also seemed to be a sense that the children enjoyed eating "junk food" or less healthy food, and that parents would often buy these less healthy foods to appease their children, sometimes with the result of the parents themselves also eating some of the food (though not as much as the children). A couple service providers voiced concern that such American or junk food was less affordable than the foods normally eaten by the parents, thus putting additional financial pressure on the families, or that having two or more sets of diets for a single household added financial burden. Focus group participants seemed to disagree with each other about which kinds of foods were relatively more or less expensive, though there did seem to be a general agreement of the basics (rice and legumes) being the most affordable foods, which might imply that to some extent the Americanized tastes of their children add some financial cost to the household food budget.

Many of the families the service providers worked with received free school meals for their children. Like focus group participants, service providers also mentioned

that their clients blame the schools for their children's Americanized tastes. A sad irony, it seems to me, of the schools being the source and inspiration for children's Americanized diets (pizza was almost ubiquitously mentioned as the favorite food), and those foods being more expensive for families to purchase, is that it may make it more difficult for families to afford fresh fruits and vegetables, thereby making consumption of fruits and vegetables at schools all the more important and yet seeming to not happen. In conjunction with this potential problem, one service provider noted that her clients didn't have a clear sense of *what* the children were eating at school, which caused both worry and confusion for the parents.

The changing diets of youth seemed to connect to other changing dynamics between generations as described by service providers. A few service providers suggested that with older generations depending more on younger generations for help with things like language translation and rides for errands, as well as many children eventually surpassing their parents in education and income, that younger generations may hold more power in households than before. This means that youth may feel more empowered to make their own decisions about diet and other aspects of lifestyle. This can combine with parents' genuine desire to see their children succeed in the US, which for some parents seemed to mean helping their children fit in, as mentioned by a few service providers.

Theme 4: Concepts of quality and quantity from the HFSSM and food security definitions did not translate into the languages or experiential understandings of participants.

Concept 1: Balanced meal (Quality)

One of the key results regarding the concept of “balanced meal” occurred outside of the focus groups themselves. Meetings with interpreters revealed that the concept “**balanced meal**” has no direct translation in any of the three languages (Nepali, Mai Mai, Arabic). In every case, an explanation was necessary in each of the languages of the concept that was trying to be conveyed. We attempted to work around this challenge by holding up a visual image of the USDA’s MyPlate for participants to see, while asking them how their diets compared to the idea of a “balanced meal.”

When shown the image of MyPlate, most focus group participants seemed to understand that the concept of “balanced meal” meant the inclusion of the five depicted food groups. At the same time, besides this baseline understanding, participants also commented on how the MyPlate image didn’t quite capture their typical diets. For example, one Somali Bantu participant explained that their (Somali Bantu) diet is different because they eat everything mixed together into one dish: *“It’s all the same [as MyPlate], it’s just that ours is all mixed together [in one dish]”* (FG2). One Iraqi participant laughed and explained that the sweets were missing from the image: *“In our culture, you have to add the sweets, the sugar”* (FG3).

Several nutrition providers noted that the relative portions and types of foods in each food group eaten commonly by resettled refugees may not always coincide with

MyPlate. For example, they realized that many families were eating primarily potatoes as their vegetable, and they also referenced other UVM researchers who had found their participants eating almost “95% rice” with a few vegetables. They were unsure to what extent the proportions or types of vegetables were a result of resource constraints or simply a common dietary choice unrelated to resources or previous food experiences. Based on these examples, they also warned caution in assuming that resettled refugees eating “traditional” diets were necessarily eating healthy diets. I also heard commonly among service providers about their clients mistaking unhealthy foods for healthy foods, such as mistaking SunnyD or fruit punch for real juice. One medical provider recalled how she came to realize that one of her patients who referred to eating hamburgers was actually only talking about eating hamburger buns. These examples suggested that there may be some misunderstandings and miscommunications surrounding the MyPlate food groups and the extent to which diets match MyPlate when discussing the topic with resettled refugees.

The most common difference noted in focus groups was the idea of eating **all the food groups within the whole day, but not necessarily within a single meal**, or at least not for every meal:

“So, it seems like we do eat everything that’s there [in MyPlate], but like, we don’t eat the way like the American people eat. Like we do eat the vegetables, fruits, protein, and dairy product, but not together. So, but for one people, like in a day basis, like they will eat everything that’s in the MyPlate.” (FG1)

“So, [she] said that sometimes when you are missing one food group, you know, in the morning, then you can take it later. It doesn’t have to be all in one.” (FG4)

Also related to the concept of balanced meal was the emergent **concept of minimum foods required for something to be considered a “meal,” or even to be considered “food.”** For example:

*“So she is saying that dinner is the main meal in their home. And it **has to be containing** protein which is the meat, it has to have carbohydrates which is the rice, and then the vegetables....and also plus they always put yogurt in the meal...” (FG3)*

*“She says, **if there is no rice and soup, we cannot eat.**”*

[Fasting] *“For 24 hours. But when they say fasting, they doesn’t like fast like without eating anything. They don’t eat like rice, but they do eat like fruits and then water. They do eat something... yeah, they are allowed to take any kind of fruits when they are fasting, but **not rice, like not food food.**” (FG5)*

This last quotation also supports the suggestion by interviewed service providers that without rice, some of their clients would not consider something to be a meal.

Finally, some participants’ understandings of the concept of **“balanced meal” captured constructs not intended by the use of “balanced meal”** in the HFSSM. Most commonly, these different **constructs centered around alternative ideas of what was meant by “healthy” or “nutritious.”** For example:

*“She said that yes, they know what’s healthy, but sometimes their, like table, include healthy and non-healthy. And now, she is saying that they suffering actually, most of the Iraqi suffering from eating the non-healthy, because the meals always have to have, as example, sweets, or certain stuff that has a lot of fat, you know... so she starting controlling and knowing what is a **balanced** and a **healthy** diet. Now she is reducing her, like, salt, sugar. She’s not eating carbohydrates and she is trying to eat like chicken without skin; meat, she removes the fat.” (FG4)*

Concept 2: Running out (Quantity)

The constructs intended to be captured by the HFSSM terms “running out” of food or when food “didn’t last” differed in a number of cases than the cognitive constructs captured by participants using similar terminology. These constructs included **referring to having nothing to eat in general, but in fact specifically simply not having certain things to eat:**

*“If we **don’t have anything to eat**, also, we do manage to make a good meal, but with like rice, vegetables, and lentils.” (FG1)*

*“So the way they manage is, let’s say they were eating rice and chicken and pasta, and beef; instead of that, **if there’s nothing to eat**, if there’s rice at home, she would make rice and beans ...And so, she would make whatever is at home, to manage.” (FG2)*

*“So she says she prioritizes. When the benefit comes in on the first of the month, she and her husband will go to Costco and buy, you know, a sack of rice, like the big ones, you know, rice, flours, oil, sugar, you know, the big ones so that it could last them longer. And beef. And she would go to the farms to slaughter goat, put it in the fridge. She also go to the Somali local stores to buy a box of chicken, store it in the fridge. She she got everything that will back them up [for the month]. And she would take the kids to the store to get the snacks that they like, like hamburgers, chicken nugget, noodles, you know, all that, and if all of that is done - because that's the kind of food they [the children] like to eat- **if all of that is finished before the month ends, and the kids would have to eat the rice, whatever the mom makes with the rice and the flour and the oil, and so on.** So that's what, according to her, she does to manage.” (FG2)*

In these cases, **having nothing carried the implication of not having certain foods, often the foods more preferred or seen as typical good food**, rather than not having anything acceptable or edible to eat. One medical provider also argued this notion based on discussions with her patients about their diets. In reference to her Nepali patients, she explained:

“And they usually just say rice, but they're including lentils, do you know that? ...Yeah, it's lentils and rice. Usually. So, they'll say, ...you could be eating lots and lots of things, but you're not eating lentils and rice. So that's another thing that's interesting. So when you're taking a dietary history of different people from Bhutan, they'll say, oh my child's not eating.” And then we'll run through, and I'll be like, “They're eating all kinds of stuff. But they're not eating lentils and rice. So

then they don't perceive their child as eating." So that's the other thing around food, and taking a history is, there's also what's considered EATING can be-, I've found very different from family to family. Cuz I'm like, "oh, but they're eating!" But they're not EATING, you know, in the sense that the family feels EATING. Snacking, or you know, not eating the right food, doesn't count as eating. So that's another challenge yeah."

Several other service providers also mentioned the idea that food didn't qualify as a real meal or real food to some of their clients if it didn't contain rice. At the same time, for rice to be the minimum requirement for food to be perceived as enough, it means also a low likelihood for such respondents answering affirmatively to "running out" or not having enough food, since rice was a relatively affordable staple purchased in large quantities.

The subjective concept of "**not enough**," translatable into every language, seemed to more closely capture the cognitive constructs intended by the "running out" concept of the HFSSM. It also seemed to capture general expressions of insufficient or non-preferred household diet:

*"For her, she said sometimes when there is **not enough food**, she is trying to cut from her meal to give for her children." (FG4)*

*"So, in certain families, like people have incomes, uh, but it's **not enough for them** to use like, whatever they wants to buy, they can't buy, because of the limited budget they have to skip or cut certain percent of the food." (FG1)*

The concept of “running out” was also expressed as being **relative to each individual household member who has unique dietary needs** and preferences:

“So, it depends on like how individual’s appetite is. Like for old people and for kids, they do eat less than the adult. And then like, we do manage accordingly, like giving that to the old person and then kids, and then adults more.” (FG5)

Another service provider recounted how she had discussed the concept of “running out” with some of her clients, and that to them the concept of “running out” registered in the sense of running out of something and then needing to go to the grocery store to get more.

Despite some of the complexities of the notion of “running out,” a few service providers did describe some rare instances of extreme food insecurity. One nutrition provider described a home visit in which baby formula had run out, the refrigerator was completely empty, and the older child complained of only eating rice. Other nutrition providers also commonly encountered the problem of families running out of WIC baby formula in the middle of the month, along with running out of food stamps. They recalled the shock on some of their clients’ faces when unable to get more formula. Given the previous quotations from focus group participants, it may make sense that the issue of baby formula would be particularly difficult because the ability to “manage” with “whatever is at home” at the end of the month would not apply as easily to infants accustomed to eating formula. At the same time, aside from running out of certain foods,

most service providers had not encountered families that told them outright that they had no food, but rather that they were “managing” with what they had.

Concept 3: Safe Food (Quality)

When asked about which foods they considered safe or unsafe to eat, participants’ responses indicated a **wide variety of interpretations of the concept of “safe” foods**. Some participants interpreted it to mean **foods that made them feel unwell to eat generally, while others interpreted it as foods that are riskier for people with specific health conditions** like diabetes:

“...we are used to eat with salty food, so sweet makes us sick.” (FG1)

“Butter is VERY dangerous, unsafe. Sugar, sugar, any food that has sugar. Salt also is unsafe.” (FG4)

“So they are saying that, if we have to say, there is not any food that is unsafe to us, because it still depend on individual’s health condition.” (FG5)

In some cases, **“unsafe” foods meant foods that were religiously prohibited, while in other cases “unsafe” reflected a distrust in food production processes in the US**, particularly in the case of **canned foods**:

“So, she is using, like the Quran is the biggest constitution for her. Like the Quran, there is mention there is some foods that is not good for you, so there is

mention that do not eat this. And she said, if God ordered us not to eat something, it must not be useful for us, must be harmful.” (FG3)

“...like for example if you go to the Food Shelf or to the grocery store, there’s some foods that, you know, you’re not comfortable buying them, you know like canned food. They may have some ingredient. Like some folks, if you didn’t read the label, then it’s like unsafe for you to buy that kind of food and eat it.” (FG2)

At the same time, **most participants demonstrated familiarity with the idea of “expired foods.”** In some cases, this was when particularly asked about foods that have gone bad, but most often it came up in conversations about food at the Food Shelf.

“Since moving to this country, one idea that we got is like, we should not eat the expired food. Whenever the date is expired, we came to know that we should not be eating that.” (FG5)

“They get some stuff from the Food Shelf, but mostly stuff is expired.” (FG3)

“...they stopped going to the Food Shelf because it is all expired stuff. Mostly expired. Always expired.” (FG4)

What did not seem to come up in focus groups but did come up in interviews was the notion of food safety with regards to proper handling and storage of food. Several service providers who conducted home visits described encountering foods left out on

counters or in cabinets that would need to be stored in refrigerators to be safe. A common practice was to leave out food that had been cooked until it was completely eaten, sometimes sitting all day or overnight until fully consumed. The practices that would be considered unsafe by USDA guidelines in some cases appeared to be related to recent arrival, but in other cases seemed to be a custom even for families that had been living in Vermont for a longer period of time. It was unclear to service providers whether the improper storage of foods had any bearing upon food security due to foods possibly expiring faster.

Theme 5: Strategic and adaptive food management practices prevailed among participants, highlighting the temporality and ambiguity of food security concepts.

Within my GTM analysis, my original “strategic management” code eventually became a major category (or theme). I began to recognize that many other codes, when put together, conveyed a **picture of adaptability and flexibility in participants’ approaches to food management** and perceptions of food security elements. This **flexibility challenged the possibility of clear objective or subjective definitions of food security concepts**, or of a clear bounding between food security and other forms of household security. Again, the USDA definition of food security includes the concepts of **access, enough food, nutritious food, safe food, acceptable food, socially acceptable acquisition, and certainty of these things**. The experiences and opinions expressed by participants suggest ways in which these concepts are continually negotiated, rather than statically defined or deterministically enacted.

Ambiguity 1: Food Sufficiency and Acceptability

Participants' descriptions of their diets suggest that many participants exercise **adaptive flexibility in determining what “enough,” “nutritious,” and “acceptable” foods are, above a certain hardline minimum.** This relates to the concept of “running out,” discussed above, where “running out” often meant running out of certain foods, and where running out of the staple minimums like rice was less likely. Above a few minimum foods, concepts like “running out,” “enough,” and “acceptable” **didn't seem to be clearly bounded concepts, as the idea of sufficiency was constantly negotiated through adaptations to the diet:**

“So, if we ever have to skip like meal, then we usually like cut meat, and fruits.

*Like **regular food** we do have to eat, because we are used to eat that, like **rice and lentils**, we eat that, but fruits and meat, it's not **compulsory**, so.” (FG1)*

“So, we usually like, in our meal, we usually make like rice, curry, and then lentils, plus a dairy product, and pickles, and then if we run out of budget then we skip pickles and dairy product, and then if our budget is still tight, then we will skip vegetables and then we will just eat lentils.” (FG1)

“...after they stop getting food stamps, their income is limited, so their budget is really tight, so they have to skip certain things.” (FG1)

*“So, the way they manage is, let’s say they were eating rice and chicken and pasta, and beef; instead of that, if there’s nothing to eat, if there’s rice at home, should make **rice and beans** ...And so, she would make **whatever is at home, to manage.**” (FG2)*

*“And so, over here [in the US], food is not-; although it’s an issue, it’s not much of an issue. It’s an issue, but it’s not much of an issue, because they can try and **manage whatever they have.** Really, it’s **rice and beans really.** If the kids don’t like it, they will eat it at that time.” (FG2)*

This **idea of minimum foods was NOT expressed as unacceptable foods, or even as “poor” food, both of which did come up in discussions of food in the refugee camps:**

*“But there [in the refugee camp] people [who] cannot work, use to eat like **poor food**, and they swear they never got enough food to eat.” (FG1)*

*[Refugee camp] “Rice mixed with stone, **not good rice.** And then lentils, and then like few vegetables... They would give us rotten vegetables, and then we had to last that food for two weeks, which is impossible, so it was tough.” (FG5)*

Rice and legumes, while being baseline “minimum foods” (my code for the concept), were **not only eaten when resources were low, but also as a regular and preferred part of the Bhutanese participants’ diets.** When we asked participants to

describe their **“favorite” foods, their “typical” diets, “low-cost” foods, and the amount of variety they get in their diets, rice and legumes came up often** or was implied to be a normal part of the diet, along with other favorites like vegetables and fruits:

“We are Nepali. We are used to eating lentils, rice, vegetables, so that makes a good meal ...yeah, it’s common.” (FG1)

“Yeah, heavy meal, yes, we basically eat like every day same food. Like rice is common, but like in vegetables, we do eat variety of vegetables, not one.” (FG1)

One volunteer who worked with a Bhutanese family also discussed that the foods common in the family and preferred by them also tended to be affordable foods, meaning that food in general was not a large part of their budget.

Iraqi participants also expressed an idea of minimum foods, which also overlapped with their described favorite, typical, and variety of foods. The main distinction within the data between the Iraqi and other cultural groups was the Iraqi participants’ inclusion of meat as a minimum, which is not as low-cost as rice and legumes, particularly for Halal meat:

“She’s saying that the Iraqi household always depend on meat, rice, and soup. This is like the main good meal that they eat every single day. Rice, meat, and soup.” (FG3)

*[Soup] “Yes, lots of vegetables. But then, [she] said that the **main important thing** with this is to have to put **meat**, either chicken or beef. With this, all the soup, have to add this protein in it.” (FG3)*

*“She says, if there is **no rice and soup, we cannot eat.**” (FG3)*

Similarly, in several other cases, having to cut back on certain food items was associated with not being able to eat “whatever we want to buy.” This phrase suggested that there was some sense of limited or cautious purchasing behaviors necessary among participants. One service provider also expressed it as being “careful” and needing to use “creativity” to stretch resources. However, at the same time, this behavior wasn’t necessarily perceived as leading to insufficient food or a sense of deprivation, suggesting that it might not be picked up as food insecurity in a survey.

Ambiguity 2: Acceptability and Certainty of Food Acquisition

Participants discussed exercising strategic and adaptable food and resource acquisition practices in order to meet household food needs. Such flexibility seems to suggest a **greater degree of complexity to the notion of certainty of acquiring foods in socially acceptable ways**. For one, participants’ strategies for acquiring affordable food, in every case where it was discussed, involved **shopping at multiple locations to secure food for the total household diet**. This multi-source shopping was driven by price, cultural acceptability, physical accessibility, and other considerations:

“So she says she prioritizes. When the benefit comes in on the first of the month, she and her husband will go to Costco and buy, you know, a sack of rice, like the big ones, you know, rice, flours, oil, sugar, you know, the big ones so that it could last them longer. And beef. And she would go to the farms to slaughter goat, put it in the fridge. She also go to the Somali local stores to buy a box of chicken, store it in the fridge. She she got everything that will back them up [for the month]. And she would take the kids to the store to get the snacks that they like, like hamburgers, chicken nugget, noodles, you know, all that, and if all of that is done - because that's the kind of food they [the children] like to eat- if all of that is finished before the month ends, and the kids would have to eat the rice, whatever the mom makes with the rice and the flour and the oil, and so on. So that's what, according to her, she does to manage.” (FG2)

“Price Chopper [supermarket] is expensive. Like mostly the main thing that you can storage, like the rice and the flour and that kind of stuff, we got to Costco. And the little things, you know, we just go to Hannaford [supermarket], or some people they prefer Price Chopper.” (FG2)

*[Interpreter] “**Wherever is cheap.**” [Moderator] “Cheap. So is that the main thing that you would use to pick where you would go, is it the cost?” [Interpreter] “They say yes.” (FG5)*

“So they are saying that, if we buy rice, we can buy a big bag of rice, which will last for like a few days, and then like lentils too. If we buy like little bit, then it will last like a few days. But fruits, and other vegetables, if we bring most, then it will ruin [go bad], so instead of spending money on those, we can buy something which will last for a long time.” (FG5)

Service providers also discussed strategies of their clients for stretching income and SNAP benefits, which also involved strategically acquiring and combining food from multiple sources. As with focus group participants, they described clients shopping for bulk rice, pasta, oil, and produce at Costco, especially for families with children; sometimes less healthy snacks at conventional grocery stores like Price Chopper; and more culturally-specific foods like special produce and Halal meats at the local specialty stores. They also mentioned schools, the local food shelf, WIC, and gardens as other significant sources of food. Several providers mentioned gardens as a particularly valuable resource because many of their clients had previous agricultural experience and knowledge of food preservation, especially clients who had lived in rural places; and additionally the gardens provided more intangible benefits like feelings of independence, community, and home. However, another service provider argued, more in line with our focus group participants, that the gardens only provide a small source of food; for it to make a significant difference, larger plots of land would be needed.

