

Social Support Provision and related Facilitators and Barriers
in a Community Kitchen

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Abstract

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Family and Child Nursing

A community kitchen (CK) is a group of people who come together to obtain, prepare, eat, and distribute food. Community kitchens operate in Canadian, Australian, and Peruvian communities. This is one of the first known studies of community kitchens as they exist in the United States. This dissertation describes facilitators and barriers to food security and health in a community kitchen project. Specifically, this dissertation has two aims:

1. To identify and describe the types of social support provision that occurred within the Family Community Kitchen Project.
2. To identify and describe facilitators and barriers to social support provision in the Family Community Kitchen Project.

This case study is the first CK study to focus specifically on understanding social support provision and facilitators and barriers of social support provision within a community kitchen. New thematic findings that enhance the current CK literature to date were found in all four social support provision categories: informational, appraisal, emotional, and tangible support. In addition, new thematic findings for facilitators and barriers of social support provision in a community kitchen were organized into four categories: social-structural conditions, project structure, group structure, and group dynamics and relationship characteristics. Themes emerged from an analysis of field notes, focus group transcripts, project documents and questionnaires.

Categorical findings and major themes provide a structure from which further exploration of CK facilitators and barriers to social support provision for food security and health can begin.

A major contribution to the CK literature is the thematic finding of ‘facilitation’ as a particularly strong facilitator to social support provision in the Family CK Project. The leader played a major role in the CK’s success; without it, there would have been multiple barriers to success. Recommendations for continued community kitchen development include further exploration of community kitchens started by and for community members. It is within these initiatives that we might continue to find new and effective strategies that are value-congruent. Formal recognition and distribution of effective community strategies for food security and health can serve to advance and sustain these initiatives and develop a public health practice that highlights the voices of those they aim to serve. Nurses have played a critical role in the expansion of both Canadian and United States’ community kitchens by forging partnerships with community kitchen support organizations and serving as advocates for local groups and community health needs in the institutions in which they work. The Family Community Kitchen Project, in structure, activities, and leadership involved, facilitated the reciprocal distribution of social support between participants. The multiple types of emotional, tangible, informational and appraisal support provision were useful to further food security and health. This study contributed significantly to the CK literature on the social and leadership aspects of CKs in local contexts.

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Important Terms

Important terms are listed alphabetically.

COMMUNITY KITCHEN (CK): Community kitchen is the generic term used for an initiative where a group of people come together to collectively obtain, prepare, and often consume food (Tarasuk & Reynolds, 1999).

CK PARTICIPANTS: Participants in a CK include a community kitchen leader, an administrator, a researcher, and community members who “create their own agenda based on felt needs, shared power, and awareness of resources” (Minkler, 2006, p. 35):

The **CK ADMINISTRATOR** assists in the management of the community kitchen project through activities such as fee collection or reminder phone calls.

The **CK LEADER** guides the community kitchen processes such as food production or group discussions.

The **COMMUNITY MEMBERS** are individuals from the community.

The **CK RESEARCHER** is an individual who carefully studies aspects of community kitchens and is often formally trained in scientific inquiry.

The **CK VOLUNTEER** assists in the tasks and activities of the community kitchen project. Some volunteers are referred to as Recipe Leads or Childcare in the text of this dissertation.

Recipe leads were volunteers who specifically helped with food preparation and food production during cooking sessions. Childcare were volunteers who specifically assisted with child activities during CK Project activities.

SOCIAL SUPPORT: Social support includes two types: (a) structural support or support that facilitates “the development of social networks, social contacts, and participation in community activities” (p.98); and (b) functional support or what is often described as “emotional,

informational, [appraisal], and [instrumental]” (Engler-Stinger & Berenbaum, 2006, p.92) support.

SOCIAL SUPPORT PROVISION: “The provision of support refers to the actual offering or conveying of supportive actions and behavior – emotional, informational, and/or instrumental” (Nurullah, 2012, p.174). It is sometimes referred to as “received support” (Schultz & Schwarzer, 2004).

APPRAISAL SUPPORT PROVISION is “the provision of information for self-evaluation purposes, constructive feedback, and affirmation” (Heaney & Israel, 2008, p. 190).

EMOTIONAL SUPPORT PROVISION is the provision of “empathy, love, trust and caring” (Heaney & Israel, 2008, p.190).

INFORMATIONAL SUPPORT PROVISION can be defined as “the provision of information that a person can use to address problems” (Heaney & Israel, 2008, p.190).

INSTRUMENTAL SUPPORT PROVISION can be defined as “the provision of tangible aid and services that directly assist a person in need” (Heaney & Israel, 2008, p.190). It is also known as "tangible support" in the literature.

SOCIAL NETWORK: A social network is the “linkages between people that may or may not provide social support and that may serve functions other than providing social support” such as social influence and social engagement (Berkman & Glass, 2000; Heaney & Israel, 2008, p.190).

SOCIAL NETWORKING: The practice of developing social relationships through making connections with others (Dominguez & Arford, 2010).

FOOD INSECURITY: Food insecurity exists whenever the “availability of nutritionally adequate and safe foods [or the] ability to acquire acceptable foods in socially acceptable ways” (USDA, 2012) is limited or uncertain.

HEALTH PROMOTION: “The process of enabling people to increase control over, and to improve, their health” (Ottawa Charter, 1986, p.83). Health promotion typically views health as well-being, empowerment, or as a resource for living (Gorin & Arnold, 2006).

DISEASE PREVENTION: Disease prevention or health protection is often defined as activities designed to protect patients or other members of the public from actual or potential health threats and their harmful consequences (Gorin & Arnold, 2006). Disease prevention usually encompasses viewing health as antithesis of disease and health as functionality (Gorin & Arnold, 2006).

WIC: “The Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) provides Federal grants to States for supplemental foods, health care referrals, and nutrition education for low-income pregnant, breastfeeding, and non-breastfeeding postpartum women, and to infants and children up to age five who are found to be at nutritional risk” (USDA, 2013).

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Dedication

To the community members and partners who made this work possible.

Chapter 1: Introduction

Background, Problem and Context for the Research

Food insecurity exists whenever the “availability of nutritionally adequate and safe foods [or the] ability to acquire acceptable foods in socially acceptable ways” (USDA, 2012) is limited or uncertain. Food insecurity may be experienced as hunger or a reliance on food charity, consuming a poor quality diet, and/or as feelings of stress and anxiety (Hamelin, Beaudry, & Habicht, 2002). Inadequate food in quality and quantity and the stress and anxiety related to food acquisition work through biopsychosocial pathways to contribute to poor physical, mental, and social health outcomes disproportionately among vulnerable groups (Connell, Lofton, Yadrick, & Rehner, 2005).

Food-related illnesses and food insecurity are significant problems in the county in which this study took place. In 2010, more than twenty percent of county children were food insecure and more than thirteen percent of residents overall were food insecure (Communities Count, 2012). Food insecurity was higher for those residing in the county’s south region; those identifying as African American, Hispanic, or female; those with annual incomes less than \$15,000; and those households with children (Communities Count, 2012). County adults with the lowest household incomes also experienced the highest rates of perceived stress, highest rates of obesity, and highest rates of diabetes prevalence in the county (Centers for Disease Control [CDC], 2010; Communities Count, 2012). Food security improvement for vulnerable individuals, households, and communities can reduce inequities in health.

Many local health promotion initiatives have recently been established in the county to address issues of food insecurity and poor health in vulnerable residents. These initiatives have included: P-Patch gardens, community gardens, market gardens, youth gardens, health coalitions,

community kitchens, farmer's markets, and a neighborhood growers' co-operative (Chen, 2008). Health promotion or "the process of enabling people to increase control over, and to improve, their health" (Ottawa Charter, 1986, p.83) is an approach to health and the determinants of health (e.g., food security) (Hamilton & Bhatti, 1996). Small group initiatives such as community kitchens and community gardens have demonstrated their potential to contribute to food security and health in vulnerable individuals, households, and communities at the local level through social support and social networks (Teig, E., et al, 2009; Engler-Stringer & Berenbaum, 2005; Garrett, 2001). The structure of community kitchens is often described in the literature as resembling self-help/mutual aid groups, social support groups, or community development initiatives (Crawford & Kalina, 1997; Tarasuk & Reynolds, 1999; Fernandez, 1996).

The Office of Disease Prevention and Health Promotion within the U.S. Department of Health and Human Services collaborates with federal agencies and the general public to develop a *Healthy People* report that provides science-based, ten-year national objectives for improving the health of all Americans. *Healthy People 2020* (2013) goals include to: (a) "promote health and reduce chronic disease risk through the consumption of healthful diets," (b) "improve mental health by ensuring access to appropriate, quality mental health services," and (c) "create social and physical environments that promote good health for all [by exploring] how programs, practices, and policies affect the health of individuals, families, and communities." These goals highlight the significance of initiatives such as community kitchens in the United States of America (USA) that contain strategies for addressing issues around physical, mental and social health such as the provision of social support and the development of social networks. These strategies can enhance current mainstream food security and health interventions such as the *Special Supplemental Nutrition Program for Women, Infants, and Children* (WIC) that are

implemented differently across states. In addition, these strategies provide ways to modify existing social and physical environments to promote good health for all. Additional study implications will be explored in the concluding chapter of this dissertation.

Purpose of the Study and Research Aims

There is a paucity of in-depth analyses of community kitchen (CK) initiatives in the United States; this results in a vague understanding of the ways community kitchens influence food security and health outcomes, particularly among vulnerable groups in the population. In response, this dissertation identifies and describes facilitators and barriers to food security and health in a community kitchen project. Specifically, this dissertation aims:

1. To identify and describe the types of social support provision that occurred within the Family Community Kitchen Project.
2. To identify and describe facilitators and barriers to social support provision in the Family Community Kitchen Project.

This study corroborates and offers new insights into what is currently known about facilitators and barriers to realizing food security and health-related outcomes in local CKs.

The knowledge gained from this study could be found useful by a number of constituencies. First, it furthers scientific understanding of community kitchen food security and health promotion. Second, it contributes to health promotion practitioner understanding of individual, household, and community agency in addressing issues of food security and health in their local contexts. Third, the knowledge gained from this study provides decision-influencing information to both governmental and non-governmental bodies as to facilitators and barriers to food security and health promotion in vulnerable communities.

Overview

The dissertation is divided into five chapters. Each of the chapters is organized into sections with headings and sub-headings when appropriate. In the following section, Chapter 2 – Review of the Literature, the constructs and context of this research are discussed. Facilitators and barriers to food security and health are discussed within the context of current research to address food insecurity in the United States and the literature on social support development in groups. The relationship between social support, food security and health in the current research literature is explored. Taken together, the review of the literature provides the conceptual framework for this study. In Chapter 3, the methodology, data collection methods, and analytic procedures used in this study are described. Chapter 4 analyzes and interprets the social support provision and the facilitators and barriers to social support provision identified in the Family Community Kitchen Project which comprises this case study. The final chapter of this dissertation contains conclusions and recommendations based on study findings.

Chapter 2: Review of the Literature

Community Kitchen Background

“Community kitchen” is the generic term for a group of people who come together to collectively obtain, prepare, and often eat food (Tarasuk & Reynolds, 1999, p.13). The history of community kitchens (CK) as they are currently known can be traced back to Latin America in the late 1970s, during a time of political and economic unrest (Hays-Mitchell, 2002; Immink, 2001). Following the 1970s, the idea of a community kitchen was embraced by a variety of community groups in North America, Australia and England. The initial driving force for CKs throughout the world was food insecurity (the unavailability or inability to obtain nutritionally adequate, safe and acceptable foods in sufficient quantities) (Tarasuk & Reynolds, 1999; Garrett, 2001; Engler-Stringer & Berenbaum, 2005). In a review of community kitchen studies, three main strategies to promote participants’ food security were found: (a) promoting participant emotional support, (b) enhancing participants’ food knowledge and skills, and (c) increasing participants’ material resources (Tarasuk & Reynolds, 1999; Garrett, 2001; Engler-Stringer & Berenbaum, 2005). All three strategies are facilitated through the processes of social support provision. The following sections in this literature review discuss the food security and health context of community kitchen strategies, the current literature on community kitchens, what is known about CK facilitators and barriers which enable or constrain social support provision, CK-relevant social support development theories, and reported effectiveness of CKs in achieving social support-related outcomes.

Food Security and Health Context

Community kitchen (CK) strategies for food security and health in individuals, households and communities can be situated and understood as a socio-ecological framework

consisting of four components: (a) food availability at the local and national levels; (b) food access at the household and individual levels; (c) stability of access over time; and (d) healthy nutrition (Bodnar & Steenhuijsen, 2011). Thirteen key variables mediate sufficient and acceptable household food access (Table 1) (Bodnar & Steenhuijsen, 2011; Rychetnik, Webb, Story & Katz, 2003). Socio-economic determinants of community, household, and individual food access include such upstream factors as: employment, income and assets, education, housing, area of residence, discrimination, and social inclusion/exclusion (Rychetnik, Webb, Story & Katz, 2003).

Table 11. Household Food Access Variables

Household Food Access Mediators

Social support
 Social networks
 Material resources
 Knowledge
 Skills
 Food preferences
 Distance to shops
 Transport to shops
 Storage facilities
 Preparation and cooking facilities
 Time
 Mobility
 Household food production e.g. home gardens, canning

An adequate local food supply (characterized by: location of food outlets, local food production, availability in outlets, price, quality, variety, local markets and promotion of foods, and food aid/safety nets) is needed to achieve community, household, and individual food access for food security (Rychetnik, Webb, Story & Katz, 2003). Regional and national food availability, including structural factors such as: food production, processing, transport and distribution policies and practices, influences local food availability (Rychetnik, Webb, Story & Katz, 2003). National food availability is further influenced by trade and production policies and

geographical conditions (Bodnar & Steenhuijsen, 2011). Together, the food availability and access components discussed above compose a socio-ecological framework of food security in which communities, households, individuals and CK strategies are situated.

Food security is a significant social and economic determinant of an individual, household, and community's health status (Labonte & Laverack, 2008). If food resources are not of sufficient quantity or quality, an inadequate diet at the individual level results (Connell et al., 2005; Mayer, 2009). An adequate and acceptable diet can promote health. An inadequate diet at the individual level is a key determinant of poor physical health outcomes in the United States especially in vulnerable groups. For example, the top nutritional risks of WIC women and children recipients (that led to their referral to the WIC program by healthcare providers) were high weight for height and inappropriate weight gain (USDA, 2011). The unique challenges in adopting healthful behaviors such as: limited resources (Drewnowski, 2009) and the high price of healthful foods (Drewnowski & Spector, 2004), contributes to chronic ups and downs in food intake and high levels of stress that make food insecure and low-income groups especially vulnerable to inappropriate weight gain. High weight for height (in the form of central accumulation of body fat) is part of the pathophysiology in cardiovascular disease, stroke, and diabetes mellitus.

Food insecurity can also impact an individual's mental and social health by producing feelings of deprivation or lack of choice and by acquiring food through socially stigmatized means such as food banks (Connell et al., 2005). Feelings of deprivation, lack of choice, and acquiring food through socially unacceptable means increase the likelihood that a person will experience stress and symptoms of anxiety, depression, and/or social isolation (Hamelin, Beaudry, & Habicht, 2002). The pathophysiology of chronic stress through multiple pathways

increases aging and morbidity and mortality (Dallman, 2010; Tomiyama et al., 2012). Social isolation contributes to health damaging behaviors such as smoking, alcohol consumption, physical inactivity, and consequent obesity.

Social support (also sometimes referred to as social services at the community level) can buffer the frequency and duration of deprivation, lack of choice, and loss of dignity (Berkman & Glass, 2000; Heaney & Israel, 2008). Social support reduces uncertainty, minimizes stress, enhances self-efficacy, increases perceived and actual control, and promotes healthy behavior (Heaney & Israel, 2008). In addition, community kitchens provide an alternative means of food acquisition that is not considered stigmatizing or demeaning to participants (Milligan, 2010). Social inclusion, perceived control, healthy behavior, and self-efficacy predict better social, mental, and physical health outcomes (Wallerstein, 1992). Food access mediators such as social networks and social support can also influence health by meeting human needs such as security and companionship and by enhancing an individual, household, or group's ability to solve health problems through the provision of information and tangible support (Heaney & Israel, 2008; Kiefer, 2007; Labonte & Laverack, 2008).

The current research demonstrates that interventions that impact mediators of food access can also impact food security and health at multiple ecological levels. The strategies of community kitchens work towards achieving a conceptualization of health embodied by health promotion as “a state of complete physical, mental, and social well-being, and not merely the absence of disease or infirmity” (Ottawa, 1986, p.12). They do this primarily through enabling food access mediators of social network development and social support provision.

Ways to Address Food Security

Three main approaches to addressing the determinants of food security and health exist in the United States. All three approaches are reflected in Rothman, Erlich and Tropman's (2001) typology of community organization, which includes locality development, social planning, and social action. Strategies such as the Women, Infants and Children (WIC) program and charitable food programs (food banks and soup kitchens) fall into a social planning approach to food security and health. A social planning approach is described as primarily "task-oriented" and "focused on [empirical] problem-solving", usually by someone outside of the community group (Minkler, 2006, p. 30). Strategies within a social planning approach often provide direct, temporary financial (food stamps and vouchers) and/or (subsidized or free) food resources to low-income, food insecure Americans. Tangible social support provision is often (though not always) coupled with nutrition education and health screening services provision.

Health promotion initiatives such as community kitchens can often be located within a locality development approach to food security and health in the United States. Locality development is described as "process-oriented," aiming to achieve "consensus and cooperation" for building group solidarity and social ties (Minkler, 2006, p.30). Some authors suggest that locality development efforts result in a sense of agency and a sense of having more power and control over determinants of health (Minkler, 2006). Self-help strategies such as bulk buying, home gardens, direct farm sales, roadside stalls, new market creation, and peer education fall within this approach. Lavoie, Borkman and Gidron (1994) consider self-help groups to be support systems and also refer to them as mutual-help groups characterized by: "[a] commonality of problem, members relating to each other as peers, members playing dual roles as both provider and recipient of help, and member control over the mode of operation" (p.12). These

characteristics are often cited as key components to understanding the unique effectiveness of self-help groups in building group solidarity and social ties, and providing social support for group participants (Levy, 2000; Labonte & Laverack, 2008).

A social action approach to organization for food security and health includes implementing strategies such as developing “persuasive arguments,” “raising consciousness,” “changing laws, policies and processes,” “consumer power,” and “disruption of business as usual” (Staples, 2004, p. 140). A traditional social action approach is often “needs-based” and both “task- and process-oriented,” aiming to directly address imbalances of power between a disadvantaged group and an advantaged group through conflict (Staples, 2004; Minkler, 2006, p. 30). A strengths-based social action approach is also emerging (Kretzmann & McKnight, 1993). According to Kalina (2001), (a CK researcher who outlined the development, implementation, and evaluation of a Canadian CK program that evolved through local concern and action) social action is the stage of organization at which full equity will be met. Labonte and Laverack (2008) support Kalina’s (2001) proposition and outline the pathways to local empowerment (as it arose from reflections on health promotion practice) as beginning with personal action and preceding to small group formation, organization, partnership development, and finally social and political action and social movements. The grass-roots community kitchen movement in Lima and Callao, Peru arose as a result of community-based health activism and resulted in: a greater awareness of social and political issues, improved nutritional and social status within a community of low income women and children, and the receipt of social services from the municipality and national government (Garrett, 2001; Immink, 2002).

Many organizing initiatives combine approaches to best meet the needs of their participants and the goals of the initiative at different points in time (Minkler, 2006). As

primarily a locality development approach to food security and health, community kitchens around the world have also utilized both social planning and social action organizing strategies to meet the needs of their participants and the goals of the initiative as they evolve over time. The following section examines what we currently know about community kitchens in regard to social support.

Promoting Participant Social Support.

Community kitchen researchers have consistently reported that community kitchens have social support and social network outcomes that can enhance food security and health in vulnerable groups and participants. Community kitchen participants and leaders often report building friendships, breaking social isolation, having someone to go to for social support, enjoying cooking and eating with others, and sharing resources and information as perceived outcomes of CK participation (Engler-Stringer & Berenbaum, 2007; Fano, Tyminski, & Flynn, 2004; Fernandez, 1996; Garrett, 2001; Ripat, 1998; Racine & St-Onge, 2000). Fano et al. (2004) found that seventy percent (N = 79) of CK participants answered affirmatively to the question “I have friends at my CK that I can talk to when things are not going well in my life” (p.76). In addition, Engler-Stringer and Berenbaum (2006) found that CK members “shared items such as clothing and baby supplies” (p.103). CK participants and leaders also report increased involvement in churches, community centers, and other community-based organizations after participating in community kitchens (Engler-Stringer & Berenbaum, 2006; Ripat, 1998).

