



“You Just Have to Build a Bridge and Get Over It”: Low-Income African American Caregivers’ Coping Strategies to Manage Inadequate Food Supplies

Robin L. Jarrett, Ozge Sensoy Bahar & Angela Odoms-Young

To cite this article: Robin L. Jarrett, Ozge Sensoy Bahar & Angela Odoms-Young (2014) “You Just Have to Build a Bridge and Get Over It”: Low-Income African American Caregivers’ Coping Strategies to Manage Inadequate Food Supplies, *Journal of Poverty*, 18:2, 188-219, DOI: [10.1080/10875549.2014.896306](https://doi.org/10.1080/10875549.2014.896306)

To link to this article: <https://doi.org/10.1080/10875549.2014.896306>



Published online: 14 Apr 2014.



Submit your article to this journal [↗](#)



Article views: 252



View Crossmark data [↗](#)



Citing articles: 4 View citing articles [↗](#)

“You Just Have to Build a Bridge and Get Over It”: Low-Income African American Caregivers’ Coping Strategies to Manage Inadequate Food Supplies

ROBIN L. JARRETT

*Department of Human and Community Development and
Department of African American Studies, University of Illinois
at Urbana-Champaign, Urbana, Illinois, USA*

OZGE SENSOY BAHAR

*School of Social Work, University of Illinois at Urbana-Champaign,
Urbana, Illinois, USA*

ANGELA ODOMS-YOUNG

*Department of Kinesiology and Nutrition, College of Applied Health Sciences,
University of Illinois at Chicago, Chicago, Illinois, USA*

This article examines the experiences of food shortages among a sample of low-income, African American caregivers of preschoolers and how they coped with the risk of inadequate food supplies. Data derived from qualitative interviews identified multiple food-based, social network-based, and institution-based strategies that caregivers used to alleviate or prevent food shortages. The configuration of strategies varied among households and reflected different approaches for coping with inadequate food supplies. Highlighting the resilience of low-income families, these findings expand on current research that misses the complex and diverse ways households coped with food shortages. The research also suggests strength-based interventions grounded in the firsthand experiences of households.

KEYWORDS *African American, family resilience, food shortages, coping strategies, qualitative research*

Address correspondence to Robin L. Jarrett, Department of Human and Community Development, University of Illinois at Urbana-Champaign, 905 S. Goodwin Ave., MC-180, Bevier Hall 269, Urbana, IL 61801, USA. E-mail: rjarrett@illinois.edu

The U.S. Department of Agriculture (USDA) defines *food insecurity* as “limited access to adequate food due to lack of money and other resources” (Coleman-Jensen, Nord, Andrews, & Carlson, 2012, p. 2), classifying households that report “reduced quality, variety, or desirability of diet” as low food insecure and those that report “multiple indications of disrupted eating patterns and reduced food intake” as very low food insecure (USDA, 2012, para. 2). Conversely, *food security* has been defined as “access by all people at all times to enough food for an active healthy life” (Coleman-Jensen et al., 2012, p. 2), differentiating between high food security and marginal food security (USDA, 2012). Used to guide annual data collection on food insecurity that is reported by the USDA, the American Institute of Nutrition provided a conceptual definition of *food insecurity* that emphasizes the social components of food access and acquisition. Relatedly, *food insecurity* is defined as the “limited or uncertain availability of nutritionally adequate and safe foods or limited or uncertain ability to acquire acceptable foods in socially acceptable ways” (Cook & Frank, 2008, p. 193).

According to the most recent USDA report, 17.9 million households (14.9%) in the United States were food insecure in 2011 (Coleman-Jensen et al., 2012). Moreover, 5.7% (6.8 million) of households experienced very low food security where food intake of one or more household members was reduced and their eating patterns were disrupted because of limitations in resources (Coleman-Jensen et al., 2012). Compared to non-Hispanic Whites, and higher income households, low-income urban African American households with children have higher rates of food insecurity (Coleman-Jensen et al., 2012). Among African American households food insecurity was double that of non-Hispanic White households (Coleman-Jensen et al., 2012). Negative health consequences of food insecurity include stress, maternal depression, and obesity in adult women (Cook & Frank, 2008; Laraia, Borja, & Bentley, 2009; Larson & Story, 2011) and adverse growth and developmental outcomes in children (Cook & Frank, 2008; Larson & Story, 2011; Mammen, Bauer, & Richards, 2009).

Supplementing a well-established quantitative literature that documents the measurement, correlates, and prevalence of food insecurity (Stevens, 2010), a small body of qualitative research examines how households respond to food insecurity (Ahluwalia, Dodds, & Baligh, 1998; Hoisington, Shultz, & Butkus, 2002; Monroe, O'Neil, Tiller, & Smith, 2002; Quandt, Arcury, Early, Tapia, & Davis, 2004). Researchers used accounts from household members, primarily women, to describe the experience of food insecurity. Based on racially and ethnically diverse low-income samples, including African Americans in urban and rural settings (Ahluwalia et al., 1998; Monroe et al., 2002; Radimer, Olson, & Campbell, 1990), Hispanics in urban and rural settings (Mammen et al., 2009; Olson, Anderson, Kiss, Lawrence, & Seiling, 2004; Quandt et al., 2004), and Non-Hispanic Whites in urban and rural settings (De Marco, Thorburn, & Kue, 2009; Hoisington

et al., 2002; Mammen et al., 2009; Olson et al., 2004; Radimer et al., 1990), qualitative studies found that households used four types of coping strategies to avoid or delay food shortages: Food-provisioning, food-consumption, network, and institutional strategies (Kempson, Keenan, Sadani, & Adler, 2003; Radimer et al., 1990; Seefeldt & Castelli, 2009). Households typically used multiple strategies, cycling between periods of food security and food insecurity (Ahluwalia et al., 1998; Radimer et al., 1990).

Despite these important insights, the body of qualitative research on strategies for coping with food insecurity is relatively small. Few studies focus exclusively on low-income urban African American households, a population at high risk for food insecurity. Some of the qualitative studies of African American households are more than 10 years old, reflecting past economic conditions and policy environments (Ahluwalia et al., 1998; Hoisington et al., 2002; Monroe et al., 2002). Further, though studies focus on identifying coping strategies in response to food insecurity, researchers have not fully explored the variable combination of strategies that households use to manage food insecurity, and how such strategies vary by food security–insecurity status among low-income households equally at risk for food insecurity.

To address gaps in the literature, we conducted exploratory qualitative interviews to examine the experience of food insecurity and the coping strategies used by African American households. Using a resilience framework, we specifically focused on an understudied sample of low-income African American female caregivers of preschoolers who lived in an inner-city neighborhood and who are at particular risk for food insecurity. Further, in response to our limited understanding of variability in how households manage the risk of food insecurity, we compared the strategies of low-income households experiencing food shortages and household that did not experience food shortages. Qualitative data allowed us to highlight the dynamic and complex processes “behind the numbers” that are missed in quantitative studies of food security that focus on correlates and prevalence (Hamelin, Habicht, & Beaudry, 1999; Pinstrup-Andersen, 2009). Detailed descriptive accounts derived from qualitative data also allowed us to elaborate theoretically on how strategies households used reflected resilient coping processes.

The study was guided by three questions:

- What are low-income African American female caregivers’ experiences with food shortages?
- What are the coping strategies caregivers use to manage the risk of food shortages? and
- What are the similarities and differences in the use of coping strategies between low-income households that experience food shortages and those households that do not?

The focus on food insecurity and related coping strategies is significant in key ways. Qualitative research on the firsthand experiences of low-income African American households and their coping efforts can provide a full contextual picture of the daily lives of households experiencing food shortages, as well as a better understanding of family strengths used in response to the adversity of food insecurity (Stevens, 2010). Such insights can make substantive contributions to the study of food insecurity and inform theoretical discussions of resilience. Moreover, the focus on food insecurity is significant because of its implications for the health and well-being of adults and children. Programs and policies are needed to improve the physical and mental health of adult caregivers who manage the stress associated with food shortages, as well the physical and developmental health of young children at risk for food insecurity.

LITERATURE REVIEW

A handful of qualitative studies identified four types of coping strategies households use to avoid or delay running out of food or going hungry (Radimer et al., 1990). They include food-provisioning, food-consumption, social-network, and institutional strategies (Hoisington et al., 2002; Quandt et al., 2004; Swanson, Olson, Miller, & Lawrence, 2008). In general, households at risk for food insecurity used multiple strategies from the four types of coping strategies identified (De Marco et al., 2009; Seefeldt & Castelli, 2009).