The strategic food sourcing practices seemed to be portrayed as a reliable way to get by on a limited budget, like a continual process of creating “stone soup” (as one service provider phrased it). Service providers and focus group participants seemed to

convey a sense of resettled refugee families (other than recent arrivals) having an intimate familiarity with where to find the best prices on different foods, a familiarity that is gained over time and shared between community members in some communities. However, there are arguably some aspects of uncertainty to these strategies. There is a degree of inconsistency to which foods are available at affordable prices at which stores at which times, and whether they can be purchased with electronic benefit transfer (EBT) cards. For example, Costco offers many products for a limited time only, as long as supplies are available, though it may be more reliable for sourcing the staples that participants cited purchasing there. Focus group and interview participants did not mention this inconsistency per se, but did mention the use of sales flyers and buying clearance items, which also offer discounted products for a limited time. These discounted foods were essential for some of the focus group participants' food management strategies:

*“They are saying that **if they don’t look for sale, then we can’t have food, for [because] of the, expensive.**” (FG5)*

Buying discounted or cheap food was one part of a larger dynamic strategy for meeting household food needs, a strategy which also included a reliance on sources of free food for many participants, including WIC and the local food shelf. A few Iraqi participants and most Somali Bantu participants expressed shame (indicating unacceptability) in going to the Food Shelf, but **most Bhutanese and Iraqi participants expressed that they did not feel shame. Rather, an occasional or frequent visit to the Food Shelf seemed to be an acceptable and even normalized part of their total food**

management strategy for sourcing both cheap and expensive ingredients, rather than being seen as a last-resort measure:

“She saying that I do go to food shelf on regular basis, and if I find something that I like, then I do bring.” (FG1)

“And the main big problem is that the bread is the main thing in their meals. It is VERY expensive here. So what they do, sometimes they bake bread in their houses to avoid buying loaf of bread for four dollars.... She said that is good idea, but sometimes the electricity and the gas is very expensive here. Sometimes when you bake you pay a lot for electricity, so it’s better to go to the food shelf! To get the bread.” (FG3)

Service providers’ perspectives of food shelf social acceptability paralleled those of the focus group participants. Most service providers who discussed the topic had not encountered a sense of embarrassment or social stigma in using the food shelf, including two providers who worked with Bhutanese families. A couple suggested that use of the food shelf was usually seen as just another part of the system of government support along with SNAP and WIC, perhaps related to also being accustomed to receiving aid in previous countries. Only one service provider mentioned encountering a few families who avoided going to the food shelf because they felt it was too embarrassing and they feared being recognized by someone from their community.

As part of their household food strategy, a few participants also described buying lower-cost versions of similar things, such as buying frozen spinach rather than

fresh. Several service providers also recommended this strategy to their clients. However, input from other focus group participants suggests that this strategy would be unacceptable for certain foods, due to participants' disapproval of the quality of the vegetables compared to countries they had lived in previously:

“Yeah, the taste in Nepal is way better than here. So probably like if we garden, if we plant something in the garden, it taste much better than the food that we buy from the grocery store.” (FG1)

“I do go to the farmers market every Saturday, but it [is] expensive... So, if we get anything from the farmers market, then we feel like it's the same taste that we used to get in Nepal.” (FG1)

“Yes, yes, it's completely different, taste very different. In their country, they always buy fresh.” (FG3)

“...especially cucumber here. There we used to just [get] the cucumber and then make it... and eat it, it taste so good. But here we can't do that unless we put extra spices on it because it smell.” ... [another participant] “oranges also.” (FG5)

The strategic sourcing of food is also inextricably connected to the skills required to use the food – a concept that has been discussed under the term “food agency” (Trubek, Carabello, Morgan, & Lahne, 2017). Among all focus group and interview participants, the skills to cook food from scratch was never mentioned as a barrier, except

in the case of wanting to learn to cook “American” foods for children. The implication seemed to be that when the right kinds of foods (culturally appropriate) are available and accessible at the right price (affordable), most resettled refugee families have the skills to prepare the food. One volunteer added that within the Bhutanese family she befriended, the cooking and shopping seemed to be fairly distributed among the family members rather than primarily the responsibility of the mother, suggesting that among some families or communities these skills may be somewhat widespread. Adding growing, foraging, and preservation knowledge to this skill set yielded a picture of potentially high levels of food agency among many resettled refugee communities (though this would need to be statistically tested). The barriers to food security, then, seemed to lie more in the mix of acceptability and accessibility that influenced which foods ended up in household kitchens. High food agency among New Americans likely contributed to the high rate of use of coupons for farmers’ markets, as one service provider calculated that most clients who signed up for the coupons were New Americans (disproportionate to the total distribution of clients). It is interesting, then, that most focus group participants mentioned avoiding the farmers’ markets (as well as the local cooperative market) due to their high prices.

Concerns about certainty for many participants tended to be centered on **certainty of competing costs and certainty of income, rather than around certainty of food per se, but clearly relates to the ability to afford food.** For some participants, these concerns trumped their concerns about food, particularly for the Somali Bantu and Bhutanese participants who felt their options for affordable food on a small budget were adequate.

“The main concern here is health insurance and other things they need to worry about. Back home [Kenya camp], health insurance, health, was free for them... But over here, [she] says that there are times that she’s sick and she can’t go to the hospital because of the bills that she would get, because she doesn’t qualify for health insurance. So, it’s health and other house expense that worries them the most, because over here your credit gets ruined if you’re not on time.” (FG2)

“Yeah, so the food stamps is sometimes not enough. By the 20th or the 15th of the month it’s already gone. Sometimes also when the husband is like working, you know, sometimes the money goes for like rent or other stuff that is very important, and then they don’t have a lot at the end of the month. She said that they have a lot of other bills.” (FG3)

“So she was saying that she’s size 11, and it’s only her husband who brings income to the house, so her benefit is \$600 with you know, 9 kids, and like, the month is not even over yet and she has nothing because she used all the benefits that was available to her. And so, she waits, or she tries to cut some money from the bill so that she can provide for the kids. And so, if it’s very hard for her to manage, what she does is for electric bill, when it’s like \$370 she, instead of paying the whole \$370, she gives them either \$100/\$150 and the rest she goes grocery shopping so that the kids don’t starve.” (FG2)

These last three quotations demonstrate some of the constant negotiations participants need to engage in, juggling trade-offs in paying for certain expenses rather than others,

one of which is food. In the second example, earned income is prioritized for bills rather than food, while in the third example, some of the electric bill goes unpaid in order to have money for food. These trade-offs complicate the concept of household food security. In all three examples, participants' households face a shortage of resources. However, the choices made about which expenses to pay versus which things to sacrifice - including longer-term considerations of credit - can leave each household appearing to have a different level of food security from the others. One service provider also discussed the precarious situation for clients of having to balance costs for housing, heat, electricity, gas, and transportation, which are often a greater source of concern than food.

In addition to the unpredictability of competing costs, participants experienced **uncertainty in their incomes and in the amount of food stamps they received**, sometimes expressing shock at how seemingly unfairly the two were linked:

“Sometimes we do worry about that [not enough resources for food], because if somebody is working in the family and then the person is not feeling well, he can't go outside to work, and then there is no way that they can buy food. So, that's the time. And then another thing is like, if somebody is mourning, if somebody dead, they have to skip their work and they have to stay there for the mourning ceremony, and that's the time when they can feel...not earning.” (FG5).

“And also, because she has little kids, she is sort of forced- not really forced, that's not the word, but, it's better for her to stay home than work because when her and her husband were working all the benefits were cut, including {medicare? medicaid?}, and you know, it's very costly, so, and the rent of the house goes up,

and with food and all that, they couldn't, even with them two working, um, health care, food, rent, and everything, there was no benefit coming in with her working and taking the kids to daycare. And so, she decided to stay home and husband work full time.” (FG2)

The experience of having household food benefits cut after a household member started working was common among the participants. As in this last quotation, some participants felt that their best financial option was therefore to not work, while others chose to continue working despite the significant loss of resources that it resulted in for their families. One volunteer interviewed discussed how the family she works with didn't receive SNAP because both parents were working, but that without being on SNAP they couldn't get the fee for the American citizenship test waived. Without waving the fee, the cost for the test was prohibitively expensive (upwards of \$700, according to her). She reasoned that the family would actually save money if one of the parents quit their job in order for everyone to take the citizenship test, because the family was on the verge of the oft-cited “benefits cliff” (also known as “cliff effect”) (Prenovost & Youngblood, 2010; Thomas, 2013). Having citizenship would then likely increase the chances of securing a higher-paying job.

Finally, participants' choices about spending money on food were not only influenced by immediate considerations but **also longer-term considerations. Having to worry about credit scores (see above quotation) or late fees influenced participants' spending choices.** Additionally, some participants also discussed social obligations that required them to save up money for the future, such as religious events or weddings, which resulted in them cutting their current consumption:

“So usually religious events are planned ahead of time, so then we can start planning, like we can reduce our amount of intake and then we can save for later.” (FG5)

CHAPTER 4: DISCUSSION

Introduction

Here I apply the five themes described above in considering the fit of the HFSSM to our research data, the importance of food security elements not included in the HFSSM, and larger implications for how we think about food security measurement and solutions to food insecurity. I end with some key takeaways of this research for local service providers and policymakers.

Validity of the HFSSM for Measuring Food Security among Refugees Resettled in the US

The five themes detailed in Chapter 3 point to potential problems in applying the HFSSM to resettled refugee populations in the United States, and perhaps to other populations as well. I summarize these potential problems in Table 8, listed according to HFSSM question or group of similar questions.

Table 9. Potential measurement problems with the HFSSM for resettled refugees, listed by question.

HFSSM Q#	Wording	FS Domain	Data Conflicting with Intended Constructs
HH2, HH3	"(worried) whether our food would run out ;" "food we bought just didn't last ."	Quantity	<ul style="list-style-type: none">•Referring to having nothing to eat in general, but also still having some things to eat•Running out of <i>certain</i> things•Referring to having <i>less</i> food, but not necessarily running out•Relative to running out of food in the refugee camps

AD1, AD5, CH4-5, CH7	" cut the size of your meals or skip meals ;" " cut the size of any of your children's meals ;" "did any of the children ever skip meals ;" " not eat for a whole day ."	Quantity	<ul style="list-style-type: none"> •Inconsistent meal eating patterns; regular skipping of meals, especially breakfast •Cutting <i>certain</i> foods from the meal, rather than reducing the <i>size</i> of the meal •Reducing food intake to save up to have enough resources for a future event •Relative to previous experiences with food
HH1, AD2, CH3	"children were not eating enough ;" " enough of the kinds of food we want to eat;" "eat less than you felt you should "	Quantity	<ul style="list-style-type: none"> •“Enough” being when there is a minimum of certain foods •Complexity of children eating different foods than adults •“Enough” as relative to previous experiences of having much less or much more food
AD3-4, CH6	" hungry but didn't eat;" " hungry but you just couldn't afford more food;" " lose weight "	Quantity	<ul style="list-style-type: none"> •No mention of hunger in the US •One mention of adult losing weight due to prioritizing food for children •Hunger framed by previous experiences of food deprivation in refugee camps or during war time
HH4, CH2	"couldn't afford to eat balanced meals ;" "couldn't feed the children a balanced meal "	Quality	<ul style="list-style-type: none"> •Balanced day rather than balanced meal •“Balanced” sometimes interpreted incorrectly as “healthy,” “nutritious,” or “enough;” lack of exact translation in all three languages
HH1	"enough of the kinds of food we want to eat"	Quality	<ul style="list-style-type: none"> •Foods “wanted” are possibly indistinguishable from preferred, good, favorite, acceptable, typical, familiar, minimum, and low-cost foods •Relative to kinds and quality of foods eaten in previous countries •What “we” want is complicated by changing tastes of especially younger resettled refugees
CH1	"relied on only a few kinds of low-cost food"	Quality	<ul style="list-style-type: none"> •Inconsistent opinions about which foods are expensive vs low-cost •Inconsistencies in costs of same foods between stores •Normalcy of relying on low-cost foods generally as typical staples of one’s diet •Overlapping with “kinds of foods we want” •Normalcy of eating some of the same foods every day, including low-cost •Relative to variety and costs of foods eaten in previous countries
HH2	" worried (whether our food would run out)"	Psychological	<ul style="list-style-type: none"> •Relative to previous experiences of food supply, deprivation, and worry •Framed in comparison to degree of worry about other competing costs •Framed in comparison to degree of unpredictability of resources •Related to a general sense of being provided for or not
HH2-CH7 (all required questions)	"Before we got money to buy more;" "couldn't afford ;" "wasn't enough money ," etc.	Access	<ul style="list-style-type: none"> •Evidence of non-financial barriers to access, especially for recent arrivals

Theme 1:

For Theme 1, and in some cases intersecting with the other themes, we can see ways in which previous experiences with food insecurity or security can potentially impact perception and responses to nearly every HFSSM question. In some cases, having **previous experiences with severe food insecurity could heavily and comparatively shape perceptions of what it means to run out of food, of food not lasting, of cutting meals or skipping meals, of having enough to eat, and of what causes worry about food.** Having experiences with eating poor quality food in refugee camps or war time, or conversely eating very high-quality fresh food in previous countries, can also shape perceptions of which kinds of foods are acceptable or preferred and whether they are affordable or expensive.

These potential impacts of previous experiences are unaccounted for in the HFSSM, but the experiences of resettled refugees **raise important questions about the subjective nature of food security measurement.** We can see that these comparative perspectives have bearing upon worry, sense of certainty, perceived food sufficiency, and the expected role of government and supplemental/emergency food systems. For the Bhutanese participants, the experience of previous food deprivation while on rations in refugee camps seemed to relate to their current expression of not feeling worried because the government would provide for those in need and because US food consumption was perceived as sufficient, even if at times it included only rice and lentils, or only rice. Some of the Bhutanese participants expressed a sentiment that food insecurity was so bad previously, that in comparison to that experience they felt more food secure in Vermont.

For the Iraqi participants, those that most remembered the food deprivation accompanying war felt that they were far more food secure in the US due to the presence of the emergency food system (i.e. local food shelf). Those that most remembered receiving staple food baskets from the government before the war felt that the government wasn't doing enough in the US compared to what they received in Iraq, and they placed importance on meat as a part of a sufficient diet. Despite some feelings of insufficiency, Iraqi participants did not express feeling worry, which some attributed to their religious faith and the interpreter attributed to cultural taboos about expressing worry. We also learned that many of the Iraqi participants had been accustomed to a middle-class lifestyle in Iraq and were likely on average more highly educated than participants from other focus groups. The Bhutanese and Iraqi participant experiences suggested that being accustomed to a higher standard of living and diet may make anything less than that seem insufficient, while that same amount and quality of food and lifestyle may seem ample for those that had previously experienced less. For Somali Bantu participants, other concerns in the refugee camps and in the US seemed to take precedent over concerns about food. In the refugee camps, they described having sufficient food, utilities, and medical care, but were primarily concerned about safety. In the US, they felt burdened by the multiple costs associated with living (e.g. medical care, utility bills) and the consequences for not paying bills on time. With food low on the priority list of expenses, the participants expressed feeling sufficient with a minimum of rice and beans.

For all groups of participants, even when food supply is low or perceived as not enough, it is not necessarily accompanied by a feeling of worry, or even necessarily a

feeling of uncertainty that would be reported as such. **When considered altogether, these experiences suggest that worry may not be a valid indicator of the uncertainty aspect of food insecurity for resettled refugees, while perception of food sufficiency also may not be a valid indicator of sufficient *nutrient* intake.** There may be better indicators of the unpredictability of food other than expressed worry. For example, interview and focus group data described how participants would often take free food every time it was offered, even when it was food that they didn't eat like peanut butter. This acceptance of unacceptable food may be indicative of an underlying feeling of insecurity. The extent to which that acceptance relates to previous food insecurity experiences versus current food insecurity needs to be studied further.