Engler-Stringer and Berenbaum (2006) classified community kitchen social support into two types: (a) structural support or support that facilitates “the development of social networks, social contacts, and participation in community activities” (p.98) and (b) functional support or what is often described as “emotional, informational, [appraisal], and [instrumental]” (p.92)

support. Instrumental support provision is “the provision of tangible aid and services that directly assist a person in need” (Heaney & Israel, 2008, p.190). It is also known as "tangible support" provision in the literature. Informational support provision is “the provision of information that a person can use to address problems” (Heaney & Israel, 2008, p.190). Emotional support provision is the provision of “empathy, love, trust and caring” (Heaney & Israel, 2008, p.190). Appraisal support provision is “the provision of information for self-evaluation purposes, constructive feedback, and affirmation” (Heaney & Israel, 2008, p. 190).

Facilitators of social support development. Facilitators of social support network development and social support provision in community kitchens are defined in Table 2. Tarasuk and Reynolds (1999) suggest that mutual support between members in a community kitchen was facilitated by a carefully designed program with an explicit goal of social support provision. Interpersonal relationships for social support provision were also facilitated by new experiences and different meals made in community kitchens (Engler-Stringer & Berenbaum, 2007b; Fernandez, 1996). For example, one CK participant in Fernandez’s (1996) community kitchen study reported:

To have a new experience with food that somebody else makes is very good because then one can extend the recipe towards other people, one learns to get along with people who share one, or the other people learn to get along with us. (p. 77)

Table 12. Facilitators of Social Support Development and Provision in Community Kitchens

Facilitators	References
Providing a place for community members to gather	Tarasuk & Reynolds, 1999; Engler-Stringer & Berenbaum, 2007b; Ripat, 1998
Limiting CK participation to those who resided in the surrounding neighborhood	Garrett, 2001
Building on existing networks and organizations	Garrett, 2001
Beginning with members of similar backgrounds and experiences	Garrett, 2001; Tarasuk & Reynolds, 1999; Engler-Stringer & Berenbaum, 2007b
Local partnership development and collaboration	Garrett, 2001; Immink, 2001; Engler-Stringer, 2005
Conducting phone calls with participants	Fernandez, 1996
Small group size	Tarasuk & Reynolds, 1999
Frequent gatherings	Tarasuk & Reynolds, 1999
Including both kin and non-kin members, volunteers and health care professionals	Milligan, 2010; Garrett, 2001; Mackereth, 2007
Providing a fun and positive experience	Ripat, 1998; Fernandez, 1996
Promoting group tolerance, respect and sensitivity	Garrett, 2001; Frankston Community Health Service, 2006; Ripat, 1998; Milligan, 2010
Longitudinal program participation	Garrett, 2001
Sharing CK duties and roles as well as stories, problems and solutions	Marquis et al., 2001; Crawford & Kalina, 1997; Milligan, 2010; Tarasuk & Reynolds, 1999; Engler-Stringer & Berenbaum, 2007b; Ripat, 1998; Fernandez, 1996; Garrett, 2001
Child care provision	Tarasuk & Reynolds, 1999; Marquis et al., 2001; Engler-Stringer & Berenbaum, 2007b
Allocation of time for eating a meal together	Tarasuk & Reynolds, 1999; Engler-Stringer & Berenbaum, 2007
A group leader who is approachable, committed to the community, and possesses strong counseling, referral, and social networking skills	Garrett, 2001; Tarasuk & Reynolds, 1999; Marquis et al., 2001; Fernandez, 1996
Program flexibility	Fernandez, 1996
Celebration of cultures	Milligan, 2010

Garrett (2001) and Immink (2001) discussed the important role of building on existing community work, providing a shared community experience, enhancing community capacity, and collaborating with key stakeholders in facilitating social support network development and social support provision in community kitchens. For example, parish priests, community health workers, non-profit organizations, and local health departments assisted community members in establishing local kitchens in Canada and Peru.

Barriers to social support development. Barriers to social support network development and social support provision in community kitchens include: limited time for breaks during CK cooking sessions (longer breaks increased time for socialization) (Engler-Stringer & Berenbaum, 2007b), program emphasis on technical aspects of cooking (Engler-Stringer & Berenbaum, 2007b; Tarasuk & Reynolds, 1999), and the involvement of heterogeneous groups with diverse perspectives and food ways (Engler-Stringer & Berenbaum, 2007b; Fernandez, 1996; Milligan, 2010). In Fernandez's (1996) study of a community kitchen group in Canada, one program participant reported on the effects of heterogeneous groups on program participants: "Well we were in a group with Canadians but the food they prepare is very different from ours. So we formed a group of Spanish" (p.11). In addition, Fernandez (1996) reported that, if a CK participant's family members refused to accept the food prepared in the community kitchen, the member might stop participating. Lack of sufficient money to cover costs (Fernandez, 1996; Garrett, 2001; Tarasuk & Reynolds, 1999) or participants who arrived late to CK cooking sessions (Fernandez, 1996) generated conflict that inhibited socialization between participants within community kitchen groups. Engler-Stringer and Berenbaum (2007b) identified both a lack of childcare and lack of a separate room for childcare as barriers to social networking, because participants tended to be distracted by their own children. Barriers to participation (for social

support development) included required monetary contributions for program participation, lack of transportation, time demands, date and time of the kitchen, and a lack of access to a refrigerator or freezer to store food cooked in the community kitchen (Engler-Stringer & Berenbaum, 2007b; Fernandez, 1996; Garrett, 2001; Hays-Mitchell, 2002; Marquis, Thomson, & Murray, 2001; Milligan, 2010; Ripat, 1998; Tarasuk & Reynolds, 1999). CK funding resources are particularly vulnerable to funding fluctuations within partnering organizations, and when funds are withdrawn or reduced, this produces a significant barrier to sustainable social support development and provision in a community kitchen (Garrett, 2001).

Design and Measurement in Community Kitchen Studies.

Community kitchen studies conducted to identify and describe what is currently known about social support provision, outcomes, and facilitators and barriers to social support provision are primarily exploratory and descriptive in nature. Study designs have included case studies (Engler-Stringer & Berenbaum, 2005, 2006, 2007a, 2007b; Fernandez, 1996; Garrett, 2001; Hays-Mitchell, 2002; Immink, 2001; Milligan, 2010; Ripat, 1998; Fernandez, 1996); pre-post program evaluation (Crawford & Kalina, 1997); cross-sectional, post-test only evaluation (Fano et al., 2004); time series evaluation (Marquis et al., 2001); grounded theory (Tarasuk & Reynolds, 1999); and intervention trials (Cree-Kanashiro & Uribe, 2000; Mackereth, 2007; Marquis et al., 2001). A diversity of qualitative methods was used in these study designs to explore social support provision, outcomes, and facilitators and barriers of social support provision. These included: participant observation and direct observations (Crawford & Kalina, 1997; Engler-Stringer & Berenbaum, 2005, 2006, 2007; Fernandez, 1996; Hays-Mitchell, 2002; Milligan, 2010; Tarasuk & Reynolds, 1999); document review (Fernandez, 1996; Immink, 2001); journaling (Fernandez, 1996); in-depth interviews (Engler-Stringer & Berenbaum, 2005,

2006, 2007; Fernandez, 1996; Garrett, 2001; Milligan, 2010; Ripat, 1998; ; Tarasuk & Reynolds, 1999); and focus groups (Marquiset al., 2001). Some CK studies also utilized quantitative survey methods (Crawford & Kalina, 1997; Creed-Kanashiro & Uribe, 2000; Fano et al., 2004; Milligan, 2010).

Community kitchen social support findings have primarily arisen in studies aiming to explore the health-promoting aspects of community kitchen participation such as healthy eating behavior change, skill development, and quantity of food resources obtained from CK participation. To date, no community kitchen study has focused specifically on understanding social support provision and facilitators and barriers of social support provision within a community kitchen (Engler-Stringer & Berenbaum, 2005, 2007b). Social network and social support outcomes are consistent findings in CK studies to date and are two of the most important contributions of community kitchens to food security and health (Tarasuk & Reynolds, 1999). In addition, little is known about community kitchens as they exist in the United States. Differences in history, cultures, geography, and food security and health policies exist between the United States and other countries with CKs. One example is Canada's universal, single-payer health care system versus the United States' multi-payer, heavily private health care system. In addition, food insecurity is substantially less prevalent in Canada than in the USA (9.0% versus 14.1%) (Nord, Hooper, Hopwood, 2007). The difference was largest in households with children, in which the prevalence of food insecurity in the USA is double that in Canada (Nord, Hooper, Hopwood, 2007). According to Nord et al. (2007), thirty percent of the Canada-USA difference in food insecurity may be accounted for by the higher average educational attainment in Canada. Ben Levin (2011) identified some structural differences in education that may contribute to lower food insecurity prevalence in Canada. These include: better trained teachers,

reasonably well paid, good job security and unionization, teachers are well respected and treated well, smaller differences in funding levels from one district to another, and generally more spending in higher need communities. Furthermore, cultural differences between societies such as the degree of collectivism versus individualism, or materialist versus post materialist societies can influence food security and health structures at the national, regional, and local levels (Basabe & Ros, 2005).

This study builds on community kitchen knowledge and insights gained in the literature to date on social support outcomes. Community kitchen social support outcomes are also embedded within the broader literature on social support development. A discussion of the social support development literature follows.

Social Support Development Literature

Community kitchens work to change or enhance a participant's social network and social ties for social support provision by facilitating new connections with others. Known in the literature as "social networking" or "community building," this practice often occurs through collective problem-solving processes that produce new network ties and/or strengthen existing ones (Dominguez & Arford, 2010; Gunawardena et al., 2009; Heaney & Israel, 2008; Minkler, 2006). For community or social networks to exist, there must be relationships between people. According to Dominguez and Arford (2010), there are three types of social relationships that can be increased through social networking: bonding, bridging, and linking. Bonding relationships or ties tend to contain family and friends and are most often associated with "strong" ties (Dominguez & Arford, 2010, p. 117). Strong ties provide individuals with emotional support and include certain forms of informational and instrumental support such as rides (Briggs, 1998). Bridging and linking ties are among "socially dissimilar persons" (Dominguez & Arford, 2010,

p. 117). Bridging and linking ties work to reduce inter-group inequities (Briggs, 2007; Dominguez & Arford, 2010, p. 118). These ties facilitate access to resources and information, and often come from health promotion workers such as nurses (Dominguez & Arford, 2010; Heaney & Israel, 2008; Labonte & Laverack, 2008). Bridging and linking ties can facilitate social inclusion and social integration (Dominguez & Jariego, 2008; Granovetter, 1973).

The development of social relationships for social support provision in community kitchens can be understood as dynamic and emergent, with relationships taking and changing shape through actions and interactions. Brown and Isaacs (1996) articulated twelve operating principles for building social ties. These principles included: “focus on real work, keep it simple, act, build from good, seek what unifies, do it when people are ready, design spaces where community can happen, find and cultivate informal leaders, learn how to host good gatherings, acknowledge people’s contributions, involve the whole person, [and] celebrate” (p.525-529). In addition, key concepts and processes identified in the community organizing and community building literature to effect change in a community include enhancing empowerment, critical consciousness, community capacity, participation and relevance, issue selection, and social capital in local groups (Minkler, 2006). Social capital describes resources and norms that arise from social networks (Dominguez & Arford, 2010). These factors and concepts can assist in understanding how new connections or social ties are developed in community kitchens to enhance a participant’s social network and social ties for social support provision.

Organizing models based on feminist and multicultural organizing principles can also assist in creating an understanding of facilitators and barriers to structural support in community kitchens. As primarily a feminist movement, community kitchens emphasize a women-centered organizing model that promotes community building, collectivism, caring, mutual respect, and

self transformation (Ferree & Martin, 1995; Minkler, 2006). Many times, the development of social groups and activities come from existing social ties (Stall & Stoecker, 2006). The process of networking in a women-centered organizing model often begins with the formation of a small group where trust and group norms of respect and tolerance can be established (Gutierrez & Lewis, 2006; Stall & Stoecker, 2006). Researchers report that these groups “create [a safe and nurturing] atmosphere that affirms each participant’s contribution, provides time for individuals to share, and helps participants listen carefully to each other” (Stall & Stoecker, 2006, p.208). Furthermore, routine activities in women-centered organizing models such as childcare, grocery shopping, storytelling, communal dining, dialogical group meetings, and personal care facilitate the development of trusting relationships (Stall & Stoecker, 2006). Women-centered and multicultural organizers are often from within the local community and act as role models, mentors, facilitators, or teachers of empowerment (Gutierrez & Lewis, 2006; Stall & Stoecker, 2006).

In community organizing with women of color, Gutierrez and Lewis (2006) discussed the importance of education, participation, and capacity-building. The authors identified several principles critical in effective organizing with women of color. These included: (a) “being an active learner and facilitator who can view a given situation through the lens of women of color,” (b) “recognizing and embracing the conflict that characterized cross cultural work,” (c) “involving women of color in leadership roles,” (d) “beginning with the formation of small groups,” and (e) “recognizing and building upon ways in which women of color have worked effectively within their own communities, building upon existing structures” (Gutierrez & Lewis, 2006, p.251, 243). The relationships built in women-centered and multicultural organizing activities have met the basic needs of participants such as food, clothing, and medical care (Stall

& Stoecker, 2006) and have built the capacity of participants to address health issues in their area (Gutierrez & Lewis, 2006).

While social networking theory and community building theory can assist in the development of an understanding of some of the facilitators and barriers to structural support for functional social support provision, social network theory can also assist in the development of an understanding of the facilitators and barriers to social support provision that occur through social network structures and characteristics (Berkman & Glass, 2000; Heaney & Israel, 2008). The term *social network* in social network theory refers to the “linkages between people that may or may not provide social support and that may serve functions other than providing social support” such as social influence and social engagement (Berkman & Glass, 2000; Heaney & Israel, 2008, p.190). The structure of an individual, household, or community’s social network (size, density, homogeneity, proximity) and the characteristics of their social ties (frequency of contact, reciprocity, duration, intimacy) as a result of social networking shape the provision and type of social support given and received (Berkman & Glass, 2000). Emotional social support is considered most effective when given from people or groups who are socially similar (homogenous) to the support recipient(s) (Thoits, 1995). This network characteristic “enhance[s] empathetic understanding, making it more likely that the support provided is in concert with receiver needs and values” (Heaney & Israel, 2008, p. 197). In addition, mutually shared roles of support provider and support recipient among members in self-help groups often promotes high levels of reciprocity among members (Dominguez & Arford, 2010; Heaney & Israel, 2008).

Social network theory as conceptualized by Berkman and Glass (2000) also offers additional insights into influences on social network structure outside the control of the individual, group, or community, such as culture (norms and values, racism, sexism,

competition), socioeconomic factors (relations of production, inequality, discrimination, poverty), politics (laws, public policy, political culture), and social change (urbanization, civil unrest, economic depression) (Berkman & Glass, 2000). These social structural conditions occurring at a macro level “condition the extent, shape, and nature of” social network structure and the characteristics of ties “which provide opportunities for” social support provision that “impacts health through” behavioral, psychological and physiologic pathways (Berkman & Glass, 2000, p. 143).

Local intervention studies have effectively used social network theory, social networking theory, and community building theory to facilitate social support provision to enhance or help individuals cope with their food security and health status (Teig et al, 2009; Wakefield, Yeudall, Taron, Reynolds, & Skinner, 2007). The review of community gardens in south-east Toronto by Wakefield et al. (2007) found that social support development was facilitated by providing a place where communication with people from other cultures could begin, and by using food and shared experience as a starting point for understanding. These actions led to the reduction of resident social isolation. Armstrong (2000) also found that community gardens in upstate New York facilitated social support provision by providing a physical location for residents to meet, socialize, and learn about other organizations and activities in their local community. The creation of social connections was seen in both studies as needing sufficient time to develop. Social networking for social support provision including emotional, informational, appraisal, and instrumental support is a key social support development strategy of community kitchens that distinguishes community kitchens from other food assistance programs such as WIC, food banks or soup kitchens. Food banks and soup kitchens often do not expand or provide new network linkages to address issues of food security and health in vulnerable individuals, groups, and

communities (Ripat, 1998; Tarasuk & Reynolds, 1999). However, they do play an important role in meeting an individual's or household's immediate food needs that remain unmet by government social safety nets.

Literature Review Summary

In summary, the CK literature discusses three main CK food security and health strategies: (a) promoting participant emotional support; (b) enhancing participants' food knowledge and skills; and (c) increasing participants' material resources. The provision of informational and instrumental social support facilitates the enhancement of participant (critical) food knowledge, skills, and resources. Facilitators of participant social network development for social support provision identified in the literature on CKs include CK components such as a place for community members to gather, the limitation of CK participation to those who reside in the surrounding neighborhood, the inclusion of members with similar backgrounds and experiences, and small group size. CK barriers to social network development include limited cooking breaks and too much emphasis on the technical aspects of cooking. Many CK facilitators and barriers to social network development for social support provision are supported within social network theory, social networking theory, and community building theory.

The literature on food security and health promotion suggests that social support provision and social network expansion are significant mediators of food security and health for groups and individuals, as well as, upstream factors such as social isolation and discriminatory practices that often produce the condition of food insecurity in the first place. Chronic consumption of inadequate food in terms of both quantity and quality contributes to poor physical health outcomes over time (Connell et al., 2005; Mayer, 2009). In addition, feelings of deprivation or lack of choice and an inability to access to socially acceptable foods that result

from experiences of food insecurity and hunger increase the likelihood that a person will experience symptoms of anxiety, depression, and social isolation (Connell et al., 2005). As a result of participation in community kitchens, participants have reported: increased ease in accessing food in both sufficient and acceptable quality and quantity, reductions in anxiety associated with not having money to buy food, and maintenance of dignity (Crawford and Kalina, 1997; Engler-Stringer, 2005; Engler-Stringer & Berenbaum, 2006; Fano et al., 2004; Tarasuk & Reynolds, 1999). Participants also noted positive changes in their consumption of fruits and vegetables, their preparation of lower-fat meals, their reduction in the perception that a nutritious diet is time consuming, and a new preference for foods tried in the CK (Crawford and Kalina, 1997; Engler-Stringer, 2005; Engler-Stringer & Berenbaum, 2006; Fano et al., 2004; Tarasuk & Reynolds, 1999).

To date, no community kitchen studies have focused specifically on understanding social support provision and facilitators and barriers of social support provision within a community kitchen (Engler-Stringer & Berenbaum, 2005, 2007b). Community kitchen social support outcome findings have primarily arisen in studies aiming to explore the health-promoting aspects of community kitchen participation such as healthy eating behavior change, skill development, and quantity of food resources obtained from CK participation. Social network and social support outcomes are consistent findings in CK studies to date and are two of the most important contributions of community kitchens to food security and health. In addition to a lack of focus on social support provision and social network building in community kitchens, little is known about community kitchens as they exist in the United States.

This study responded to a lack of knowledge on community kitchens in the USA by identifying and describing facilitators and barriers to food security and health in a community

kitchen group located in the Pacific Northwest region of United States over a period of three months. The chapter that follows presents a discussion of this study's background, methodology, data collection methods, and analytic procedures.

Chapter 3: Research Methods

This study is part of a larger Family Community Kitchen (CK) Project that began in the fall of 2009 and lasted for a period of nine months. The Family Community Kitchen Project arose from the actions of a local community member, who mobilized the community around food security and health promotion. The purpose of the Project, as stated by the CK leader, was “to increase accessibility to quality foods for households with few resources and support systems and to provide participants with lifelong skills to support their health and wellbeing” (Leader, Document). The leader applied for a community development grant and created partnerships with academia, Public Health, WIC, Parks and Recreation, and local food producers and distributors to “bring community kitchens to low income families with children in [an underserved, urban area]” (Leader, Document). She also actively recruited participants at community sites including the local WIC agency, community center, local grocery stores, and faith-based health fairs.

The Family Community Kitchen Project was part of a broader community kitchen coalition that began work in 2007 to initiate several community kitchens throughout the area. As part of the coalition steering committee, the researcher was asked by the CK leader to assist with Project development, evaluation, and improvement. Thus, the current study aims to describe and understand the facilitators and barriers to food security and health that occurred over a three month time period in the Family CK Project. Later in the research process, the CK leader was invited to participate in the research component of the Family Community Kitchen Project.