Food-provisioning strategies entailed shopping strategies that included shopping for lower cost food, purchasing store or generic brands, purchasing in bulk or stockpiling, utilizing coupons, shopping at discount stores, and shopping at several stores to secure the best prices (Ahluwalia et al., 1998; De Marco et al., 2009; Mammen et al., 2009; Quandt et al., 2004). Households also cut back on food items that were purchased and made food substitutions, such as purchasing canned foods as opposed to fresh fruits and vegetables (Hoisington et al., 2002; Stevens, 2010). Food-consumption strategies included cooking meals with leftovers, using freezers to store extra foods for later, serving smaller amounts of food, and preparing large pot meals that allowed households to stretch low-cost ingredients (De Marco et al., 2009; Mammen et al., 2009; Olson et al., 2004). Household members ate what was available, ate smaller meal portions or leftovers from others, and skipped meals (Hoisington et al., 2002). Risky strategies included the consumption of spoiled and unsafe foods (Hoisington et al., 2002).

Social-network strategies entailed drawing upon personal relationships including kin, significant other males, and friends and neighbors. Kin were the most frequently used source for food-insecure households (De Marco et al., 2009; Mammen et al., 2009; Swanson et al., 2008), and friends and neighbors were used in addition to kin aid or in the absence of kin support

(De Marco et al., 2009; Mammen et al., 2009). Significant other males included romantic partners and children's fathers (Edin & Lein, 1997). Food assistance from network members involved financial contributions to food budgets, purchasing food items for households, and meal sharing (De Marco et al., 2009; Mammen et al., 2009).

Institutional strategies consisted of government programs, day care settings, food pantries, churches, and food banks (De Marco et al., 2009). Government programs such as the Special Supplementary Nutrition Program for Women, Infants, and Children (WIC) and the Supplemental Nutrition Assistance Program (SNAP), also known as Food Stamps (LINK in Illinois), were widely used by food-insecure households (Mammen et al., 2009; Seefeldt & Castelli, 2009; Swanson et al., 2008).

There were some indications that strategies varied with respect to food status, context, and household composition. Relative to food-insecure households, at-risk food-secure households competently used a larger number of strategies, including more positive provisioning strategies (Mammen et al., 2009; Olson et al., 2004). Food-secure households were also more "skilled" in developing social networks and had less food insecurity than peers who were less skilled (Swanson et al., 2008). Food-insecure peers used fewer and riskier strategies to manage food insecurity (Mammen et al., 2009; Olson et al., 2004).

Urban-rural differences were also found. Rural households more often used canning and gardens to supplement food supplies (Mammen et al., 2009; Quandt et al., 2004). Researchers also found that the lack of anonymity and stigma in small towns and rural settings sometimes discouraged the use of public soup kitchens and food pantries (De Marco et al., 2009). Rural food-insecure households preferred community-based food resources over government-based programs (Harvey, Summers, Pickering, & Richards, 2002). In urban settings such as Detroit, Michigan, researchers found that SNAP was the main source of institutional support for food-insecure households (Seefeldt & Castelli, 2009).

Household composition affected food insecurity management strategies. Households without children, relative to households with children, did not have access to the WIC program (Quandt et al., 2004). Studies of households with minor children more frequently described mothers going without food or eating less so that their children could eat (Ahluwalia et al., 1998; Hoisington et al., 2002; Quandt et al., 2004; Stevens, 2010), and in extreme cases, delaying food to children (Monroe et al., 2002).

More generally, food insecurity was a dynamic process, with households cycling between periods of adequate food supplies and periods characterized by food shortages. Relatedly, coping strategies were activated during periods of food shortages resulting from crises (e.g., job loss), or dwindling funds (Quandt et al., 2004). Periods of food insecurity and intensive coping strategies also coincided with the end-of-pay periods when money had been

exhausted or the end of the month when Food Stamps had been expended (Ahluwalia et al., 1998; Hoisington et al., 2002; Quandt et al., 2004).

In summary, we have a broad picture of the ways that households manage food insecurity. We now describe the qualitative study that allowed us to examine more closely the experiences of food insecurity among low-income African American households, the strategies they used to address the prospect of inadequate food availability, and variations in coping strategies among households.

RESEARCH DESIGN

Theoretical Framework

We used a family resilience perspective (McCubbin, Thompson, Thompson, & Fromer, 1998; Walsh, 2002) as our guiding theoretical framework to explore strategies that female caregivers used to deal with food insecurity. There is a strong tradition of research on low-income families that highlight the resilience or “strengths of Black families” (Hill, 1998; Logan, 2000). Studies of low-income African American families have focused on families’ coping and “survival” strategies that allow households of women and children to survive and thrive despite adversity (Dickerson, 1995; Stack, 1974). Given its emphasis on active coping and survival strategies, a resilience framework is particularly appropriate to highlight household strengths and agency, with a focus on how caregivers marshal resources to deal with food shortages.

Methodological Approach

An interpretive approach guided the study (Tesch, 1990). This approach focuses on the subjective meaning-making processes and daily lived experiences and practices of human actors (Tesch, 1990). In this study, an interpretive approach helped us to understand participants’ experiences, behaviors, and meaning making around food insecurity. For our purposes, the interpretive approach was informed by theoretical concepts (e.g., coping, agency) from the family resilience framework (Hill, 1998; Logan, 2000) and guided data collection (interview questions on strengths) and analyses (coping strategy codes) (Patton, 1990).

Study Setting

Low-income female-headed African American households who live with their children in inner-city settings are particularly vulnerable to food insecurity (Coleman-Jensen et al., 2012; Congressional Digest, 2010). Such households predominated in Lincoln Heights (pseudonym), the targeted community. 2010 Census data revealed this predominantly (97.8%) African American

and/or Black (U.S. Census Bureau, 2010b) community to be an extremely impoverished one. The median household income was \$25,583 (U.S. Census Bureau, 2010a). The percentage of community residents living below the poverty line was 43.23%, with an unemployment rate of 29.8% for the population age 16 years and older (U.S. Census Bureau, 2010a). The percentage of impoverished female-headed households constituted 71% of households with children younger than 18 years of age in this community (U.S. Census Bureau, 2010b).

Sample

We used a purposive sampling strategy to recruit women who met the following criteria: (1) self-identified as African American, (2) were at least age 18 years, (3) had a household income at or lower than 185% of the federal poverty level, (4) had at least one child enrolled in one targeted preschool program, and (5) resided in the targeted high poverty neighborhood in Chicago, Illinois. We targeted this population because they were at particular risk for food insecurity (Coleman-Jensen et al., 2012). We focused on female caregivers because they are the primary managers of food resources within households and particularly for young children (Seefeldt & Castelli, 2009; Stevens, 2010). Overall, 12 mothers or primary caregivers (nine mothers, two grandmothers, and one sibling caregiver) who participated in one neighborhood preschool program participated in the study. Twelve participants allowed us to achieve saturation (Guest, Bunce, & Johnson, 2006). Pseudonyms are used throughout.

Participants' ages ranged from 18 to 58 (Mean = 31.9). The oldest participants were grandmothers ($n = 2$) in their early and late fifties and the youngest participant, age 18, was a sibling caregiver ($n = 1$). In eight households caregivers were never married. One mother was divorced, one grandmother was widowed, and two caregivers were married. Household composition entailed two cohabitating units, two female heads with children, and eight extended kin units. Households included one to nine children. Five caregivers were formally employed. Two caregivers had a bachelor's degree, two had some college education, and four had a high school degree or equivalent.

Data Collection

An African American female research assistant conducted the interviews between January 2008 and May 2009. An interview guide with open-ended questions was used (Patton, 1990). We did not use the USDA questions to assess food insecurity. We wanted to understand caregivers' personal perspectives on food insecurity and used an open-ended question instead. Given the sensitive nature of food insecurity (Stevens, 2010), we were also

careful in how we asked about the topic: "Families' food budgets often change when it comes to getting food. Sometimes you have more resources to get food and sometimes you have less. Have you experienced times like this and what is it like?" We then probed about the impact of food insecurity on children: "How does this affect what your child eats?" Each interview ranged from 1½ to 2 hours in length and was conducted in caregivers' homes or at the preschool site.

Data Analysis

The interviews were audio taped and transcribed verbatim. N-Vivo (version 8) was used to facilitate the coding process. We began with an initial set of a priori codes related to coping strategies in response to food shortages that derived from the substantive literatures informing the study, including food-provisioning, food-consumption, social network, and institutional strategies. These initial codes served as "sensitizing concepts." That is, they served as starting points to organize, analyze, and understand our data (Charmaz, 2003; Patton, 1990). A constant comparison between caregivers' accounts and the sensitizing concepts ensured that the content of conceptual categories reflected caregivers' experiences. Other newly developed codes inductively emerged from repeated readings of the interviews. (e.g., over-shopping, undershopping). Five randomly selected transcripts were coded independently by two members of the research team and disagreements were resolved through discussion (Willging, Waitzkin, & Nicdao, 2008). This process of double coding led to greater definitional clarity, including the expansion or revision of codes, and served as a reliability check (Miles & Huberman, 1994).