Even the feeling of hunger or the experience of weight loss can be problematic as indicators. The medical provider who suggested that experiences of extreme food deprivation can alter physical hunger feedback mechanisms and perceptions of hunger is also supported by literature (Piwowarczyk, Keane, & Lincoln, 2008). In considering hunger and weight loss as indicators, it could also matter *when* after arrival the surveys are administered, and of course *who* is being surveyed. Medical providers interviewed noted a high prevalence among refugee arrivals of being underweight or undernourished, in which case further weight loss would not necessarily be a reliable indicator of food insecurity experienced after arrival. Resettled refugees may still experience food insecurity in their host country, but it may be *relatively* better than the level of food insecurity experienced previously, which could even lead to weight gain. This is particularly likely in the case of weight gain associated with affordable types of foods, which may be less healthy foods consistent with much of the literature connecting obesity

to low incomes and the types of food that tend to be more affordable (Dinour, Bergen, & Yeh, 2007; Holsten, 2009). The medical provider noted, for very similar reasons, that most of her resettled refugee clients experience problems with obesity rather than weight loss. At the same time, a few of our Iraqi participants did joke that they could tell if someone was skipping meals to feed their child because they would become very skinny. Based on these pieces of evidence, **weight loss might be a valid indicator only of the most severe end of the food insecurity spectrum, and only after resettled refugees have been living in the US for a minimum period of time.**

Theme 2:

For Theme 2, important barriers other than issues of economic access emerged, especially for recently resettled refugees. **This presents a problem for most of the HFSSM questions, all of which are framed around economic access.** As noted by one participant, in some cases money was the most significant barrier, while in other cases the barrier was transportation or another cause. This is further complicated by considering that *a combination of barriers can lead to food insecurity, which may be difficult to capture in a brief survey.* While it may seem to make logical sense that many of these barriers ultimately relate back to insufficient financial resources, our data strongly suggest that it **should not be assumed that survey respondents will think about the HFSSM economic access questions in the same way as intended.** To be valid, surveys must be cognitively tested with respondents in some way that determines which constructs a question captures *for the respondents* (Miller, Chepp, Wilson, & Padilla, 2014), not just if it makes sense to the surveyor. When hearing a question about having

food challenges *because* “there wasn’t enough money for food,” participants would not necessarily take this to include food stamps or transportation challenges, nor to exclude food acquired from a food pantry. Even beyond this, particularly in the case of newly arrived refugees, some barriers mentioned in the focus groups do not result from insufficient funds. These include many of the cultural and linguistic barriers described in the previous chapter, which are also often associated with levels of acculturation (Hadley, Zoghiates, & Sellen, 2007; Patil, Hadley, & Nahayo, 2009). Mares (2017) also found in her research with diverse women living in Vermont that broader economic constraints, cultural negotiations, comparative experiences to previous places of residence, as well as gendered expectations of reproductive labor played important roles in the management of food security. She similarly critiques the HFSSM’s emphasis on “material wealth over other determinants of food security, particularly in marginalized communities navigating complex relationships of formal and informal economies” (p. 13). While the decision to limit the HFSSM to solely issue of economic access may be valid for measuring food security among other American populations, **our results suggest that economic access alone may not be valid for measuring food security among resettled refugees and other New Americans, at least not for recently resettled refugees** who may be less “acculturated” to living in the US. By limiting the measurement to only economic access, **not only do we risk missing cases of food insecurity, but we also fail to pick up on important barriers that local or federal policy changes may address.**

Theme 3:

While Theme 3 doesn't directly address a specific HFSSM question, it **raises questions about the validity of measuring food security at the household level due to important generational differences within the households.** Having multiple and starkly different diets within the same household unit can complicate such concepts as preferred foods, balanced meals, relying on a few low cost foods, and even running out. **What constitutes "socially acceptable" foods is dynamic and contested within a single household, even within a single person over time.** Multiple diets may add to the household food costs, and also **changes the picture of food agency** within the household as parents are less familiar with the preparation and nutritional value of children's preferred foods. It can also increase the burden of reproductive labor often carried by women in households, as was also shown in Mares' (2017) ethnographic research with four resettled refugee women in Vermont. Having different diets **may also make it challenging at times for parents to respond to some survey questions about their children's diets.** When the food consumed by youth is less familiar to parents, determining portion sizes and what is considered "enough" may also be challenging. In some cases, children who eat at school consume foods that are typically culturally prohibited, as suggested by focus group participants. In other cases, children may not eat at school because they do not like the food, but parents don't know about it, as suggested by some of the interview participants. Further complicating this picture of intergenerational dietary dynamics are parents who often worry that their children aren't eating enough, even when the children are becoming overweight, as one medical provider noticed about some of their clients. This could relate to previous experiences with food

deprivation, and can also relate to cultural norms that guide parenting behavior and perceptions of weight and health. The diets of resettled refugee youth, and the dynamics between resettled refugee parents and children with regards to diet, need to be researched more in depth in order to adequately understand their implications for food security survey measurement. Within such research, it is important to examine processes of dietary change of resettled refugee youth. As noted, many of the parents identified the schools as primary mechanisms of changing youth diets, as was also the case in Mares (2017). Yet, a further nuance to examine within this school-based change is how such change may be related to limited economic resources in households that push parents to make use of free school meals for their children despite concerns about its cultural appropriateness, as was also found in Mares (2017).

Another important note about internal household dynamics regards the distribution of food, which falls under the *utilization* domain of food security. Due to the managed process of food security discovered by Radimer et al. (1992), child hunger is considered a more severe indicator of food insecurity than adult hunger. When we asked about whether food might be prioritized for certain household members under circumstances of resource shortages, most participants replied that food was always distributed equally within the household and would never be distributed unequally. A couple participants did express that the most important thing was to make sure that the children were adequately fed, which might imply a similar order of priority as the American families interviewed in Radimer et al. (1992). At the very least, our research did not pick up any indication of other family members like the breadwinner being the

priority for feeding, as was the case in research in other countries (Renzaho & Mellor, 2010).

Theme 4:

Theme 4 discusses a few key concepts of food quality and quantity that seemed particularly problematic with respect our participant populations, which clearly apply to a few of the HFSSM questions. Previous studies with resettled refugees have particularly found it necessary to modify in some way the “balanced meal” phrasing of questions HH4 and CH2, after discovering participant difficulties in understanding this term (Dharod, Croom, Sady, & Morrell, 2011; Hadley, Zodhiates, & Sellen, 2007; Peterman, Wilde, Silka, Burmudez, & Rogers, 2013). Based on the lack of direct translations for this term in the participant languages, and the variety of interpretations of a “balanced meal” even after we explained its meaning, I agree that **there needs to be some degree of modification of the two HFSSM “balanced meal” questions** when administering them to our participant populations. At the very least, to state the obvious, the term would need to be explained in more words than a direct translation of “balanced” and “meal.” The variety of participant interpretations of the concept of “balanced meal” (even once translated and explained) further suggests that modifications to the HFSSM would also need to clearly express that the question refers to the five food groups and not to other forms of healthy eating (e.g. low fat, low sugar), and should be flexible enough to incorporate the idea of balanced diets within the course of a day rather than be limited to a single meal. A study with Pacific islanders in Hawaii similarly found that term “balanced meal” sometimes invoked only the three food groups most regularly eaten by

participant, and in other cases the concept was unfamiliar to participants (Derrickson & Anderson, 2000; Derrickson, Sakai, & Anderson, 2001).

The **HFSSM would also need to consider the cultural appropriateness of the assumption that eating all five food groups is typical or desirable**, since some diets do not necessarily regularly include dairy, fruit, or meat (if the protein group is conveyed as such). It would need to consider differences in understanding of relative portions and numbers of servings for the five food groups. Participants seemed to consider that they met the MyPlate guidelines if they had eaten one of the groups at some point during the day, which could consist of only a single serving or less. Answering a question about balanced meals also requires adequate knowledge of what constitutes each food group, but service providers gave examples of American foods that clients mistook for other foods, such as SunnyD for real orange juice. Furthermore, **“meal” may not be the most appropriate unit of dietary intake to measure for resettled refugees**, as certain foods (e.g. rice) must be present for some respondents to consider the food a “meal” or even real food.

The concepts of “running out” of food and food that “didn’t last” can also be more subjective and nuanced than the HFSSM anticipates. That participants in several groups described simultaneously having “nothing to eat” or “nothing in the house” while still having certain things to eat, suggests that the **boundaries delineating concepts of household food scarcity are not necessarily straightforward, consistent, or only referring to assessments of quantity**. Furthermore, concepts of having *less* or *little* food do not always accompany the perception of having *not enough* food; in other words, the perception of being food insecure. This relates back to the possible impact of previous

experiences on perceived food sufficiency. Running out of food or having nothing in the house often referred to not having the types of foods that were seen as more optional in the diet, but did not refer necessarily to running out of the “compulsory” foods of rice and pulses. **In these cases, early signs of food insecurity would be the reduction in certain kinds of foods, rather than reduction in food quantity. To run out of the minimal foods of rice or pulses would constitute a much more severe form of food insecurity.** It is also **possibly insufficient or invalid to inquire about reliance on “low-cost foods” because low-cost foods comprise the base of participants’ diets.** At the same time, because children often begin to prefer different diets than their parents, parents responding to a survey may perceive that their children are not eating enough or not eating what they should be eating even when the children are in fact eating enough but not eating the minimum foods of the parents, as suggested by one medical provider.

Theme 5:

Finally, **the dynamic and adaptive behavior surrounding household food management discussed by participants presents a challenge to survey measurement for all the but most severe signs of food insecurity, as it suggests that the food security concepts included in the HFSSM are continually negotiated rather than consistently defined and experienced.** In the literature, these adaptive behaviors are sometimes referred to as “coping strategies,” and left out of food security survey measurement because of their inconsistent statistical associations with food security (Coates et al., 2006; NRC, 2005). However, it seems to me that these strategies cannot be conceived separately from the idea of food security itself nor from its indicators, as these

behaviors are part and parcel of the experience of food security. For example, participants expressed **flexibility in the notion of what constitutes sufficient food quantity or quality, down to a threshold of certain minimum foods** that were seen as necessary to constitute an acceptable diet. These minimum foods shared significant overlap with foods that participants expressed as their favorite foods, their typical foods, socially acceptable foods, low-cost or affordable foods, and also frequently/repetitively consumed foods (hence, lower variety), particularly in the case of the Bhutanese and Somali Bantu participants. The low cost of these preferred or acceptable foods meant a lower likelihood that these foods would run out, and a lower likelihood of turning to other lower-cost foods in the event of resource shortages. Also, **whether food was “low-cost” depended on where and when the food was purchased**, as many participants made strategic use of shopping for discounts or in bulk when the opportunity was available to them. While these low-cost minimum foods did not constitute the entire desired or typical diet, participants exercised a lot of flexibility in the range between what was considered a minimum for being acceptable and a less-controlled purchasing of “whatever we want to buy.” **These acceptable foods and acceptable means of acquiring foods *included*, for many participants, regular visit to the local food shelf**, which was not seen by them to carry the same social stigma as is seen among other American population groups (NRC, 2006). The Iraqi participants expressed the most concern about the high cost of some of the central foods in their diet, mainly of bread and in some cases also of Halal meat, which seems to correspond to the Iraqi participants also being the most vocal about experiencing or witnessing more food insecurity in the US.

“Certainty” is another concept linked to food security (captured in HFSSM questions about “worry”) that is shaped by adaptive behaviors and complex household resource dynamics. For households to have certainty about acquiring food, there would need to be certainty both about the food and the means of acquiring it. When the household food management strategy entails shopping for foods that have unpredictable affordability at certain times or locations, I would argue that this means a degree of uncertainty, but it would not necessarily be reported as such in a survey. It is a different picture of food management than, say, having consistently reliable and predictable transportation to get to food shopping locations that have relatively consistent prices of desired items that the household can predictably afford each time. Conversely, regularly sourcing food from the local food shelf provided many participants with a sense of certainty and security about household food, but reliance on emergency food in the US is typically considered to constitute food insecurity (NRC, 2006).

Furthermore, whether the household can predictably afford preferred foods is inextricably linked to the certainty of other household expenses and income that can impact the amount of money available for food. **Therefore, the certainty of food access can’t be separated from the certainty entailed in these other costs, while the value of food cannot be separated from the values entwined in the other expenses.** For example, one Somali Bantu participant explained that sometimes she needs to spend money on clothes for her daughters so that they will fit in at school, which eats into the food budget. In this case, social values surrounding outward appearances were an important and required part of the household budget. It would be socially unacceptable to forgo certain expenses (e.g. having presentable clothing) for the sake of having more

money for food. **Therefore, when we think about social acceptability as it pertains to food security, we should not ignore the social acceptability of the tradeoffs made to ensure adequate food in the household.**

When faced with unexpected expenses and/or resource shortages, participants described a variety of strategies to cope with the situation, which at times meant sacrificing some of the food budget and other times did not - and all of this is in the context described above where the diet itself is adaptable. A subtler point within this discussion of coping strategies is **the apparent *normalcy* of many of the strategies.** “Coping” seems to imply a temporary state that is distinguished from a normal or sufficient state, but in the case of the adaptive management strategies exercised by participants, many of these strategies were deeply embedded in their way of life in the US. Having to shop at multiple stores because of the differences in affordability and acceptability of foods between the stores, and making regular use of the local food shelf and government programs like SNAP and WIC, were not conveyed by most participants as unusual or unacceptable forms of “coping.” Again, this may relate to previous experiences of food and resource shortages, and to a long-term experience of poverty, that make such food and resource acquisition practices be seen as socially acceptable. Mares (2013) also found in her study of undocumented migrant workers that regular sourcing of emergency foods had become normalized for many of the workers despite not having similar emergency food systems in their home countries, and that the particular kinds of emergency food sources accessed and their cultural acceptability was often mediated by gender. At the same time, from the perspective of a middle-class American who has never previously experienced poverty, some of these acquisition strategies might

register as socially unacceptable. **How, then, can we assess food security when the social acceptability domain is so highly subjective and amorphous?** Despite the difficulty of assessing social acceptability, though, **we cannot ignore the importance of the domain**, especially when looking at food security for diverse populations like resettled refugees.

The adaptive management strategies also complicate the notion of *certainty*. This raises the question of **what is uncertainty of sufficient food access, and where do we draw the boundaries around the concept?** The HFSSM primarily detects uncertainty through the occurrence of worry, or of running out of food and being unsure of how to get more, but I have already demonstrated how these concepts are problematic in the case of resettled refugees in the US. Few participants or clients of service providers said outright that they had no food, but instead usually said that they were “managing” with what they had. This concept of “managing,” however, covered a wide variety of states of management, from having very little to eat in the household to the seemingly normal everyday practices of acquiring food on a limited budget. **“Managing” seemed to imply a self-perceived state of not being food insecure, but masked important differences in relative food security that might be more easily detected in other populations.** At what point within those differences do we determine that a household is food insecure, and how can we make such a determination given the complications discussed? **At what point does being “careful” with how one spends money and being “creative” with how one makes supplies last become insecurity?** Additionally, different levels of food agency (*utilization*) between households and within households influence how affordably dietary needs and desires can be met. How should we factor in these differences in

utilization knowledge and skills when considering the degree to which households' need to manage resources creatively qualifies as insecurity? **The very notions of “enough” or “not enough” is intrinsically mediated by the strategies, skills, and networks for acquiring and preparing food.** My analysis of the data does not yield clear answers to these questions, but does at least raise the importance of these nuances and complexities for conceptualizing food security.

Furthermore, there is also a potential problem with the *communication* of household food insecurity that can be masked by the word “managing.” Several service providers pointed out that **often their clients were reluctant to admit that they had little or no food in their households.** Generally, they discovered the food insecurity of their clients through home visits, other service providers expressing concern about the particular family, and through building a relationship of trust with a particular family or mother. One service provider argued that the general format of a standardized list of questions to ask about a sensitive and complex topic like food insecurity is the wrong approach for several reasons, the first being the issue of embarrassment or pride barring discussion of the topic. Second, as mentioned previously, some resettled refugees have experienced mistreatment from their governments and may hold a fear or distrust of government as a result. Even with trained interviewers administering the HFSSM, a survey can end up feeling like an interrogation to respondents. Interviewers need to be further trained in issues of trauma and cultural sensitivity for the particular culture of the respondent. Third, respondents may fear that their responses will in some way affect the benefits they receive from the government. Linguistic barriers may make it difficult to clearly communicate otherwise to respondents. Fourth, food insecurity is a complex

experience, and without being able to ask follow-up questions or get to know the family more closely, it is difficult to definitively determine whether or not a particular household is food insecure. This problem is only exacerbated by the wide diversity of resettled refugee communities.

Problems with Demographic Questions

Our research also picked up a few potential problems with processes of collecting demographic information that are important to note for administering the HFSSM or any other household survey to resettled refugees. With the linguistic and cultural differences between interviewer and respondent, there are multiple chances for misunderstandings. One example is the **concept of a household**. A couple service providers described how their clients lived in non-traditional household structures, such as multiple families living under one roof but not sharing food, or various relatives living in a house for a short period of time. Their conclusion was that establishing a mutual shared definition of what is intended by the term “household” often requires having a short conversation to verify that mutual understanding. Most of our focus group participants did seem to understand the intended meaning of the term “household,” so this did not register as a major problem. What did seem to be a bigger problem was the **question of household income**. Interpreters and several service providers explained that this was a more difficult question for respondents to answer accurately, especially when multiple people in the family worked multiple temporary or part-time jobs. Some of the responses we received about income from focus group participants didn’t seem to make sense based on other responses that those same participants gave during the focus groups.

Additional conversation will likely be required when collecting demographic information from survey respondents in order to verify a mutual understanding of the concept of yearly household income.

Important Food Security Elements Not Included in the HFSSM

If we compare the US and/or FAO definitions of food security to the concepts included in the HFSSM questions, it becomes immediately apparent that some elements of food security are not being tested by the HFSSM. Again, in considering these elements, the USDA definition states that “Food security means **access by all people at all times to enough** food for an active, healthy life... Food insecurity is limited or **uncertain availability of nutritionally adequate and safe foods** or limited or **uncertain ability to acquire acceptable foods in socially acceptable ways**” (USDA, 2014). From the above results and discussion, we can see that the HFSSM captures *some* elements of “enough,” “nutritionally adequate,” “uncertain,” “acceptable foods,” and “access,” but not all elements of those concepts. It places most focus on the domain of *quantity*, and limited focus on the *quality* and *psychological* domains. It does not include “safe foods” or “socially acceptable ways.”

A panel charged by the USDA to assess the HFSSM based on a review of food security literature also pointed out that the HFSSM does not cover all the concepts included in the USDA definition of food security (NRC, 2005; NRC, 2006). They concluded that it is unnecessary to measure all the concepts included in the food security

definition because measurement is limited to the household level, because food is generally safe in the US, because nutritional adequacy and other elements are already measured by other surveys like NHANES IV, and because the USDA is primarily concerned with economic causes of food insecurity (NRC, 2006). However, we cannot assume that the limited definition and measurement of food security is sufficient for populations with whom the HFSSM has not yet been adequately tested and validated, such as resettled refugees. Some of the omissions between definition and survey discussed by the review panel arose through our research, as well as additional ones. Some food security elements are entirely missing from the HFSSM, while others are only partly included. My elaborative and emergent codes were helpful in illuminating aspects of the data related to these missing food security elements.

Above I discussed in conjunction with themes 4 and 5 some of the problems with the concepts of certainty and “socially acceptable ways” of acquiring food, as well as some of the flexible or rigid boundaries surrounding what constitutes “acceptable” food and “enough” food. Here I discuss additional food security elements that are not included in the HFSSM but emerged as important concepts in our research.

“Nutritionally Adequate” Food

The HFSSM asks limited questions to ascertain the nutritional adequacy of household food consumption, including only asking about “balanced meals” and about eating “a few kinds of low-cost foods.” Above I discussed the problems with the concepts of balanced meals, low variety, and low-cost foods when applied to resettled refugees. Despite these problems, it is still important to somehow capture the concept of nutritional

adequacy. Asking only general questions about dietary adequacy and feelings of security would miss nutritional inadequacies implied by the concept of minimum foods, or “compulsory” foods. That is, many Bhutanese and Somali Bantu participants expressed feelings of food adequacy as long as there were rice and pulses to eat. However, a diet consisting of mainly rice and pulses may be missing sufficient amounts of certain vitamins and minerals, and would not meet the dietary guidelines of MyPlate. When it is also *normal* to eat mainly rice and pulses, it becomes particularly difficult to assess the degree to which eating fewer than five food groups is a result of insufficient household resources. This makes it difficult to determine food security status in terms of nutritional adequacy. Participants described cutting *certain* foods as resources became more and more limited, which may be the key indicator of nutritional adequacy. However, which foods are reduced, how much of each is reduced, and the social acceptability of reducing those foods will differ between cultural groups and between households within the same cultural group. Furthermore, in asking about dietary diversity with resettled refugee respondents, care needs to be taken in how concepts are communicated and understood, so that a vegetable, for example, means the same thing to everyone. Mutual understanding needs to be verified in terms of the types and amounts of foods implied by questions.

Additionally, there is a potential problem in the case of parents being able to assess the nutritional adequacy of their children’s diets. In this case, the nutritional inadequacy of children’s diets may be related to limited resources, but it may also be related to limited knowledge and familiarity of the foods and how to prepare them, a problem that would fall under the dimension of *utilization*.