Paradigm, Methodology and Methods

Positivist and interpretive frameworks are two common philosophical frameworks used to guide research in nursing science. Positivism assumes an objective and stable reality whereas

an interpretive framework assumes that there is not one objective truth to be found (Denzin & Lincoln, 2005). In an interpretive-constructivist paradigm, the researcher focuses on interpretation and understanding through dialogue between the researcher and the researched (Labonte & Robertson, 1996). This study used a descriptive, case study methodology based on the constructivist paradigm to understand facilitators and barriers of food security and health in the Family Community Kitchen Project (Stake, 1995; Scholz & Tietje, 2002; Yin, 2003). The Family CK Project, as a whole, acts as the case in this study. Because community kitchens in the United States are relatively ignored with minimal formal description and evaluation, a qualitative approach was used to facilitate an in-depth understanding of the facilitators and barriers of food security and health in the project.

Prior experience with community kitchens and analysis of the CK literature suggested specific aims for the data collection in this study: (a) to identify and describe the types of social support provision in the Family Community Kitchen Project and (b) to identify and describe facilitators and barriers to social support provision in the Family Community Kitchen Project. A focus on depth of understanding of the Family CK Project facilitators and barriers to food security and health through detailed description from a variety of viewpoints necessitated the use of ethnographic methods. Methods included direct and participant observations, focus groups, documents, and questionnaires (Schensul & LeCompte, 2013; Stake, 2004).

Conceptual Framework

Descriptive, case studies often begin with a guiding conceptual framework (Stake, 1995, p.82). The researcher and CK leader's familiarity with possible processes and impacts of community kitchens from their previous work in the field, guided development of the following

framework to “address issues of food insecurity and diet-related chronic disease in the community” (Leader, Document):

- The Family CK Project will foster participant social support networks and social support by providing a space for interaction and connection with neighbors and sharing food cultures in a nurturing environment with an angle of empowerment to share food ways with others,
- The Family CK Project will enrich participant cooking and meal planning knowledge and skills by having guided cooking stations following healthy recipes with input from both a nutritionist and experienced cook,
- The Family CK Project will increase participants’ quality food resources by cooking large quantities of food to share, taking home prepared meals, and eating balanced meals together in a supportive environment.

This framework is diagrammed conceptually in Figure 1.

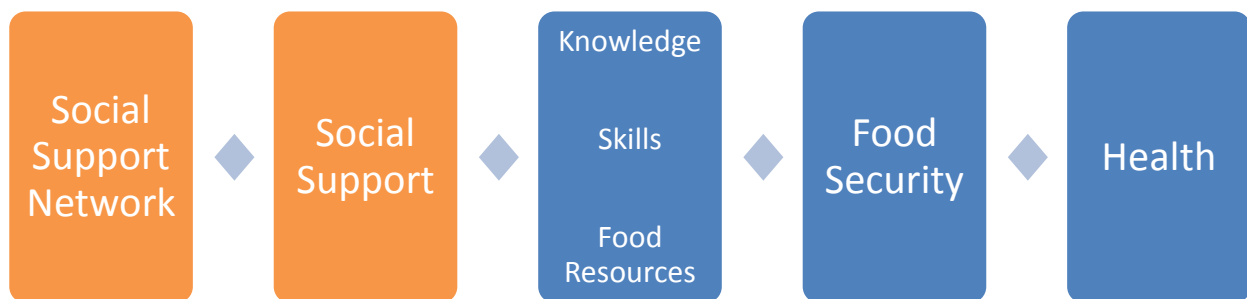


Figure 13. Family Community Kitchen Project Guiding Conceptual Framework

Design, Data Collection Tools, and Protocols

This study utilized a descriptive, case study design with mixed methods. Participants were required to be active Family CK member in order to be included in the study. Further

inclusion criteria were: (a) at least 16 years of age or older, (b) mentally competent, (c) English-speaking, and (d) receiving WIC benefits or participating in the community center. Eleven of the project participants were given the opportunity for involvement in the research aspect of the project. A total of ten out of eleven Family Community Kitchen Project community members during the first CK session were recruited and participated in this study. All ten community members completed at least one survey and eight of the study participants completed at least one focus group (Table 3).

Table 13. Data Collection Participation by Method

Participant	October 2009	November 2009	December 2009
1	^a F	^b s (pre)	s (post)
2	F s (pre)		Fs (post)
3	F s (pre)		Fs (post)
4	F s (pre)		Fs (post)
5	F s (pre)		s (post)
6	s (pre)		Fs (post)
7			Fs (pre)
8	s (pre)		Fs (post)
9	s (pre)		
10		s (pre)	

Note. ^aFocus group; ^bSurvey (pre = pre survey; post = post survey)

The background characteristics of community members, who participated in the study, by study method, are described in Table 4.

Table 14. Characteristics of Community Members by Method

Respondent characteristic	Questionnaire (N = 10)	Focus group (N = 8)
	%/Mean (Range)	%/Mean (Range)
Gender		
Male	10%	12.5%
Female	90%	87.5%
Age (years)	34(22-65)	36 (22-65)
Number of people living in the home	4(1-7)	4(1-7)
Number of children < 18 years-old living in the home	2 (0-5)	2 (0-5)
Number residing in same zip code as community center?	60%	75%
Receiving WIC benefits		
Yes	40%	37.5%
No	60%	62.5%
Marital Status		
Single	70%	62.5%
Married	30%	37.5%
Amount (\$) spent on groceries/week		
50	20%	25%
50-100	30%	25%
100-150	20%*	25%
>150	20%*	25%
Race		
Caucasian	10%	0%
African American	80%	87.5%
Multi-racial	10%	12.5%
Were you born in the United States?		
Yes	100%	100%
No	0%	0%

Note. *One participant responded between 100 to >150

The Family CK leader was also recruited and participated in this study. The background characteristics and comments of the researcher and leader were analyzed (Table 5).

Table 15. Characteristics of Researcher and CK leader

Respondent characteristic	Researcher	CK Leader
	(N = 1)	(N = 1)
	%/Mean (Range)	%/Mean (Range)
Gender		
Male	0%	0%
Female	100%	100%
Age (years)	26	30
Number of people living in the home	1	4
Number of children < 18 years-old living in the home	0	2
Number residing in same zip code as community center?	0%	100%
Receiving WIC benefits		
Yes	0%	0%
No	100%	100%
Marital Status		
Single	100%	0%
Married	0%	100%
Amount (\$) spent on groceries/week		
50	0	0
50-100	100%	0
100-150	0	100%
>150	0	0
Race		
Caucasian	100%	0
African American	0	0
Multi-racial	0	100%
Were you born in the United States?		
Yes	100%	100%
No	0%	0%

Data was collected throughout a three-month, longitudinal period from October 2009 to December 2009 and include: field notes, focus group audio, questionnaires, and documents. The data collection and preliminary analyses can be divided into three phases over a three-month period, as shown in Table 6. Data collection occurred at monthly community kitchen gatherings as well as at pre-and post-group discussion gatherings. Each phase of data collection supported the development and refinement of the next phase.

Table 16. Timeline of Data Collection

Month	Dates	Observations*	Focus group	Data collection		
				Document	Questionnaire	
					Pre	Post
1	Oct. 2009	25	1	7	7	0
2	Nov. 2009	25	0	1	2	0
3	Dec. 2009	25	1	1	1	7
Total		75	2	9	10	7

Note. *Includes participatory and direct observation field notes

Field notes. The researcher sought to describe situations and events of interest in detail during the field work in order to understand facilitators and barriers to food security and health in the community kitchen. Observational field notes captured Family CK social support provision, and facilitators and barriers to social support provision from the perspectives of the researcher and CK leader (Tracy, 2012). Participatory observation collection protocols were based on Spradley (1980) and direct observation protocols were based on Schensul and LeCompte’s (1999) direct observation approach. An observation guide (a copy of printed forms that provide space for recording observations) was useful in obtaining relevant information; while field notes enabled the researcher and CK leader to record observations in a narrative style (Schensul & LeCompte, 1999; Spradley, 1980). Dates, locations, and relevant contextual information were included on all observations (Spradley, 1980). Observational guides evolved over time; see Appendix A for observation guides.

Observations were conducted in the community center before, during, and after CK sessions. During this time the CK leader and researcher collected field notes on their experiences in community kitchens and planning for community kitchens as well as on community kitchen procedures, foods, participation, and setting characteristics. CK session observations were recorded by hand or dictated into an audio recorder during or immediately after CK participation.

Typed or recorded observations were entered into a Microsoft Excel spreadsheet to organize data for analysis. Location or source of data, date, time, day of the week, and total field note hours were noted. Field note titles were arranged to reflect content, and the field notes included analytic reflections.

Focus groups. Focus groups were useful in capturing an understanding of the Family CK Project social support provision and facilitators and barriers to social support provision from the perspectives of community members, the CK leader, and the researcher. According to Tracy (2012), focus groups can assist in learning how a certain group reacts to a shared experience. The group effect can be captured with as few as three participants (Tracy, 2012). Focus group questions were based on a review of the published and lay literature on community kitchens and the interests of the CK leader. Focus group questioning followed recommendations outlined in Krueger and Casey's (2000) *Focus Groups: A practical guide for applied research*. These recommendations included an icebreaker as a transition into key questions and drawing a picture to prompt insights into participant expectations of a community kitchen (Kueger & Casey, 2000). See Appendix B for focus group tools used in this study.

The Family CK leader primarily facilitated the focus groups with the assistance of the researcher. Focus groups lasted no more than ninety minutes and took place in the community center auditorium before the first CK session and after the last CK session. Focus groups were audio-recorded, and field notes were recorded by the primary researcher and CK leader. The audio recordings were then transcribed verbatim by the primary researcher and entered into a Microsoft Access data management system.

Questionnaires. Questionnaires were developed early in the research process based on prior experience and reviews of community kitchen literature. Questionnaires provided

additional clarification to qualitative data that emerged and also identified participant food practices and needs. Gillham's (2008) small-scale social survey development methodology and a previous course taken on survey methods assisted in survey creation. Surveys are known to be effective in answering "who" and "what" questions and were useful to identify Family CK Project participant characteristics such as gender, age, ethnicity, zip code, and health practices and needs. The questionnaire was pilot-tested with the CK leader and Project partners and was revised based on feedback before the project began (Gillham, 2008). Changes included: rewording of questions, revisions in survey layout, and the addition of survey questions that were useful to the CK leader for planning and evaluating CK activities. See Appendix C for questionnaire tools used in this study.

Questionnaires were administered in written form to participants during cooking sessions. Participants were able to ask questions during questionnaire administration, and questions were clarified at this time on an individual basis by the researcher and CK leader. The completion of the questionnaire lasted no more than ten minutes. Survey data were coded and entered into an Excel spreadsheet.

Documents. Documents were collected to capture an understanding of facilitators and barriers to social support provision from the perspective of the CK leader. Specifically, these documents included:

- a grant application,
- recipe packets (3),
- CK policies and procedures,
- a written project overview,
- description of project history,

- volunteer recruitment materials, and
- community member recruitment materials

Documents can be effective in revealing what people do or did and what they value (Denzin & Lincoln, 2005). Documents were entered into a Microsoft Access data management system for analysis.

Recruitment

Study recruitment was included in the initial phone contact with each participant prior to their involvement in the first community kitchen session. Interested participants were given detailed instructions about various aspects of the focus groups, questionnaires, and project observations. A verbal commitment to attend the focus groups was obtained by telephone and written consent was obtained prior to the beginning of the focus group. In addition, project participants were re-introduced to the research study by the researcher and CK leader during the pre-session meeting at the beginning of their first community kitchen session. Interested participants were given detailed instructions about the purpose and logistics of the questionnaire prior to administration. Project participants were made aware of when and where observations would take place, what we would be looking at and why. Consent was obtained before participating in the questionnaire process. During data analysis, the CK leader's comments and information provided particularly rich data and so formal consent was obtained from the CK leader to include these comments and information in the analysis.

Data Management and Analysis Procedures

This study analyzes focus group transcripts (N = 2), surveys (N = 17), documents (N = 9), and participatory (N = 3) and direct observations (N = 72) amassed throughout a three-month data collection period, with particular attention to social support provision and facilitators and

barriers to social support provision. Responses to questionnaires were transferred into Microsoft Excel for analysis. Verbatim transcripts were produced for each focus group and were verified for accuracy. Transcripts were formatted in Microsoft Word using Tables for initial data analysis and then coded text was transferred into Microsoft Excel for further analysis. Documents were created in Microsoft Word. Documents were formatted into Microsoft Word Tables for analysis. Field Notes were transferred to text files and then formatted into Microsoft Word Tables for analysis. Data Management followed Chris Hahn's (2008) recommendations in his book: *Doing Qualitative Research Using Your Computer: A Practical Guide*.

The subsequent analysis of data followed the ethnographic analysis procedures as discussed by LeCompte and Schensul (2013) in book 5 of *Ethnographer's Toolkit: Analysis & Interpretation of Ethnographic Data*. Analysis began with an understanding of conceptual bins deriving from the CK leader conceptual framework (LeCompte & Schensul, 2013). Data was organized chronologically and by type of data (field notes, focus group transcripts, documents, and questionnaires) into an Excel spreadsheet (LeCompte & Schensul, 2013, p.57-60). Data was read and re-read to gain familiarity and then primary cycle coding began with an examination of both qualitative and quantitative data and the identification of items that captured ideas around social support provision in Chapter 2 (LeCompte & Schensul, 2013, p.101-102).

The researcher created a list of codes with a brief definition and example of each. As the analysis became more focused, a codebook (LeCompte & Schensul, 2013, p.138, 145-154) was developed listing key codes, definitions, and examples from the analysis. This codebook mapped how codes emerged and changed over time, with new versions resaved with the date of modification. (LeCompte & Schensul, 2013, p.248). Throughout the coding process, the constant-comparative method (LeCompte & Schensul, 2013, p.101-102) was used to compare

the data applicable to each code and to modify code definitions to fit new data (or create a new code). Related items were organized into higher-order patterns, and where applicable, by linking to larger level theories such as social support theory, social network theory, social networking theory, and community building theory (LeCompte & Schensul, 2013, p.154). Given the small sample size and the descriptive nature of this study, the questionnaire findings are exclusively reported using descriptive statistics (e.g., percentages).

Organization of emergent data and further analysis was guided by a modified version of Berkman and Glass's (2000) conceptual framework of How Social Networks Impact Health based on study findings (Figure 2). This framework outlines the relationships between social support provision and health outcomes, and social-structural conditions, project structure, group structure, and group characteristics and dynamics. Project and group structure are embedded within broader social-structural conditions. At the same time, project and group structure serve to reinforce and/or reshape social-structural conditions. These factors influenced the formation of social ties and related characteristics from which social support provision occurred (Berkman & Glass, 2000).

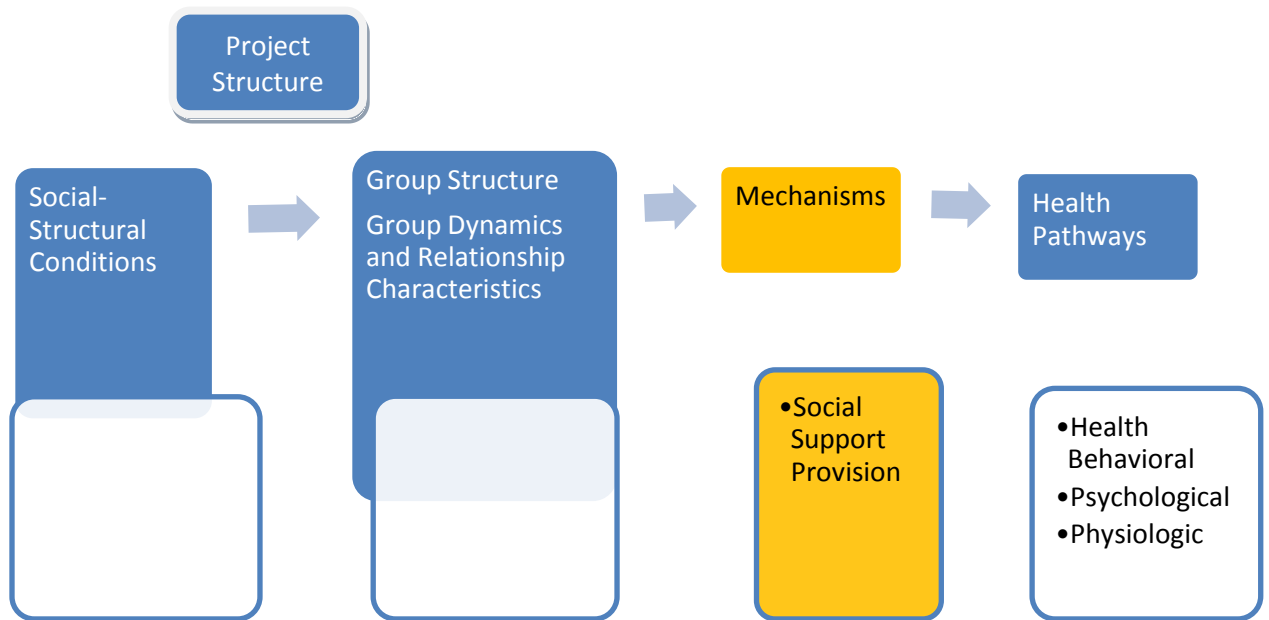


Figure 14. Modified Framework of Berkman & Glass’s (2000) How Social Networks Impact Health Framework based on Study Findings

Emergent categories were compared and contrasted with concepts found from social network theory (Berkman & Glass, 2000; Heaney & Israel, 2008) and social networking theory (Dominguez & Arford, 2010; Heaney & Israel, 2008; Minkler, 2006). In addition, emergent categories were compared and contrasted with concepts found from: social support theory (House, 1981; Heaney & Israel, 2008), health promotion theory (Ottawa Charter, 1986), group dynamics theory (Wheelan, 2005), program theory (Shaw, Greene, & Mark, 2006), and community-driven participatory action research theory (Montoya & Kent, 2011). Where excerpts from questionnaires, focus groups, documents, or observations are presented in the following chapter, names have been removed to protect participants’ anonymity.

Trustworthiness.

Four primary techniques were used in this study to establish trustworthiness of the findings: (a) utilizing an auditor, (b) triangulation, (c) long-term engagement in the field, and (d) thick description (Lincoln & Guba, 1985). Establishing an audit trail for this data analysis was an

intensive and comprehensive process that required definition of all terms and careful concept delineation. The auditor played a key role to insure trustworthiness in two ways. First, credibility and confirmability were assessed with respect to visibility or verifying final codes which can be traced back to original coded documents. Decisions were explicit and communicated (Akkerman, Admiraal, Brekelmans, & Oost, 2008). Second, credibility and confirmability were assessed with respect to substantiation or verifying that codes were present in data, and that they were logically and scientifically acceptable (Akkerman, Admiraal, Brekelmans, & Oost, 2008). The auditor also noted new codes or inconsistencies in the data. The auditor provided a summary of the audit procedure, findings, and an assessment of the credibility and conformability of the study with respect to visibility and substantiation. These summaries can be found in Appendix D. The researcher then assessed the accuracy of the auditor's claims which resulted in either an adjustment of the reviewer report or the addition or revision of codes.

Credibility and dependability were supported by the researcher's long-term engagement in the field (~2 years) prior and during the Family CK Project, as well as by the continued involvement of the community kitchen leader in the study. Full engagement in the field as a researcher, administrator and participant allowed deep relationships to develop between the researcher and the CK leader and some of the participants as well as members of the community kitchen coalition steering committee. This presented opportunities for on-going observation and discussion about community kitchens.

Data triangulation involved the use of different sources of information (focus groups, questionnaires, documents, and observations) in order to increase the trustworthiness of the study. During the analysis stage, data sources were compared to determine areas of agreement as

well as areas of divergence. According to Schensul, S., Schensul, J., and LeCompte (1999), testing sources of information against each other helps clarify meaning and enhance richness of detail. A comparison of the results of the current study with existing theory also added credibility to the analysis.

Thick description for each category of findings from data analysis was used in this study to give readers the opportunity to form a mental picture of social support provision and facilitators and barriers to social support provision in the Family CK Project (LeCompte & Schensul, 2013; Stake, 2000). This level of detail gives readers the opportunity to develop their own conclusions about social aspects in the Family CK Project.

Member checking of data collected occurred during or at the end of each focus group discussion by the researcher and CK leader. Post focus group discussions with the CK leader served to summarize and consolidate the main points made by participants in the group discussion by question asked. Debriefing between the CK leader and the researcher led to improvement in focus group questions. Final dissertation results were reviewed with the Family CK leader, and her feedback was incorporated into the findings. These practices helped ensure accurate assessment of ideas and participant thoughts throughout the project (Krueger & Casey, 2000).

Initial analysis of the results was provided as feedback to the community through a video about the program. This video was used by some community members in church meetings and also by the CK leader during a coalition fundraiser. The researcher maintained involvement with community kitchens after the end of the data collection period by continuing to serve as a CK administrator and a coalition steering committee member to support community kitchens in the area. The researcher worked with coalition members to prepare CK presentations that were

given at academic and professional conferences. The researcher's intensive involvement with community kitchens spanned a time period of four years in the field.