We made frequent use of visual data displays (e.g., graphs, charts, tables) to aid in data reduction and facilitate conceptualization processes (Miles & Huberman, 1994). We developed summary matrix displays for each participant. These were tables with separate columns with each caregiver's responses on a particular theme (Charmaz, 2003; Miles & Huberman, 1994). This strategy made it possible to identify patterns within the data, including similarities and differences between caregivers. Throughout the process, we wrote analytic memos to further develop codes (e.g., undershopping), including their meaning and the conditions under which that they operated (Charmaz, 2003).

FINDINGS

Households' Experiences With Food Supplies

As we did not use the USDA food insecurity measure, we use the terms *adequate or inadequate food supplies* and *with or without food shortages*

interchangeably to closely reflect caregivers' experiences. The experience of having adequate or inadequate food supplies varied among caregivers, with the majority experiencing food shortages.

THE EXPERIENCE OF ADEQUATE FOOD SUPPLIES

Four participants said they had not experienced a time when they did not have adequate food. Karah lived with her seven children ranging in age from 9 months to 17 years and her significant other, Jamal. She asserted, "I don't have no problem with that. No problem at all with that, with the food, no problem." Janice, a single mother who lived with her mother, two siblings, and her child, said that she and her son Tramell had not experienced a time when there wasn't enough food in the house. When we asked Janice if changes in her budget affected what Tramell eats, she asserted, "Uh-uh [no], he eats regularly." When asked about not having adequate food supplies, Kenya, the mother of four young children, who lived with her significant other Malik responded, "I ain't never had that happen." When probed further about the possible impact of budget fluctuations on her child's food supplies, Kenya noted: "Marcus eats the same. We all eat the same."

In a community where households routinely experienced food shortages, even the most stable caregivers could conceive that inadequate food supplies could affect them. Keisha shared a rent-free family home with her sister and was one of the working caregivers. She initially asserted, "I'm always going to have extra. I'm never running short on food." However, when Keisha was asked if there were changes in her resources that affected what her child Leticia ate, she reported, "I mean that haven't happened. . . . That haven't happened to us yet."

THE EXPERIENCE OF INADEQUATE FOOD SUPPLIES

Eight participants said that there were times when household members had experienced inadequate food supplies. When asked if her household had experienced food shortages, Ayana, a single mother of a preschooler and teenager pronounced, "Yes, I have! Actually, when I got pregnant with my daughter Felicia, I wasn't getting food stamps at all." Ayana continued, "I got pregnant, and I had to stop working. . . . My [older] son wasn't used to, 'Well, Mom can't afford [food] this month.'" Latoya, one of nine children in a household of 12 and the caregiver of her sibling, Rachel, the target child, reported, "Yes, yes I have experienced [that] because then [my mother] couldn't get all the food and stuff that she wanted, 'cause she didn't have that much money."

Participants had periods of having enough food and times where food supplies were insufficient. Shawna, a single mother of two who lived in a three-generational household with a total of six people, sometimes

experienced food shortages. However, when she was employed, her food supplies were stable, "When I had my other job, I used to work at a trucking company . . . and I got paid more. I was able to keep food consistent [in my house]." Tracy, whose household included her adult daughter, two grandchildren, and teen daughter, experienced a period of inadequate food supplies due to a medical crisis that led to job loss. She reported that unemployment income wasn't "nearly enough" to cover food and living expenses.

As caregivers talked about the strategies they used to manage inadequate food supplies, they sometimes described the stress on themselves and their children. Candice, a grandmother in her fifties, shared what it felt like for adults in her household and her granddaughter Kelly not to have enough food, "It's an easy going month, you feel at ease. . . . When people get hungry, they get frustrated [sic] and a little testy. . . . Kelly will get a little testy at first."

When we asked Claudia, a single mother of two young children and who lived with her mother, what it was like to not have enough food, she described the personal strain and the negative impact on her son Justin:

It's stressful. . . . Things get to racing through your mind, like how are you gonna' get this? . . . When I don't have as much, it kind of affects [Justin] because then I don't have enough to get the things that I need to. . . . It don't affect him because he still gonna' eat, but it will affect him 'cause that could be his fruit. That could be his vegetable, you know, what I have to leave behind and that's his nutrition.

We also queried Ayana about what it was like not to have enough food. Ayana shared a similar story of the painful nature of not having enough food, "When you have too little, it hurts. It more takes out from your kids. . . . Even if you try not to show the kids that you're depressed . . . they can sense it You might yell out at 'um.'"

When food was available caregivers were grateful, despite a history of food shortages. Dominique illustrated, "We thank God for the food to be in our house. . . . We eats the food 'cause it's a lot of peoples out here don't have food to eat on. So I tell 'um every day to be thankful for what we have."

Strategies for Managing Food Shortages

Households used four categories of strategies: (1) food-provisioning strategies, (2) food-consumption strategies, (3) social-network strategies, and (4) institutional strategies. As detailed in caregivers' accounts, we identified a total of 14 strategies across the four categories (see [Table 1](#)). In some cases, these strategies were used to prevent food shortages, whereas in other instances women used these strategies to minimize the consequences of inadequate food supplies.

TABLE 1 Overview of Food Management Strategies by Type and Frequency of Use

	Food-provisioning strategies				Food-consumption strategies			Social-network strategies		Institutional strategies				
	Sales and prices ^a	Store coupons	Family packages	Purchasing style	Multiple stores ^a	Stretching leftovers	Eating less	Rationing	Kin help	Significant other males	Friends and neighbors	Community sources	WIC LINK	Total
Aisha (A:26, A/C:2/2, S) IFS	x				x				x	x			x	5
Ayana (A:32, A/C:1/2, D, E) IFS	x		x		x	x		x	x	x			x	10
Candice (A:58, A/C:3/6, M) IFS	x				x	x		x	x			x	x	7
Claudia (A:24, A/C:3/2, S) IFS	x			x	x				x				x	5
Dominique (A:26, A/C:3/6, S) IFS	x	x		x	x	x		x	x	x		x	x	12
Latoya (A:18, A/C:3/9, S) IFS	x				x		x		x				x	5
Shawna (A:28, A/C:4/2, S, E) IFS	x				x				x	x	x		x	6
Tracy (A:52, A/C:1/3, W, E) IFS	x		x		x				x		x			6
Janice (A:21, A/C:2/3, S) AFS	x			x	x				x				x	5
Karah (A:35, A/C:2/7, S, E) AFS	x	x		x	x								x	6
Keisha (A:40, A/C:2/2, M, E) AFS	x	x		x	x				x				x	6
Kenya (A: 23, A/C:2/4, S) AFS	x		x	x	x					x			x	7
Total	12	3	3	7	12	3	4	2	10	5	3	3	3	10

WIC = Women, Infants, and Children; LINK = Food stamps in Illinois; IFS = With inadequate food supplies; AFS = With adequate food supplies; A = age; A/C = Adult/child ratio in the household; S = single; D = divorced; M = married; W = widowed; E = employed.
^aShared strategies.

FOOD-PROVISIONING STRATEGIES

Food-provisioning strategies entailed shopping tactics for acquiring foods, including shopping for low prices/sales, going to multiple stores, using coupons, buying family packages, and purchasing style. Food-provisioning strategies relied upon the human capital skills of individual caregivers and reflected, in many cases, proactive efforts to prevent food shortages.

Prices and sales. For all of the caregivers, purchasing foods at the lowest cost was paramount. Caregivers stretched their food dollars by shopping at discount stores. Keisha provided an example, "I was mainly getting Leticia's baby foods from Kroger when she was much younger, like all the Gerber products, 'cause the products are way cheaper than Jewel." Similarly Claudia stated, "If I find a budget [sale] somewhere else, that's where I'm going to go. Like if there is a store that has cheaper foods than this other store, then I will go to that cheaper store." Shawna avoided grocery stores with high prices, "Moo & Oink, they kind of expensive! That's why I don't buy too much from them. They kinda' high."

Another way to purchase food for lower prices was to shop for sales. Dominique asserted, "What I buy at Fair Play . . . [its'] stuff that's on sale." Kenya's response was similar, "Food for Less, you gotta' catch a sale. Every time I go, I catch the sale. They prices be real nice, real cheap." Janice reported that she shopped at Aldi because of its prices, "I like Aldi sales, and I don't dislike nothin' about them. Aldi's got everything for cheap and I don't dislike nothin' about them."

Caregivers also kept track of different sales that were taking place at different stores. Keisha was particularly savvy in her approach to shopping for food items on sale:

Today is Wednesday. All the sale papers are in my door. So that'll give me a chance to go through [them]. . . . So if the meat is on sale here, then I'll get that from there. If the pop or the dairy products are on sale at Strack-Van-Til's then I will . . . stop in.

Sales also made regular grocery stores more accessible and helped expand the range of grocery stores available to some caregivers. Tracy exemplified this point, "It depends on the sales the store is having I only do occasional shopping [at Dominick's], only if there is a sale Jewel has good sale prices, but if there is no sale, the prices are too expensive." Given caregivers' limited resources, participants were attentive to food costs and developed provisioning strategies with this goal in mind.