Safe Food

The HFSSM does not ask about safe foods at all. This may be because eating unsafe foods did not emerge as significant in the Radimer et al. (1992) research. However, in the case of resettled refugees, it may be important to ask about food safety for several reasons. One reason is that even though accessing emergency food resources may be seen as culturally acceptable or normal in some communities of resettled refugees, participants indicated that these sources of food are often expired. Thus “resorting to emergency measures” may not emerge as a problem under *social acceptability*, but it would arise as a problem under food safety. The second reason is that unsafe food preparation and storage practices may be more common among recently resettled refugees. The barrier to this kind of food safety is not limited resources but rather is related to knowledge and education. It is important to be careful about how surveys ask about food safety, though, because in some cases “unsafe foods” were interpreted as foods that were religiously prohibited, culturally distrusted (e.g. canned food), or likely to make a person feel unwell for a variety of reasons. Additionally, it cannot be assumed that resettled refugee respondents are familiar with the concept of expiration dates on foods. Most of our focus group participants were familiar with the concept, but some indicated that they had learned this idea since arriving to the US. Recently resettled refugees may not yet be familiar with expiration date labeling because expiration labeling arose out of a specific food systems context in the US and is not always applied the same way in other countries (Friedberg, 2009).

Access

As discussed above, other types of access besides **economic access may be particularly important to include for resettled refugees, and especially so for recent arrivals**. Further supporting the need to include other types of access in the HFSSM is the FAO definition of food security, which includes “physical, social and economic access” (FAO, 1996; FAO, 2009). Also problematic within the domain of access is the attribution of *causation*. Each HFSSM survey question is double-barreled in the sense that it inquires about a food security element or indicator under the condition that it is caused by a problem with economic access. This design is meant to exclude reasons that may be personal choices on the part of the respondent, such as losing weight because they want to be thinner (NRC, 2005). However, by tying each question about a food insecurity indicator to an explanation of its *cause* (economic access), we risk the possibility of a false negative response. That is, the respondent may answer that they did not experience the indicator when in fact they did, but due to other non-economic barriers of access. This potential problem needs to be adequately tested for among resettled refugees.

In order to adequately capture all elements of food security for resettled refugees, an alternative survey design would need to offer more options for the causes barring access to adequate food. Phase 2 of this research project (beyond the scope of this thesis) tested for significance of these additional barriers through an alternative food security survey. At the same time, **testing for causality through survey measurement is challenging when we consider each of these barriers as one contributor among several or many to food access problems**. With each household facing unique and dynamic combinations of access barriers, it is a challenge to include such complexity

within survey design and subsequent program responses. However, such a challenge is worthwhile to engage in, in order to more comprehensively address the problem of food insecurity.

Utilization

Utilization is an important dimension of food security for households. It includes the knowledge of preparation and storage, nutrition knowledge, facilities, and intra-household distribution that make it possible to transform the food from a stage of raw/purchased ingredients into something that every household member can then consume (Pinstrup-Andersen, 2009; Renzaho & Mellor, 2010). Analytic codes related to utilization did not arise often as food security concerns for focus group participants. To the contrary, many expressed knowledge of cooking food and the willingness to take the time to cook food despite it taking hours of each day, implying a high degree of food agency. Even though it did not come up in focus groups, interviewed service providers mentioned a few barriers to utilization that they had noticed in their work, such as knowledge of how to use American cooking facilities for new arrivals or knowledge of how to prepare American foods affordably for children. **In the case of purchasing and preparing American foods for children, limitations in the dimension of *utilization* can become barriers to food security when they reduce the nutritional adequacy of children's diets or increase the household cost of food.** At the very least, it is certainly worth considering and investigating possible *utilization* barriers in closer detail for resettled refugees and other New American populations in order to understand their implications for food security.

Assets/Stability

The balance of total household resources and the constant negotiations and compromises in spending that emerged through Theme 5 highlight the **connection of food security to household assets**, as discussed by Renzaho & Mellor (2010).

Understanding this broader context of the household's various resources provides a more comprehensive understanding of the experience of food insecurity, while paying no attention to assets leaves us with an incomplete understanding of food insecurity. Not only do households need to consider competing costs, but also future financial well-being, as indicated by some participants' concerns with credit scores, late fees, and important future social events. In situations where households are able to afford sufficient food by paying less for other expenses or by drawing from savings or other longer term assets, we should question whether we can reasonably call this a situation of food *security*, and we should also consider how or whether it can be included in a survey about food security. A panel charged by the USDA to review the HFSSM also concluded that it is important to include measures of duration and frequency of food insecurity experiences, in order to capture the long-term tradeoffs made at the household level (NRC, 2006).

Additionally, a major sub-theme running through Theme 2 (barriers) and Theme 5 (strategic management) was **the significance of social assets**, often referenced in the data through the word "community." Another term to describe these social assets is *social capital*. Social capital is one capital among five or seven capitals, depending on the particular capitals framework being employed (Bebbington, 1999; Emery & Flora, 2006;

Tuazon, Corder, & McLellan, 2013). Social capital essentially refers to the social organization of human relationships, meaning that it can include institutions, social networks, policy systems, relationships, families, businesses, and other examples; along with the bonds that tie people together in these ways, like trust, reciprocity, and a sense of belonging (Emery & Flora, 2006; Jacobs, 2011; Tuazon, Corder, & McLellan, 2013). This thesis is not an in-depth exploration of the different capitals and accompanying frameworks, but it is essential to acknowledge the emergent importance of social ties in our research. These important social ties are perhaps best captured by the idea of social capital.

Renzaho and Mellor (2010) support the conceptual use of capitals discussing that the food security dimension of *asset creation* is founded on five kinds of capital (natural, financial, physical, human, social). Renzaho and Mellor (2010) explain that *assets* in the context of food security refer to the “structures and systems that sustain a household’s or individual’s **ability to withstand sudden shocks** that threaten their access to food” (p. 6). An important aspect this idea of assets is that it relates to *vulnerability* and *resilience* of households and communities, two notions that are critical to discussions of complex systems and sustainability (Maxwell & Smith, 1992). Resilience generally refers to the capacity of a system to absorb change (1992). Social capital can serve as a critical buffer to shocks in the household or community food system, leading to greater resilience (1992).

In many ways, **informal relationships with community members served as resources and buffers against shocks for households** when needed. The first source of this kind of support seemed to be extended family. Service providers and a few focus

group participants described households composed of multiple generations, and in some cases multiple related families living under the same roof (e.g. spouses and children of two brothers). These extended families were able to pool physical capital like cars and human capital like English skills, cooking skills, certification to drive, familiarity with local available resources, and each person's available free time. This kind of sharing also occurred between family members living under different roofs. Service providers and focus group participants also described more general cultures of sharing among New American communities, including within each of the three focus group cultural communities. For example, the practice of feeding guests was common among focus group participants, as was sharing food with community members or neighbors when there was extra food. One service provider observed that her clients seemed to prefer reaching within their own communities for help with food or money before reaching for outside help. Sometimes this meant going to relatives' or friends' houses to share meals. These family and community social ties were also essential to processes of orientation for new arrivals, and have also been found to be critical for new arrivals of other immigrant groups, particularly for undocumented migrant workers who have few other places to seek such information without risking exposure (Mares, 2013). A few focus group participants also described setting up informal loans with specialty store owners to be able to acquire food that month that would be paid back at a later date. It is likely that shared language, cultural norms, and relationships of trust make this kind of social capital possible with these business owners. The very existence of these stores also represents a kind of social capital that makes culturally appropriate food locally available. Finally, the presence of non-profit organizations that are staffed by New Americans seems to serve a

critical role in mitigating food insecurity, such as the Association for Africans Living in Vermont. Interviewed service providers who were themselves New Americans demonstrated close familiarity with the cultural intricacies of the clients they served, particularly for clients of a similar cultural background. One service provider suggested that many clients came to him specifically for help because he was New American, even when the help they needed was far beyond his job description. In some cases, religion is the source of the bond between New Americans. A couple Iraqi participants suggested that their local mosque was an important place for social support.

All of these examples of social capital serve critical roles in the complex assemblage of strategies and resources that help mitigate against food insecurity. Similarly, Martin et al. (2004) found a positive association between social capital and food security, even for resource-strapped households (Renzaho & Mellor, 2010). Because of the complexity of these webs of social relationships and behaviors, it is difficult to conceptually separate out any single source of social capital to understand the extent to which it helps mitigate against food insecurity. Studying these relationships of social capital as a complex system could be a fruitful research project in order to identify key leverage points for strengthening food security for New Americans. Studying the dynamics between different types of capital within New American communities would also expand our understanding of the *security* part of food security - that is, the extent to which they help protect against shocks in household food access. It is clear that **these forms of social capital represent strengths of New American communities in Vermont, and therefore should be a key component of future efforts to support New American food security.** Important caveats to this are to not treat or conceive of all New

American communities as the same, and to recognize important tensions and rifts within New American communities. Not all forms of social capital will apply to and benefit every New American equally. Social capital is mediated through social identifiers like ethnicity, gender, age, caste, education, community roles, individual traits, and others. More research is needed to examine how these positionalities relate to social capital in New American communities in Vermont.

Another form of capital that was emphasized repeatedly by service providers and focus group participants alike was physical capital (Renzaho & Mellor, 2010), specifically in the form of vehicle ownership. Almost unanimously participants agreed that personal vehicles were essential for getting by in Vermont. At the same time, vehicles can be a relatively vulnerable household asset, just one accident or mechanic bill away from disuse, except when bolstered through social capital (e.g. ride sharing). Adding on to this problem, some government benefits programs like SNAP limit the amount of assets households can own (\$6,550 as of 2007), “constraining the ability of a family to own reliable transportation and receive food stamp benefits... If a low-income family on a tight budget owns an unreliable vehicle, the family must redirect money away from food expenditures into car maintenance” (Blanchard & Matthews, 2007, p. 205). Typically, built infrastructure comprises the category of physical capital (also called built or manufactured capital), such as road networks and sometimes transportation (Emery & Flora, 2006; Tuazon, Corder, & McLellan, 2013). I interpret this to allow the inclusion of public transportation like buses. The issue of vehicle ownership is closely tied to issues of public transportation, which is why I include it in the physical capital category. **The general impression from participants and service providers was that the local public**

transportation system was insufficient to meet the needs of New Americans, a sentiment that is also supported by Bose (2014). This made vehicle ownership one of the first priorities for participants after arrival to Vermont. The crucial importance of this particular physical asset may be different in larger cities in the US with more extensive public transportation networks; regardless, transportation is a critical asset for food security, both for obtaining food and for obtaining the resources for food.

Similar to Renzaho and Mellor (2010), **I argue that *assets* is an intrinsic part of the concept and experience of food security, based on the ways in which these capitals (especially social capital) were integral to adaptive food management strategies of participants.** Like with *utilization*, it became apparent that food security is inextricably *mediated through*, rather than conceptually separate from, *assets*. The importance of *assets* also places food security within the broader system of resources in the household. In this sense, food security is just one aspect of the broader concept of “**sustainable livelihood security**,” whereby

“livelihood is defined as adequate **stocks and flows of food and cash** to meet basic needs. Security refers to secure ownership of, or access to, resources and income-earning activities, including **reserves and assets** to offset risk, **ease shocks** and meet contingencies. Sustainable refers to the maintenance or enhancement of resource productivity on a **long-term basis**” (Maxwell & Smith, 1992, p. 28).

In this livelihood security approach, food is just one priority among many (1992). In this sense, “**food cannot be seen as a *unique and objectively defined* need at a**

particular point in time, independent of people's other priorities at that point in time and their inter-temporal decision framework" (emphasis added) (1992, p. 31). This also complicates the idea of food security and its measurement because it demonstrates that *choice* is an inherent part of the constant negotiation and management of short- and long-term household livelihood security. Being able to determine through measurement, then, whether a household is food insecure due to voluntary reasons only really applies to certain voluntary reasons, like intentionally wanting to lose weight (NRC, 2006). Beyond that, however, it becomes quite difficult to say which specific decisions made within this livelihood security context are voluntary or otherwise, and the idea of choice becomes intrinsically tied to the complex relationships of elements that combine to create a household livelihood. This may open the "Pandora's Box of data and interpretation" when it comes to measuring food security (Maxwell & Smith, 1992, p. 31). Maxwell and Smith (1992) argue that "It may be more appropriate to recognize complexity and diversity in such a way as to maximize the choice and freedom of maneuver of the food insecure themselves, rather than trying to impose a small number of indicators from outside" (p. 31). In such complexity, we begin to move from the problem of measurement to the priority of solutions. Below I consider some potential ways that service providers and local policy makers may intervene in local systems to support the food security of resettled refugees in line with the sustainable livelihoods approach.

Content Validity: Implications for Conceptualization and Measurement of Food Security

After discussing the implications for food security measurement of the five emergent themes of the data, and the importance of food security elements not included in the HFSSM, I can now return to the original research question: To what extent does the HFSSM validly measure food security among resettled refugees living in the US? Again, as discussed in Chapter 1, this question has essentially become a question of the *content validity* of the HFSSM for measuring food security in this population. The discussion of the five data themes and of the food security elements missing from the HFSSM demonstrates that administering the HFSSM to resettled refugees in the US is not simply a matter of getting the language translations right. Instead, the perceptions and experiences of our participants diverged in significant ways from those of the participants in previous studies with whom the HFSSM has been validated.

From the evidence, we can infer that for the most part the HFSSM does *not* validly measure food security among resettled refugees in the US. This is partly because the HFSSM does not actually measure food security in the full sense of the definition of the concept for *any* populations, as discussed in Chapter 1. The HFSSM measures only direct economic access to food, but not indirect aspects of economic access, not other forms of access, and not the social acceptability of the means of access. It measures “certainty” only in terms of worry, and “at all times” only in terms of whether a particular experience has occurred in the past 12 months. It measures “all people” by including questions about children but not about every individual in the household, though individual questions may be unnecessary for populations that tend to demonstrate equitable distribution within the household. It measures “nutritionally adequate” only in terms of balanced meals and dietary diversity. It does not measure

“safe foods” or “acceptable foods,” with the possible exception that “low-cost” foods may be seen as less acceptable for some households. It does not measure “at all times” for longer-term time periods, and it does not measure food *utilization* in order to be consumed by “all people” in the household. **Our research shows evidence that all of the unmeasured components of the construct “food security” are important to include in measurement**, if the survey is indeed intended to measure “food security” rather than more limited specific components of the construct. Our research also suggests that **the specific components of the food security construct that *are* measured in the HFSSM are *not* being validly measured by the HFSSM *for resettled refugees in the US*. What the HFSSM *may* be validly measuring for these populations appears to be **only the most extreme forms of food insecurity**, such as having so little food that not even rice is present in the household.**

The adaptable strategies for meeting household food security from Theme 5, as well as the trade-offs involved in doing so, raise further questions about how food security is conceptualized and measured. First, when elements of food security like access, enough food, nutritious food, safe food, acceptable food, and socially acceptable acquisition are continually negotiated rather than consistently defined and experienced, it raises the question of what is being missed through survey measurement of food security that relies on a clear definition and bounding of food security concepts and their measureable indicators. This then also raises the question of how adequately survey measurement in general can capture food insecurity for individual households. Second, it raises the question of whether the scope of survey questions is large enough to truly measure food *security*, when households are making trade-offs in other or future

expenses and assets for the sake of meeting food security in the short term. Taking away from future security adds an element of uncertainty that is not currently within the scope of food security survey measurement.

Beyond Food? Social Justice and Food Security

When we look at the barriers to food security for resettled refugees in the US (Theme 2), the adaptive strategies to manage household resources (Theme 5), and the importance of the *assets* dimension of food security, we can begin to see that **food security is about much more than just food, and is larger than the individual**. Even though food security was the primary topic of our research, evidence clearly arose to indicate that there were important problems beyond food that had direct or indirect bearing upon food security, which supports the argument for approaching food security through a livelihood security approach (Maxwell & Smith, 1992). At the same time, it seems to me that this livelihood approach can also be situated within a social justice context. With clues provided in our data but not in-depth research to explore this topic, I draw more heavily from literature here to suggest implications of these beyond-food barriers. Passidomo (2013) writes of the tendency within food systems research to focus on “the food itself,” and the need for more research to use food as a “lens for contesting broader structures of injustice,” (p. 89). This isn’t to say that issues like food insecurity aren’t at all rooted in food systems, but that they are also inextricably tied to larger systems in essential ways that should be included in the analysis. She critiques many

urban food systems initiatives like urban gardening (and we could name some others) for being “laden with messages of personal responsibility and individual empowerment, and often neglectful of the structural causes of food insecurity and hunger” (p. 90). These structural⁷ inequalities are built on differences in political and economic power, and on legacies of racism and other forms of discrimination in US communities (Passidomo, 2013).

To the end of attending to some of the local and broader contexts surrounding food security, and in the interest of producing research that is useful to food systems practitioners in Vermont, my second research question asks: **Which social and structural qualities of the local environment influence resettled refugees’ experiences of food insecurity in Vermont?** Addressing this question then leads us to being able to ask: **What can policy makers, planners, and service providers do to most effectively combat these structural barriers?**

Literature on urban and regional planning, food access, and social justice asks similar questions and provides a helpful starting place to think about local structural barriers to food security and what to do about them. For example, in their critique of the concept of “food deserts,” Horst, Raj, and Brinkley (2016) argue that the common solution of adding a new grocery store to an area misses the underlying causes of food access limitations - “poverty, low wages, food pricing, segregated land uses and inadequate and inequitable transportation options,” as well as cultural food preferences of residents, and factors like advertising that sway food choices (p. 11). They assert that “solving food access issues is about more than just building a store. **It is about focusing**

⁷ Here the word “structural” refers to the literal structures of the built environment, as well as the more abstract structures of complex systems. Furthermore, the word “structure” connects to larger conversations about structuralism and post-structuralism, though this topic is beyond the scope of this thesis.

on community development” (p. 12). Focusing on community development, from their perspective, means **fighting for increased minimum wages and affordable housing, engaging with community members to find out what their greatest food access barriers are and solutions they desire, and focusing on strengthening the already existing resources in communities** rather than on attracting outside capital to build entirely new projects. The authors provide an example from Seattle where residents who were consulted about their food access challenges expressed that they most wanted “living wage jobs, affordable housing, affordable health care, and access to appropriate transportation more than a nearby supermarket” (p. 12). Examples of already existing resources in communities were ethnic stores, corner stores, liquor stores, and buying clubs where residents were already buying food. Projects around the country to build on local resources have included supporting the selling of produce in liquor stores and corner stores; subsidized shopping at farmers markets; community gardens in low-income neighborhoods; distributing food through churches, libraries, and community centers; and supporting local entrepreneurship (Horst, Raj, and Brinkley, 2016).

Furthermore, john a. powell,⁸ a prominent scholar of structural racism, argues that urban and regional equity is primarily a question of opportunity - “How is opportunity distributed throughout a region *spatially, socially, and racially?*” (emphasis added) (2010, p. 45). Here, opportunity includes more than just jobs; it also includes education, health care, services available, and health of the environment. Lack of opportunity means the insufficiency of any of these aspects, but, “when those things are truly available and accessible—spatially, socially and economically— you have a viable community” (p. 45).

⁸ This author spells his name with lowercase lettering.

We can see ways in which our focus group and interview data apply to this discussion of structural barriers and inclusive community development, especially data related to Theme 2. In light of the barriers described by participants and service providers, I consulted town plans (Table 9) for the towns with the six highest resettled refugee populations (Table 6), as well as for the Chittenden County Regional Planning Commission (CCRPC). Examining town plans can reveal important clues about the priorities of local governments and how (or whether) the barriers faced by different residents are being addressed in the built environment and dominant local social systems. **In this discussion I also tie in specific recommendations for local government, planners, and service providers.**

Table 10. Local policy documents and assessments consulted.