Ethical Considerations

Study participation was voluntary and participants could withdraw from the study at any point in time without penalty or loss of benefits to which they were otherwise entitled. In order to maintain confidentiality, all typed information was coded. No names were used on the actual data forms. A \$10 Safeway gift card was given to participants in order to compensate them for their time. In addition, food and beverages were provided at each focus group to increase comfort during discussions. No gifts, payments, services without charge, or extra course credit were offered to the group leader for study participation. This study received approval from the University of Washington and the King County Public Health IRB Department (See Appendix E and F for approved consent forms). The following two chapters of this dissertation discuss the results of data analysis, study conclusions, and implications of findings.

Chapter 4: Results and Discussion

Results Framework

The first section of this chapter contains descriptive information on the Family Community Kitchen case study context. The second section presents the results and discusses the types of social support provision found in an analysis of the Family Community Kitchen Project. These results can be understood within the third section of this chapter. Section three presents the results and discusses the types of facilitators and barriers to social support provision found. The findings and narrative that follow present a synthesis of triangulated data that was compared and contrasted over time to arrive at descriptive themes within each category of social support provision as well as facilitators and barriers to social support provision.

A synthesized presentation of the findings of this research is found on the following page in a pictorial framework (Figure 3) and major categorical concepts are defined in Table 7 for an orientation to study findings that follow. The framework shows an inner circle containing the term *social support provision*. Surrounding that inner circle are four outer circles each containing a major category of facilitator and barrier that emerged from the data. Major themes within each category are presented as bullet points. These are the category themes that dominated participants' discussions, questionnaire feedback, CK leader documents, and researcher and CK leader observations.

The pictorial arrangement of findings in Figure 3 utilized a modified version of Berkman and Glass's (2000) Conceptual Model of How Social Networks Impact Health to organize case study findings. In this figure, Family Community Kitchen Project social-structural conditions are viewed as conditioning the structure of the Family Community Kitchen Project, which in turn condition the structure of the Family CK group and the nature of Family CK group relationship

characteristics and dynamics. Thematic findings within group relationship characteristics and dynamics such as reciprocity and facilitation from this case study are considered proximal influences on social support provision within the Family Community Kitchen Project. Social-structural conditions can also directly (or indirectly through shaping project structure) influence social support provision.

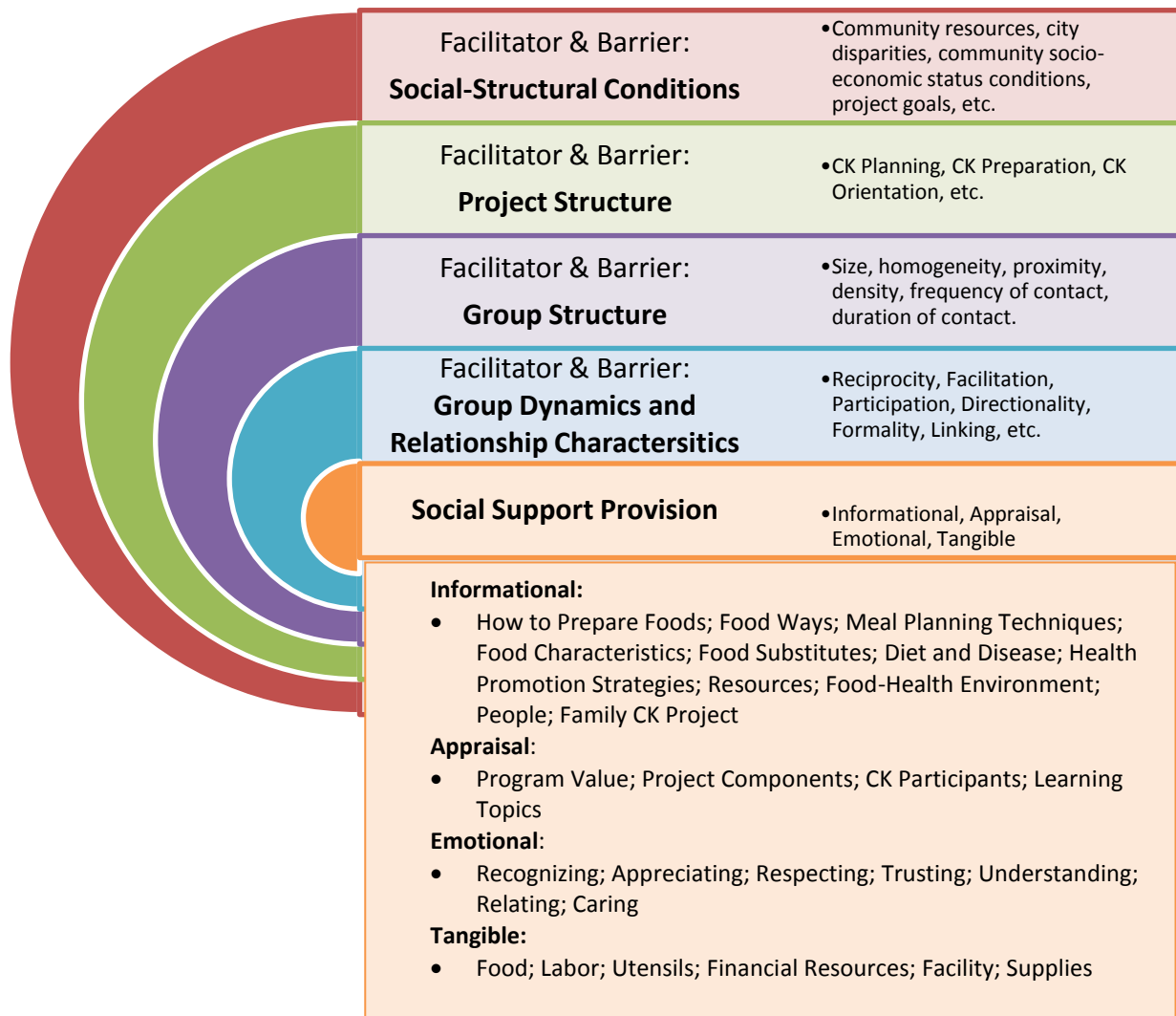


Figure 15. Social Support Provision and Related Facilitators and Barriers Case Study Findings

Table 17. Major Findings and Conceptual Definitions

Study aim	Category	Definition
Facilitators and Barriers of Social Support Provision		A factor that assists or constrains the exchange of social support between people. These factors often lie somewhere on continuum from facilitator to barrier. At times, a factor can be both a facilitator and barrier depending on the broader context within which it emerges.
	Socio-Structural Conditions	The circumstances that form the setting for an event (Berkman & Glass, 2000).
	Project Structure	Includes the following components (Staples, 2004): <ul style="list-style-type: none"> • Activity: A thing that a person or group does or has done. • Activity Goal: A desired end result of the activity. • Activity Format: The way in which a CK Activity is arranged or set out.
	Group Structure	Characteristics of the group (Berkman & Glass, 2000; Heaney & Israel, 2008, p 190).
	Group Dynamics and Relationship Characteristics	The underlying processes that give rise to a set of relations (characteristics of relationships between individuals in a group) that characterize the Family CK group (Wheelan, 2005; Heaney & Israel, 2008, p190; Berkman & Glass, 2000).
Social Support Provision		“Provision of support refers to actual offering or conveying of supportive actions and behavior – emotional, informational, and/or instrumental” (Nurullah, 2012, p.174).
	Informational Support Provision	“The provision of information that a person can use to address problems” (Heaney & Israel, 2008, p. 190; House et al., 1988).
	Appraisal Support Provision	“The provision of information for self-evaluation purposes, constructive feedback, and affirmation” (Heaney & Israel, 2008, p. 190; House et al., 1988).
	Emotional Support Provision	The provision of “empathy, love, trust and caring” (Heaney & Israel, 2008, p. 190; House et al., 1988).
	Tangible (Instrumental) Support Provision	“The provision of tangible aid and services that directly assist a person in need” (Heaney & Israel, 2008, p. 190; House et al., 1988).

The Family Community Kitchen Case Study Context.

The first section of this chapter has four parts that together provide descriptive information on the Family Community Kitchen case study context. The first part provides a history and description of the Family Community Kitchen Project. The second part includes descriptive information on the local area in which the project was based. The third part includes descriptive information on participants involved in the project. The fourth and final part includes descriptive information on major Family Community Kitchen Project partners.

History and Description of the Family CK Project. The first documented community kitchen in the city the Family CK Project was based began in the summer of 2007 under the leadership of a public health nurse (and working mother of three children). After hearing about community kitchens from a colleague, the public health nurse traveled to Canada (where hundreds of community kitchens exist) to learn more about community kitchens and how to implement them in her community. The public health nurse was motivated by her own personal struggles and her clients' struggles in the area to provide healthy meals on the table in a timely fashion. The first kitchen served neighbors in the public health nurse's community as well as people in surrounding communities and made basic food to take home and eat later.

The cost to participate in the first community kitchen in the area was \$25/member/session. Each cooking session provided about three to four household-size, main-dish meals for participants to take home. The kitchen was made possible through the social connections and partnerships the public health nurse forged with a local senior center, a public health coalition in the area, a parks and recreation department, and many community volunteers. The Family Community Kitchen (the focus of this case study) leader took on a role as the leader of the first community kitchen in the city started by the public health nurse and shortly after,

began planning for the Family CK Project as a result of her observations that the cost of the first community kitchen was “prohibitive of participation for many community members in the area” (Leader, Document). The Family Community Kitchen leader was a friend of the public health nurse, a registered dietician at a local food co-operative, and a member of the community in which the Family CK occurred.

The mission of the Family CK Project, as stated by the Family CK leader, was to “increase accessibility to quality foods for low income families with few resources and support systems” (Leader, Document). The leader described both the context and importance of the Family CK Project from her perspective in a grant application:

Looking at the food culture in America which is reflected in our obesity epidemic and crumbling health care system, it is clear that we must reshape our food habits.

Community kitchens offer the potential through long term establishment to address the issues of food security and diet related chronic disease prevention through lifestyle habits around food. Offering this Community Kitchen Project to [an underserved, urban area] will bring dynamic benefits to the community. In this time of economic hardship, community kitchens bring an exceptional opportunity to build community bonds and improve our food culture right inside our neighborhoods. The success of this pilot program will present as a tool for improving food security and public health and potentially gain permanent support from a public funding source that can make community kitchens sustainable into the future. This is why the Community Kitchen Project is increasingly important. (Leader, Document)

Planning for the Family Community Kitchen Project began in early 2009 in conjunction with the Family Community Kitchen leader and participants of a local CK coalition’s steering

committee (a newly formed community kitchen coalition in the area). In the spring of 2009, the Family CK leader received word that her proposal for the Family Community Kitchen Project would receive financial support from a local, private funding organization. The private funding provided the leader with the freedom to shape the Family CK Project to best meet the needs and concerns of participants. An earlier partnership created with a 501c (3)-non-profit organization by the public health nurse in the first CK, provided the Family CK Project with a fiscal sponsor for grant money distribution to the Project.

The Family Community Kitchen began in a local community center kitchen in the fall of 2009. Childcare was provided for CK participants by the community center. At the beginning of each community kitchen session, participants would sign in and pay a participation fee of \$5/household/cooking session or \$12/three cooking sessions. Participants were not turned away if they could not pay. The structure of the Family Community Kitchen included room for about eight families who came together to: plan, prepare, consume, and take home food. In addition, education activities were provided to participants and their families in the areas of: health promotion, nutrition, culinary arts, food safety, and the food system. Activities were tailored over time to meet the needs of the participants and their families.

Local Area Characteristics. The Family Community Kitchen and other community kitchens around the area organized during a time of political and economic unrest in the United States marked by an economic recession, declining social capital, high rates of hunger and food insecurity, and rising rates of food-related chronic diseases such as diabetes mellitus and hypertension across the lifespan. The emergence of community kitchens in the area paralleled a growing national food movement organized loosely around the concepts of nourishment and health that emphasized alternative ways to grow, distribute and consume food such as through

community-supported agriculture (CSAs), farmer's markets, community gardens, slow food and eating local. As a major food hub with optimal food growing geography, the area was at the forefront of many of these growing alternative food movements when community kitchens were inserted into the food landscape. Shortly after the establishment of the area's first community kitchen, several additional community kitchens began in the area with the assistance of the newly formed community kitchen coalition.

The southeast neighborhood within which the Family CK Project was located was originally inhabited by the Salish peoples. With the arrival of a railway from downtown and a lumber mill, white resettlement of the area began. World War II jobs brought thousands of migrants to the city and some migrants settled in the area where the Family CK was based while most were limited to central parts of the city due to discriminatory hiring and housing practices and de facto housing discrimination (Erickson, 2011). With the *Open Housing Ordinance* passage in 1968, a steady increase in the number of African American residents moved to the area from central parts of the city (Erickson, 2011). This population shift was further exacerbated by gentrification in the central neighborhood (Erickson, 2011). Today, forty percent of the city's African American population lives south of the city's central areas (Erickson, 2011). Twenty-six percent of the population in the same zip code as the location of the Family CK project identify as Black or African American (United States Census, 2010). Those who identify as White account for 30.9%, Asian 32.6%, Hispanic or Latino (of any race) 8.1% and multiracial 5.7% of the population in the southeast zip code (United States Census, 2010). In the last twenty years the southeast neighborhood has seen a huge influx of South East Asian and East African residents, contributing to this area's diverse cultural landscape (Erickson, 2011; Chinn, 2011).

Thirty-one percent of southeast residents are foreign born (Public Health Seattle & King County, 2012).

In the last decade, widespread gentrification in the southeast neighborhood in which the Family CK Project was located has led to rising property values. The neighborhood has a thriving pedestrian business district, public art, a farmer's market, an urban growers' cooperative, market gardens, community gardens, p-patches, an urban farm, a bakery, a butcher shop, and a number of restaurants and other retail shops (Chen, 2008; Seattle Department of Neighborhoods, 2013). In addition, the *Boys and Girls Club* has opened a new facility in the neighborhood, and neighboring communities and community centers in the area have been enhanced and renovated. Connections are also being strengthened to the neighborhood immediately to the east, which itself has seen a retail revival including a new food market cooperative. The Family Community Kitchen Project was part of this growth occurring in the area.

In addition to the ethnic diversity in the southeast area, the area has the largest youth population from 0 to 14 years-old in the city at 19.7% of the population (United States Census, 2010). Sixty-five percent of the population in the southeast have no college degree and 35% live below 200% of the poverty line (\$22,980/year for a household size of one) (Public Health Seattle & King County, 2012). Family households comprise 64.2% of households in the neighborhood and 29.3% have children less than 18 years of age (United States Census, 2010). The area also has some of the highest levels in the county of adults (age 18 and over) who reported that household food money often or sometimes did not last (Communities Count, 2007). The groups at highest risk included those ages 18-44, persons identifying as African American and Hispanic/Latino, women, those whose annual incomes equaled less than \$15,000, and those with

a high school degree or less (Communities Count, 2007). Thirty-one percent of adults reported experiencing discrimination in the area in which the project was located (Communities Count, 2007). The area also has the highest rates of heart disease as cause of death, the highest smoking rate, and 13% of residents rate their health as fair or poor (Public Health Seattle & King County, 2012). Obesity prevalence in the same zip code as the Family CK Project is 20% to 22.5 % of the adult population (communities to the north have a prevalence of 15-19.9% or lower and communities to the south and west have a prevalence of 15-19.9% to 22.5-26.0% (Drewnowski, Rehm, Solet, 2007).

According to a Communities Count Survey (2011), between 2004 and 2011, south county region adults experienced a decline in the “physical and emotional comfort, and the practical resources, that they receive from family, friends, co-workers, and others.” East region adults reported higher levels of neighborhood social cohesion (or “mutual trust among neighbors combined with a willingness to intervene on behalf of the common good”) than adults in the city and south region (Communities Count Survey, 2011). However, south region adults participated highly in community organizations such as congregations and youth organizations compared to most other regions (Communities Count Survey, 2011). “Community service did not differ by race, ethnicity, country of birth, primary language, income, education, employment, veteran status, relationship status, or the presence of children in the household” (Communities Count Survey, 2011). The community in which the Family CK Project is based has a rich history in community development, organizing, and self-sufficiency initiatives.

Participant characteristics. Ninety percent of community members who participated in the study and attended the Family Community Kitchen identified as female. The average age of study participants reported was 34 years-old (22-65), and 60% of participants resided in the same

zip code as the community center in which the project was held. Forty percent of participants were currently receiving WIC benefits, and 70% were single, never married. The average number of children living in a household was 4 (1 to 7) with the number of children less than 18 years of age ranging from 0 to 5 (2). Fifty percent of participants reported spending less than \$100 on groceries a week for their household, 80% identified as Black or African American, and 100% of study participants reported that they were born in the United States. Similar findings have been reported in other CK studies (Milligan, 2010).

The CK leader and researcher also identified as female. At the time this study was conducted the researcher was 26 years-old and the leader was 30 years-old. The CK leader resided in the same zip code as the community center in which the project was held whereas the researcher resided in a community north of the community center. The CK leader was married while the researcher was single, never married. The CK leader had two children, one under the age of five, living in her household whereas the researcher did not have children. The researcher spent less than \$100 on groceries a week for her single household. The researcher identified as White and was born in the United States while the CK leader identified as Multiracial and was also born in the United States.

In addition to a demographic description of community members, community member food practices and needs at the time of the study were gathered by means of a participant questionnaire. These descriptors are summarized in Table 8 and Table 9. Most community members indicated that they felt confident in their cooking skills at the time the study began. In addition, community members' top needs reported included: saving money on food and trying new and different foods. Eighty percent of community members surveyed reported that they never or sometimes prepared or cooked food with others.

Table 18. Top Needs Reported by Community Members

Question	% (N = 10)
Save money on food	60%
Take food home to eat	20%
Try new and different foods	70%
Make new friends or social connections	10%
Learn cooking/baking skills	30%
Learn how to plan and prepare a meal	30%
Learn more about nutrition	40%
Learn more about food safety	0%
Learn how to best use the new WIC package	10%

Table 19. Food Practices and Food Security Results for Community Members

Question	Response 1 st time questionnaire completed					
	“Never True”		“Sometimes True”		“Often True”	
	n	(%)	n	(%)	n	(%)
I feel confident with my cooking skills.	10	0	10	20%	10	80%
I plan the meals I want to cook before shopping for food.	10	0	10	70%	10	30%
My family and I eat at least one meal per day from a fast food restaurant, convenient store or cafeteria.	9	33.3%	9	44.4%	9	22.2%
I eat grains, vegetables, fruits, dairy products and meats/beans daily.	10	0	10	40%	10	60%
I eat at least 5 servings of fruits and vegetables each day.	10	30%	10	60%	10	10%
I usually need more food than I have.	9	33.3%	9	44.4%	9	22.2%
I prepare or cook food with others.	10	30%	10	50%	10	20%
I usually eat food with others.	10	0	10	40%	10	60%

CK leader and researcher food practices at the time of the study were also recorded in field notes.

These descriptors are summarized in Table 10.

Table 20. Food Practices and Food Security results for CK leader and Researcher

Question	Response 1 st time questionnaire completed					
	“Never True”		“Sometimes True”		“Often True”	
	n	(%)	n	(%)	n	(%)
I feel confident with my cooking skills.	2	0%	2	50%(R)	2	50%
I plan the meals I want to cook before shopping for food.	2	0%	2	100%	2	0%
My family and I eat at least one meal per day from a fast food restaurant, convenient store or cafeteria.	2	50%	2	0%	2	50%(R)
I eat grains, vegetables, fruits, dairy products and meats/beans daily.	2	50%(R)	2	0%	2	50%
I eat at least 5 servings of fruits and vegetables each day.	2	50%(R)	2	50%	2	0%
I usually need more food than I have.	2	50%(R)	2	50%	2	0%
I prepare or cook food with others.	2	50%(R)	2	50%	2	0%
I usually eat food with others.	2	0%	2	50%(R)	2	50%

R = researcher responses

Major Partner Characteristics. Major community kitchen partners included WIC and Parks and Recreation. WIC is “the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) [and] provides supplemental foods, health care referrals, and nutrition

education for low-income pregnant, breastfeeding, and non-breastfeeding postpartum women, and to infants and children up to age five who are found to be at nutritional risk” (USDA, 2013). It is the single largest healthcare access point for women, infants and children and one of the major food insecurity interventions in the United States.

The WIC clinic was located in close proximity to the community center that housed the Family CK Project. Changes in the WIC food package occurred at the time of the project. WIC staff at the local clinic reported that WIC recipients did not know how to utilize the new foods offered. A community kitchen partnership offered a solution to this programming gap.