Multiple stores. To stretch their limited food dollars, all participants sequentially used multiple grocery stores each month to secure groceries at the lowest price. Aisha said, "I try to go to all the stores every month." She patronized Aldi and Fair Play (discount grocery stores), Jewel (a regular grocery store), a corner store, and an online specialty grocery store. Karah

said, “I try to switch ‘um up. So I go to one meat store one month and the other meat store the next month.” A review of Karah’s shopping routine further revealed store diversification. Karah shopped at Aldi (discount store), Moo and Oink, (meat specialty store), and One Stop (small independent grocery store). Ayana shopped at multiple stores to secure the best prices. She chuckled as she shared this information:

Sometimes I end up at both grocery stores [Fair Play and Food for Less], regardless, ‘cause one has certain things on sale and the other one has certain things on sale. Yes, sometimes you go to both because one might have certain things here and one might not, dependin’ on your income that you can spend, dependin’ on the quantity of food that you need.

Despite caregivers’ labor intensive activities, their shopping efforts provided them with a sense of efficacy in managing the “predicament” of food shortages. As Ayana described her shopping strategies, she also applauded her own abilities:

I try to avoid getting in any of those predicaments. Sometimes you can’t help it, but you can do a lot to avoid it . . . by shoppin’ wisely. . . . I try to shop for my money’s worth. . . . [When I don’t have enough in my budget], it really doesn’t [affect] my kids because I’m a very smart shopper. I can take \$20 and make it go a long way.

Coupons. Three caregivers used coupons to lower their food costs. They secured coupons from newspapers and mail solicitations. Keisha used coupons at multiple stores, “If I have coupons and if I can remember to take [them] up to one or the other [stores], then I can use the coupons. All of them take it.” Dominique’s shopping trips were determined by the availability of coupons, “I go to Aldi first. I go straight to all the other stores, go on, get it out of the way. . . . They got canned goods at all them places.” When we asked how she decided which store to patronize Dominique replied, “Because you have coupons. When you get sales papers, you have coupons in there. You take the coupons out of it, then you can get through with your coupons.”

Tracy, who was an avid coupon user and who promised to share her coupons with the interviewer—“I’m a have to save the coupons for the next time, so I can give it to you”—also used coupons to purchase prepared foods for her children. With laughter, she said, “From Subway . . . they get a cold cut sandwich with their little meal. . . . Yeah, I use coupons for those too!”

Coupons stretched food budgets. Limited use may point to issues with access to coupons, availability of cheaper generic foods without coupons, or limited organizational skills.

“Family packages”. Three caregivers purchased food items in large sizes or “family packages”. For example, Tracy said, “I buy meats [at Food for Less]

because they have larger sizes . . . family sized packages.” Foods purchased this way were more economical as Kenya reported, “Food-For-Less sell their food by family pack. Fair-Play don’t. . . . I get more at Food-For-Less, and I don’t get more at Fair-Play.”

Ayana was particularly analytical about the process of purchasing large quantities:

[At] the Meat House . . . a half a slab of pork chops gonna’ run me about \$12. . . . I got at least 20 or 21 pork chops. . . . I go to Fair Play to buy some meat. I buy a pack of pork chops, goin’ to cost me about \$7. You got about five or six of ‘um in there? Uh uh [no].

Family packs offered significant cost savings and made food available for current and future use.

Purchasing style. Faced with the prospect of running out of food, caregivers made budgeting decisions concerning the amount of food to be purchased. Estimations of expenditures took into account current and future food needs of the household and informed shopping activities. Caregivers were asked what they did when they found themselves running short on food. Seven caregivers identified two purchasing patterns that allowed them to temporally regulate the acquisition of food and stabilize food supplies. Undershopping involved buying less food than immediately needed. Over-shopping entailed purchasing surplus food for future use. Purchasing style reflected caregivers’ budgeting skills and proactive planning activities to avoid or anticipate food shortages.

Three caregivers undershopped or reined in their budgets. When she found herself running short on food, Claudia said she routinely purchased fewer items in one month to save money as a precaution against potential food shortages the following month:

Me as a mother . . . I don’t overspend. . . . If I had more in my budget, I will hold that until the next budget. . . . I don’t spend all of it. . . . I have to feed them [my children] the next month and I might not have enough.

Kenya described another aspect of undershopping. To ensure that the household had adequate food throughout the month, Kenya spent less on food during early shopping trips. By doing so, she could address evolving food needs, “I always spend under. . . . If I don’t spend it all, I save something, like if it’s some bread or something [else I need].”

Three participants overshopped by purchasing more food items than immediately needed. Ayana illustrated how households enhanced the stability of their food supplies:

Far as me having enough [food], you just end up overshopping, which sometimes is good. So that way the next month, if you get a letter sayin’,

“Oh, the food stamps cut.” And you say, “Well I did stock up on canned goods”.

As she described the household's grocery shopping strategies, one informant, Dominique, identified the practice of switching between undershopping and overshopping, “[My grandmother and aunt] say I can use the whole LINK card, and sometime they say leave somethin' on there for the middle of the month or the end of the month.” Dominique flexibly used both patterns to address ebbs and flows in household food supplies and household resources.

FOOD-CONSUMPTION STRATEGIES

Consumptions strategies entailed how foods were prepared and eaten. Stretching leftovers, eating less, and rationing foods were used by caregivers. Unlike food-provisioning strategies, consumption strategies were crisis oriented and used in direct responses to impending or current food shortages.

Stretching leftovers. When food was scarce caregivers were careful not to be wasteful. Making use of food that remained from earlier meals was a response to inadequate food supplies. Three caregivers employed stretching leftovers as a strategy to deal with food shortages. For example, when we asked Candice what happened when she ran short of food, she replied:

I can usually stretch something out. There are always leftovers in the freezer. . . . If I cook a lot . . . I know somethin's goin' to be left over. Put it in zip lock bags, put it in the freezer. Later on . . . I just pull it out and heat it up and do the sides, maybe, corn, and potatoes.

When Dominique was asked what she did when food supplies were limited, she described a sequential pattern of consuming available foods:

I have to cook instead of gettin' in the microwave. Some of the stuff you could put in the microwave, that's what they eat first. That's what leaves first, then all the meat and then the deep freezer. That's what you got to get on the stove and cook.

Interestingly, Dominique's consumption entailed moving from prepared convenience meals that required limited cooking. Presumably higher cost convenience meals were available at the beginning of month when resources were more plentiful. During periods of dwindling resources, Dominique had to make use of more disparate stock piled foods from the freezer and that required more intensive preparation.

Eating less. Four households curtailed the amount of food that they consumed by eating less. Caregivers' accounts suggest the periodic nature

of inadequate food supplies and the need to utilize this drastic strategy. In some households eating less extended to adults only, whereas in other households children also ate less. In Dominique's and Latoya's households everyone ate less. They described a cycle of having more or less food and how, in particular, the family adapted to the latter:

Yeah, we eat a lot more when it's a lot of food; but when it's not a lot of food, we eat less. We have to limit it down. Rachel [preschooler] had to get less food and it was bad 'cause we love to eat. . . . She'll eat less portion of food. . . . When we have more in our food budget, she eats more food.

In Candice's household, everyone ate less by skipping meals:

You used to eatin' three times a day. Now you're eating twice. . . . But when you know it's nothin' you can do, you just have to build a bridge and get over it. . . . So then you've got to get adjusted. But normally it's just for a short period. So everybody seems to work together on it.

Caregivers like Candice recognized the limits of their efforts, patiently accepting periodic food shortages.

Ayana deprived herself to insure that her two children ate. Reflecting on fluctuations in her food budget, she explained, "Felicia [preschooler] eats the same. . . . It actually didn't change the way that they ate. It more changed probably my way of eating. . . . My babies come first. And if some-thing's left, then I'll eat." Caregivers like Ayana utilized the strategy of eating less in response to food shortages, yet managed to maintain children's food supplies.

Rationing. Two households used rationing or allocated predetermined amounts of food. Dominique described her family's rationing plan and related rules when food was exhausted:

Sometimes when I go to the grocery store, I been knowin' what they like. . . . Like you get this three. He goin' to get this three. You dog [eat all] your three, that's on you. Just don't touch nobody else stuff. That's just how it works in our house.

In her household, Dominique provided rules for when these foods were depleted. Although seemingly harsh, these rules had the potential to prevent family conflict during difficult periods of food shortages.

Ayana allocated or "issued" snack foods for her daughter Felicia to control the outlay of food, "There's times when I go grocery shoppin.' I buy the snacks with grocery shoppin' sometimes and I issue it out." Even with

snacks, Ayana understood the importance of temporally rationing all of the household's food to prevent the prospect of inadequate food supplies for her daughter. Rationing allowed caregivers to spread food supplies over an extended time period, lessening the prospect or duration of food shortages.