Jurisdiction	Document Reviewed	Year
Burlington	Burlington Municipal Development Plan	2014
	Burlington Urban Agriculture Task Force: Report to Burlington City Council	2012
South Burlington	City of South Burlington Comprehensive Plan	2016
	South Burlington Sustainable Agriculture / Food Security Action Plan	2013
Winooski	Winooski Municipal Development Plan	2014
Colchester	Colchester Comprehensive Town Plan	2014
Essex Junction	Village of Essex Junction Comprehensive Plan - 2014	2014
Essex Town	2016 Essex Town Plan	2016
Chittenden County	2013 Chittenden County ECOS Plan	2013

Note: See bibliography for more detailed citations of the documents reviewed.

Employment

From our research, one significant barrier to food security was employment. Service providers explained that resettled refugees have an especially hard time securing livable wage jobs in Vermont. This is related to English proficiency, lack of formal

education through certain levels (depending on the job), degrees or certifications from other countries that are not accepted in the US, lack of prior related work experience or any work experience, difficulty working due to physical or mental health limitations, and at times forms of bias on the part of employers (suggested by one service provider). Some resettled refugees have no prior formal work experience due to previously making a livelihood based on plant or animal agriculture or subsistence through informal types of work. Service providers and focus group participants complained that there were inadequate opportunities for earning an agriculture-based living in Vermont. This is despite the presence of programs like New Farms for New Americans that work to secure land for New Americans to cultivate. Gender also appears to be related to lack of prior work experience, with women in some New American communities working primarily as caregivers prior to arrival in the US.

Even though employment is one of the primary barriers to food security for resettled refugees, it can be difficult to distinguish which aspects of this barrier can be addressed at the structural level versus falling primarily as the responsibility of the individual. In some respects, it is both. For example, improving English proficiency can be enacted by the individual, but creating opportunities for affordable and accessible English learning is more structural in nature. The requirement of English skills for jobs or other daily life management is also structural in nature. Learning English isn't necessarily needed in other locations in the US, particularly locations of large concentrated non-English speaking populations. Education and training for jobs is also something that can be enacted by the individual, but the opportunities for doing so are structural in nature. Vermont Refugee Resettlement (VRRP) and local service providers engage in efforts to

persuade local employers to hire resettled refugees, and also provide some basic job skills training. In terms of urban and regional planning, the six town plans I consulted discuss the importance of attracting businesses to their communities and growing the number of jobs available, and most discuss the importance of achieving livable wages. The ECOS plan discusses how 21% of the county lives at less than 200% of the poverty line, and the need for job skills training that all community members have the opportunity to engage in (CCRPC, 2013). However, these plans do not discuss the barriers faced specifically by New Americans in accessing livable-wage jobs.

Housing

Housing was another significant barrier discussed by focus group and interview participants. They asserted that rent was too expensive, that heat posed an extra challenge during the winter, and that neighborhoods with relatively lower rent did not always feel safe for resettled refugees. **The availability of affordable and safe housing and its geographic location relative to goods and services is a structural issue that planners can strongly influence.** Each of the six town plans advocates for increasing the stock of affordable housing and having a diverse housing stock. There is a notable shortage of affordable housing throughout the entire county, with over 10,000 households in the county spending more than half their income on housing (CCRPC, 2013). The ECOS plan points out that non-white residents are more likely to be low-income and have difficulty affording housing.

Burlington in particular faces a housing crisis, which is especially problematic because it is home to the highest number of New Americans in the county. Planners

found only 6 vacant rental properties out of 1,639 surveyed in Burlington. The town plan explains that the presence of the University of Vermont (UVM) and several private colleges in the city exerts inflationary pressure on housing prices and attracts absentee landlords, which likely explains why over 50% of the rental housing is considered “substandard.” Households using Section 8 or other public housing assistance occupy 23% of rental units in Burlington. Even as early as 1990, over half of all renters there were spending more than 30% of their incomes on rent (Burlington City Council, 2014).

While the will to increase affordable housing is strongly expressed in every plan, the most common barrier to implementing it is lack of adequate funding. However, despite the issue of funding, several plans recognize that **one thing that can be done immediately is to have better enforcement of existing regulations, including more aggressively pursuing cases of discrimination** (Burlington City Council, 2014). A few interview participants suggested that New Americans face more discrimination in housing than American residents. This means they often end up living in less safe neighborhoods where they sometimes encounter discrimination from neighbors, especially against Black Muslim New Americans. One service provider also argued that the rules for residents of some types of affordable housing disrupted some family structures by limiting who or how many could live in the housing.

Transportation

Transportation was described as a problem for food access both explicitly and implicitly. Explicitly, service providers and a few focus group participants said that transportation to food stores was difficult, especially when trying to use public

transportation. Implicitly, the priority of car ownership and reliance on rides to grocery stores suggested that participants did not consider public transportation as a viable or preferable way to get groceries. Participants described several specific challenges related to taking public transportation or walking, some of which were related to cultural and linguistic barriers (difficulty understanding bus schedules, snow) and some of which were similar to barriers face by other Vermont residents (inconvenient bus schedules).

Transportation is another structural barrier that can be addressed by local planners. Transportation systems serve a critical role in getting food to people, and in getting people to food, to jobs that pay for food, and to vital social services (Bose, 2014). The Chittenden County Regional Planning Commission (CCRPC) plays a vital role in coordinating the public transportation system, which crosses multiple town boundaries. The ECOS plan recognizes that low-income residents and communities of color have less access to private transportation, making public transportation an important focal point in the ECOS and town plans (Burlington City Council, 2014; CCRPC, 2013). The needed improvements in public transportation that came out of community visioning processes for the plans included the need for extended service hours, more buses on weekends, and more frequent buses during peak hours (CCRPC, 2013). Participants in our research pointed out also that transportation particularly to Costco was difficult but important. They explained that it was difficult to reach Costco from the nearby town of Winooski due to the lack of sidewalks along parts of the route, and also the infrequency of buses nearby (none go directly to Costco). **Given the importance of Costco to participants' food management strategies, this seems like a priority for improvement.** The ECOS plan points out that the biggest hindrance to making transportation improvements is

funding. The county already spends \$754 million just to maintain the current system, and their costs already exceed their capacity (CCRPC, 2013). Perhaps some funds can be taken from other projects like capital-intensive street or town beautification projects described in some of the town plans, in order to prioritize serving the needs of low-income Vermonters who rely on public transportation.

Community Engagement

An essential step in creating equity-oriented community change is **engaging the voices of community members in decision-making processes** (Horst, Raj, & Brinkley, 2016; powell, 2010). Powell (2010) argues that “if you have a plan to fix the region but you don’t look at how particular populations are situated within the region, they will get left out” (p. 47). Engaging community members is also a powerful point of leverage within a community system, changing the “structure of information flows,” whereby new direct feedback mechanisms are created between residents and policy-makers (Meadows, 1999). In these processes, it matters *whose* voices are being heard. This is especially challenging when linguistic and cultural differences make clear communication difficult to begin with.

Discussions about diverse community members in each of the six town plans seem to have a direct connection to *who* participated in the community visioning process for each plan. Stakeholder participation has been recognized as an important part of the process of plan formulation in order to help ensure that the community plan serves the interests of those stakeholders (Hodgson, 2012). The ECOS plan likely includes extensive mention of New Americans and equity because of the key “partner

organizations” that were included in the planning process – the Vermont State Refugee Coordinator, Association for Africans Living in Vermont (AALV), organizations focused on racism and social justice, and a UVM refugee expert (CCRPC, 2013). The ECOS planning process utilized specific strategies to include “groups that have historically been left out of the public policy decision-making process,” including hiring an Equity Coordinator; speaking with over 600 members of marginalized communities; holding interviews, focus groups, and multiple community gatherings; and seeking repeated feedback throughout the planning process. Similarly, Essex Town and Essex Junction funded a community visioning process that explicitly sought to include voices of New American and LGBTQ residents (Town of Essex, 2016; Village of Essex Junction, 2014).

In contrast, the Burlington and South Burlington town plans mention having community visioning processes, but neither discusses who was involved or strategies to include historically underrepresented voices. South Burlington describes with implicitly exclusionary language having participation among “citizens” of the town (South Burlington City, 2016), while Burlington describes vaguely having “respect and tolerance for diverse views and values” in the process (Burlington City Council, 2014). In comparison to the explicitly and strategically inclusive ECOS and Essex visioning processes, the processes of Burlington and South Burlington don’t appear to be such purposeful attempts to include diverse voices. This is especially concerning in the case of Burlington, which hosts the highest number of New Americans as well as the majority of community services for New Americans in Vermont.

Specific strategizing for how to include New American perspectives in decision making processes is necessary and recommended due to a number of barriers

to participation that interviewed service providers discussed: 1) There are nuanced internal class and ethnic tensions within New American communities that planners may perceive as singular cohesive communities. For example, the understandings gained through speaking with Somali community members should not be applied to Somali Bantu community members due to a deep historical divide between the two groups. 2) Diverse social norms can influence how comfortable different community members are with advocating for themselves (especially in the case of women or youth), or with sharing information about hardships they may face, especially when sharing with government staff or community outsiders like white Americans. 3) Language, literacy, and cultural barriers can significantly affect the processes of communication in every stage of planning, as well as the diminish effectiveness of outreach efforts. Finally, in addition *hearing from* diverse community members, it is also important that staff and consultants *employed in* and with *power over* planning processes be representative of diverse community members. One recommendation would be to **prioritize hiring New Americans in service-provider organizations and public offices. Cultural-sensitivity training should also be a priority for current and new employees.**

A related important theme from interviews with service providers was the **need for increased collaboration between service providers in order to more effectively support the wellbeing of New Americans in Chittenden County.** Likewise, the ECOS plan and town plans point to areas where collaboration – between towns, local government departments, non-profits, institutions, local businesses – is needed in order to achieve the goals in the plans. Regionally, collaboration is needed to address shared goals that cross town boundaries, like transportation, affordable housing, and local food

production and consumption. Thinking and acting in systems is a major principle advocated in the ECOS plan, and is also emphasized in many plans around the country that address food systems (Hodgson, 2012). More immediate and tangible collaborative efforts could include the creation of a **regularly-updated universal online searchable list or database of different service providers (along with the services provided and contact information) in Chittenden County that serve New American clients**, categorized according to specific needs. The Refugee and Immigrant Service Providers' Network (RISPnet) is likely the best mechanism through which to organize this effort. Connecting this database to a social media platform would also facilitate communication and collaboration between service providers.

Sense of Place

We did not directly ask participants about their sense of place and belonging in Vermont or in specific places in Vermont, but several pieces of evidence from the data seemed to suggest that this might be an important topic for consideration. The first piece was a few service providers suggesting that resettled refugees prefer to shop at small specialty stores because they can find culturally appropriate foods *in their own language*, as well as a few mentions among focus group members of struggling with communicating in English in supermarkets. The second piece of evidence was conversation specifically about the local cooperative grocery store, City Market. Participants from 4 focus groups never mentioned the local co-op when asked where they shop, with the exception of a single Iraqi participant who shopped there, while participants in 1 Bhutanese focus group mentioned getting vegetables from there and

from the farmers market but complained that they were expensive. Similar sentiments were expressed about local farmers markets. No participants mentioned buying anything other than the high-quality vegetables from City Market, despite the store offering quite a few culturally-specific foods and rare ingredients, as well as offering discounted prices for bulk spices and rice, making efforts to offer cheaper conventional brands and holding frequent sales, and offering cooking classes from diverse cultural perspectives. What seems particularly interesting about the paucity of City Market patronage among participants was a general sentiment expressed among service providers that the local specialty stores are relatively expensive. This suggests that the *perception* of affordability does not necessarily equate to actual relative affordability of specific goods between these two types of stores, meaning that this difference in perception is at least partially explained by something other than price. It may have to do with how different grocery stores market themselves to their clientele. Participants mostly expressed shopping at Costco and the local conventional supermarket Price Chopper for cheaper items. These two stores specifically market themselves as being cheaper sources of food. Fewer participants expressed shopping at the other local conventional grocery stores Hannafords and Shaws, which do not market themselves as discount stores as heavily as Costco and Price Chopper, and some participants expressed that these stores were also expensive. The small specialty stores were where participants described acquiring more culturally-specific foods like spices and Halal meat, and seem to be marketed as more culturally specialized. These differences in marketing suggest differences in *whom* the stores are marketed to. This includes the linguistic differences noted by participants.

John powell argues that the built environment communicates values, including sending us messages about whether we belong and whether we are an outsider to a space (j. a. powell, public lecture, February 8, 2017). This “othering” can be based on race, age, gender, nationality, religion, ability, or other aspects of perceived identity. From this perspective, we might suggest that the differences between the types of grocery stores also convey subtle messages about who most belongs in those spaces or how. Again, our research did not explore this topic in depth, but I suggest it here because of the potential repercussions of *not* considering it. As john powell put it, “not belonging is stressful,” referencing current research that suggests that people of color (especially Black Americans) experience more rapid physical aging and deterioration specifically attributable to the higher degrees of stress experienced by these populations based on race - a phenomenon called “weathering” (j. a. powell, public lecture, February 8, 2017) (for example, see: Das, 2013; Geronimus, Hicken, Keene, & Bound, 2006). Additional evidence shows increased psychological distress and decreased physical health among Arab Americans associated with increased discrimination after September 11, 2001 (Padela & Heisler, 2010). Messages about belonging for New Americans in Vermont extend beyond just grocery stores. Instances of harassment of New Americans in Vermont sometimes surface in the news, and may be worse since the 2016 presidential election (Cassidy, 2017). Powell (j. a. powell, public lecture, February 8, 2017) also argues that part of a sense of belonging is the presence of other people like oneself. The sense of belonging through the presence of similar community member poses a particular challenge for Vermont, the state with the highest proportion of White residents (95.3%) (US Census Bureau, 2010). The remaining population in Vermont is 1.0% Black, 0.4%

American Indian, 1.3% Asian, 2.0% multiracial or “other” race; 1.5% is Hispanic/Latino of any race (US Census Bureau, 2010). This sense of belonging may also be more difficult for smaller New American communities.

This isn't to say that there aren't also many successful efforts to create more inclusive environments for New Americans in Vermont, including social activist groups and demonstrations, non-profit organizations working to better serve New Americans, efforts to include culturally appropriate foods in Burlington Schools, community gatherings to celebrate New Americans, public displays discussing the stories of New Americans, conscious efforts among white residents to refer to resettled refugees respectfully as New Americans, and other “place-making processes” of New Americans community members themselves like growing and selling familiar foods (Mares, 2017). Furthermore, messages and perceptions of belonging are experienced differently by different individuals. At the same time, we can still ask how environments can be made more inclusive. John powell argues that our goal should not just be to remove barriers in the built environment, but to design environments to be inclusive, to tell people that they belong (j. a. powell, public lecture, February 8, 2017). This pairs well with the importance of building upon existing resources in communities as suggested by Horst, Raj, and Brinkley (2016), and with my discussion of social assets of New American communities. Additionally, from the approach of sustainable livelihood security, **policies that enhance resilience of systems should be priority**, rather than just food-focused “defense strategies” to support food insecurity household (Maxwell & Smith, 1992). **Strengthening forms of social organization (social capital) that already contribute to**

the resilience of New American households and communities may be one effective strategy for enhancing resilience.

One example of building on existing resources in ways that also create more inclusive environments is to support local New American entrepreneurs, and to partner with them on community-building projects. For example, the local specialty stores that sell culturally-specialized foods are key resources in New American communities, not just for food, but also for building social relationships. **Local food-security initiatives could focus on partnering with these stores.** Raja, Ma, and Yadav (2008) come to a similar conclusion when examining the presence of food stores in Buffalo, New York. They find that even though there are fewer supermarkets in predominantly Black neighborhoods in the city, there are in fact many smaller grocery stores. They recommend “that local governments support existing food businesses (small grocery stores) and encourage networks between grocery stores and local food producers of healthful food” (p. 480). They give the example that “using economic development monies, local governments can set up **grants or loan programs directed to grocery stores for the purchase of refrigeration equipment to store fresh produce.** This would enable businesses to increase inventory and, therefore, upscale their operation as well as supply healthy foods within the neighborhoods” (p. 480). Similarly, the American Planning Association (APA) recommends that planners create incentives for local businesses to partner with nonprofits to offer more healthful foods in the stores (Raja, Ma, & Yadav, 2008). In the case of the specialty stores in Vermont, this would entail **consulting with store owners about challenges they face in sourcing culturally-**

specific foods, which are often not available locally, and in offering them at affordable prices.

Furthermore, in building upon social capital, we might conceptualize these specialty stores as one of several community nodal points for New Americans in Vermont. One primary challenge described by service providers was in being able to communicate their services to New Americans. I learned through our research of several spaces that are frequented by large portions of resettled refugee communities in Vermont. The first is of course VRRP. After that, every resettled refugee must complete a health examination, which must occur in one of two medical health centers. Additionally, many resettled refugees needing assistance after the resettlement process visit AALV, *the* primary service provider after VRRP. During these periods, many New Americans are also shopping at the local specialty stores, and visiting religious institutions. **Planners can provide support for these community nodal places to partner with other local nonprofits to communicate services that exist for resettled refugees.** These partnerships can be facilitated through the local Refugee and Immigrant Service Providers Network (RISPNet).

An example of focusing on community centers is discussed in the Colchester town plan. In strategizing how best to encourage cultural diversity, the Colchester town plan specifically suggests supporting religious organizations, which can often become centers of cultural diversity and community (Town of Colchester, 2014). Colchester also explicitly mentions its own role as a service provider for resettled refugees due to the presence of VRRP there. The Winooski town plan goes even further and takes an explicit stance on needing to celebrate and include diversity in all of its projects (Winooski

Planning Commission, 2014). The town plan boasts of its number and proportion (25.4%) of foreign-born residents; intentionally sets out a plan to include “symbolic features” throughout the town that celebrates and welcomes cultural diversity; and also resolves that downtown revitalization must be a part of the diverse and welcoming community that Winooski wishes to encourage. In contrast, despite its large resettled refugee population, there is no reference to resettled refugees or other New Americans in Burlington’s town comprehensive plan, with a brief mention at the end about needing to include more “minorities” on decision-making boards (Burlington City Council, 2014). To the contrary, as is the case in some of the other town plans, the Burlington plan makes frequent reference to its “sense of place,” strong neighborhood and town “identity,” and its role and legacy as a “cultural” center. By embedding these terms into discussions of history, tourism, and art, while curiously *not* attaching them to discussions of diversity, the implication seems to be that New Americans are *not* a part of these aspects of town identity.