The community center in which the Family CK Project was based is part of the city’s Parks and Recreation Department. Located in the southern part of the city, this center is the second largest community center in the state. Parks and Recreation provides recreational programs such as, youth team sports, camps, and life-long learning opportunities to the city’s residents. At the time of the program, a neighboring community center closed and residents were directed to the community center in which the Family CK Project took place.

Summary. This section provided descriptive information on the Family Community Kitchen history and characteristics, local area characteristics, project participant characteristics, and major partner characteristics. This information provides important context from which to interpret the study findings in the areas of social support provision and the facilitators and barriers to social support provision in a Family Community Kitchen Project. The following section presents the results and discussion related to identified types of social support provision found in an analysis of the Family Community Kitchen Project.

Social Support Provision

Four types of social support provision were found in the Family Community Kitchen Project upon analysis. These types include: informational, emotional, appraisal and tangible support provision as outlined in Figure 4. These broad types of supportive behaviors or acts were first described by House (1981) and provided a guiding framework for the organization of social support provision thematic findings into categories in this case study (Figure 4). The organization of findings into categories is not meant to suggest the categories are mutually exclusive as many social support provision findings overlapped and could be placed into more than one category of support provision. This overlap is demonstrated in Figure 4 and is an essential tenet in the social support provision findings. Within each major social support provision category are major descriptive themes that were found in focus groups, questionnaires, documents and observations. A visual summary of each of these themes is provided at the beginning of each social support provision section. As noted previously, the data to be described in the following paragraphs are drawn from focus groups, questionnaires, observations, and documents in this case study. Findings are compared and contrasted to what is currently known about emergent themes in the CK literature.

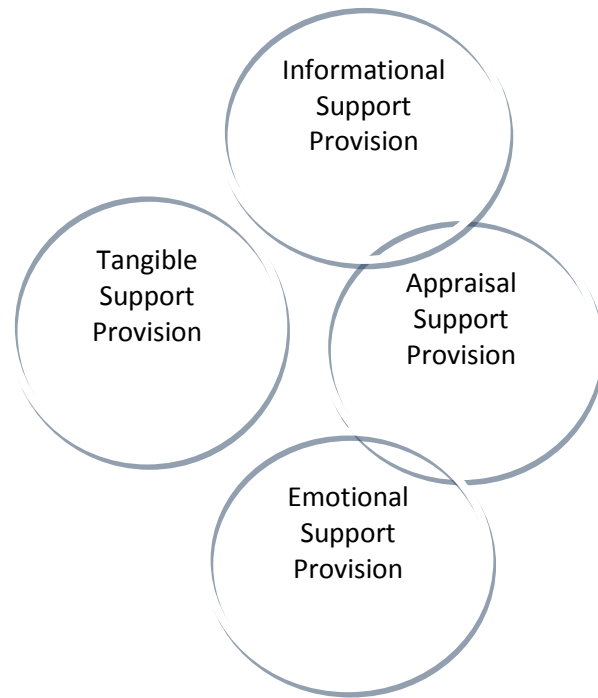


Figure 16. Categories of Social Support Provision Findings

Major Themes in Informational Support Provision.

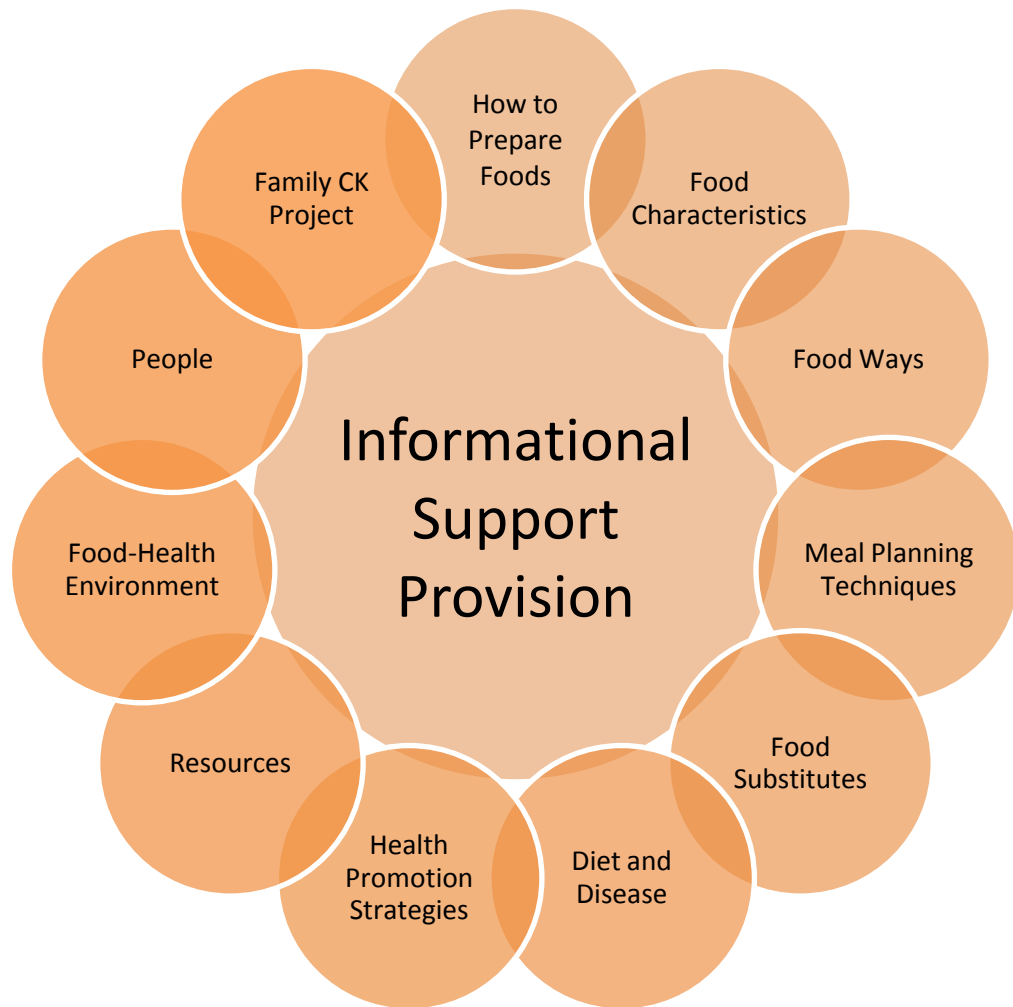


Figure 17. Major Informational Support Themes Identified in the Family CK Project

The first category of social support provision that emerged from an analysis of the Family CK Project is informational support provision. This type of social support provision includes analysis findings that capture “the provision of information that a person can use to address problems” (Heaney & Israel, 2008, p. 190; House, Umberson, & Landis, 1988). Several major themes emerged from the data related to topics (or types) of informational support provision in the Family CK Project. These included how to prepare foods, food ways, meal planning

techniques, food characteristics, food substitutes, diet and disease, health promotion strategies, resources, food-health environment, people, and the Family CK Project (see Appendix G for thematic definitions). The following sections describe these informational support provision themes in detail.

How to prepare foods, food ways, and meal planning techniques. The recipe leads, group leader, group administrator (researcher), and community members all provided informational support on how to prepare foods during the CK sessions. Participants were often observed exchanging information on how to prepare foods in group discussions and other CK session activities. For example, the Family CK leader was observed sharing information with the researcher (who also served as the group administrator) and community members during a group discussion on how to improve the flavor of greens: “If it’s cut up more it will absorb more flavors” (Leader, Focus group).

Community members also shared information with each other and the CK leader and researcher on how to prepare foods and food ways during group discussions:

I’ll put neck bones and onions and my mom will put pigtales in it...Not big globs of fat on the meat...I am getting the meat that is trimmed all the fat off of it as much as you can and a lot of it is just for flavor. (Community member, Focus group)

In addition, exchange of information on meal planning techniques occurred between participants:

If you want to freeze [the CK food] then you can save it for a day when you are really hectic then you can pull it from the freezer and put it in the oven. (Leader, Focus group)

Food characteristics and food substitutes. Information on food characteristics (or any feature or quality belonging to a food and serving to identify it) was a vital part of the exchange

between participants in group discussions. One community member discussed information on food safety:

They just had a report out saying that you really need to be careful when you purchase beef because it's everything but beef. It's just a whole bunch of different parts of the cow.

(Community member, Focus group)

Engler-Stringer and Berenbaum (2006) found that leaders were often observed sharing food safety information with group members. Participants were also observed exchanging information on harmful and healthy food characteristics during group discussions. The CK leader shared information with community members on bleached and brown foods in the Family CK Project:

We don't need bleach in our bodies so that's why I focus on trying to get rid of things that aren't good for our bodies. What I tell in my classes is brown is beautiful. (Leader,

Focus group)

During food production sessions participants were also observed exchanging information on nutritious and healthy food characteristics with each other:

Talking with each other, listening to nutritional and culinary information given by recipe leads, [and] asking questions about recipe preparation. (Researcher, Field note)

Furthermore, recipe packets distributed by the CK group leader during cooking sessions contained information on nutritious and healthy food characteristics. This finding was similar to Engler-Stringer and Berenbaum's (2006) observation that in one community kitchen group "the leader often brought clippings from books and magazines about food and nutrition. She generally had the information photocopied for each participant (p.103)."

In addition to exchanging information on nutritious and healthy food characteristics, participants also shared information on healthy food substitutes or foods that taste as good as

unhealthy foods but differed in composition. During a group discussion one community member shared with the group:

I know with that seasoning mix for example it is pretty much the same stuff as what we have already been using such as seasoning salt. I took out a little bit of the salt [because I was] using so much salt. (Community member, Focus group)

Diet and disease and health promotion strategies. The link between diet and disease was a frequent topic of information exchange noted in Family CK Project group discussions. The CK leader exchanged information with community members on how what we eat can cause a range of symptoms:

They have seen it in alternative schools where they changed up the diet and kids had way less violence and being sent to the principal and it was based on the food. (Leader, Focus group)

Interpersonal exchanges that occurred during food production were observed by the researcher:

[The CK leader] was explaining gluten free [food], Celiac disease, and why the food is not good for you. (Researcher, Field note)

Closely related to diet and disease information exchange, information exchange on strategies to promote health also occurred between participants in the group discussions. For example, the CK leader shared information on how to get children to eat more vegetables:

Childcare takes care of [the community center garden] and they are so excited about growing their own vegetables...and that makes them want to eat more vegetables because they grew it. (Leader, Focus group)

In addition, community members shared ideas with each other on strategies to promote health in their children:

My son has just developed asthma. You know, there are certain foods he might not need to eat. (Community member, Focus group)

Resources and food-health environment. Resources and food-health environment are two additional information exchange topics that often dominated participant discussions. Participants were observed frequently exchanging information on community resources with each other:

The food stand just up there, you can get all your produce; you can get fresh vegetables and fruit. (Community member, Focus group)

Another community member described the types of foods available on WIC:

I'm sure there are plenty of other things that you could do with the cheese that you get or the new items that you get now since there are so many different things we get now.

(Community member, Focus group)

During a discussion on kitchen equipment, participants shared information on where to find low cost, quality equipment in the area. For example, one participant shared with others in the group:

I've gotten two of the really good pots from Good Will and my mom went and bought her one of those big roasting pans, it was brand new for fourteen dollars. (Community member, Focus group)

In addition, the researcher, as participant-observer, shared information on community resources with members during CK activities:

I talked to [community member] and [community member] for awhile. [Community member] told me her son had Celiac disease and I told her that I had gotten the gluten free cookies from the Grocery Outlet. (Researcher, Field Note)

Engler-Stringer (2005) also found that CK participants shared information about programs, activities, and other community opportunities during community kitchen sessions.

In addition to resources, information on food-health environment in the area in which the Family CK project operated were exchanged between project participants. For example, two community members shared with the group:

(Community member 1): Shopping in the grocery stores is ridiculous...you going to spend about fifty bucks...their stuff is outdated a lot...I don't trust their meat.

(Community member 2): Oh, their meat is horrible...I don't know...it doesn't even look right. (Community members, Focus group)

Community members were also observed sharing information with the leader and the researcher on the state of hunger and nutrition in community households during group discussions:

The main staple in most folks' homes that I know money is an issue in buying food is Top Ramen because you can buy a gang of that, fill everybody up...ten for a dollar. You don't have to worry about nobody being hungry but where is the nutritional value in it? There's none. (Community member, Focus group)

Furthermore, participants discussed access to food equipment in their community:

Now a days [blenders are] cheap and they don't seem to last and I can't afford a Vitamix blender... I need a good blender. (Community member, Focus group)

As an example of the food-health environment that characterized the community in which participants resided, the CK leader echoed community member concerns regarding experiences with health care professionals in the area:

That's really true too when they have all the symptoms and they talk to their doctor and their doctor doesn't believe them. (Leader, Focus group)

In addition to health care experiences in the community, the leader was also observed discussing community issues of food justice during food consumption at the community center:

During this activity [the CK leader] did her unplanned objectives, she didn't have formal objectives for this time but she talked about what was in the foods, food justice, what we want to make next time, and we got feedback from everyone. (Researcher, Field note)

These words from one community kitchen participant typified a number of comments made regarding the food-health environment in the community in which the Family CK Project took place:

So one of the things you need to consider is that in low income communities the grocery stores tend to have lower quality [food]. Go to somewhere [up north] and go to that QFC and its like another world...I mean they have the sushi guy...got his own station...specialty this specialty that....this really nice upscale store...you go to QFC over here; girl...two times we went and she saw mice. (Community member, Focus group)

Engler-Stringer and Berenbaum (2006) found that CK members “talk[ed] about politics during planning and cooking sessions, and particularly about politics, poverty, and food (p.181).”

People and Family CK Project. Informational exchange on people's characteristics and/or identities occurred in the Family CK Project. Community members were observed sharing information on personal characteristics with each other such as where they worked:

I worked in a domestic violence center. (Community member, Focus group)

They also shared information with each other on their children during group discussions:

That is why I have to make this one, him, sit down because he snuck some candy and I made him throw it away because sugar doesn't work very well for him. (Community member, Focus group)

In addition, community members shared information with the leader and researcher on gender, household size, and whether or not they received WIC coupons through questionnaire demographics. In exchange, the leader and researcher shared biographical information about themselves with community members during group discussions:

I'm a nursing student at [the university]. My background is pediatric nursing. I've been a pediatric nurse for four years and I decided to go back to school again. I'm from Texas and I just moved up here a couple years ago. (Researcher, Focus group)

In addition to personal characteristics, the CK leader often shared information about upcoming Family Community Kitchen Project plans during group discussions and food consumption activities:

We are planning to meet again so pretty much the regular schedule. I'll talk to them about Saturdays because I do like that idea. We are thinking to do like a workshop like where to shop and why. (Leader, Focus group)

Field notes indicated that the CK leader also shared her learning objectives with the group:

The [CK leader] went over the learning objectives from the last CK: different ways you can use chicken, how we are using chicken now for the soup stock, why we are doing it, [and] what we get out of every station. (Researcher, Field note)

Information exchange about Family CK Project development strategies between community members and the CK leader occurred during group discussions. One community

member suggested that peer advocacy was a particularly effective way to build trust and deliver information about preparation of healthy meals:

Peer advocacy is actually the way we need to go on so many levels, as opposed to somebody who is like ‘girl let me show you how.’ I don’t know you like that, like a friend or a colleague. (Community member, Focus group)

Observations during food consumption revealed information exchange on development strategies between participants as observed by the researcher:

Basically everyone gave feedback to [the CK leader] on what they wanted to make for next time. In the process they also suggested that they be recipe leaders for the next time and make their own recipes and show each other how to make their own recipes. This is great news and we want this to happen. (Researcher, Field note)

Summary. In summary, data analysis revealed information exchange in facilitating problem-solving in the following thematic areas: how to prepare foods, food ways, meal planning techniques, food characteristics, food substitutes, diet and disease, health promotion strategies, resources, food-health environment, people, and Family CK Project (Figure 5).

Major Themes in Emotional Support Provision.



Figure 18. Major Emotional Support Themes Identified in the Family CK Project

The second type of social support provision that emerged from an analysis of the Family CK Project is emotional support provision. This type of social support provision includes data focused on the provision of “empathy, love, trust and caring” (Israel & Heaney, 2008, p.190) between Family CK participants. Several themes emerged from the data related to the types of emotional support provision exchanged between participants including: understanding, relating, caring, recognizing, appreciating, respecting, and trusting (see Appendix G for thematic

definitions). These emotional support provision themes will be elaborated on in the paragraphs that follow.

Understanding. Family CK Project participants were often observed providing each other with understanding or agreement of opinion or feeling in group discussions. In response to a community member's statement about "trying new stuff" i.e.:

I am gradually trying to get rid of stuff and I also want to master making a lot of stuff from scratch like making corn bread from scratch. I've tried it but I think I got something mixed up and it didn't work so I didn't do it right. (Community member, Focus group)

The Family CK leader responded with affirmation:

Right, one bad experience makes it so you don't want to try it again. (Leader, Focus group)

Here the CK leader indicated understanding of how the community member felt regarding trying new foods. This example typifies a number of exchanges of understanding between participants in the Family CK Project.

Relating. CK Project community members were also observed relating to each other in group discussions. For example, in response to a community member who shared information on her child's illness, two community members responded affirmatively:

(Community member 1): Yeah, my son has asthma and he gets allergies too.

(Community member 2): Yeah, my son has that too. (Community members, Focus group)

Community members were also observed relating to foods used in the home setting. A participant responded to another participant's comment on the use of a type of hot sauce:

Yeah, somebody hooked me up on that it's good. (Community member, Focus group)

During Family CK cooking sessions, the researcher, as participant-observer, noted that she connected with others about food products, specifically gluten-free foods:

I told [community member] before we started that that we purchased [a gluten free food] and I think we were able to relate on that. (Researcher, Field note)

Caring. Caring or the displaying of kindness and concern for others was observed in Family CK group discussion activities. During a discussion on whether or not the CK leader had met community member expectations for the cooking sessions, one community member responded:

To be honest, I didn't know there was going to be so many nice people. I thought everyone was going to be mean and up-tight. When you meet new people you don't know what those people are going to be like. (Community member, Focus group)

Another participant stated:

I have caring and teaching and family and the heart says love because I felt a lot of love being here. (Community member, Focus group)

The above comments typified a number of caring exchanges between participants in the Family CK Project.

Recognizing. The formal acknowledgment of the significance of the CK group or participants in the CK group was also observed in the Family CK Project. In one group discussion, for example, participants were asked to describe the worst part of participating in the community kitchen. In response, one participant stated “going home,” (Community member, Focus group) recognizing the importance or acknowledging the significance of the CK group in her life. Participants were also noted frequently recognizing the work of other participants. In response to a drawing shared by another group member, one participant stated, “You're a good

artist” (Community member, Focus group). These comments typified a number of recognizing exchanges between participants in the Family CK Project.

Appreciating. Acts of appreciation were present in the Family CK Project. Often community members would thank the group leader, or the group leader would “thank [community members] for coming” (Leader, Focus group). The group leader would often let community members know she appreciated their feedback by stating, “That’s good to know” or “Cool, okay, thanks,” (Leader, Focus group) for example, after community members gave feedback during group discussions.

Respecting. In addition to acts of appreciation, community members would often display regard or respect for each other during group discussions through such statements as “But I’m not speaking for everybody else either,” (Community member, Focus group) regarding a prior opinion expressed on the cost of the Family CK for participants. At other times the group leader would make comments such as, “I want to respect your time because I know we got kids,” (Leader, Focus group) when CK activities were running late, showing regard for CK participants’ schedules. The provision of respect between community members and recipe leads during CK cooking sessions was noted in researcher observations.

Trusting. The group leader often relied upon community members’ word that they would attend CK activities. The exchange of trust between the CK leader and community members was noted during a group discussion topic in CK cooking session attendance:

We had our crew, the ones I can count on, but now you guys are it. (Leader, Focus group)

Reciprocity of trust was also noted between community members and the group leader during cooking sessions:

I have to say, I was so touched last Thursday when my daughter needed my help for her homework and I was trying to do ten things at once and [community member] was just like ‘oh I got it I helped her with her homework’ and I just loved that. Knowing that this was a community I could count on to help my child and just as equally if [community member’s child] needed some help I would step in to do that because that is what this is about. You don’t always feel that everywhere you go and I was really, really touched by that. (Leader, Focus group)

Summary. In summary, Family CK data analysis captured the provision of emotional support. The exchange of different types of emotional support provision was noted between project participants in the thematic areas of: understanding, relating, caring, recognizing, appreciating, respecting, and trusting emotional support exchanges. Engler-Stringer (2005) and other CK researchers (Racine & St-Onge, 2000) have also found that emotional support is present in community kitchens studied. For example, Engler-Stringer (2005) found that “some participants described how they discussed difficult events in their lives while cooking or eating” (p.102).