SOCIAL-NETWORK STRATEGIES

Among the strategies households used to stretch their food resources within the social network-based category, extended kin were most frequently called upon for help, followed by significant other males, and lastly by friends and neighbors. Reliance on others as a strategy to manage food supplies reflected caregivers' social capital. Caregivers had to be skilled in developing and maintaining social relationships that could be mobilized when food supplies or budgets ran low. These strategies were used to prevent and delay food shortages.

Kin assistance. For 10 households family members were a hedge against inadequate food supplies. For Shawna, it was her grandmother. When asked what she did when she had limited food supplies, Shawna answered, "I can call my grandma even if she just helped me. I can call her and she'll still help me."

Tracy, a grandmother, could count on her adult daughter for food assistance, "My daughter also receives food stamps. So when she was at the store she'd call me and say, 'Mom I'm at the store. I'm going to bring you some items, some meat, and veggies.'"

For some caregivers kin assistance was a routine aspect of women's food budgets. When her food stamps were low, Aisha regularly received help from her uncles and grandmother:

I still got my grandma and my uncles helpin' me. . . . They been helpin' me since forever. . . . I'm glad that [my grandmother] think about us whenever she do go out to the store. . . . Like when she go to the store, she might say, 'Well they probably need this. . . . She don't gotta' think about us when she go out to the store, but she do so. I'm happy about that.

Dominique also underlined the routine nature of food assistance at her aunt's home, "I can go there and eat anytime I want to. I go there a lot." For other caregivers like Claudia, kin assistance was used during crises:

When I have enough in my budget, everything is fine, 'cause I'm able to get everything that I need to get for the children to eat for that month. But if I don't have enough in that budget that's when I have to either go to my mother or my other family members.

Sometimes help was reciprocal in networks as illustrated by Shawna who received assistance but also had to contribute, "I have to sometimes buy food for my grandma house . . . when the kids are over there." Participants also recognized the limits of reciprocal food assistance with financially strapped kin. According to Ayana, her ability to eat at kin's home was due to her willingness to open her home as well. When asked if she could go to her kin's house when her resources were slim, she said, "Yes, yes because they always knew they was welcome in my house. So yeah." Ayana added:

They really look at it as though it's just one of me, even if I have my little girl. She's four. So they still lookin' at that's just one meal. So that's fine. . . . A person is willin' to feed one before they're willin' to feed three.

Sometimes kin were a drain on household food supplies. Shawna was unable to maintain food supplies when noncontributing kin lived with her and "ate up all of the food." Moving away improved her food situation, "It was me, my brother, my grandmother, my uncle, my cousin, whoever comes over. . . . Since I'm in my own house I keep more food now 'cause it's just me and my kids."

Keisha was actively involved with kin who lived in lower-middle class suburban neighborhoods. She believed that if she experienced food shortages they would contribute without reciprocation:

If I was gonna' come short on food. . . . I know that my sisters would give to me. It wasn't that I have to pay it back or anything. . . . I know that they would come and bring it to me or tell me to come by and get it, because we never wanna' see kids starving.

Significant other male assistance. Five caregivers said significant other males provided food assistance. Unmarried partners were unable to provide full economic support to caregivers' households because of their own poverty. Instead, males provided assistance when they could. According to Shawna, "Andre will help me if I'm short." Shawna further reported, "My boyfriend help me. . . . He usually buys take-out food all the time." Significant males helped stabilize food supplies. Partners like Malik indirectly contributed to food budgets by paying for caregivers' meals. Kenya stated, "Malik'll ask me, 'Is I hungry?' He'll give me some money to get somethin' to eat while I'm out."

Ayana's former companion, Dante, provided money for his daughter's snacks. Consequently, Ayana did not need to allocate those funds in her regular grocery shopping trips, "I might not have to spend money on weekly snacks. Sometimes her dad might have gave her \$5.00. And she might have spent \$1.00 a day." During food shortages, Aisha's companion Jeremy provided direct monetary contributions for food, "If I need him to, we might

spend \$60 to \$80 [on food]. He'll buy groceries if we need it. I really try not to depend on him. . . . He's there when I need him. . . . So if I don't got it and my sister don't, I can always depend on him."

Friends and neighbors assistance. Three caregivers received food assistance from friends or neighbors. When asked about food shortages Shawna reported that her daughter Nikki relied on her neighbors, "Nikki still eats the same, 'cause she goes to the next door neighbor's house, and she eats. So it don't affect the way she eat at all. Nikki still eat." Shawna had lived next door to her neighbor Lisa and her family for over two decades and these relationships had become close. Shawna continued:

Lisa, I been friends with her since I was little. We're over there and they're over our house like all the time. So it's like one big family. . . . Nikki goes there every day. She's been there since she was a kid. She's like family to them. . . . They cook for her, and she's sure to eat over there.

Tracy also received food assistance from nonfamily members. When her family was low on food, she reported, "Friends and people at church decided to give us groceries. . . . I was pleased and overwhelmed. They were all so nice. I'm grateful. God is good." When asked how having limited money for food affected Patrice, Dominique included assistance from friends in her network repertoire, "I try to get her what she likes or what she wants at that given moment. And if I can't get it, I'm 'a call a brother or friend or somebody, uncle, somebody. Somebody'll pull through." Food assistance was an aspect of close friendships. Dominique reported that she ate meals at her best friend's house. She also appreciated getting help from her friends when she needed and not having to pay back, "I got friends that [help]. I don't have to repay them anything. That's what friends for. If you need a friend and have to pay them back, what you need a friend for?"

INSTITUTIONAL STRATEGIES

We asked caregivers about their food budgets and sources they used to pay for food. Caregivers identified governmental sources and community resources for food assistance. Benefits from governmental sources, such as SNAP and WIC, entailed eligibility criteria and rules that caregivers had to navigate. Community resources, such as food pantries, were less stringent in their eligibility requirements, though knowledge of their existence and locations was necessary. These strategies could be used to prevent or delay food shortages.

SNAP (LINK). Ten caregivers currently used SNAP, also known as LINK in Illinois, to purchase food. LINK was a critical buffer against food shortages and caregivers were unanimous in their praise:

Dominique: I love it. I like it 'cause without LINK I'll be hungry.

Latoya: What I like about it [LINK]? . . . She [my mother] can get all the food she want.

Claudia: It helps me a lot. If I had to buy all the foods that my children need out of my pockets, I would not have any money to take care of them.

Mothers like Dominique cited problems with maintaining LINK eligibility that dampened their glowing reports, "[My LINK card] don't go down unless I miss an appointment or somethin'. Then they'll cut it down or they'll ask for a rent receipt. . . . I don't bring it in. Then they'll cut it down."

Aisha described the emotional impact of fluctuations in LINK allocations:

They just went up in February and I got \$278. So I was excited, like "They givin' me more money, okay, I could use this". So that way with the money my uncles give me I might not have to buy food. I can buy whatever. Then in March they went down and in April they went down to \$215. . . . I was upset about it.

Having a defective LINK card could be particularly problematic according to Ayana:

I'm goin' to Fair Play [grocery store] to buy something. He swipe my card three times and it didn't go through. . . . Then you have to [wait] to get a new card. . . . Ok, my kids could be hungry today, nothin' in the refrigerator today.

Candice also detailed how the lack of a LINK card negatively affected families' food supplies, "Loss of a job or when they didn't fill out the application for the LINK. Now you got to stretch what you had, and that means less food for everybody."

WIC. Of the nine households eligible for WIC, only three households reported currently using the WIC program and were positive about its impact. The food provided by WIC allowed mothers like Keisha to conserve cash and to spend the money on other food items, "I don't have to buy milk every month, it's already supplied. I don't have to buy eggs. . . . I could go buy something that's not covered, chicken, beef, fresh vegetables." Karah, who also liked the WIC program and experienced "no problems with it", focused on the savings that came with WIC:

They help me out with milk for the baby, 'cause that's a lot. . . . They give her a nice amount. . . . I still had my food stamps to get the milk and the eggs and stuff like that From Aldi I get my milk, my eggs, sometime WIC juice. . . . So I don't never buy no milk or no eggs from there [Aldi]. I go straight to WIC.

Kenya received WIC and LINK and reiterated how caregivers' budgets were enhanced with these governmental resources, "Before I got stamps, I used to have to pay. Once I had my baby, I went to get a medical card. I went to get WIC. I went to get stamps. I didn't have to pay for nothin'."

Other caregivers had participated in the WIC program in the past. Difficulties with establishing eligibility for her son led Claudia to leave the WIC program:

Justin was receiving WIC for up to three years. And then when we moved here in this neighborhood the doctor . . . could not get his files together. So his WIC stopped. And now that we're with a new doctor, hopefully he can get his papers together and I might pursue WIC and I might not because I buy the stuff myself and Justin will be five in September.