The ECOS plan most comprehensively addresses equity issues for New Americans and other underrepresented groups, and spells out specific ways to support diverse communities in addition to “embracing diversity” and a “sense of belonging” (CCRCP, 2013). It recognizes that New Americans and people of color in Chittenden County disproportionately face “cultural and structural racism, xenophobia, and exclusion from social networks, education, and governance,” as well as discrimination in housing and jobs, leading to lower incomes and greater difficulties meeting basic needs. The plan even points out that “art” and “culture” must expand to include programs and events that engage diverse residents. The plan emphasizes that equitable participation and

opportunities for all community members is intrinsic to the idea of sustainable communities. **The ECOS and Winooski plans may be good examples for other towns to follow in revising their comprehensive plans.**

The ECOS and Winooski plans may be good examples of what Phillimore (2010) refers to as processes of “integration” rather than “assimilation” in his study of mental health impacts of different acculturation processes among resettled refugees in the UK. Integration involves mutual adaptations of resettled refugees and the host community, rather than a one-way adaptation (assimilation), a chosen separation, or discriminatory marginalization. The ECOS and Winooski plans demonstrate recognition that the county and town themselves need to undergo change in order to be inclusive their diverse residents, rather than just looking for ways to help New Americans fit into the dominant society. An essential component to the mutual adaptation of integration is building relationships between resettled refugees and members of the dominant society (in the case of Vermont, predominantly White Vermont residents). Phillimore (2010) found numerous factors that constrained resettled refugee and asylum-seeking participants from interacting and forming relationships with local UK citizens, including the trauma of forced displacement and persecution; post-traumatic stress; the grief of losing friends and family and concern for remaining family; feeling criminalized or vilified by the host-country society and media; the stress of insecure residence status for asylum seekers; stark changes from having greater wealth in their previous country to living in poverty in the host country; low English proficiency; being accustomed to cultures significantly different from the dominant host-society culture; being accustomed to safer rural living and warmer climates; being accustomed to more communal lifestyles, especially for

women now experiencing isolation; being a single mother; cultures that discourage women from talking about sexual violence with men or cultural outsiders; not having a job in the host country that forced greater interaction with local residents; and experiencing discrimination and harassment in the host country. All of these factors tended to create more isolation and lead to stress for participants. The primary source of help with these stresses for participants was sharing with their peers, which was at times based on ethnicity and other times based on religion. A major barrier to interacting with peers was lack of community space. **These barriers, and the importance of community spaces for New Americans, are important for local governments and service providers to consider in their efforts to create inclusive communities with New Americans.**

Another aspect to creating inclusive environments for New Americans in Vermont relates to how New Americans are discussed and treated by service providers and other residents seeking to support New Americans. An example of this emerges in the documentary *Welcome to Vermont*, a film exploring the lives of four New American families in Vermont. The documentary ends with a hard-hitting letter from one of the film participants to the filmmaker:

“.... You did ask me why I moved away from Vermont; well, I moved away because I had enough of being treated as a refugee, someone who has an amazing story but can’t live like everyone else. I felt like in Vermont, there are virtual limitations for refugees or immigrants. I can only work in a diversity office or immigration related jobs but I can’t compete for other jobs. I believe that I am bigger than this and I am tired of talking about my misfortunes. I turned 30 and I

realized that it is time for me to live my life freely and the way I want it. I am not weak, I am strong but sharing my story makes me feel like weak and need help. I appreciate your interest in my story, but there is no way you will be able to present my story if you don't understand me and being around me long enough to get to know me" (Niaglova, 2014).

The above quotation parallels some of my own analytic codes. I noticed that among service providers there was a mixture of discourse referring to resilience and self-sufficiency of resettled refugees on the one hand, and vulnerability and needing help on the other. **The nuances of how resettled refugees and other New Americans are discussed, in terms of disadvantage and marginalization, is another important point for service providers and planners to continue to explore.** For example, referring to resettled refugees as New Americans discursively emphasizes belonging and dignity. The quotation above also relates back to one service provider's argument that really understanding the food situation of a household requires developing a relationship with the family and getting to know them in a more intimate and nuanced way. She had quite a few misgivings about the adequacy of a survey to capture these more nuanced aspects of food security. Finally, the quotation also relates to my other findings and discussion supporting the idea of building on existing community strengths.

Insufficiency of Food Stamps - The Role of Welfare in a Free-Market System

Focus group and interview participants agreed nearly unanimously that the amount received from SNAP simply isn't enough to provide sufficient food to households. Even though SNAP is intended to be "supplemental" to household incomes,

in most cases it served as participants' and clients' primary resource for food. Likewise, they complained that the income guidelines determining the amount of SNAP benefits were too financially restrictive, forcing some families to decide between having a second adult working in the household or receiving SNAP benefits. One participant explained that her household was financially better off without the second job and still receiving SNAP. For families that faced limited SNAP benefits and household income, the local food shelf was one important source of food, despite complaints that the food was always expired and low quality.

This issue of SNAP benefits and food shelf usage connects to the larger political-economic systems in which they are situated. The role of the emergency food system and how it relates to the responsibility of government to provide for its people is a topic debated within anti-hunger and food systems circles. While anti-hunger advocates often point out the useful role of emergency food providers in distributing food in the immediate term to those who wouldn't otherwise have it, regardless of quality, social justice advocates sometimes critique this anti-hunger viewpoint as failing to address the underlying economic structure that leads to people needing emergency food in the first place (Poppendieck, 1994). Part of this underlying economic structure is the role of public entitlements. Poppendieck (1994) argues strongly that "tacitly, the institutionalization of [emergency food] programs seems to embody, or at least accept, the idea that destitution is to be a permanent part of our society and that it is acceptable for poor people to be dependent for their basic needs on the generosity of strangers, on wholly discretionary giving. Such beliefs erode the cultural foundations of public entitlements" (p. 73). Following this, she asserts that "true food security will require a

fundamental change in the way in which we distribute rights and quite probably a change in the way we produce the food to which we allocate rights. As we debate the best ways to respond to hunger, are we obscuring the structures that produce it?” (p. 75). Part of the argument here is that within an emergency food system, clients have no right or guarantee to food, but rather depend on the discretion of the private and nonprofit sectors. This may present a barrier to clients’ power to advocate for more culturally-appropriate foods, such as how Mares (2013) found that being placed in the role of client rather than consumer led many of the migrant workers she spoke with to feel that they should not complain about the lack of cultural appropriateness of the emergency food they received. Poppendieck identifies the moral basis of this system as one based on compassion to alleviate suffering, motivated by notions of benevolence and caring for those less fortunate (1994). She juxtaposes this to a social justice food security framework, in which the moral basis is one of enforceable rights guaranteed by the government, and is motivated by feelings of solidarity and a concern for fairness.

It is important to ask these questions about the responsibility of government to ensure sufficient food access for all of its people. One possible approach for assigning such responsibility is establishing a legal right to food (Allen, 1999). Another possible approach is through continually ensuring a sufficient legal minimum wage. Each of these propositions encounters strong political resistance at the federal level in the US, often attributed to the predominant set of free-market economic policies that have been variously termed neoliberalism, neoliberalisms, neoliberalization, neoliberal technologies of government; and now post-neoliberalism (Brenner, Peck, & Theodore, 2010; Ferguson, 2009; Ong, 2007; Peck, Theodore, & Brenner, 2009). Briefly, under the

German Freiburg School of post-WWII economic policy, influential neoliberal economists argued that any social welfare policy meant to be a balancing force against the negative social impacts of the free market are inherently destructive to the economy because they are anti-competitive (Foucault, Davidson, & Burchell, 2008; Lemke, 2001). This same line of logic pervaded into the Chicago School of economic theory, which produced globally influential neoliberal economists that advocated for “market-led regulation” (Foucault, Davidson, & Burchell, 2008; Lemke, 2001). Of course, social welfare has never entirely disappeared from US federal policy, and various forms of social support are still provided by the government. However, these forms of support still receive heavy resistance from policy-makers. Imagining an economic system in which social need takes precedence over economic demand is an idea that encounters even more resistance due to scale of change required. Allen (1999) explains that treating food as a right rather than as a commodity requires a radical restructuring of economic relations around food that requires looking at alternative forms of production and distribution, and increased power and ownership over the means of production in the hands of the people. Here we see that projects of social justice connect to changes needed in the underlying structure of the economy.

My point here is to argue that issues of food security cannot be completely separated from broader questions of political and economic policies and power. The fact that most participants were primarily concerned with non-food-related barriers (discussed above) suggests that tackling food insecurity requires changing these larger structures. How to do so, and how New Americans with various visa statuses may fit within these

rights-based systems, is a larger conversation (beyond the scope of this thesis) among food systems and social justice advocates.

Limitations

There are several limitations to the methods and inferences included in this thesis. In many ways, the first phase of our research (capture by this thesis) raises more questions than it answers about food security measurement among diverse populations. It reveals a variety of ways in which certain food security concepts or questions may not invoke the intended construct in respondents' minds, or ways in which the constructs may apply differently in respondents' lives. This seems to lead us further, rather than closer, from finding reliable ways to detect the occurrence of food insecurity in resettled refugee or other diverse populations. However, where Phase 1 leaves loose ends, Phase 2 of our research attempts to weave them back together. Where this first phase proposed a number of potential barriers and indicators of food security, Phase 2 tests these in the form of new structured interview questions with resettled refugees. This will allow us to make some statistical inferences about which of the potential barriers and indicators seem to be the most prevalent among the three cultural groups of resettled refugees included in this research. Phase 2 also strengthens the research by asking these questions in the form of individual interviews, and by cognitively testing each question in follow-up questions. Through comparison, these procedures will help us understand the ways in which the focus group process from Phase 1 may have impacted our initial results, either positively or negatively. For example, participants may have felt less comfortable sharing stories of

food insecurity in front of their peers than in one-on-two (researcher and interpreter) interviews.

This research may also be limited in inferences that can be generalized to other places in the US. It may be helpful for thinking about challenges New Americans may face in newer, non-traditional resettlement cities that tend to be smaller and more rural (Bose, 2014). However, the challenges and experiences of New Americans in larger US cities will differ in some ways. Larger, more diverse cities may experience geographies of race and segregation on much larger scales in ways that do not comparably apply in Vermont, and also have larger proportions and numbers of New Americans that service providers try to support. At the same time, some barriers may be reduced slightly in larger cities, such as the necessity of car ownership, the unavailability of translated materials or qualified interpreters, and isolation due to the presence of few others from the same country.

In addition, one service provider organization I was unable to successfully arrange an interview with was VRRP. I was particularly interested in learning more about the initial orientation process for resettled refugees, given the concern about this process highlighted by so many of the other service providers. Speaking with someone from VRRP would have allowed me to tailor my understandings and recommendations regarding this important initial orientation.

Finally, I would be amiss to not mention the limitations of my own positionality and experiences in navigating through this research. I am not a New American, nor have I had much previous exposure to working with resettled refugees. I also recognize that even though my father is from Puerto Rico and has experienced being a minority and

cultural outsider in the US, I myself am a native English speaker and carry many of the privileges and limited perspective of being white-passing. These things limit my understanding of the data, and likely influenced the nature of our interactions with participants in many ways unknown to myself but described as potential dynamics by other literature. For these reasons we relied heavily on interpreters, service providers, and local experts who work with New Americans, as well as implemented extra quality checks in our research like back-translation. It did at least likely help that Dr. Berlin and myself are both women and trained interviewers (albeit novice in my case). Additionally - and part of what draws me to this research - I grew up in a struggling low-income household and have shared some of the experiences described by our participants. On the one hand, this may provide me some extra insight into the experiences of food insecurity and poverty, but on the other hand there is also the potential for my own experiences of these things to bias my understanding of how they have been experienced by our participants. Continual self-questioning, reflexivity, memo-writing, and discussions with others about the research has hopefully led me to a more nuanced understanding of our participants' perspectives.

Conclusion

This chapter has emphasized the divergences of our data from the HFSSM over their consistencies. The intention in doing so is to highlight some of the ways the HFSSM may fail to capture the experiences of food insecurity among resettled refugees that arose through our research, which has potentially been leading to an underestimate of the prevalence of food insecurity within these populations. In many ways, it throws into

question the content validity of the HFSSM for measuring food security status among resettled refugees in the US, and challenges the findings of previous food security research with resettled refugees in the US that found the HFSSM to be valid for this purpose. While it qualitatively evaluates these divergences, it does not statistically capture the prevalence of each of these differences among resettled refugee populations. The alternative survey design and testing in Phase 2 of this research project will help to show which divergences may be of most concern among the three populations surveyed. Resettled refugees represent very diverse communities, and as such it may be difficult to draw generalizations about food insecurity experiences, but we can at least highlight diverse experiences that are as of now most likely NOT being captured by the HFSSM or other common food insecurity surveys.

These diverse experiences can inform not only the design of the HFSSM, but also local and national service providers and policy-makers who seek to provide support for the well-being of resettled refugee communities. The research can at the very least help to sensitize researchers and service providers to potential challenges that their resettled refugee participants are facing. Perhaps most notably, this kind of sensitizing may help to better prepare for *new* communities of refugees arriving in the US, which may be particularly vulnerable to encountering these barriers. Our research highlights some specific challenges that these new communities may face. This also helps make a case for the benefit of conducting in-depth food security assessments with each new group of refugees, in order to better serve the specific needs of that community.

Additionally, the recommendations discussed in this chapter are influenced by an understanding that in order to address food-systems issues in communities, we have to

holistically address other problems in communities related to social justice, such as issues of equity and cultural and social inclusion in local communities, participation in decision-making processes, and underlying political and economic structures. Even though the goal addressed through this thesis is to mitigate food insecurity, the solutions for doing so span beyond food systems. In these efforts, building on existing strengths and sources of resilience in communities, like social capital, is a key priority. Many of these issues can be addressed at the local level, but this also requires the towns within Chittenden County to work together to plan across the region and think in systems. While such a process can be fraught and complex, it can help to address the underlying roots of food insecurity and social inequity for New Americans living in Vermont.

Bibliography

- Allen, P. (1999). Reweaving the food security safety net: Mediating entitlement and entrepreneurship. *Agriculture and Human Values*, 16(2), 117-129.
- Anderson, S. A. (Ed.). (1990). Core indicators of nutritional state for difficult-to-sample populations. Report of the Life Sciences Research Office of the Federation of American Societies for Experimental Biology. *Journal of Nutrition*, 120, 1557S–1600S.
- Anderson, L., Hadzibegovic, D. S., Moseley, J. M., & Sellen, D. W. (2014). Household food insecurity shows associations with food intake, social support utilization and dietary change among refugee adult caregivers resettled in the United States. *Ecology of Food and Nutrition*, 53, 312-332.
- Ballard, T., Coates, J., Swindale, A., & Deitchler, M. (2011). *Household hunger scale: indicator definition and measurement guide*. Washington, DC: Food and Nutrition Technical Assistance, FANTA II, US AID and FNI 360.
- Bandak, A., & Kuzmanovic, D. (2015). Introduction: Analytical displacement and the project of the humanities. In Kuzmanovic, D., & Bandak, A. (Eds.), *Qualitative analysis in the making*. New York: Routledge.
- Bebbington, A. (1999). Capitals and capabilities: a framework for analyzing peasant viability, rural livelihoods and poverty. *World Development*, 27(12), 2021-2044.
- Becot, F., & Kolodinsky, J. (2014). *Burlington healthy food assessment*. The University of Vermont, Center for Rural Studies.
- Bhatia, S., & Ram, A. (2001). Rethinking ‘acculturation’ in relation to diasporic cultures and postcolonial identities. *Human Development*, 44(1), 1-18.
- Bickel, G., Nord, M., Price, C., Hamilton, W., & Cook, J. (2000). *Guide to measuring household food security*, revised 2000. United States Department of Agriculture, Food and Nutrition Service: Alexandria, VA.
- Bitler, M., & Haider, S. J. (2010). An economic view of food deserts in the United States. *Journal of Policy Analysis and Management*, 30(1), 153-176. DOI: 10.1002/pam.20550
- Bitto, E. A., Morton, L. W., Oakland, M. J., & Sand, M. (2003). Grocery store access patterns in rural food deserts. *Journal for the Study of Food and Society*, 6(2), 35-48.
- Blanchard, T. C., & Matthews, T. L. (2007). Retail concentration, food deserts, and food-disadvantaged communities in rural America. *Remaking the North American food system: Strategies for sustainability*, 201-215.
- Bowen, G.A. (2006). Grounded theory and sensitizing concepts. *International Journal of Qualitative Methods*, 5(3), 12-23.
- Bose, P. S. (2014). Refugees in Vermont: Mobility and acculturation in a new immigrant destination. *Journal of Transportation Geography*, 36, 151-159. DOI: 10.1016/j.jtrangeo.2014.03.016
- Boyle, H. E., & Ali, A. (2010). Culture, structure, and the refugee experience in Somali immigrant family transformation. *International Migration*, 48(1), 47-79.
- Brenner, N., Peck, J., & Theodore, N. (2010). After neoliberalization?. *Globalizations*, 7(3), 327-345.

- Bryant, A., & Charmaz, K. (2007a). Grounded theory in historical perspective: An epistemological account. In A. Bryant & K. Charmaz (Eds.), *The SAGE handbook of grounded theory* (pp. 31-57). London: Sage Publications.
- Bryant, A., & Charmaz, K. (2007b). Introduction. In A. Bryant & K. Charmaz (Eds.), *The SAGE handbook of grounded theory* (pp. 1-28). London: Sage Publications.
- Burlington City Council. (2014). *Burlington municipal development plan*. Burlington, VT.
- Cafiero, C., Melgar-Quiñonez, H. R., Ballard, T. J., & Kepple, A. W. (2014). Validity and reliability of food security measures. *Annals of the New York Academy of Sciences*, 1331(1), 230-248.
- Carlson, J. A. (2010). Avoiding traps in member checking. *The Qualitative Report*, 15(5), 1102.
- Caspi, C. E., Sorensen, G., Subramanian, S. V., & Kawachi, I. (2012). The local food environment and diet: a systematic review. *Health & Place*, 18(5), 1172-1187.
- Cassidy, M. B. (2017, January 3). Cassidy: Resisting bigotry. Vermont Public Radio. Retrieved from <http://digital.vpr.net/post/cassidy-resisting-bigotry#stream/0>.
- Charmaz, K. (2014). *Constructing grounded theory* (2nd ed.). Los Angeles, CA: Sage Publications.
- Chittenden County Regional Planning Commission (CCRPC). (2013). *2013 Chittenden County ECOS plan*.
- Clarke, A. E. (2005). *Situational analysis: Grounded theory after the postmodern turn*. Thousand Oaks: Sage Publications.
- Clarke, A. E. (2007). Grounded theorizing using Situational Analysis. In A. Bryant & K. Charmaz (Eds.), *The SAGE handbook of grounded theory* (pp. 191-213). London: Sage Publications.
- Coates, J., Frongillo, E.A., Rogers, B.L., Webb, P., Wilde, P.E., & Houser, R. (2006). Commonalities in the experience of household food insecurity across cultures: What are measures missing? *The Journal of Nutrition*, 136(5), 1438S-1448S.
- Coates, J., Swindale, A., & Bilinsky, P. (2007). *Household Food Insecurity Access Scale (HFIAS) for measurement of food access: indicator guide (v. 3)*. Washington, DC: FHI 360/FANTA.
- Coates, J., Webb, P., & Houser, R. (2003). *Measuring food insecurity: going beyond indicators of income and anthropometry*. Washington, D.C.: Food and Nutrition Technical Assistance Project, FHI 360, 2003.
- Coates, J., Wilde, P.E., Webb, P., Rogers, B.L., & Houser, R.F. (2006). Comparison of a qualitative and a quantitative approach to developing a household food insecurity scale for Bangladesh. *The Journal of Nutrition*, 136(5), p. 1420S-1430S.
- Coleman-Jensen, A.J. (2010). U.S. food security status: Toward a refined definition. *Social Indicators Research*, 95, 215-230. DOI 10.1007/s11205-009-9455-4
- Coleman-Jensen, A.J., Rabbitt, M.P., Gregory, G., & Singh, A. (2016). *Household food security in the United States in 2015*. (United States Department of Agriculture, Economic Research Report No. ERR-215). Retrieved from <http://www.ers.usda.gov/webdocs/publications/err215/err-215.pdf>
- Cook, D. A., & Beckman, T. J. (2006). Current concepts in validity and reliability for psychometric instruments: theory and application. *The American Journal of Medicine*, 119(2), 166-e7-166e16.