Major Themes in Appraisal Support Provision.

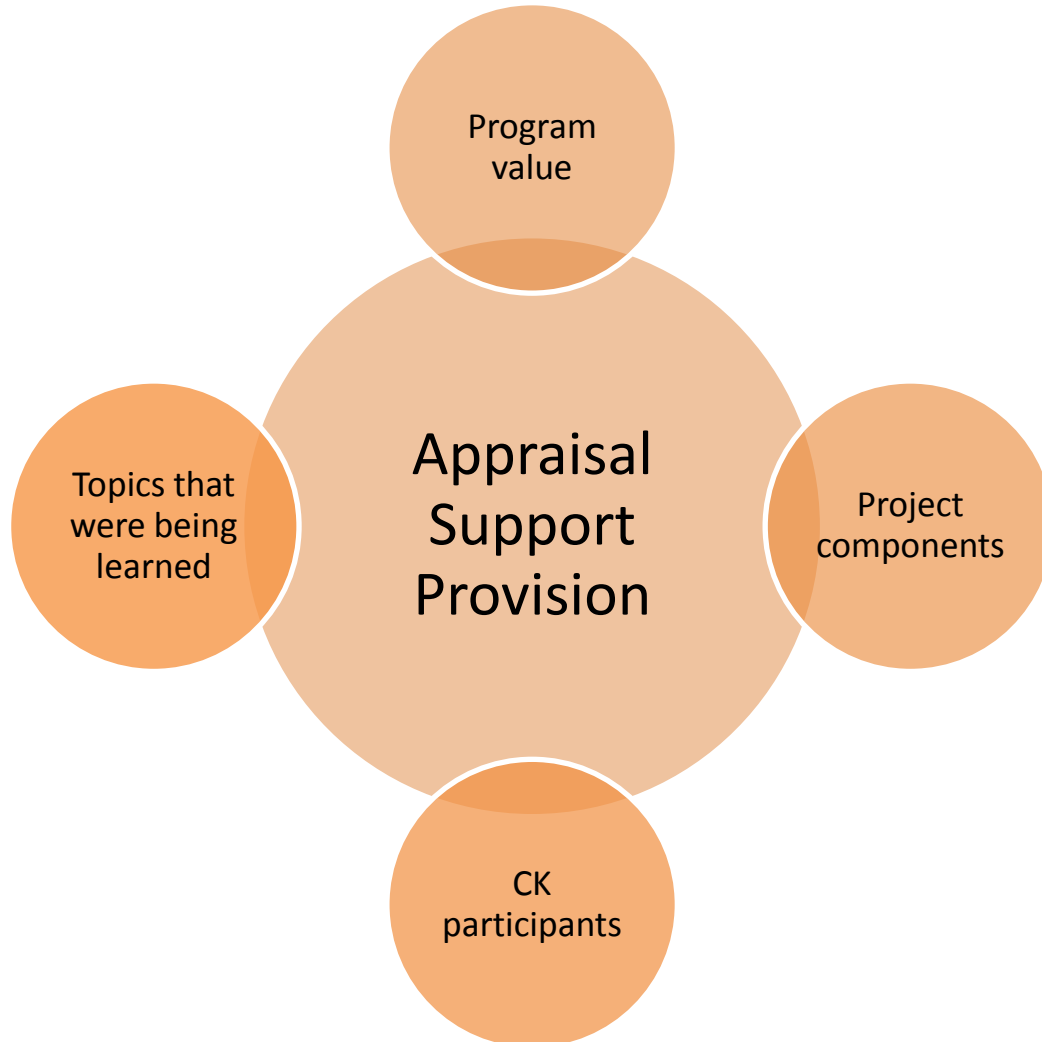


Figure 19. Major Appraisal Support Themes Identified in the Family CK Project

Closely related to emotional and informational support provision, the third category of social support provision that emerged from an analysis of the Family CK Project is appraisal support provision. This type of social support provision includes analysis findings that captured “the provision of information for self-evaluation purposes, constructive feedback, and affirmation” (Heaney & Israel, 2008, p. 190) between Family CK participants. Several themes emerged from the data related to topics of appraisal support provided between participants in the

Family CK Project. Some of the major themes exchanged in the Family Community Kitchen Project included information on program value, project components, CK participants, and topics that were being learned (see Appendix G for thematic definitions). These appraisal support provision themes are described as follows.

Program value. CK Project participants were often observed exchanging information on program value or the importance, worth, or usefulness of CK activities. One community member articulated to the group that the food they received from the CK was worth more than the cost to participate:

It is none of my business what everyone's finances are but I really think that ten dollars for all that we could take home, I think that ten dollars is sustainable. (Community member, Focus group)

Other CK participants discussed the meaning of the Family CK to them:

This is my picture and I drew everyone cooking and laughing and having a good time and some healthy food over here that we are learning how to cook...and coming here means to me that we get to meet new people and that we get to learn how to cook different foods that we never ate before. (Community member, Focus group)

This comment typified a number of exchanges made in the group discussion between the CK participants about the value of the Family CK Project.

In questionnaires, community members provided information to the CK leader and administrator on the value of CK participation. For example, community members reported that since participating in the CK Project they had a perceived reduction in needing more food than they have. This feedback affirmed the work the CK leader was doing and also provided constructive feedback for program improvement over time.

The exchange of appraisal support on program value was also noted during CK food consumption activities through one observation made by the researcher:

During this activity [the CK leader] did her kind of unplanned objectives, she didn't have any formal objectives for this time but she talked about what was in the foods, food justice, what we want to make next time, and we got feedback from everyone. Everyone said we did a good job. She talked about coming back if they want to. (Researcher, Field note)

This observation is an example of program value as perceived by the researcher and shared between community members and the CK leader.

Project components. CK Project participants exchanged information on aspects of specific project components for CK leader self-evaluation and constructive feedback purposes. One community member commented on the quality of the childcare received in the CK Project, particularly in her confidence about the quality of childcare providers:

I was like 'okay well I go here and I'll see' because if they are not having someone who is running it right I'll just tell the lady that I'll go over there and help out the kids. When I saw that you guys had really good people that you picked over there [I was okay].

(Community member, Focus group)

Other community members provided feedback on food preparation and cooking methods and the types of foods used in Family CK cooking sessions:

It's a little different for me. I guess I am used to one way of cooking and eating and this is totally different. (Community member, Focus group)

At other times, different foods were something some community members reported that they enjoyed in the CK during group discussions:

One recipe we made that I really like is the chicken enchiladas, if I had to pick a favorite recipe I think that would be it. (Community member, Focus group)

Community members also exchanged information on foods made in the CK during food consumption:

[CK participant] commented on that she liked the recipes last time versus this time.

(Researcher, Field note)

This information helped the CK leader align CK activities with the needs and wants of participants.

Reciprocal exchange of appraisal support between the CK leader and community members was noted during group discussions. The CK leader often provided constructive feedback to community members about issues in food production. For example, one community member-reported a ‘dirty’ taste of the chard prepared in the last CK cooking session. The CK leader appraised the situation as resulting from poor vegetable washing and/or the place where the food was obtained:

[The chard] were the ones from Clean Greens and maybe they didn’t get washed well enough. (Leader, Focus group)

Other areas of appraisal support exchange included program costs.

You know I am glad that it is five dollars... Or twelve for three but I would pay the ten dollars [to participate in each CK session]. (Community member, Focus group)

Working together to achieve food production was another area of appraisal support provision between participants. One CK participant noted that “working together was good” (Community member, Focus group) in a group discussion on what they liked most about the CK

program. Community members were also observed commenting to the CK leader about program timing:

It's hard because I have to work [but] I think we actually need more time. (Community member, Focus group)

Dinner and kid activities were other project components. Participants, including community members, the researcher, and the CK leader, commented on these activities in group discussions.

I really liked our dinners together that was one of my favorite parts and I'm really glad [CK leader] really wanted that. I think it's cool that all the families and kids come and eat and it's amazing to me last time because you guys were talking about the different things that you wanted to eat next time and I just remember [participant child] because she was like: 'Ummm Lasagna!' [CK participant child] loved making that fruit saladshe was all over that...she talked about that the whole weekend! (Researcher, Focus group)

CK participants. Community members were observed exchanging appraisals of each other in group discussions:

To be honest, I didn't know there was going to be so many nice people. I thought everyone was going to be kind of mean and stuff and up-tight. (Community member, Focus group)

Community members also exchanged appraisal information with the CK leader on her leadership style:

I really liked about and the fact that we have someone here that gives kind of a challenge to try to do things differently. (Community member, Focus group)

The leader would provide constructive feedback to community members on their group behavior during CK cooking sessions in group discussions:

That is one thing that I definitely noticed that each time you came it really looked like you were tired from a day's work which is fully understandable but then when we left I noticed that you picked up your energy so that was a really great observation that I made it was worth it, it wasn't like you were more drained after two hours worth of cooking.

(Leader, Focus group)

At other times the leader was observed appraising a community member's food preparation approaches at home:

Flavor exactly...some people eat the ham hocks some people don't, I don't (Community member, Focus group).

To which the CK leader responded:

But I don't think there is anything wrong with that as far as health wise. (Leader, Focus group)

Some participants exchanged information with each other on their children's behavior. This information exchange was meant to provide constructive feedback to other participants who had concerns about how their child was behaving at home. For example, the CK leader shared a personal story on her son's behavior to demonstrate that hyperactivity in young boys is not abnormal:

Today [my son] was on one of those rocking horses he was like crazy and my daughter would never have done that I mean he was like [waves hands] and I was like

“bronco!”(Leader, Focus group)

Another participant stated:

Just get through the twos because you know sometimes they say the terrible twos start before one... I mean before they get to two and yeah give him till two he's still little.

(Community member, Focus group)

The comments above on parenting typified a number of appraisal exchanges between CK participants in the Family CK Project. Engler-Stringer and Berenbaum (2007) also noted that community kitchens were an optimal environment to share parenting advice: "one of the more common ways in which CK participants provided one another with informational support was in giving advice about children (p. 102)."

Topics that were being learned. When asked to reflect on their experiences in the CK Project during group discussions by the leader, some community members appraised the learning that occurred in the CK. In regards to WIC learning, one participant stated:

I thought maybe [WIC] was what it was more geared towards but I don't discourage the fact that we are learning how to cook other things as well. I think it would [be] nice to learn other things that are different. I'm sure there are plenty of other things that you could do with the cheese that you get or the new items that you get now since there are so many different things we get now [on WIC]. (Community member, Focus group)

Feedback on project education components that participants enjoyed was also common in group discussions:

It is good to know that they are using those different products in making these things too.

(Community member, Focus group)

This information provided constructive feedback to the CK leader for program educational improvement over time.

Summary. In summary, Family CK data analysis captured the provision of appraisal in the thematic areas of program value, project components, CK participants, and topics that were being learned, that a participant could use for self-evaluation purposes, constructive feedback, and/or affirmation. These findings are closely related to emotional and informational support provision findings and in some cases overlap with each other. This is the first CK study to identify and distinguish appraisal support provision as separate from emotional and informational support provision findings. Appraisal support provision emerged as a major type of social support provided between participants in the Family CK Project. The literature on social support provision suggests that appraisal support provision plays a role in enhancing or building self-esteem and self-efficacy or mastery of skills and thus has important implications for food security and health impacts further downstream from social support provision.

Major Themes in Tangible Support Provision.

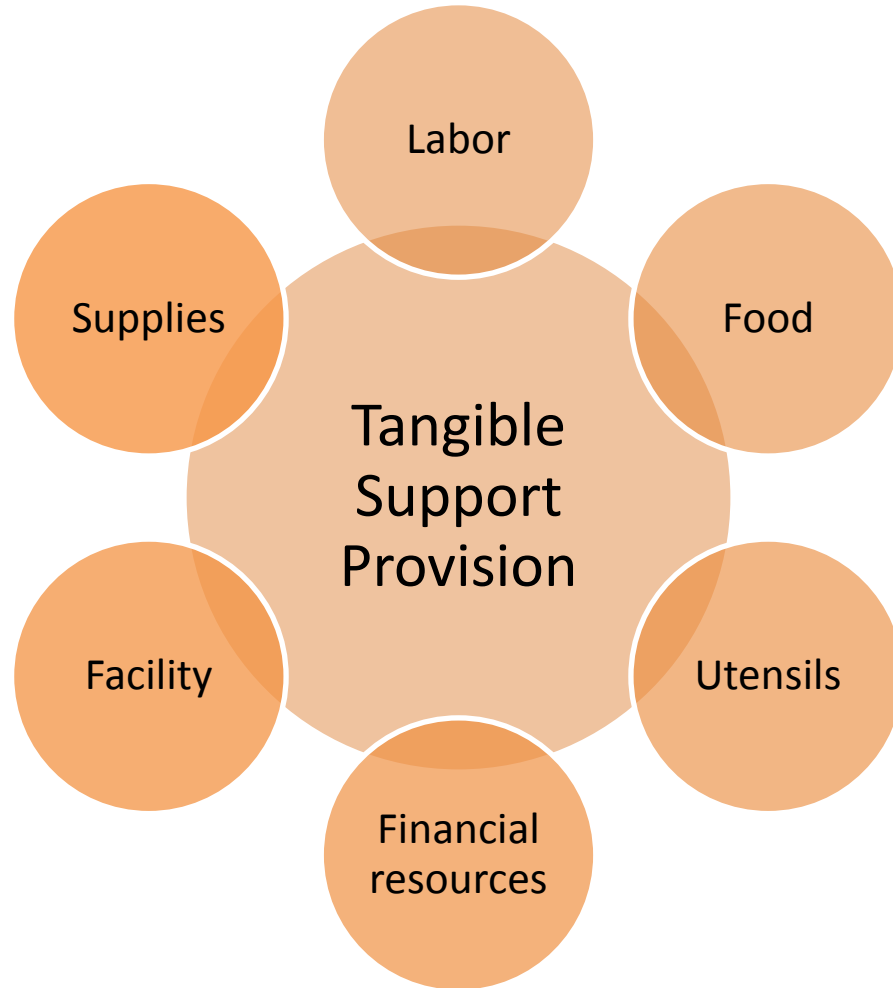


Figure 20. Major Tangible Support Themes Identified in the Family CK Project

The fourth and final category of social support provision that emerged from an analysis of the Family CK Project is tangible or instrumental social support provision. This type of social support provision includes analysis findings that captured “the provision of tangible aid and services that directly assist a person in need” (Israel & Heaney, 2008, p.190) between Family CK participants. Several themes emerged from the data related to types of tangible support provision found in the Family CK Project including labor, food, utensils, kitchen equipment, financial

resources, facility, and supplies (see Appendix G for thematic definitions). These tangible support provision findings are described in further detail in the paragraphs that follow.

Labor. The exchange of labor between CK participants in the Family CK Project was observed by the researcher in almost all CK activities. For example, the researcher noted that CK planning and preparation activities involved shopping for food, conducting reminder calls, and menu development by the CK leader and researcher for community members in the CK. Set-up for CK cooking and group discussion activities often involved the early arrival of the CK administrator (i.e. researcher), leader, and volunteers (i.e. recipe leads and child care) to set up chairs and tables in the multipurpose room. The researcher observed:

I arrived at 5 p.m. to set up for the group discussion. I set up chairs and tables and the playroom. [The CK Leader] arrived at 5:20 p.m. with her children and began to prepare quesadillas [for the group]. (Researcher, Field note)

Cooking session set-up often involved organizing food and equipment into stations prior to community member arrival:

I put [the food] into stations: the cornbread station, the green bean station, the sweet potato pie station and the fruit salad station. (Researcher, Field note)

It also involved pre-preparing food items:

First, on the salmon cakes we put all the ingredients together, chopped up the onions, mixed the ingredients for the dip, and then we took them to [another CK participant] who cooked [the salmon cakes] and then we put them in a pan. (Researcher, Field note)

Childcare labor was also exchanged between volunteers and community members:

I met [a volunteer] on the other side [of the community center] and thanked her for providing childcare on such late notice. (Researcher, Field note)

Community members were also observed providing childcare for each other and the CK leader during cooking sessions.

As observed by the researcher, clean-up labor was exchanged between CK participants at the end of cooking sessions and group discussions:

[The CK leader] washed [community center] plastic cups and I picked up kitchen items.

Everyone helped to wash dishes so that went really well. (Researcher, Field note)

Furthermore, labor in food distribution was exchanged between CK participants during cooking sessions:

Participants labeled food trays [with participant names] with masking tape and labels that [the CK leader] had brought. (Researcher, Field note)

These observations typified a number of observations on the exchange of labor or work between all CK participants.

Food. Exchange of food (giving and receiving food) between participants was observed in many CK activities throughout the three-month duration. For example, during one group discussion the researcher offered food to the CK leader and community members before exiting the building: “Take some food. I offered some plastic bags [for food storage]” (Researcher, Field note). In addition, food was also exchanged between project participants in CK cooking sessions. Distribution boxes for participants were set up in the multipurpose room and served as receptacles for food items made during food production: “So the recipes made were the salmon cakes, the caramel glazed pears, the collard confetti, the tortellini soup, and the cheese bread” (Researcher, Field note). Community members also reported a perceived increase in ‘not needing more food than they have’ on post questionnaire assessment. Prepared food was a major source of tangible support between CK participants.

Facility, kitchen equipment, and utensils. Direct observations captured the provision of a place to gather for cooking and group discussions as well as childcare between CK participants and community center staff:

The community center...is divided into two rooms by a giant sliding door. On the other side of the wall is the childcare center. (Researcher, Field note)

In addition, direct observations also captured the provision of tangible aid for dining and group discussion use by the community center staff. These included community center tables and chairs and use of their facility's multipurpose room for dining. At other times, CK staff provided resources to CK participants for food consumption:

Utensils, serving utensils, plates, bowls, napkins, cups, hot cups, sipper cups, baby wipes for hands, paper towels, dish soap, towels, washcloth. (Researcher, Field note)

Financial resources. Financial resources in the form of gift cards were provided to participants by the CK leader and researcher. Financial resources were also provided to the CK leader as well as fellow community members for food purchase in the form of a (sliding scale) participation fee paid by community members. The CK leader received a small honorarium for her time (\$100 per month) from a funding foundation. These findings are similar to findings in other community kitchens studied in which CK leaders were either paid staff (some of whom were community workers and some of whom were healthcare or other types of professionals) or community members (Engler-Stringer, 2005, p.149).

Supplies. Various forms of supplies were provided to community members by the researcher and CK leader via personal funds throughout the project. These included such items as: "Materials for drawing: Manila paper, Markers, Toys in childcare, Paper surveys, Labels for

food, and Recipe packets” (Researcher, Field note). In addition, participants were often observed exchanging food distribution containers with each other:

We all brought plastic containers for everyone to store their food in. (Researcher, Field note)

In their study on social support in CKs, Engler-Stringer and Berenbaum (2006) also found that participants shared items such as clothing and baby supplies. The authors found other types of tangible support occurring between group members outside of the CK such as “helping each other with transportation, household task, childcare and offering a place to stay” (Engler-Stringer & Berenbaum, 2006, p. 103). Exchanges outside of the CK were not explored in this study.

Summary. In summary, Family CK data analysis captured the provision of tangible aid and services. Major types of aid exchanged between participants included labor, food, utensils, kitchen equipment, financial resources, facility, and supplies for CK activities. This type of social support provision directly assisted participants in need.

The second section of this chapter presents the results and discussion related to identified facilitators and barriers to social support provision in the analysis of the Family Community Kitchen Project. These results provide a context from which to understand social support provision findings described above.

Facilitators and Barriers of Social Support Provision

The third section of this chapter presents the results and discussion for the second aim of this study. The major themes that influenced the exchange of social support provision between people in the Family CK Project were grouped into four categories from upstream, social-structural conditions, to midstream, project structure and group structure, and downstream, group dynamics and relationship characteristics. The relationship between these categories and social support provision, as described by Berkman and Glass (2000), was diagrammed in Figure 3 in Chapter 3. According to the relevant literature, themes within each category can serve as both facilitators and/or barriers to social support provision at different points in time. Therefore, the thematic findings of facilitators and barriers lie somewhere on a continuum from facilitating to constraining social support provision. Findings on facilitators and barriers are organized into upstream, midstream, and downstream influences (or the most distal to proximal influences on social support provision) and are discussed in further depth in this order in the text that follows.