When asked why her son Tramell no longer received WIC, Janice's account, though cryptic, suggests a problem with the gatekeepers who determined eligibility, "I think my baby was one when we got off WIC 'cause he was *too fat*. They couldn't find a vein to take his blood work."

Although some of the target children were age 5 and no longer eligible for WIC, some of the eligible caregivers did not participate in the program. These caregivers may have determined that additional food was not worth the hassle of managing eligibility.

Community resources. Three caregivers reported using community resources, mainly during crises. Candice said she used food pantries when she ran low on food. With respect to frequency, she said, "Maybe three times a year I've been up there." Candice used community resources only during emergencies. Tracy reported a health crisis that precipitated the use of community resources. Although, she no longer uses community resources, Tracy was pleased with their assistance during her time of need:

Things are fine [now]. We have more than enough food. . . . I have had to a long time ago, go to food baskets at church and food give-aways. So I would not be reticent to go again if I needed to.

Dominique routinely used community resources at the end of the month when her food stamps (LINK) were depleted. She described the ease in using these local services for ongoing food crises:

I definitely go to the church and get me a food box. I go to the Salvation Army and get me a food box. . . . It ain't goin' to take that long to stand in no line for 15 to 20 minutes, to show an ID. . . . I definitely take them church boxes . . . 'cause that box of food come in handy when you low, when the food stamps done ran out.

More generally, participants had positive experiences with faith-based and other nonprofit organizations that were easily accessed and had lenient eligibility requirements.

Configuration of Strategies in IFS and AFS Households

Our analyses revealed a distinct pattern in households' use of individual strategies. Of the 14 strategies identified, two strategies were shared by all 12 caregivers. Monitoring prices and sales and using multiple stores, which derived from the food-provisioning category, were strategies used by households with inadequate (IFS) and adequate (AFS) food supplies. These were called "shared strategies." The remaining 12 strategies derived from the four categories of food provisioning, food-consumption, social-network, and institutional categories and were used in varying combinations to complement shared strategies. We called these strategies "complementary." Further analyses revealed no difference in the use of complementary strategies based on demographic characteristics (e.g., age, education, number of children). Key differences emerged based on food status. IFS and AFS households varied with respect to the number of complementary strategies used and how they combined the array of strategies.

NUMBER OF COMPLEMENTARY STRATEGIES USED IN IFS AND AFS HOUSEHOLDS

Overall, higher numbers of complementary strategies were used by IFS households. Within the IFS group, the largest number of complementary strategies was used by three IFS households (5, 8, and 10). The inclusion of crisis-oriented food-consumption strategies (eating less, skipping meals, stretching leftovers) suggested that they experienced more severe food shortages, relative to other IFS households. Other households within the IFS group used three to four of the complementary strategies. Food-consumption strategies were absent from their repertoires. With one exception, the size of caregivers' repertoires was smaller than those IFS households that used food-consumption strategies.

In comparison, AFS households used three to five complementary strategies. AFS households used fewer strategies than the IFS households whose repertoires included food-consumption strategies, but slightly more than the IFS households that did use food-consumption strategies. These data suggest that the number of strategies used is not necessarily related to success in alleviating food shortages. Despite using large numbers of coping strategies, IFS households still experienced food shortages.

RANKING OF COMPLEMENTARY STRATEGIES IN IFS AND AFS HOUSEHOLDS

Based on frequency of use, we were able to rank the complementary strategies used by IFS and AFS households (see [Table 2](#)). IFS and AFS households

TABLE 2 Comparison of Strategies by Food Status

IFS households (<i>n</i> = 8)	AFS households (<i>n</i> = 4)
Social-network strategies (15)	Food-provisioning (7)
Kin assistance (8)	Purchasing style (4)
Significant other males assistance (4)	Coupons (2)
Friends and neighbors assistance (3)	Family packages (1)
Institutional strategies (10)	Institutional strategies (6)
LINK (7)	LINK (3)
Community resources (3)	WIC (3)
WIC (0)	Community resources (0)
Food-consumption strategies (9)	Social-network strategies (3)
Eating less (4)	Kin assistance (2)
Stretching leftovers (3)	Significant other males assistance (1)
Rationing (2)	Friends and neighbors assistance (0)
Food-provisioning strategies (6)	Food-consumption strategies (0)
Purchasing style (3)	Eating less (0)
Family packages (2)	Stretching leftovers (0)
Coupons (1)	Rationing (0)

IFS = With inadequate food supplies; AFS = With adequate food supplies; WIC = Women, Infants, and Children; LINK = Food stamps in Illinois.

differed in their rankings of particular categories of strategies, reflecting different approaches to managing food shortages.

IFS households. Social-network strategies comprised the most frequently used group of complementary strategies among IFS households. These strategies require the ability to develop, sustain, and activate social relationships as needed. For all eight IFS households kin members were most important, followed by significant other males (*n* = 4) and friends and neighbors (*n* = 3). Caregivers in IFS households relied upon kin who were equally poor and, in some cases, participated in routine, reciprocal aid to avoid food shortages. Kin networks used by IFS households temporarily addressed food shortages and offered caregivers psychological relief from the strains associated with inadequate food supplies.

Although three IFS caregivers relied only on kin, five other IFS households also used assistance from significant other males and/or friends and neighbors. Only IFS households relied on friends and neighbors as a coping strategy. In two instances, IFS households coupled significant other males and friends and neighbors, along with kin. Given the severity of their hardship, such households dispersed their need for food assistance over a larger group of social-network members. Yet IFS households relied upon nonfamily individuals who were also economically challenged. Thus, though network members, such as significant other males and friends and neighbors could provide short-term solutions, they were limited in their ability to alleviate food shortages. Some of the IFS households did not use significant other males or friends and neighbors. It is likely that even though kin alone could

not alleviate food shortages, these IFS caregivers sought to limit the number of draining exchanges with other individuals who were resource strapped.

Institutional strategies ranked second among the complementary strategies used by IFS households. Seven out of eight IFS caregivers used LINK. The caregiver who did not use LINK was employed. Although LINK did not cover all of households' food needs, it was a critical coping strategy against unrelenting food shortages. IFS households capably, albeit with periodic challenges, negotiated the eligibility requirements of LINK. None of the IFS households that were eligible for WIC currently used it as a complementary strategy, suggesting that these caregivers were unable to navigate program eligibility requirements. As a crisis-oriented complementary strategy within the institutional category, community resources were used by only three IFS households and in routine (monthly) and sporadic emergency modes. It appears that community resources are used to shore up the limitations of individual, social-network and government resources. Perhaps the remaining five households were unwilling to use community resources and/or unaware of the locations.

Food-consumption strategies, which are most clearly crisis oriented, reactive responses to full-blown food shortages, ranked third among IFS households. Four caregivers used "eating less," and three coupled it with stretching leftovers, or "rationing" ($n = 2$). In more severe cases of food shortages, two IFS households used all three food-consumption strategies. The third place ranking suggests that food-consumption strategies are not preferred strategies among IFS households. Yet they may become inevitable in some households when other strategies are exhausted or ineffective.

Food-provisioning strategies, which required human capital skills, ranked last as a response to food shortages among IFS households. Although IFS households utilized complementary provisioning strategies, they used these proactive strategies less, relative to other strategies in their repertoires. Five of the IFS households used one or two of the complementary food-provisioning strategies, whereas three households used none. Interestingly, three IFS households used food-provisioning strategies, a proactive human capital activity, along with reactive food-consumption strategies that were a direct response to food shortages. The combined use of planful proactive strategies and reactive crisis-oriented strategies may reflect a temporal dimension. During relatively stable periods households make use of proactive strategies, switching to more crisis-oriented reactive strategies as food shortages loom.

AFS households. Food-provisioning complementary strategies (purchasing style, store coupons, family packages) ranked in first place among AFS households. AFS households invested heavily in these types of strategies to avoid food shortages. All four AFS households made use of complementary strategies from this category. Food-provisioning strategies reflect human capital skills, including planning and budgeting, and some AFS

caregivers considered themselves particularly accomplished with respect to these skills. Moreover, some AFS caregivers specifically believed that it was their individual competence and not assistance from others that was critical to their households avoiding food shortages.

Institutional strategies ranked second with respect to frequency of complementary strategies used among AFS households. Whereas three of the four AFS caregivers used LINK, one caregiver, who was employed, did not. WIC was only used by AFS households and three caregivers coupled WIC with LINK. Caregivers' use of LINK and, especially WIC, highlights their resource-seeking skills in securing additional food resources and maintaining eligibility. AFS households saw LINK as the foundation of their food supplies, but they also considered WIC as a way to stretch their food supplies. None of the AFS households used community resources. Perhaps WIC food allotments made it possible to forego community resources.