- Cook, T. D., & Campbell, D. T. (1979). *Quasi-experimentation: Design and analysis for field settings*. Boston, MA: Houghton Mifflin Co.
- Corbin, J., & Strauss, A. (1990). *Basics of qualitative research: Grounded theory procedures and techniques*. Newbury Park, CA: Sage Publications.
- Crotty, M. (1998). *The foundations of social research: Meaning and perspective in the research process*. London: Sage Publications.
- Das, A. (2013). How does race get “under the skin”? Inflammation, weathering, and metabolic problems in late life. *Social Science & Medicine*, 77, 75-83.
- Deitchler, M., Ballard, T., Swindale, A., & Coates, J. (2010). *Validation of a measure of household hunger for cross-cultural use*. Washington, D.C., Academy for Educational Development [AED], Food and Nutrition Technical Assistance Project [FANTA], (USAID Cooperative Agreement No. GHN-A-00-08-00001-00).
- Derrickson, J., & Anderson, J. (2000). Face validity of the core food security module with Asians and Pacific Islanders. *Journal of Nutrition Education*, 32(1), 21-30.
- Derrickson, J. P., Sakai, M., & Anderson, J. (2001). Interpretations of the “balanced meal” household food security indicator. *Journal of Nutrition Education*, 33(3), 155-160.
- Dey, I. (1999). *Grounding grounded theory: Guidelines for qualitative inquiry*. San Diego: Academic Press.
- Dey, I. (2007). Grounding categories. In A. Bryant & K. Charmaz (Eds.), *The SAGE handbook of grounded theory* (pp. 167-190). London: Sage Publications.
- Dharod, J. M., & Croom, J. E. (2010). Child hunger: its prevalence and association with body mass index and dietary intake among Somali refugee children in the United States. *Annals of Anthropological Practice*, 34, 126-140.
- Dharod, J. M., Croom, J. E., & Sady, C. G. (2013). Food insecurity: its relationship to dietary intake and body weight among Somali refugee women in the United States. *Journal of Nutrition Education and Behavior*, 45(1), 47-53.
- Dharod, J.M., Croom, J., Sady, C.G., & Morrell, D. (2011). Dietary intake, food security, and acculturation among Somali refugees in the United States: Results of a pilot study. *Journal of Immigrant & Refugee Studies*, 9, 82-97. DOI: 10.1080/15562948.2011.547827
- Dinour, L. M., Bergen, D., & Yeh, M. C. (2007). The food insecurity–obesity paradox: a review of the literature and the role food stamps may play. *Journal of the American Dietetic Association*, 107(11), 1952-1961.
- Emery, M., & Flora, C. (2006). Spiraling-up: Mapping community transformation with community capitals framework. *Community Development*, 37(1), 19-35.
- FAO. (1996). Rome declaration on world food security. Rome: FAO. Retrieved from http://www.fao.org/wfs/index_en.htm
- FAO. (2001). *Food balance sheets: a handbook*. Rome: FAO.
- FAO. (2009). Declaration of the World Food Summit on food security. Rome: FAO. Retrieved from http://www.fao.org/fileadmin/templates/wfs/Summit/Docs/Final_Declaration/WSFS_09_Declaration.pdf
- FAO. (2017). Voices of the hungry: The Food Insecurity Experience Scale. Retrieved from <http://www.fao.org/in-action/voices-of-the-hungry/fies/en/>

- FAO. World Food Summit: 13-17 November 1996 Rome Italy. Retrieved 6/1/17 at <http://www.fao.org/WFS/>.
- FAO, IFAD and WFP. (2013). *The state of food insecurity in the world 2013: The multiple dimension of food security*. Rome: FAO. Retrieved from <http://www.fao.org/docrep/018/i3434e/i3434e.pdf>
- FAO, IFAD and WFP. (2014). *The state of food insecurity in the world 2014: Strengthening the enabling environment for food security and nutrition*. Rome: FAO. Retrieved from <http://www.fao.org/3/a-i4030e.pdf>
- FAO, IFAD and WFP. (2015). *The state of food insecurity in the world 2015: Meeting the 2015 international hunger targets: Taking stock of uneven progress*. Rome: FAO. Retrieved from <http://www.fao.org/3/a-i4646e.pdf>
- Ferguson, J. (2010). The uses of neoliberalism. *Antipode*, 41(s1), 166-184.
- Foresight. 2011. *The future of food and farming: Challenges and choices for global sustainability*. Final Project Report. The Government Office for Science, London.
- Foucault, M., Davidson, A. I., & Burchell, G. (2008). *The birth of biopolitics: lectures at the Collège de France, 1978-1979*. Springer.
- Franzen, L., & Smith, C. (2009). Acculturation and environmental change impacts dietary habits among adult Hmong. *Appetite*, 52(1), 173-183.
- Freidberd, S. (2009). *Fresh: A perishable history*. Cambridge, MA: Harvard University Press.
- Frongillo E.A., Nanama S. (2006). Development and validation of an experience-based measure of household food insecurity within and across seasons in northern Burkina Faso. *Journal of Nutrition*, 136, S1409–19.
- Gallegos, D., Ellies, P., & Wright, J. (2008). Still there's no food! Food insecurity in a refugee population in Perth, Western Australia. *Nutrition and Dietetics*, 65, 78-83.
- Geronimus, A. T., Hicken, M., Keene, D., & Bound, J. (2006). "Weathering" and age patterns of allostatic load scores among blacks and whites in the United States. *American journal of public health*, 96(5), 826-833.
- Glaser, B. G. (2005). *The grounded theory perspective III: Theoretical coding*. Mill Valley, CA: Sociology Press.
- Glaser, B. J., & Strauss, A. L. (1967). *The discovery of grounded theory: Strategies for qualitative research*. New York: Aldine de Gruyter.
- Haley, H. L., Walsh, M., Maung, N. H. T., Savage, C. P., & Cashman, S. (2014). Primary prevention for resettled refugees from Burma: where to begin? *Journal of Community Health*, 39, 1-10.
- Hadley, C., Patil, C. L., & Nahayo, D. (2010). Difficulty in the food environment and the experience of food insecurity among refugees resettled in the United States. *Ecology of Food and Nutrition*, 49, 390-407.
- Hadley, C., Sellen, D. (2006). Food security and child hunger among recently resettled Liberian refugees and asylum seekers: A pilot study. *Journal of Immigrant Health*, 8, 369-375. DOI 10.1007/s10903-006-9007-9
- Hadley, C., Zodhiates, A., & Sellen, D.W. (2007). Acculturation, economics and food insecurity among refugees resettled in the USA: A case study of West African refugees. *Public Health Nutrition*, 10(4), 405-412. DOI: 10.1017/S1368980007222943

- Hall, S. (1990). 'Cultural identity and diaspora.' In J. Rutherford (Ed.), *Identity and difference*. London: Sage, p. 221–37.
- Hall, S. (1997), 'Old and new identities, old and new ethnicities.' In A. King (Ed.), *Culture, globalisation and the world-system: Contemporary conditions for the representations of identity*. Minneapolis: University of Minneapolis Press, p. 41–68.
- Hamilton, W. L., Cook, J. T., Thompson, W. W., Buron, L. F., Frongillo, E. A., Olson, C. M., & Wehler, C. A. (1997). *Household food security in the United States in 1995: summary report of the Food Security Measurement Project*. Alexandria, VA: US Department of Agriculture, Food and Consumer Service.
- Harris, L.J., & Story, M. (1989). Food habits and dietary change of Southeast Asian refugee families living in the United States. *Journal of the American Dietetic Association*, 89(6), 800-803.
- Harvey, L. (2015). Beyond member-checking: A dialogic approach to the research interview. *International Journal of Research & Method in Education*, 38(1), 23-38.
- Higgins, P. A., & Straub, A. J. (2006). Understanding the error of our ways: Mapping the concepts of validity and reliability. *Nursing Outlook*, 54, 23-29.
- Hodgson, K. (2012). *Planning for food access and community-based food systems: a national scan and evaluation of local comprehensive and sustainability plans*. American Planning Association Report, 1-175.
- Holsten, J. E. (2009). Obesity and the community food environment: a systematic review. *Public Health Nutrition*, 12(3), 397-405.
- Horst, M., Raj, S., & Brinkley, C. (2016). Getting Outside the Supermarket Box. *Progressive Planning*, 207, 9-12.
- Ingvarsdotter, K., S. Johnsdotter, and M. Ostman. 2012. Lost in interpretation: The use of interpreters in research on mental ill health. *International Journal of Social Psychiatry* 58 (1): 34–40. doi:10.1177/0020764010382693.
- Jacobs, C. (2011). *Measuring success in communities: The community capitals framework*. Extension Extra 16005. South Dakota Cooperative Extension Service.
- Jones, A. D., Ngunjiri, F. M., Pelto, G., & Young, S. L. (2013). What are we assessing when we measure food security? A compendium and review of current metrics. *Advances in Nutrition*, 4, 481-505.
- Kearney, M.H. (2007). From the sublime to the meticulous: the continuing evolution of grounded formal theory. In A. Bryant & K. Charmaz (Eds.), *The SAGE handbook of grounded theory* (pp. 127-150). London: Sage Publications.
- Kelle, U. (2007). The development of categories: Different approaches in grounded theory. In A. Bryant & K. Charmaz (Eds.), *The SAGE handbook of grounded theory* (pp. 191-213). London: Sage Publications.
- Kendall, A., Olson, C. M., & Frongillo, E. A. (1996). Relationship of hunger and food insecurity to food availability and consumption. *Journal of the American Dietetic Association*, 96(10), 1019-1024.
- Kibria, N. (1994). Household structure and family ideologies: The dynamics of immigrant economic adaptation among Vietnamese refugees. *Social Problems*, 41(1), 81-96.
- Lake, A., & Townshend, T. (2006). Obesogenic environments: exploring the built and food environments. *The Journal of the Royal Society for the Promotion of Health*, 126(6), 262-267.

- Lamoureaux & Dickenson. (2013). *South Burlington sustainable agriculture / food security action plan: Final Report*. South Burlington, Vermont.
- Lemke, T. (2001). 'The birth of bio-politics': Michel Foucault's lecture at the Collège de France on neo-liberal governmentality. *Economy and Society*, 30(2), 190-207.
- Life Sciences Research Office. (1990). Core indicators of nutritional state for difficult to sample populations. S. A. Anderson (Ed.). *The Journal of Nutrition*, 120, 1557S-1600S.
- Mares, T. M. (2013). "Here we have the food bank": Latino/a immigration and the contradictions of emergency food. *Food and Foodways*, 21(1), 1-21.
- Mares, T. M. (2017). Navigating gendered labor and local food: A tale of working mothers in Vermont. *Food and Foodways*, 25(3), 177-192.
- Martin, K. S., Rogers, B. L., Cook, J. T., & Joseph, H. M. (2004). Social capital is associated with decreased risk of hunger. *Social Science & Medicine*, 58(12), 2645-2654.
- Maxwell, D., Coates, J., & Vaitla, B. (2013). How do different indicators of household food security compare? Empirical evidence from Tigray. Medford: Feinstein International Center, Tufts University. <http://fic.tufts.edu/assets/Different-Indicators-of-HFS.pdf>.
- Maxwell, S. (1996). Food security: A post-modern perspective. *Food Policy*, 21(2), 155-170.
- Maxwell, S., & Smith, M. (1992). Part I: household food security: a conceptual review. In S. Maxwell & T. Frankenberger (Eds.), *Household food security: concepts, indicators, and measurements. A technical review* (pp. 1-72). New York: UNICEF/IFAD.
- Meadows, D. H. (1999). Leverage points: Places to intervene in a system. Hartland, VT: The Sustainability Institute. Retrieved from http://donellameadows.org/wp-content/userfiles/Leverage_Points.pdf
- Melgar-Quinonez, H.R., Nord, M., Dunford, C. (2004). Testing food security scales for low-cost poverty assessment. *FASEB Journal*, 18, A488-A488.
- Melgar-Quinonez, H. R., Zubieta, A. C., Mknelly, B., Nteziyaremye, A., Gerardo, M. F. D., & Dunford, C. (2006). Household food insecurity and food expenditure in Bolivia, Burkina Faso, and the Philippines. *The Journal of Nutrition*, 136, 1431S-1437S.
- Messick, S. (1989). Validity. In R. Linn (Ed.), *Educational Measurement*, 3rd ed. Washington, DC: American Council on Education, p. 13-104.
- Miles, M., Huberman, M., & Saldaña, J. (2014). *Qualitative data analysis: A methods sourcebook*, 3rd ed. Los Angeles: Sage Publications, Inc.
- Miller, K., Chepp, V., Wilson, S., & Padilla, J.L. (Eds.) (2014). *Cognitive interviewing methodology*. Hoboken, NJ: John Wiley & Sons, Inc.
- Morland, K., Wing, S., Roux, A. D., & Poole, C. (2001). Neighborhood characteristics associated with the location of food stores and food service places. *American Journal of Preventive Medicine*, 22(1), 23-29.
- National Research Council (NRC). (2005). *Measuring food insecurity and hunger: Phase I report*. Panel to Review U.S. Department of Agriculture's Measurement of Food Insecurity and Hunger. Committee on National Statistics, Division of Behavioral and Social Sciences and Education. Washington, DC: The National Academies Press.

- National Research Council (NRC). (2006). *Food insecurity and hunger in the United States: An assessment of the measure*. Panel to Review the U.S. Department of Agriculture's Measurement of Food Insecurity and Hunger, G. S. Wunderlich & J. L. Norwood (Eds.), Committee on National Statistics, Division of Behavioral and Social Sciences and Education. Washington, DC: The National Academies Press.
<https://doi.org/10.17226/11578>.
- Niaglova, M., & Vermont Folklife Center (2014). *Welcome to Vermont: four stories of resettled identity* [Motion picture]. Burlington, VT: Mira Productions, LLC.
- Nihart, A., Robb, W., & Hyman, J. (2012). *Burlington Urban Agriculture Task Force: Report to Burlington City Council*. Burlington, Vermont.
- Nord, M., Satpathy, A. K., Raj, N., Webb, P., & Houser, R. (2002). Comparing household survey-based measures of food insecurity across countries: Case studies in India, Uganda, and Bangladesh. Discussion Paper No. 7. Friedman School of Nutrition Science, Tufts University.
- Nunnery, D. L., Haldeman, L. A., Morrison, S. D., & Dharod, J. M. (2015). Food insecurity and budgeting among Liberians in the US: how are they related to socio-demographic and pre-resettlement characteristics. *Journal of Immigrant and Minority Health, 17*, 506-512.
- Office of the United Nations High Commissioner for Human Rights (OHCHR). Universal Declaration on the Eradication of Hunger and Malnutrition. Retrieved from <http://www.ohchr.org/EN/ProfessionalInterest/Pages/EradicationOfHungerAndMalnutrition.aspx>
- Ong, A. (2007). Neoliberalism as a mobile technology. *Transactions of the Institute of British Geographers, 32*(1), 3-8.
- Padela, A. I., & Heisler, M. (2010). The association of perceived abuse and discrimination after September 11, 2001, with psychological distress, level of happiness, and health status among Arab Americans. *American Journal of Public Health, 100*(2), 284-291.
- Parnell, W. R., Reid, J., Wilson, N. C., McKenzie, J., & Russell, D. G. (2001). Food security: is New Zealand a land of plenty? *The New Zealand Medical Journal, 114*, 141-145.
- Passidomo, C. (2013). Going "Beyond Food": Confronting Structures of Injustice in Food Systems Research and Praxis. *Journal of Agriculture, Food Systems, and Community Development, 3*(4), 89-93.
- Patil, C. L., McGown, M., Nahayo, P. D., & Hadley, C. (2010). Forced migration: Complexities in food and health for refugees resettled in the United States. *NAPA Bulletin, 34*, 141-160.
- Patil, C.L., Hadley, C., & Nahayo, P.D. (2009). Unpacking dietary acculturation among new Americans: Results from formative research with African refugees. *Journal of Immigrant Minority Health, 11*, 342-358. DOI: 10.1007/s10903-008-9120-z
- Peck, J., Theodore, N., & Brenner, N. (2010). Postneoliberalism and its malcontents. *Antipode, 41*(s1), 94-116.
- Peterman, J. N., Wilde, P. E., Liang, S., Bermudez, O. I., Silka, L., & Rogers, B. L. (2010). Relationship between past food deprivation and current dietary practices and weight status among Cambodian refugee women in Lowell, MA. *American Journal of Public Health, 100*(10), 1930-1937.

- Peterman, J.N., Wilde, P.E., Silka, L., Bermudez, O.I., & Rogers, B.L. (2013). Food insecurity among Cambodian refugee women two decades post resettlement. *Journal of Immigrant Minority Health, 15*, 372-380. DOI: 10.1007/s10903-012-9704-5
- Pérez-Escamilla, R., Segall-Corrêa, A. M., Maranhã, L. K., Sampaio, M. D. F. A., Marín-León, L., & Panigassi, G. (2004). An adapted version of the US Department of Agriculture Food Insecurity module is a valid tool for assessing household food insecurity in Campinas, Brazil. *The Journal of Nutrition, 134*, 1923-1928.
- Phillimore, J. (2011). Refugees, acculturation strategies, stress and integration. *Journal of Social Policy, 40*(3), 575-593.
- Piowarczyk, L., Keane, T. M., & Lincoln, A. (2008). Hunger: the silent epidemic among asylum seekers and resettled refugees. *International Migration, 46*(1), 59-77.
- Polivy, J., Zeitlin, S. B., Herman, P. C., & Beal, A. L. (1994). Food restriction and binge eating: a study of former prisoners of war. *Journal of Abnormal Psychology, 103*, 409-409.
- Poppendieck, J. (1994). Dilemmas of emergency food: A guide for the perplexed. *Agriculture and Human Values, 11*(4), 69-76.
- Powell, j. a. (2010). Regionalism and race. *Race, Poverty, and Environment, 17*(1), 45-58.
- Powell, j. a. (2017, February 8). Blueprints for belonging: Exploring the role of planning and design in building equitable communities [Public lecture]. University at Buffalo, Buffalo, NY.
- Prenovost, M. A., & Youngblood, D. C. (2010). Traps, pitfalls, and unexpected cliffs on the path out of poverty. *Poverty & Public Policy, 2*(2), 53-82.
- Radimer, K.L. (2002). Measurement of household food insecurity in the USA and other industrialised countries. *Public Health Nutrition, 5*(6A), 859-864.
- Radimer, K.L., Olson, C.M., Campbell, C.C. (1990). Development of indicators to assess hunger. *The Journal of Nutrition, 120*, 1544-1548.
- Radimer, K.L., Olson, C. M., Greene, J. C., Campbell, C. C., & Habicht, J. (1992). Understanding hunger and developing indicators to assess it in women and children. *Journal of Nutrition Education, 24*(1), 36S-44S.
- Raja, S., Ma, C., & Yadav, P. (2008). Beyond food deserts: measuring and mapping racial disparities in neighborhood food environments. *Journal of Planning Education and Research, 27*(4), 469-482.
- Refugee Processing Center. (2017). Refugee arrivals calendar year as of 31-July-2017. U.S. Department of State, Washington, DC.
- Reichertz, J. (2007). Abduction: The logic of discovery of grounded theory. In A. Bryant & K. Charmaz (Eds.), *The SAGE handbook of grounded theory* (pp. 214-228). London: Sage Publications.
- Renzaho, A., & Burns, C. (2006). Post-migration food habits of sub-Saharan African migrants in Victoria: A cross-sectional study. *Nutrition & Dietetics, 63*, 91-102.
- Renzaho, A.M.N., & Mellor, D. (2010). Food security measurement in cultural pluralism: Missing the point or conceptual misunderstanding? *Nutrition, 26*, 1-9. DOI: 10.1016/j.nut.2009.05.001
- Rondinelli, A. J., Morris, M. D., Rodwell, T. C., Moser, K. S., Paidá, P., Popper, S. T., & Brouwer, K. C. (2011). Under-and over-nutrition among refugees in San Diego County, California. *Journal of Immigrant and Minority Health, 13*, 161-168.