Upstream Facilitator and Barrier Themes in Social-Structural Conditions

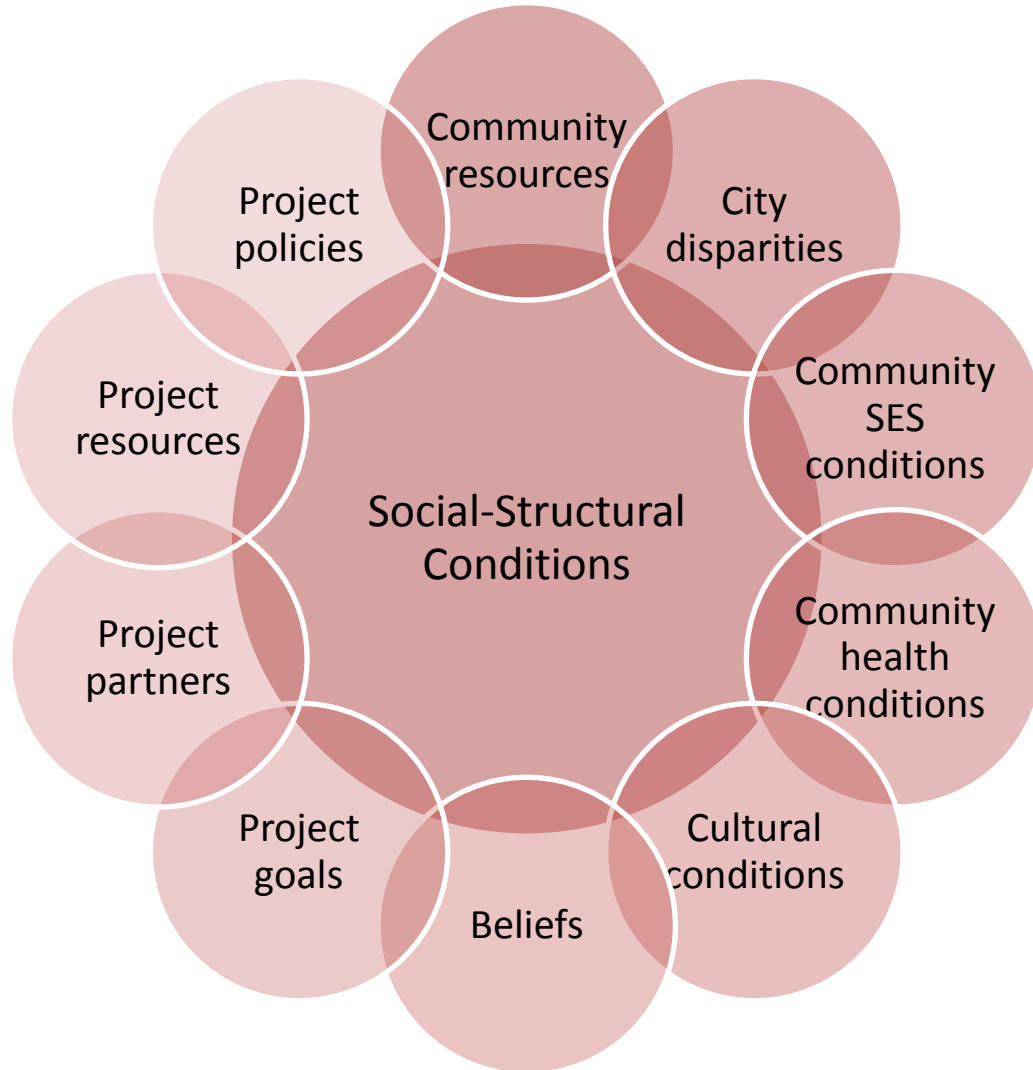


Figure 21. Major Social-Structural Themes Identified in the Family CK Project

The first category of facilitators and barriers to social support provision that emerged from an analysis of the Family CK Project is social-structural conditions. This type of facilitator and barrier includes analysis findings that capture the circumstances of the setting for the kitchen and in terms of which it can be fully understood and assessed (Berkman & Glass, 2000). Several major themes emerged from the data related to the types of social-structural conditions

surrounding the Family CK Project. These included: community resources, city disparities, community socioeconomic status (SES) conditions, community health conditions, cultural conditions, beliefs, project goals, project partners, project resources, and project policies (see Appendix G for thematic definitions). These social-structural condition themes are described below.

Community resources and city disparities. The Family Community Kitchen Project and its related activities occurred at a local community center. The community center was located in an urban, low-income area in the Pacific Northwest. One participant's thoughts typified a number of comments and observations made about the quality of resources available in grocery stores in this particular area compared to other areas of the city:

So one of the things you need to consider is that in low income communities the grocery stores tend to have lower quality [food]. Go to somewhere [up north] and go to that QFC and its like another world...I mean they have the sushi guy...got his own station...specialty this specialty that....this really nice upscale store...you go to QFC over here; girl...two times we went and she saw mice. (Community member, Focus group)

Another community member commented that “you can't really shop at Safeway or QFC, and you better not shop at SARS” (Community member, Focus group). The Family CK Project was located within a particular area characterized by grocery store inequity and grocery stores that were un-shop-able.

The area in which the project occurred was also perceived to have a lack of desired grocery stores as one participant commented:

We take the kids to Whole Foods, my sister goes there and they went there on a field trip and I was like “oh my God, why don’t they have one of these stores over on this side of town?!” (Community member, Focus group)

Another community member commented on the price of food in the grocery stores in the neighborhood:

Well, I mean shopping in the grocery stores is ridiculous, you going to spend about fifty bucks just trying to [buy fruits and vegetables]. (Community member, Focus group)

Community members also commented on a number of acceptable community resources for food such as a local food cooperative, a local butcher shop, a discounted grocery store, and a bulk food supplier in or near the southeast area. For example, one community member commented on a local food stand: “The food stand just up there, you can get fresh vegetables and fruit” (Community member, Focus group). Participants expressed to the CK leader and researcher that they wanted to know “where to shop at other than the [local food co-operative], I mean I do a lot of farmer’s markets especially up here at the fruit and produce [stand]” (Community member, Focus group). In addition, community members expressed their satisfaction with the Grocery Outlet near the area:

Let me tell you something, that Grocery Outlet over here, they not playing but that’s because it’s been gentrified. I’ve seen so many name brand, organic stuff in that store. They had something there I knew that she could eat. There’s a lot of stuff you could buy in quantity like the granola bars and fruits and vegetables. [Their prices] are reasonable, a lot of their canned goods were very reasonable. [What] I would like there was maybe if they had their polish sausage, if they have the names that I know, but other than that ... I like to wash with arm and hammer because it has less dyes and other chemicals in it for

sensitive skin and [they have it for] 5 dollars for the 41 load and it's 13 dollars at Wal-Mart. [They] also have body care products, shampoos, lotions, the name brand organic kinds, third the price of the original. You can go in there and really save a lot and good quality for the money. (Community member, Focus group)

One community member's experience with WIC services in the area captures the circumstances of the setting for the kitchen in terms of the quality of some community resources and a community member's motivation to participate in the Family CK Project:

My experiences in the past with diet and food and basically with WIC they go into how many cups and portions and this and that this was a little more detailed as far as, no, we are going to show you we are going to help you learn how to cook healthier foods.

(Community member, Focus group)

The housing authorities were another community resource for community members in the area:

I would consider getting in touch with the housing authorities and seeing if you can work with them. They have an actual kitchen where they host events and so people can come and they are able to use the kitchen. You might [also] want to think about some of the teen clinics or Tree House they have at the YMCA upstairs where they teach the kids how to get ready to move into their house, they have a nice kitchen facility too.

(Community member, Focus group)

Community socio-economic status (SES) conditions. Socio-economic status facilitators and barriers to participation in the Family CK Project emerged as another major social-structural condition finding. One CK participant in a Family Community Kitchen Project group discussion highlighted the socio-economic state of new mothers in the area:

You have a lot of new moms or moms that are just struggling and if they are working during this hour. See we are just blessed to have the type of job where we can flex out some time and some people are just not in a place where they can. (Community member, Focus group)

For community members including Family CK participants, “struggling” often involved financial concerns, particularly when following a prescribed diet. One community member described her struggles with maintaining a gluten-free diet to manage her Celiac disease:

I was really excited about seeing you guys at the health fair because I’m just at the point now where I’m like, ‘I know this stuff but I’m tired and I would like for somebody to show me.’ I was happy to see you [at the health fair] because my money is real tight right now [with] Celiac disease. (Community member, Focus group)

Another participant commented on the quality of food on a limited budget:

The main staple in most folks homes that I know that money is an issue in buying food is Top Ramen because you can buy a lot of that and fill everybody up. It’s ten for a dollar and you don’t have to worry about anybody going hungry but where is the nutritional value in it? There’s none. (Community member, Focus group)

Community health conditions. Many participants made comments describing the health conditions of people in the community and the need to follow prescribed diets. For example, in response to a request for a diabetic menu by a community member during a group discussion: “Do you make [a menu] for diabetes?”(Community member, Focus group), another community member responded:

Maybe you have a family member or maybe you are pre-disposed [to diabetes] and African Americans, we're diabetic, so I would love a menu for diabetes because I have a dad and he is diabetic. (Community member, Focus group)

More generally, the CK leader, who was also a community member, observed that in her community disease is related to socioeconomic status and discriminatory practices:

There is higher diabetes, higher heart disease, more deaths from diabetes, and it is all related to your income and what you are exposed to and what companies will and will not go into that neighborhood [depending on] if they are going to profit there and so you have things like that where you have a really dirty store who has really cheap or old or kind of like half-okay products. (Leader, Focus group)

These comments highlighted the health conditions within which CK participants and the Family CK Project existed.

Social structural conditions such as community resources, community socioeconomic status, and community health conditions are facilitators and barriers of social relationship development from which social support provision arises. Findings in this study corroborate global CK study findings on social-structural conditions that surrounded the emergence of community kitchens in other countries. In the late 1970s, community kitchens in the cities of Callao and Lima, Peru, emerged during a time of increasing rates of poverty and hunger for the cities' low-income women and children as a consequence of rising rates of unemployment, income inequities, and gender inequities related to economic policy adjustments (Garrett, 2001; Hays-Mitchell, 2002; Immink, 2001). Like Peru, the Family Community Kitchen Project was organizing during a time of political and economic unrest in the United States marked by an economic recession, declining social capital, and high and increasing rates of hunger and food

insecurity (*National Coalition for the Homeless, 2011; Putnam, 2000*). In addition, the Family CK Project operated within a city with significant structural inequities in quality of food. Furthermore, high prices of fruits and vegetables were considered unaffordable for community members. These conditions and issues existed for the majority of Family CK participants despite the areas recent growth and influx of alternative food initiatives.

Cultural conditions. The participation of primarily women in the Family CK Project highlights the gendered context of food preparation in USA households. Gender role expectations were observed in group discussions between female and male participants. For example, in response to a question posed by the CK leader on whether or not macaroni and cheese was something participants would like to make in a future CK cooking session, one female participant reacted to her male partner by stating, “I knew he was going to look at me because that’s what [he and my son] always want me to make” (Community member, Focus group).

The geographical community environment in which the Family CK Project resided was characterized as multi-cultural by the CK leader during a group discussion on food preferences:

There are people in the community who don’t eat a lot of cheese and milk because that is not what their culture does. They want bugler wheat or they want corn tortillas or they eat tofu because we have a lot of different people in our area. (Leader, Focus group)

Some Family CK participants held strong beliefs about how foods should be prepared and paired. During one group discussion, a participant shared, “If you ask me every time we eat fried chicken we always have macaroni and cheese, goes hand in hand” (Community member, Focus group). At other times, some cultural diversity was noted through favorite foods shared during group discussions:

I have a couple favorite meals, one is lasagna, and I make it with turkey and spinach, you know all that good stuff, but it's always homemade, my kids really like it. (Community member, Focus group)

One of my favorite things to make is teriyaki. I like to make the sauce from scratch and then have it in the fridge so I can make quick easy meals and it can be a lot of things. I could marinate chicken or I could marinate beef if I wanted and make stir fry or I could just you know put it on sauce over rice so I like to make teriyaki sauce and teriyaki foods. (Leader, Focus group)

Similarities in food preferences were an important motivator for participating in collective kitchens with other Latin American women in Fernandez's (1996) dissertation on a community kitchen group in Canada (p.132). The Family CK while homogenous in demographics displayed a range of food preferences between participants. These preferences challenged the CK leader's ability to find a common dish that everyone would enjoy.

Beliefs and project goals. A diversity of beliefs, perceptions and goals regarding the Family Community Kitchen Project were held by community members, the CK leader, and the researcher. CK participant beliefs and project goals also captured the circumstances that formed the setting for kitchen development and the terms in which it can be fully understood and assessed. According to Nils Nilsson's (2013) thesis on understanding beliefs, there are two main ways we create our beliefs: (a) by using all of our senses, and (b) by inventing explanations for what we already believe. Many of the participant beliefs described in the following paragraphs can be understood within this framework and previously described social-structural conditions.

Community members often shared their beliefs about the Family Community Kitchen Project during group discussions. For example, in response to the group discussion question,

“What comes to mind when you hear the words community kitchen?” (Leader, Focus group), one participant responded:

I did this dining room table with flowers and that was a picture of me bringing family together, working in the kitchen in spring with [my] kids and during the holidays and everybody [is] together. I thought this year that this is really something for [my sister] to get together so that this year me and my mom might make stuff good for [my sister] as well as we can eat it ourselves and introduce it to our kids. I thought that this would be a fun thing, that’s what I [think] the kitchen [is]. Flowers are just beautiful to me so I always put that in the room with family. (Community member, Focus group)

Another community member described the CK as a place that brings people together:

[A] community kitchen [is] where people come together to make healthy meals. I think it brings the community together and they’ll become healthier by eating healthier meals. (Community member, Focus group)

These beliefs contributed to shaping the CK Project structure, group structure, and group social relationship characteristics and dynamics for social support provision.

Beliefs and perceptions held by the CK leader and the researcher also contributed to shaping the CK Project structure for social support provision. For example, the CK leader’s beliefs on food and food practices were described in her funding proposal and served to facilitate a CK structure that connected people through food:

Food is the one common thread that weaves through all our lives. Eating is a basic need we all face and throughout history has shaped the cultures of people around the world. (Leader, Document)

In addition, during Family CK Project group discussions the CK leader described her and the researcher's beliefs and perceptions regarding the term 'healthy':

The idea of healthy, really it trips people up, and actually it's something that [the researcher] and I very specifically tried not to ever even use that word 'healthy' because everybody is going to have a different idea of what healthy means and to me healthy doesn't mean bland [food] just because I, I try to make my food as healthy as possible to my standards and it's flavorful because I don't want to eat bland food. (Leader, Focus group)

Long term CK Project goals were outlined by the CK leader in her grant proposal and included her beliefs about low income family food security and health status: "[This project will] address the issues of food security and diet-related chronic disease prevention for low income families with few resources and support systems" (Leader, Document). Short term goals or project outcomes and project outputs were outlined in the family CK grant proposal and included food access, skill development, and social network expansion beliefs:

Through their involvement in community kitchens, participants will increase access to healthy foods by cooking and eating balanced meals together. They will enrich their cooking and meal planning capacity by having guided cooking stations following healthy recipes with input from both a nutritionist and experienced cook. Lastly, they will foster social networks by interacting and connecting with their fellow neighbors (Leader, Document).

In addition, the CK leader also expressed her beliefs about evaluation:

Data collection [including: surveys, detailed notes and participant feedback] will be used for assessment and evaluation of the community kitchen as a tool for enhancing public health, increasing food security, and limiting social isolation (Leader, Document).

As outlined by the CK leader:

[Evaluation] would [also] refine the methodologies needed to replicate the [Family CK] model successfully throughout the city. Once assessed and evaluated, our greater coalition will use the model as a training resource (Leader, Document).

Tarasuk and Reynolds (1999) and Fernandez (1996) found that the purpose or goals of the kitchen, whether it was to gain cooking skills, enhance household resources, or provide emotional support for participants, significantly shaped both the structure and outcomes of the group. For example, kitchens designed to help participants meet their food needs for food security met twice a month and pooled resources and labor to cook large quantities of food to take home. It is in these types of kitchens where significant changes were seen in household food resources as a result of participation (Engler-Stringer & Berenbaum, 2007) as compared to other type of kitchens. In another example, kitchens that aimed to provide participants with social recreation and support were structured to meet periodically to prepare and consume a single meal together. In these community kitchens, emotional support was a major reported outcome for participants (Tarasuk & Reynolds, 1999). While community kitchens only appeared to focus on one strategy for food security and health promotion, Tarasuk and Reynolds (1999) found that in all community kitchen formats studied, side effects of developing cooking skills, gaining food resources, and/or providing emotional support for participants seemed to occur, though varying in degree based on focus of the program.

Staples (2004) and other organizational researchers have noted that planned project goals often reflect the project philosophies or beliefs of the CK leader [and researcher] and, in this project, serve to shape project activities, group structure and group relationship characteristics for social support provision. To date, the impact of CK participant beliefs on CK project and group structure and relationship characteristics, and social support provision have not been well explored in the CK literature. However, the program evaluation literature suggests that assumptions and values have a significant impact on both the structure of the program and program outputs, outcomes, and impacts (Raymer, 2009). Beliefs or philosophies can influence the success of projects in reaching their goals as long as approaches, strategies and tactics are congruent with these beliefs (Staples, 2004). In the Family CK Project, collective, inclusive and community building beliefs of project participants served to facilitate the success of community kitchen collective and community building activities in providing social support and developing social support networks for participants. This orientation is a group strength of the Family CK.

Project partners, resources and policies. Shortly after funding was secured for the Family CK Project, the CK leader and members of the CK coalition steering committee formed a Family Community Kitchen Project steering committee. This committee included partners from the Public Health Department, the local WIC office, Parks and Recreation, the CK coalition, local universities and community colleges, and the Family Community Kitchen Project leader. Project partners assisted in CK planning, additional partnership development, community kitchen participant recruitment, and project evaluation and improvement over time. Additional partnerships developed throughout the Family Community Kitchen Project included food partners such as local markets, nonprofit food organizations and distributors, local farms, as well as local community organizations and culinary school partnerships.

Drawing on assets from project partnerships is key to the success of any project. Resources available to the CK leader, researcher, and community members in the Family CK Project included: print materials, food, volunteers, childcare, kitchen equipment, money, community center facilities, office supplies, audio recorders, credit, gift cards, and community shops. Through a partnership with a local food co-operative, the community kitchen leader was able to buy food on credit for the CK and pay for it when funds were released from the funding sponsor. This enabled the CK leader to purchase food in advance of sessions. In addition, the provision of childcare by the community center was another asset that enabled community members to participate in the CK. Additional resources came in the form of participant monetary contributions through \$5.00/session participation fees.

Family CK analysis also revealed that, at times, resources were cut from partnerships developed for the Project. For example, budget constraints during the economic recession forced the community center to cut its funding of CK Project childcare. In Peruvian community kitchens supported by the government, receipt of resources was tied to votes (Garrett, 2001). Once the incoming party won, government aid was often withdrawn or reduced for community kitchens (Garrett, 2001). However, CKs in Peru that incorporated as non-profits experienced a smoother process by receiving aid from nonprofit organizations and avoiding government party co-optation (Garrett, 2001).

Policies proposed by project partners and the Family CK Project steering committee were also instrumental to the ability of the Family CK Project to provide social support to participants. Policy development was initiated by the CK leader and researcher prior to initiation of the Family Community Kitchen Project. The principles of action proposed by the CK leader, researcher, and project partners that affected participation included policies and guidelines on:

childcare, clean-up, payment, food safety, and illness. Special effort was made by the CK leader to make sure everyone abided by food safety rules while orienting participants to the kitchen. Policies were also found to evolve over time in the Family CK Project. At one point, the CK leader proposed a policy pertaining to registering for the kitchen in advance at the end of a group discussion:

I should clarify please don't bring people without letting me know because I do get the ingredients ahead of time and the hard thing is that if I do get more people than I [am anticipating] than everybody just gets less food and I mean for five bucks I think whatever you go home with is still pretty well worth it because you are also eating dinner but that is definitely something that has been challenging. Registration is pretty touchy I need to know exactly how many people. (Leader, Focus group)

The Family CK Project also abided by community center policy hours such as those for opening and closing the facility.

Group discussion policies and procedures regarding participation were outlined before every group discussion session as follows:

If you want to follow up on something that someone has said, you want to agree, or disagree, or give an example, feel free to do that. Don't feel like you have to respond to me all the time. Feel free to have a conversation with one another about these questions. I am here to ask questions, listen, and make sure everyone has a chance to share. We're interested in hearing from each of you. So if you're talking a lot, I may ask you to give others a chance. And if you aren't saying much, I may call on you. We just want to make sure we hear from all of you. Please remember to listen and be respectful of others when they are voicing their opinions. (Researcher, Document)

Garret (2001), in his study of community kitchens in Peru, found that CKs that implemented a rule of only accepting participants from the area in which the CK was located increased the effectiveness of the kitchen that depended on people coming to the kitchen to work.