Social-network strategies were the least frequently used complementary category within AFS households. When AFS households relied upon social-network ties, kin and, to a lesser extent, significant other males were favored. In the two AFS households that drew upon kin, relatives were middle class and had ample resources. These kin provided surplus food resources with no expectation of reciprocity, thereby expanding the food supplies of AFS households. One caregiver from the AFS group relied on a significant other male, perhaps because she did not have access to kin assistance, suggesting that when kin assistance is not available, significant other males may play a more prominent helping role.

With respect to social networks, no AFS households relied upon friends and neighbors. Various factors may be operating. AFS households had adequate resources through kin alone, significant other males, or other non-network strategies without reliance on friends and neighbors. It also may be that ties to friends and, especially neighbors, who lived in the same impoverished neighborhood would activate potentially draining exchanges that AFS caregivers wished to avoid. None of the AFS households used food-consumption strategies that are crisis oriented in nature. Clearly, AFS households' use of other strategies helped them to avoid these drastic measures. It is possible that, relative to IFS peers, they had more resources or could manage resources better by using prevention strategies.

In summary, comparisons of IFS and AFS households suggest that caregivers, irrespective of their food status, were actively engaged in efforts to manage the prospect of food shortages by combining different categories (consumption, provisioning, social network, institutional) of strategies and by combining specific strategies within categories. Different categories of strategies reflected particular skills, (human capital, social capital) and distinctive coping stances (proactive vs. reactive). Although there was some overlap in the use of shared and complementary strategies between IFS and AFS households, they differed with respect to how they prioritized different

strategies. IFS households more heavily invested in social capital strategies, whereas AFS households more heavily invested in human capital strategies. Yet, ranked as the second most used complementary strategy in IFS and AFS households, LINK, an institutional strategy, was a key component of all households' coping repertoires.

DISCUSSION

The goal of this study was to explore the experiences of low-income African American female caregivers with young children at risk for inadequate food supplies and the strategies they used to address this adverse situation. Additionally, we sought to better understand how various strategies were configured and how the combination of strategies varied with respect to household food supply status. Using a qualitative approach, we relied upon women's first-hand accounts to develop a contextually-rich, dynamic, and nuanced interpretation of coping with the risk of inadequate food supplies.

Several key findings emerged. The experience of food shortages was common in our sample. The majority of households experienced periods of having adequate food supplies and other times of not having adequate food supplies for its members. Coping strategies fell within larger categories of food-provisioning, food-consumption, social-network, and institutional strategies. Participants used multiple strategies within and across all the four categories. These findings are similar to other studies with racially diverse samples that report that inadequate food supplies are common among low-income households (Hoisington et al., 2002; Radimer et al., 1990), that food insecurity is episodic in nature (Hoisington et al., 2002; Radimer et al., 1990), and that households use multiple types of strategies to address food insecurity (Hoisington et al., 2002; Quandt et al., 2004; Radimer et al., 1990). The similarity or transferability of findings between this study and extant studies collectively enhances the credibility of findings from small-scale, qualitative research (Lincoln & Guba, 1985).

Our research differs from existing studies in a key way. With few exceptions (Mammen et al., 2009; Olson et al., 2004; Quandt et al., 2004), relatively little is known about variations among households at risk for food shortages and the strategies they use to cope with the prospect of inadequate food supplies, especially in the African American community. In our sample of urban low-income African American households with young children, we uniquely demonstrated how IFS and AFS households variably utilize coping strategies. In addition to shared strategies among households, we identified a large number of complementary strategies that IFS and AFS households distinctively used. Despite shared low socioeconomic status and race, IFS and AFS households had diverse approaches to managing the prospect of food shortages. Households that reported experiencing food shortages were

more likely to invest in coping efforts that required building and maintaining social-network ties, whereas households not experiencing food shortages invested their coping efforts in strategies that required human capital skills. Although IFS and AFS households made use of social capital and human capital skills, they did so to different degrees. We also demonstrated greater complexity in how strategies were used. Some households used the same strategies, but used them differently, including routine or crisis use of community resources, and use of impoverished or resource-rich kin to address household food needs.

This study also differs from some reports that suggest that social networks can alleviate food insecurity (Swanson et al., 2008). We expand on these discussions by noting that specific types of networks can alleviate food insecurity. They appear to be networks with resource-rich members. Our data suggests that individuals who are part of homogeneously poor social networks and experience food shortages can receive instrumental and emotional support during food crises. Yet ties to other food-challenged networks will not alleviate food shortages altogether. Further, our urban sample differs from rural samples (Harvey et al., 2002) that view governmental assistance negatively. All of our households viewed governmental institutional resources (LINK, WIC) positively and critical to coping with or avoiding food shortages.

Focusing on family strengths, this study uniquely integrates family resilience theory into discussions of food insecurity. Participants exhibited great agency despite the adversity of inadequate food supplies. With notable exception (Mammen et al., 2009), most studies downplay caregivers' agency and the psychological benefits of some coping strategies. Caregivers expressed pride in their coping efforts, particularly food-provisioning strategies that required planning and decision-making skills. Our data suggest that caregivers' coping activities promoted feelings of efficacy and control, and positive self-esteem. Even caregivers that relied upon other impoverished kin were buffered from feelings of despair and exhibited a sense of hopefulness (Mammen et al., 2009). Although their coping strategies were not always enough to completely ward off food shortages, caregivers' efforts likely decreased the frequency and severity of food shortages and helped households avoid the most risky coping strategies. Our research expands on USDA questionnaire items that identify the existence and/or severity of food insecurity within households by demonstrating a wider range of coping strategies in response to inadequate food supplies, along with households' resilience and agency that are missed in this survey measure.

IMPLICATIONS

The research has implications for food and nutrition assistance programs such as SNAP, WIC, and nonprofit food banks. Our findings suggest that

SNAP is essential to households and their ability to cope with limited food supplies. Efforts should be made to reduce barriers that interfere with Food Stamp receipt, such as longer recertification periods and reducing the length of the application process (Martin, Cook, Rogers, & Joseph, 2003; Metallinos-Katsaras, Gorman, Wilde, & Kallio, 2010). Our findings also support the need to encourage greater utilization of WIC resources that have been shown to reduce household food insecurity, enhance child nutritional health, and reduce maternal depression (Black et al., 2012; Herman, Harrison, Afifi, & Jenks, 2004). Attention should be given to barriers to WIC, such as time to complete forms, office waiting times, transportation, and frequent recertification requirements that discourage use (Bhattarai, Duffy, & Raymond, 2005). Similarly, efforts are needed to ensure that community-based food resources are widely available and to raise awareness about the location of such assistance. Access to community resources can help families avoid unhealthy food-consumption strategies.

Insights from this study can also assist nutrition educators in more effectively designing programs to reach low-income families. The Expanded Food and Nutrition Education Program (EFNEP) includes topics such as shopping on a budget, effective shopping skills, and stretching food dollars in their curriculum. However, findings from this study suggests that targeted efforts should be made to extend key skills to those households that may not be making use of all of these strategies and to reinforce proactive strategies in households that are already using them. Our research supports collaborative prevention and intervention efforts that are empowering. Household food providers should be included in discussions of food insecurity and be encouraged to take an active stance against the economic and political conditions that undergird food insecurity (Hoisington et al., 2002; Ramadurai, Sharf, & Sharkey, 2012).

STUDY LIMITATIONS AND FUTURE DIRECTIONS

The goal of the study was to provide a deeper understanding of how 12 households managed the prospect of food insecurity using qualitative methods. We recruited participants from a local preschool program that served low-income households. Thus, the small, purposively derived sample is not representative, and therefore, the research findings are not generalizable to the larger population with food insecurity experiences. Quantitative research with larger and more diverse samples is needed to determine the prevalence of particular coping strategies and to systematically examine how coping strategies may be associated with demographic characteristics of low-income households (Kempson, Keenan, Sadani, & Adler, 2003). One strategy would be to add the full range of coping strategies to the USDA food security survey. Additionally, more qualitative research is required to further explore

the full range of coping strategies and related variations used by low-income, urban African American households.

The insights from this study can be used to inform mixed-methods studies. For example, the coping strategies identified from qualitative methods can be included in large-scale studies of food insecurity with an emphasis on how these strategies effectively address food insecurity and healthy nutrition (Hoisington et al., 2002). Using quantitative USDA measures of food insecurity and in-depth interview questions jointly will enhance both validity and reliability. Mixed-method studies should also consider the impact of caregiver coping activities on stress and coping, self-efficacy, and depression.

ACKNOWLEDGMENTS

Maria Greaves-Barnes assisted with data collection, and Ezella McPherson and Kimberly Crossman assisted with data analyses for the study. Tolu Olorode, Ngozi Emuchay, Joe Whatoff, Khara Harper, and Shashenk Saxsena, undergraduate members of the Ethnographic Research Lab team in the Department of Human and Community Development at UIUC, also contributed to the research project. We gratefully acknowledge the enthusiastic involvement of our participants who made this study possible.