- Saldaña, J. (2016). *The coding manual for qualitative researchers*. Los Angeles: Sage Publications Ltd.
- Sandelowski, M. (1993). Rigor or rigor mortis: the problem of rigor in qualitative research revisited. *Advances in Nursing Science*, 16(2), 1-8.
- Sen, A. (1981). The Great Bengal Famine. In *Poverty and famines: An essay on entitlement and deprivation* (pp. 52-85). Oxford: Oxford University Press.
- Sireci, S. G. (1998). The construct of content validity. *Social Indicators Research*, 45, 83-117.
- South Burlington City. (2016). *City of South Burlington comprehensive plan*. South Burlington, Vermont.
- Stern, P.N. (2007). On solid ground: Essential properties for growing grounded theory. In A. Bryant & K. Charmaz (Eds.), *The SAGE handbook of grounded theory* (pp. 114-126). London: Sage Publications.
- Strauss, A. L. (1987). *Qualitative analysis for social scientists*. Cambridge: Cambridge University Press.
- Thomas, D. (2013). The Cliff Effect: One Step Forward, Two Steps Back-Policy Design as a Disincentive for Economic Mobility. *PublicINReview*, 1(3), 34-51.
- Town of Colchester. (2014). *Town of Colchester 2014 town plan*. Colchester, Vermont.
- Town of Essex. (2016). *2016 Essex town plan*. Essex, Vermont.
- Trapp, M. (2010). What's on the table: nutrition programming for refugees in the United States. *NAPA Bulletin*, 34, 161-175.
- Trubek, A. B., Carabello, M., Morgan, C., & Lahne, J. (2017). Empowered to cook: The crucial role of 'food agency' in making meals. *Appetite*, 116, 297-305.
- Tuazon, D., Corder, G. D., & McLellan, B. C. (2013). Sustainable development: a review of theoretical contributions. *International Journal Sustainable Future for Human Security*, 1(1), 40-48.
- United States Census Bureau. (2010). 2010 Census summary file 1: Race and Hispanic or Latino origin.
- United States Department of Agriculture (USDA), Economic Research Service. (2014). Overview: Measurement. Retrieved from <http://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-us/measurement.aspx#.UrJvTWRDuNp>
- United States Department of Agriculture (USDA), Economic Research Service. (2012). U.S. household food security survey module: 3 stage design, with screeners. Retrieved from http://www.ers.usda.gov/datafiles/Food_Security_in_the_United_States/Food_Security_Survey_Modules/hh2012.pdf
- United States Department of Agriculture (USDA), Economic Research Service (ERS). (2016, October 20). Food Security in the United States. Retrieved from <https://www.ers.usda.gov/data-products/food-security-in-the-united-states/>
- Village of Essex Junction. (2014). *Village of Essex Junction comprehensive plan 2014*. Essex Junction, Vermont.
- Wang, Y., Min, J., Harris, K., Khuri, J., & Anderson, L. M. (2016). A systematic examination of food intake and adaptation to the food environment by refugees settled in the United States. *Advances in Nutrition: An International Review Journal*, 7, 1066-1079.

- Webb, P., Coates, J., Frongillo, E.A., Rogers, B.L., Swindale, A., & Balinsky, P. (2006). Measuring household food insecurity: Why it's so important and yet so difficult to do. *The Journal for Nutrition*, 136(5), 1404S-1408S.
- Wehler, C. (1987). Community Childhood Hunger Identification Project: New Haven Risk Factor Study, Connecticut Association for Human Services, Hartford, CT.
- Wehler, C., Scott, R., & Anderson, J. (1992). The Community Childhood Hunger Identification Project: a model of domestic hunger - demonstration project in Seattle, Washington. *Journal of Nutrition Education*, 24, 29S-35S.
- Willis, M. S., & Buck, J. S. (2007). From Sudan to Nebraska: Dinka and Nuer refugee diet dilemmas. *Journal of Nutrition Education and Behavior*, 39, 273-280.
- Winooski Planning Commission. (2014). *Winooski municipal development plan*. Winooski, Vermont.
- Wolcott, H. (1994). *Transforming qualitative data: Description, analysis and interpretation*. Thousand Oaks, CA: Sage.
- Wolfe, W.S., & Frongillo, E.A. (2001). Building household food-security measurement tools from the ground up. *Food and Nutrition Bulletin*, 22(1), 5-12.
- World Food Conference. (1975). *Report of the World Food Conference, Rome, 5-16 November, 1974. Communication from the Commission to the Council. SEC (74) 4955 final, 9 December 1974*. New York: United Nations.

Appendix A: Focus Group Guide

Name of Moderator: Linda Berlin

Date: _____

of Attendees: _____

Focus Group Guide

HATCH-Funded Study: “Measuring Food Insecurity Among Vermont Refugees”

Introduction:

Hello, welcome. Thank you for volunteering to take part in this focus group. I realize you are busy, and I appreciate your time. Your point of view is important to us.

My name is Linda and I am a professor at the University of Vermont. This is Hannah, a graduate student at the University of Vermont, who will be taking notes during our conversation. We are a part of a research team at UVM that is working on this project.

We want to make it clear that we are not a part of the government. Participating in this focus group will not have any effect on whether or not you receive any benefits from the government.

Purpose:

We are conducting focus groups with resettled refugees in Vermont to learn some of the ways you may think about food management in your household. We are using the information for a project that is looking at what happens in households when food, or the resources to purchase food, is limited. It is our hope that this information will help improve services for people in need.

Procedures:

A focus group is a relaxed discussion about a particular topic, with questions to prompt the discussion. It should take about 2 hours. We want to know your views. When answering the questions, we hope that you will think about some of your own household experiences, but please also do not feel that you have to share those experiences.

We don't expect you to all have the same answers. There are no right or wrong answers. It's ok to disagree with others or change your mind. I hope you feel comfortable saying what you really think and how you really feel.

Your responses are confidential. We will keep anything you say completely anonymous; we will never release any information connected to your name. In order to create a safe space for people to talk here, we also ask that when you leave this focus group each of you do NOT share what was discussed by any particular person. You may tell people about the general research topic, but please do not mention anyone's name or what they specifically said.

Just a few quick logistics:

- You may move around the room during the discussion, but please only talk when you are seated in the circle (or table, etc)
- Bathroom [describe how to find bathroom]
- There are refreshments [describe where]. Feel free to help yourself to refreshments during the discussion

Let's go over a few expectations for the discussion:

- I want this to be a group discussion, so please feel free to respond to me or other members of the group without waiting to be called on
- Please only one person talk at a time
- Please no side conversations
- You may choose not to answer any question you wish
- If possible, turn off cell phones

Hannah will be taking notes and audio recording the discussion. The audio recording is just to make sure that we do not miss anything that was said. Only our research team will hear the recording, no one else. We will destroy the recording when the research is finished. Again, we will keep all your answers confidential and anonymous.

Benefits:

You will receive a \$25 grocery gift card in appreciation for your participation. These will be given out at the end of the focus group. You will receive the gift card no matter which answers you give to the questions.

Voluntary Participation:

You do not have to agree to be in this focus group, and you may change your mind and leave at any time.

Are there any questions at this time?

Permission to Proceed:

Completion of the focus group implies your consent to participate in this research. If you would like a copy of the consent form, I have one for you.

Turn on tape recorder

Introductions:

I'd like to start with a simple question to help everyone feel a little more comfortable talking in this group setting. After taking a minute to think about it, I'd like to go around the room and have each person respond.

The question is: What is your favorite food?

Questions:

((in bold letters are the concepts of the US module or definition that are being explored. In parenthesis are domains being covered.))

1. (Quality) How would you describe what types of foods make up a good meal?
 - a. What words would you use to describe a good meal for you and your household? (prompts: for example, “meal,” “healthy,” “balanced,”)
 - b. What would you/your household typically eat in the course of a day?
 - c. (Quantity) How many times do you typically eat in a day? Please describe, including any small amounts of food.
 - i. (Quantity) Are there times when someone might choose to **cut the size of their meals or skip meals**? Please explain. (Prompts:) For example, some people may skip meals if they are fasting for religious, cultural, or social reasons. Some people cut the size of meals if they are feeding guests.
 - d. One question that people are asked on food surveys is whether they are able to eat “**balanced meals**”. [Show image of “my plate”]. How is your food different from this “my plate” example?
 - i. Is there a better word you would use to describe this food other than “balanced?”
 - ii. Do you typically eat the same foods every day?
 - e. Are there foods that you consider **unacceptable** to eat in your community?
 - f. What foods would you consider **unsafe** to eat?
2. What would you change about the way you eat or shop if your resources became limited? (probe: Ask for specific examples if they say general things)
 - a. Are there certain times of year when families might have less to eat?
 - b. Do you or does anyone you know eat foods that you worry might be unsafe or make you sick due to limited resources?
3. (Quality) We’d like to know your thoughts about buying low cost foods. What are some examples of low cost foods that you buy?
 - a. Do you think it is typical to rely only on a few kinds of low-cost foods to feed one’s household?
 - i. (If yes, typical) What would a household be eating if they relied on only a few kinds of low cost foods?
 - ii. (Also if yes, typical) What are some reasons for buying the low-cost foods you mentioned.

- iii. (If no, not typical) In what situation might a household rely on only a few kinds of low-cost foods to feed their household?
(Possible prompts: *For example, that the foods transport better or last longer, which is helpful for someone with limited transportation or no refrigeration*).
- 4. (Availability) Are you able to find all the foods that you like in Vermont? Are there certain foods you like to eat regularly, but can't find in Vermont?
 - a. (Access) For the Nepali foods you are able to find here, is there anything that might make them difficult to purchase? (Possible prompts: For example, are they more expensive than other foods? Is it hard to get to the stores?)
 - b. (Quality) Do the Nepali foods you find here taste the same as they did in Iraq? (If no) How are they different?
- 5. (Utilization) Are there times when you or someone you know won't/can't eat food that you are offered or can receive for free? (give some prompts: For example, some people don't take certain foods from the food shelf because they won't eat them. Or other people receive food from WIC, or from friends, but then don't eat them. Or other people won't eat free school lunch)
 - a. If you are offered food and it is available to you, what might be some reasons for you to not eat it? (Prompt with all these reasons if not mentioned: Some people might not eat the food because they don't know if it complies with their **religion**. Others: won't/can't eat it because it is too **unfamiliar**; don't know **how to cook** it; don't have **time** to cook it; don't have the right kitchen **tools** to cook it; or not part of their normal diet)
- 6. (Access) What are some of the places where your household buys food (in terms of types of markets or store names, not names of towns)? (Can prompt with examples of stores: Hannafords, Price Chopper, City Market, Himalayan Market)
 - a. How do you normally **get to** those places?
 - i. Do you have any difficulties getting to those places, or to other places where you get food, or difficulties bringing groceries home?
 - ii. Are there places you would rather shop but can't get there?
 - b. Do you feel like you know where to find the best prices and foods your household prefers to eat?
 - i. After moving here to Vermont, how did you learn about where to find foods you like at the best prices?
- 7. (Access) Is there anything about shopping for food in Vermont that you think people ever find confusing?

- a. (Prompt:) Are there any **language barriers**? (Prompt: For example, some people have trouble reading food labels. Other people might have trouble at stores asking for help in English.)
- 8. (Access) Are there other ways your household sometimes gets food other than buying it with money? (Possible prompts: For example, some people get food from WIC. Some families get ThreeSquaresVT. Some families use free school lunch. Some people use gardens. Some people collect wild plants from outside. Some people share with friends.)
 - a. If you or people you know are getting food in any of these ways, how much does it matter to the household? (prompt: a little? a lot?)
 - i. If you or people you know has participated in ThreeSquaresVT, how important is it to the household?
 - b. (Social acceptability - acquisition) What do your family, friends and neighbors think about getting free food from places like the food shelf? How comfortable would they feel getting food from there?
 - c. (Social acceptability - acquisition) Are there any ways that people sometimes get food that you think might make them feel ashamed or embarrassed? (possible prompt: For example, would people feel embarrassed when they go to the DCF office (Department for Children and Families)?)
- 9. (Access) Sometimes people will lose their benefits, like ThreeSquaresVT, when they get a job. Does this ever make it difficult for some families to get enough of the foods they need? Please explain.
 - a. Are there other reasons why someone might lose their benefits even when they still need the benefits? (Prompts: for example, some people find it difficult to read the paperwork, or to fill it out correctly).
- 10. (Utilization - household dynamics) Some food surveys ask about food in people's households. What does the word "household" mean to you? Who is included in your household?
 - a. ("Household") Following the last question, do you think all members of the household get the food they need? Under which circumstances could you think of that one member might have enough food and another would not?
 - b. Are there other people you regularly feed, or give money to, who don't live in the household? (Prompts: For example, some people feed guests or friends often. Other people send money to relatives in other states or other countries.)
- 11. (**Psychological**) I would like to ask a question about your experiences with food in the refugee camps in Nepal. Please don't feel you have to answer if it makes you uncomfortable. Back in the refugee camp, was it common for some people to

not have enough food to eat, or to have to rely on only a few kinds of foods?
(possible probe - did people **worry** a lot about food?) Please explain.

- a. (If yes) Think about a household you know in your community here in the US, who has struggled with not getting enough to eat. Do you think their experience with food and resources in Vermont is similar or different from the experience of not having adequate food in the refugee camp?
 - i. **(Feelings of deprivation)** (Probe:) Even though some households have struggled with food here in Vermont, does their experience in Vermont still seem better than in the refugee camp?
- b. Do you think that refugee families here in Vermont who struggle with food sometimes FEEL WORRIED about food? Or do you think that they feel less worried than they did in the refugee camp?
- c. Are there other ways that you think people's experience in the refugee camp has influenced the ways they think about or manage food here in Vermont? Please explain.

12. Do you think many households in the Bhutanese/Nepali community in Vermont struggle with food? (If yes) What do you think are some of the main reasons for this?

Conclusion:

Thank you for taking the time to participate in this focus group. I appreciate your thoughts and comments. I hope you have found the discussion interesting.

If you would like to know more about the results of this study, the principal investigator is myself, Linda Berlin. I can be contacted at the number on the consent form (802-656-0669).

If there is anything you are concerned about, you may also contact _____.

Appendix B: Interview Guide

Intro:

- (Thank participant)
- **Explanation:**
 - I am interviewing people who work for programs that assist refugees. I am hoping to gain a better understanding challenges refugees in Vermont face related to food security, and of **how organizations in Vermont assist refugees** with those challenges.
 - This is related to a larger research project I am working on with my advisor. The larger project aims to learn more about how resettled refugees in Vermont think about food management in their household, in order to learn some of the qualities of food insecurity for these communities.
- I value **your perspective** and any personal experiences you may want to share.
- Consent:
 - **Confidential**, anonymous
 - Part of ethical research process, so you know your **rights**
 - You can **refuse** to answer any question, or ask me to **remove** later
 - Audio recorder - so I get **exactly** what you say
 - No one else will have access besides advisor, I will delete it at end of project
 - Can ask me to **turn it off**, or I can send you **transcript** and you can ask me to leave anything out
 - Is it ok if I use it?
 - Do you want transcript?
- Time: feel free to get into questions as deeply as you want. I have about an **hour**
- Do you have any questions for me at this time?
- Is it ok to proceed with interview?
- (If I have spoken with them previously, summarize what we have discussed so far and check for confirmation of my understanding before proceeding to new questions)

Interview Questions: (ask probing questions for each)

- Can you tell me a little bit about what (organization/program) does, and what your role is at (organization)? (or, to break ice: How did you get involved?)
- Can you tell me about the work you have done related to refugees?
 - What experiences do you have working with refugees related to food/nutrition?
- What are some challenges that refugees face related to food (or access, etc) that you have encountered in your work?
 - What other challenges are you aware of that could impact food insecurity for refugees in Vermont?
 - How do these challenges for refugees compare to food security challenges faced by other Vermonters?
- Probe: I would like to mention a few food-related challenges that have emerged from studies with refugees in other states. I would like to know what you think of these for the Vermont context, such as whether you would agree or disagree that they are

issues for refugees in Vermont, and why. These include (repeat any they don't address):

- (Use as probes. Only ask if they haven't mentioned them, and if they are relevant, or include new probes that are relevant to their work)
- Issues with transportation
- Difficulties securing high-paying jobs; inconvenient shifts and long work hours
 - Other high competing costs - bills, school fees, medical care, remittances
- Particularly for recent refugees, issues with understanding American grocery stores, or with reading and understanding food labels
- Issues with finding culturally-appropriate foods, or lack of affordability of culturally appropriate foods. Conversely, relative affordability of some high-status foods
- "Utilization" - limited knowledge of how to prepare foods found in the US, or how to use cooking appliances
- Pressure from children to buy more "American" foods, or conflicting food choices of family members
- Impacts of previous experiences with food deprivation, and trauma
- Differences in social acceptability of using food aid
- What sources of food aid/related resources for refugees exist in Vermont?
 - How are new refugees oriented to the Vermont food shopping environment?
 - How are new refugees oriented to assistance programs?
- How does (your organization) gauge the effectiveness of its programs for refugees?
 - Do you feel (your organization) has been successful in helping refugees?
 - What are some challenges it faces to reaching more people/to be more effective?
- Do you think VT is doing everything it could at the state level to assist refugees with food challenges? Related challenges?
 - If yes, please explain. If no, what do you think could be improved?
 - Are there improvements you would like to see at the community, state, or national levels?
 - What other changes in the food system might help?
- How does (organization) collaborate with other organizations? What role do you see for (organization) in the larger system of helping with food security/refugees?
- Are there studies or data that you would recommend I look at?
- Are there other people working with refugees that you recommend I speak with?
 - Do you have their contact information?
 - Is it ok for me to tell them that you recommended I speak with them?
- Is there anything else you would like to add? Or, do you have any questions for me? (ask several times if necessary until they answer no). Or, you can send me an email if you think of anything else.

Conclusion:

- Thank you
- Would you like me to send you copy of transcript or final report?