FUNDING

This research was funded by awards from the Pampered Chef and Christopher Family Foundation through the Family Resiliency Center at the University of Illinois at Urbana-Champaign. Additionally, this project was supported by a USDA Institute of Food and Agriculture, Hatch Award #600111 793 000 793369.

REFERENCES

- Ahluwalia, I. B., Dodds, J. M., & Baligh, M. (1998). Social support and coping behaviors of low-income families experiencing food insufficiency in North Carolina. *Health Education & Behavior*, 25(5), 599–612.
- Bhattarai, G. R., Duffy, P. A., & Raymond, J. (2005). Use of food pantries and food stamps in low-income households in the United States. *Journal of Consumer Affairs*, 39(2), 276–298.
- Black, M. M., Quigg, A. M., Cook, J., Casey, P. H., Cutts, D. B., Chilton, M., . . . Frank, D. (2012). WIC participation and attenuation of stress-related child health risks of household food insecurity and caregiver depressive symptoms. *Archives of Pediatrics & Adolescent Medicine*, 166(5), 444–451.

- Charmaz, K. (2003). Grounded theory: Objectivist and constructivist methods. In N. K. Denzin & Y. S. Lincoln (Eds.), *Strategies for qualitative inquiry* (pp. 249–291). Thousand Oaks, CA: Sage.
- Coleman-Jensen, A., Nord, M., Andrews, M., & Carlson, S. (2012). *Household food security in the United States in 2011* (Economic Research Report Number 141). Washington, DC: U.S. Department of Agriculture, Economic Research Service. Retrieved from <http://ers.usda.gov/publications/err-economic-research-report/err141.aspx>
- Congressional Digest. (2010, December). *Food insecurity in the United States: Impact on households with children*. *Congressional Digest*, 89(4), 301–306. Retrieved from <http://congressionaldigest.com/issue/child-nutrition/food-insecurity-in-the-united-states/>
- Cook, J. T., & Frank, D. A. (2008). Food security, poverty, and human development in the United States. *Annals of the New York Academy of Sciences*, 1136, 193–209.
- De Marco, M. D., Thorburn, S., & Kue, J. (2009). “In a country as affluent as America, people should be eating”: Experiences with and perceptions of food insecurity among rural and urban Oregonians. *Qualitative Health Research*, 19(7), 1010–1024.
- Dickerson, B. J. (1995). *African American single mothers: Understanding their lives and families*. Thousand Oaks, CA: Sage.
- Edin, K., & Lein, L. (1997). *Making ends meet: How single mothers survive welfare*. New York, NY: Russell Sage Foundation.
- Guest, G., Bunce, A., & Johnson, L. (2006). How many interviews are enough? An experiment with data saturation and variability. *Field Methods*, 18(1), 59–82.
- Hamelin, A. M., Habicht, J. P., & Beaudry, M. (1999). Food insecurity: Consequences for the household and broader social implications. *Journal of Nutrition*, 129, 552S–558S.
- Harvey, M., Summers, G., Pickering, K., & Richards, P. (2002). The short term impacts of welfare reform in persistently poor rural areas. In B. A. Weber, G. J. Duncan, & L. A. Whitener (Eds.), *Rural dimensions of welfare reform* (pp. 375–410). Kalamazoo, Michigan: W.E. Upjohn Institute for Employment Research.
- Herman, D. R., Harrison, G. G., Afifi, A. A., & Jenks, E. (2004). The effect of WIC programs on food security status of pregnant, first-time participants. *Family Economics and Nutrition Review*, 16, 21–30.
- Hill, R. B. (1998). *The strengths of African American families: Twenty-five years later*. Washington, DC: R & B Publishers.
- Hoisington, A., Shultz, J. A., & Butkus, S. (2002). Coping strategies and nutrition education needs among food pantry users. *Journal of Nutrition Education and Behavior*, 34(6), 326–333.
- Kempson, K., Keenan, D. P., Sadani, P. S., & Adler, A. (2003). Maintaining food sufficiency: Coping strategies identified by limited-resource individuals versus nutrition educators. *Journal of Nutrition Education and Behavior*, 35(4), 179–188.
- Laraia, B. A., Borja, J. B., & Bentley, M. E. (2009). Grandmothers, fathers, and depressive symptoms are associated with food insecurity among low-income first-time African-American mothers in North Carolina. *American Dietetic Association*, 109, 1042–1047.

- Larson, N. I., & Story, M. T. (2011). Food insecurity and weight status among U.S. children and families. *American Journal of Preventive Medicine*, 40(2), 166–173.
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Newbury Park, CA: Sage.
- Logan, S. L. M. (2000). *The Black family: Strengths, self-help, and positive change*. Boulder, CO: Westview Press.
- Mammen, S., Bauer, J. W., & Richards, L. (2009). Understanding persistent food insecurity: A paradox of place and circumstance. *Social Indices Research*, 92, 151–168.
- Martin, K. S., Cook, J. T., Rogers, B. L., & Joseph, H. M. (2003). Public vs. private food assistance: Barriers to participation differ by age and ethnicity. *Journal of Nutrition Education and Behavior*, 35(5), 249–254.
- Metallinos-Katsaras, E., Gorman, K. S., Wilde, P., & Kallio, J. (2010). A longitudinal study of WIC participation on household food insecurity. *Maternal and Child Health Journal*, 15(5), 627–633.
- McCubbin, H. I., Thompson, E. A., Thompson, A. I., & Fromer, J. E. (1998). *Resiliency in African-American families*. Thousand Oaks, CA: Sage.
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: A source book of new methods*. Thousand Oaks, CA: Sage.
- Monroe, P. A., O'Neil, C., Tiller, V. V., & Smith, J. (2002). *The challenge of compliance: Food security in rural households affected by welfare reform*. (Food Assistance Needs of the South's Vulnerable Populations, 5). Mississippi State, MS: Southern Rural Development Center.
- Olson, C. M., Anderson, K., Kiss, E., Lawrence, F. C., & Seiling, S. B. (2004). Factors protecting against and contributing to food insecurity among rural families. *Family Economics and Nutrition Review*, 16(1), 12–20.
- Patton, M. Q. (1990). *Qualitative evaluation and research methods*. Newbury Park, CA: Sage.
- Pinststrup-Andersen, P. (2009). Food security: Definition and measurement. *Food Security*, 1, 5–7.
- Quandt, S. A., Arcury, T. A., Early, J., Tapia, J., & Davis, J. D. (2004, November–December). Household food security among migrant and seasonal Latino farmworkers in North Carolina. *Public Health Reports*, 119, 568–576.
- Radimer, K. L., Olson, C. M., & Campbell, C. C. (1990). Development of indicators to assess hunger. *Journal of Nutrition*, 120(11 Suppl), 1544–1548.
- Ramadurai, V., Sharf, B., & Sharkey, J. R. (2012). Rural food insecurity in the United States as an overlooked site of struggle in health communication. *Health Communication*, 27(7), 794–805.
- Seefeldt, K. S., & Castelli, T. (2009). *Low-income women's experiences with food programs, food spending, and food-related hardships* (USDA Economic Research Services Food and Nutrition Assistance Research Program, Contractor and Cooperator Report, 52). Washington, DC: U.S. Department of Agriculture Economic Research Service. Retrieved from <http://handle.nal.usda.gov/10113/35894>
- Stack, C. B. (1974). *All our kin: Strategies for survival in a Black neighborhood*. New York, NY: Harper and Row.
- Stevens, C. A. (2010). Exploring food insecurity among young mothers (15–24 years). *Wiley Periodicals*, 15(2), 163–171.

- Swanson, J. A., Olson, C. M., Miller, E. O., & Lawrence, F. C. (2008). Rural mothers' use of formal programs and informal social supports to meet family food needs: A mixed methods study. *Journal of Family Economic Issues*, 29, 674–690.
- Tesch, R. (1990). *Qualitative research: Analysis types and software tools*. Bristol, PA: Falmer Press.
- U.S. Census Bureau. (2010a). *Median income in the past 12 months: 2006–2010 American Community Survey 5-Year estimates* [Data file]. Retrieved from <http://factfinder2.census.gov/faces/nav/jsf/pages/searchresults.xhtml?ref=geo&refresh=t#>
- U.S. Census Bureau. (2010b). *Profile of general population and housing characteristics: 2010 census demographic profile* [Data file]. Retrieved from http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=DEC_10_DP_DPDP1&prodType=table
- U.S. Department of Agriculture. (2012). *Definitions of food insecurity*. Retrieved from <http://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-us/definitions-of-food-security.aspx>
- Walsh, F. A. (2002). Family resilience framework: Innovative practice applications. *Family Relations*, 51, 130–137.
- Willging, C., Waitzkin, H., & Nicdao, E. (2008). Medicaid managed care for mental health services: The survival of safety net institutions in rural settings. *Qualitative Health Research*, 18(9), 1231–1246.