While some Family CK policies created reflected the needs of CK participants, outside policies such as those of the community center hours of operation restricted the amount of time the Family CK participants had to come together and prepare food. This policy was not congruent with participant needs as noted by one CK community member during a group discussion on CK project improvement: “I think that maybe and I mean it’s hard because I have to work and maybe I think we actually need more time. I would personally like to do it on a Sunday” (Community member, Focus group).

The impact of CK project partners, resources, and policies on the development of social ties for social support provision should be considered in analyses of the effectiveness of CKs on downstream outcomes such as social support provision, dietary behaviors, and food resources. Authors suggest that these three factors impact both the structure of projects and project outputs, outcomes, and impacts (Butterfoss, Kegler & Francisco, 2008; Raymer, 2009; Staples, 2006). Project partners, resources, and policies have important implications for the success of projects in reaching their goals.

Upstream facilitator and barrier summary. In summary, social-structural conditions such as community resources, community health conditions, cultural conditions, city disparities, beliefs, project goals, and project partners, resources, and policies influenced the development of social ties for social support provision in the Family CK Project. The Family CK Project operated within a city with significant structural inequities in quality of food and grocery stores. Furthermore, high prices of fruits and vegetables were considered unaffordable for community

members. These conditions and issues existed for the majority of Family CK participants despite the areas recent growth and influx of alternative food initiatives. In addition, the Family CK while homogenous in demographics displayed a range of food preferences between participants. These preferences challenged the CK leader's ability to find a common dish that everyone would enjoy.

In the Family CK Project, collective, inclusive and community building beliefs of project participants served to facilitate the success of community kitchen collective and community building activities in providing social support and developing social support networks for participants. This orientation was a strength of the Family CK. In addition, the ability of the CK leader to develop key partnerships with many community resources and secure assets from project partnerships was key to enabling the facilitation of social support provision in the CK. In the future, it might be important for CKs to incorporate as a non-profit to avoid government spending cuts. It is also important to ensure that both Family CK Project policies and outside policies reflect the needs of the community members they serve. This will require active involvement in local policy development.

To date, the impact of social-structural conditions on CK group structure or relationship characteristics and social support provision have not been well explored in the literature. This study highlights that these factors have important implications for the success of projects in reaching their goals.

Mid-Stream Major Facilitators and Barriers Themes in Project Structure

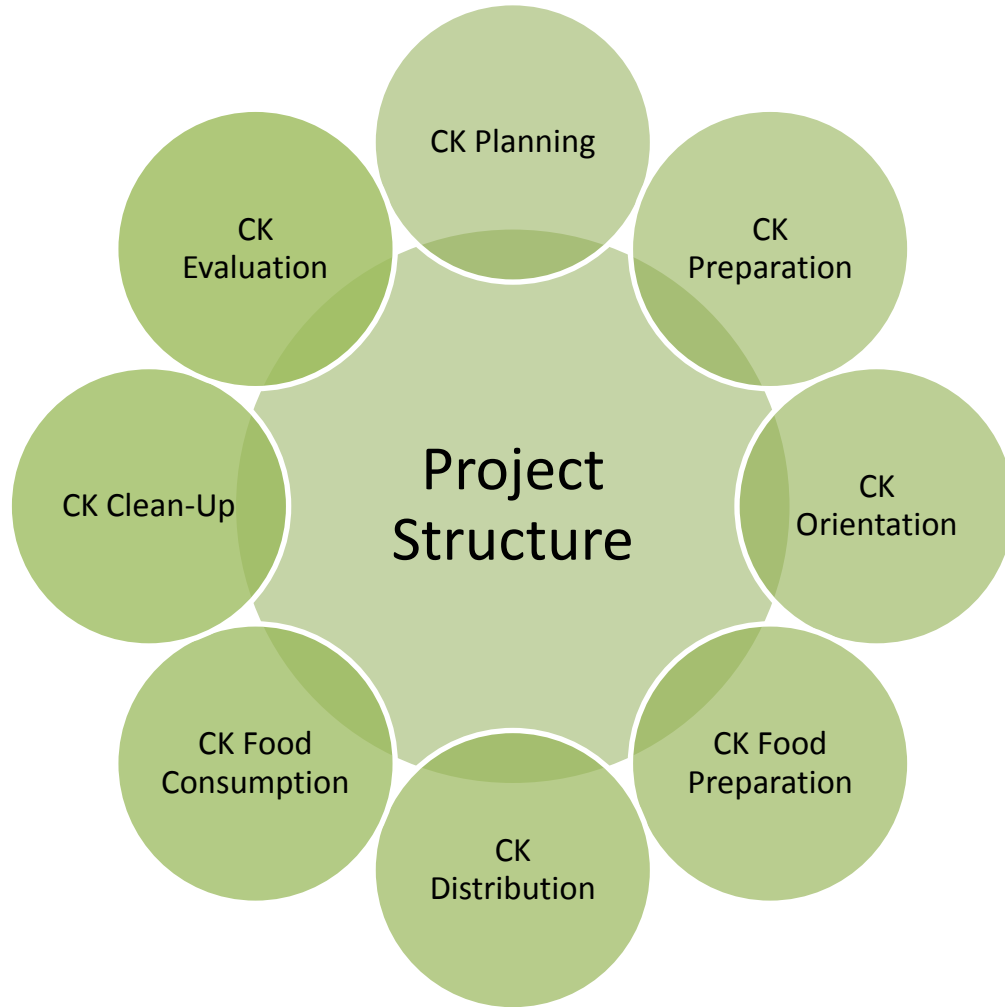


Figure 22. Major Project Structure Themes identified in the Family CK Project

Project structure emerged from an analysis of the Family CK Project as the second major category of facilitators and barriers to social support provision in the project. This type of social support provision facilitator and barrier includes analysis findings that capture the detailed description of the content of the project. Eight major themes surfaced from the data related to project structure components. These included: CK Planning, CK Preparation, CK Orientation,

CK Food Preparation, CK Distribution, CK Food Consumption, CK Clean-up, and CK Evaluation (Table 12). These components are described in further depth below.

CK planning. CK Planning format involved both the CK leader and researcher and occurred at home as well as in group discussion and food consumption activities. The duration of time spent planning is unknown but occurred every month prior to a session activity. Planning topics found in the data included session objectives, food quantity, education, recruitment, program policy, partnerships, evaluation, CK flow, kid activities, session timing, participant equipment, menus (food like/dislike), kitchen equipment, needs questionnaire, data analysis, group discussion tools, observational tools, fundraising, budgeting, and survey tools. The goal of this activity was to plan for upcoming CK activities. Planning was facilitated through tools such as structured reflection guides, phone calls, and in-person group discussions, for example.

Marquis et al. (2001) also found that group discussions were used to assess participant goals, expectations, needs, preferred method of cooking, and what they could contribute to the program. This information was used throughout the program, and subsequent group discussions reviewed whether or not goals were being met and ideas for improving the program (Marquis et al., 2001, p.131). Furthermore, Crawford and Kalina (1997) found that CK participants held meetings where they came together to establish rules and plan menus for the upcoming CK session (p.198).

Planning for homogeneity of groups also occurred in some CKs studied (Engler-Stringer, 2005; Fernandez, 1996). For example, Engler-Stringer (2005) found that there was one group of low-income individuals who all worked full-time. They had individually contacted an organization that helped place people in community kitchens. Their specific requirements (lack of availability during the day) resulted in these participants being placed together. Planning, in

this case, resulted in a specific group structure that influenced group relation characteristics and social support provided.

CK preparation. CK Preparation format involved the CK leader, recipe leads and volunteers, the researcher, and community members. The bulk of preparation occurred out in the field such as shopping for food prior to the CK, and in the community center kitchen, where food was pre-prepared for food preparation by recipe leads and volunteers, and the CK leader and researcher. Preparation activities found in the data included checklists, room set-up, data collection training, recruitment, pre-food preparation, reminders, food preparation station set-up, volunteer introductions, equipment preparation, food unloading, equipment unloading, paperwork, dining preparation, distribution preparation, volunteer orientation, childcare preparation, menu shopping, equipment shopping, and printing handouts. The goal of this activity was to prepare for upcoming CK activities. Pre-preparing food for the community kitchen participants before they arrived reduced the amount of time in food preparation and enabled participants to socialize and learn while cooking. Preparation was facilitated through division of tasks, shared kitchen set-up, food preparation stations, preparation leaders, and preparation facilitators.

During pre-food preparation, people were often noted conversing with each other about their day, what they did for Halloween, and what they were preparing. Preparation activities provided an additional time for social relationship-building. Crawford and Kalina (1997) also reported that preparation activities such as shopping for food occurred as part of the community kitchen program structure.

CK orientation. The goal of CK Orientation was to orient participants to the community kitchen. This included familiarizing participants with the evening's activity and its purpose, and

creating a comforting and welcoming setting. Orientation also provided an additional opportunity to teach about nourishment and to collect participant feedback. Orientation for community members to: the kitchen and the building, learning objectives, the layout of each cooking station, and recipe leads began right after community kitchen participation sign-in. Participant questions and concerns were answered by the leader during orientation and then participants divided up into cooking stations. Education on preparation methods and foods to use in cooking was often given by the CK leader during orientation. Orientation lasted an average of fifteen minutes before group food preparation and cooking began. The CK leader familiarized recipe leads and other volunteers with the evening's recipes and learning objectives prior to community member arrival. Informal education often occurred between recipe leads on what foods were being used, their cultural significance, and preparation techniques. Participant orientation as a component of community kitchens has not been described in the previous CK literature to date.

CK food preparation. Hands-on food preparation occurred in the community center kitchen after orientation was complete. This activity involved all CK participants and lasted approximately one and half hours. The goal of food preparation was for participants to successfully prepare and cook food together. To carry out this goal, participants were arranged in stations with one CK recipe lead per station, with each station focusing on specific aspects of a recipe (or a whole recipe). Food preparation often followed a prescribed sequence created by the CK leader. For the stations listed in the table that follows, meal creation followed specific steps by station (Table 11).

Table 11. Sample Station Food Production Sequences

Kitchen Stations	Station 1:	Station 2:
	1. Season and Roast Red Peppers	1. Season Sweet Potatoes/Potato Fries
	2. Boil Chicken Pasta Salad noodles	2. Cut chicken pasta salad vegetables
	3. Begin mixing Salad Dressing	3. Mix muffin wet ingredients
	4. Chop Apples	4. Cut onions for chicken enchiladas
	5. Begin Chicken Enchilada filling	
	6. Mix muffin dry ingredients	

At each station, written recipe instructions were provided to participants to facilitate food production. Meals produced often included both familiar and unfamiliar items and food preparation techniques, as well as, in-season items and items on WIC. Consideration was also given to food cost, participant preferences, the healthfulness of foods, food variety, and participant dietary restrictions.

The leader and researcher provided overall support for participants during the cooking session. They often answered questions, located needed equipment and ingredients, washed dishes, and/or cut up, mixed, and baked foods when needed. Community members were often observed talking, sharing, and laughing together during food preparation. Community members were also noted listening while recipe leads and the CK leader provided education on recipe preparation, special diets and disease processes, and different types of foods being used. This informal education occurred within individual stations.

The way in which CK food preparation was arranged facilitated or constrained the exchange of social support between participants. For example, Tararsuk and Reynolds (1999) found that in community kitchens with a cooking skill focus, groups gathered to watch individual members demonstrate the preparation of one to two dishes. Participation in these cooking

sessions was limited to minor roles, such as opening a can, and thus constrained the exchange of social support between participants. Full participation in meal creation was noted in the Family CK Project which might have enhanced the exchange of social support between participants.

CK distribution. CK distribution of food, education materials, and kitchen equipment occurred during the monthly CK preparation, food preparation, and food consumption activities. Distribution was conducted by all of those involved in the CK Project including recipe leads, the CK leader, the researcher, volunteers, and community members. Distribution boxes for participants were set up in the multipurpose room and served as receptacles. Special care was taken to label items and food boxes and distribute items equitably among community members. Distribution was a team effort and often occurred in an assembly line fashion.

CK food consumption. CK food consumption involved all CK Project participants and their families and occurred in the community center multipurpose room. Tables and chairs were placed in the middle of the room for dining. Food consumption followed food preparation and distribution. Dining time varied, but ranged anywhere from thirty minutes to one hour. Sometimes food was distributed by the CK leader or researcher during food consumption, but usually the finished food was set up on a buffet table near the dining tables, and participants were free to help themselves as they pleased. During food consumption, the CK leader often facilitated discussions on food composition, food justice, menu planning, program feedback, future participation, and nutrition, and provided time for participants to share what they learned with each other. Participants conversed freely and discussed a wide variety of topics ranging from their place of birth to how the food tasted. The overall goals of food consumption were to eat together, socialize, debrief, plan and share.

Tarasuk and Reynolds (1999) found that communal dining enabled participants to work together and socialize informally. Kitchens that focused primarily on consuming a meal together were seen as a primary mechanism of social recreation and emotional support for participants (Tarasuk & Reynolds, 1999, p.13). A search of the lay literature found that communal dinners were also used as a time to gather participant feedback on the food made in the CK and generate ideas of what to make for the following CK session.

CK clean-up. Clean-up occurred in the community center kitchen, dining area, and childcare space. It occurred throughout food preparation, food consumption, and post-food consumption while participants were exiting the CK. Most CK participants assisted in clean-up by washing, drying and putting away dishes; wiping down tables; sweeping floors; picking up toys; or putting away chairs and tables. The community center staff also assisted CK participants in clean-up activities. The CK leader, researcher, and volunteers often stayed late to do the final touches after community members were gone. To thank volunteers for their time, they were given food to take home. Some equipment and food was stored at the community center, other food and equipment was packed up and taken home by participants. During the final clean-up, the CK leader and researcher debriefed on how the CK went, and feedback was elicited from the recipe leads and volunteers for program improvement. CK clean-up has not been described in other CK studies to date but provided another important opportunity for social support exchange and relationship-building between CK participants.

CK evaluation.

In the case of the Family CK Project, research methods were incorporated as project components and served as project structural influences to social support provision for participants. These methods are described below and should be considered in this case as project

components or activities. The incorporation of informal research methods into community kitchen manuals as part of the program or project can be found in the lay literature on community kitchens (Spokane Regional Health District, 2012; Lowitt, 2011).

Group discussion. Group discussions occurred in the community center multipurpose room before the first cooking session and after the third cooking session. Facilitated by the CK leader and researcher, each lasted approximately two hours. The first group discussion occurred during lunch on a weekday, and the second group discussion occurred on a weekday afternoon. A question guide was created before each discussion to help facilitate conversation in the group (See Appendix B for full list of pre- and post-focus group question guides).

Upon entry into the community center multipurpose room, introductions were made and community members were asked to sign in and consent to group discussion participation. Any questions or concerns were answered at this time. Community members and their children then proceeded to a buffet table where a meal was provided free of charge. After eating, children went into an adjacent room with childcare attendants. Tables and chairs for the group discussion were arranged in a circle with a name card in front of each participant.

The group discussion was audio-recorded to ensure all voices were heard and began with an introduction of the purpose and structure of the discussion and a brief background on the CK leader and researcher. An icebreaker question asking participants to state their name and a favorite food they liked to make at home started off the discussion. Upon CK group discussion closure, additional open feedback and questions were elicited, and the community members were thanked for their time. Krueger and Casey (2000) found that qualities of a good questioning route in focus groups included an easy beginning, followed by questions that naturally flow from one to the other, that move from general to specific, and that are clear and well thought-out (p. 42-

43). Additionally, drawing a picture helps participants collect their thoughts and explain how they see a concept or idea (Krueger & Casey, 2000, p. 53). The way in which the CK group discussion was arranged facilitated the exchange of social support between participants. At the end of the group discussion, Safeway gift cards of \$10 each were distributed to the participants as a token of appreciation for their time. Most participants helped clean the dishes, and volunteers and the CK leader put away the tables and chairs.

At the end of the group discussion, the CK leader and researcher debriefed on what they heard in the group discussion and how effective the questions were. In addition, the group discussions were transcribed by the researcher, coded, and given to the CK leader with a brief summary of pertinent findings for program development. This assisted the CK leader in ongoing CK cooking session planning and development over the three-month session.

Questionnaire. The way in which the CK questionnaire was arranged structured its ability to facilitate social support provision goals between the CK leader and community members. Questionnaires were administered on a table after informed consent was received, typically in the multipurpose room of the community center. A familiar administration setting aimed to increase study participants' comfort while filling out the questionnaire. Questionnaires were administered to coincide with the CK cooking sessions, occurring during the sign-in period prior to the session orientation. During this time, sign-in information, childcare information, photo consent for the program, and payment were also collected. Administration was staggered, dependant on the arrival of participants to the community center. Participants were handed research consent forms and provided with a verbal introduction to the questionnaire by the researcher.

After consent was received, the researcher handed participants a copy of the questionnaire with a cover sheet that provided directions for completing it. In-person

administration assists in a high response rate and the ability to correct misunderstandings (Gillham, 2008, p. 59). The questionnaire consisted of ranking, ordering, and multiple choice questions. Closed questions are a more efficient way of posing the question and less trouble to answer (Gillham, 2008, p.37). The average time needed for completion was ten minutes. Gillham (2008) found that ten minutes is a tolerable maximum of time to expect someone to spend on a questionnaire (p. 55).

Both a pre-session questionnaire, which took place prior to CK cooking session participation, and a post-session questionnaire, occurring after completion of at least one CK cooking session, was administered. Structured questions included assessment and satisfaction of needs, health and food behaviors, demographics, and demand. Answers provided direct informational and appraisal support to the CK leader and researcher for program development. Gillham (2008) reported that questionnaires can yield information about people, what people do, and what people's opinions are on a subject (p. 2).

Observational reflections. The goal of observational reflections was to facilitate project reflections and improvements over time. Observational findings were discussed between the CK leader and researcher after group discussions. During this time, they reflected on a diversity of knowledge and skills held by group discussion participants and any surprising and significant topics of discussion that emerged in the group. The researcher also provided the CK leader with appraisal support. "The researcher told [the CK leader] she did awesome" (Researcher, Field note). In addition, observational reflections increased CK leader self-awareness: "[I] jumped right in forgot to introduce [myself]" (Researcher, Field note) that led to improvements in facilitation of group discussions over time. Direct observational logs such as: participation rates, expense and payment logs, and foods consumed and distributed logs, were captured by the

researcher and exchanged with the CK leader for additional reflective planning and program improvement purposes. Observations facilitated the reflection of the CK leader and researcher on how the program was going for community members and areas for improvement and discussion between sessions. In addition, the arrangement of the CK observational reflections facilitated the exchange of informational and appraisal social support between the researcher and CK leader.

This is the first study to examine research methods as a component of the community kitchen and as a facilitator or barrier of CK outcomes. The lay literature on community kitchens suggests that community kitchen programs often implement informal research strategies into their program to ensure the program is meeting the needs of participants and to improve the program over time.

Midstream Facilitators and Barriers Summary. In summary, the Family Community Kitchen Project had eight main structured activities that emerged during data analysis: CK planning, CK preparation, CK orientation, CK food preparation, CK distribution, CK food consumption, CK clean-up, and CK evaluation (group discussions, observational reflections, and questionnaires). Observational results for activities, activity goals, and activity formats are summarized in Table 12. These activities were laid out strategically to achieve activity goals and broader project goals of “addressing the issues of food security and diet-related chronic disease prevention for low income families with few resources and support systems” (Leader, Document). Most activities occurred once a month at or around the community center in which the Project took place.

Table 12. Themes in Family Community Kitchen Project Structure

Theme	Goal (Why)	Format
CK Planning	To plan for upcoming CK activities	<p>Who: CK leader, researcher Where: Home, community center, during group discussion, food consumption activities When: every month prior to a session activity Duration: unknown What: session objectives, food quantity, education, recruitment, program policy, partnerships, evaluation, CK flow, kid activities, session timing, participant equipment, menus, kitchen equipment, budget, needs questionnaire, data analysis, group discussion tools, observational tools, fundraising, budgeting, survey tools. How: Planning was facilitated through tools such as structured reflection guides, phone calls, in-person group discussions. Social Exchange Present? Yes</p>
CK Preparation	To prepare for upcoming CK activities	<p>Who: CK leader, volunteers, researcher, community members Where: in the field; in the community center kitchen, community center multipurpose room When: each month Duration: Community Center preparation: average of 2 hours Home and outside preparation: unknown What: Checklists, room set-up, data collection training, recruitment, pre-food preparation, reminders, food preparation station set-up, volunteer introductions, equipment preparation, food unloading, equipment unloading, paperwork, dining preparation, distribution preparation, volunteer orientation, childcare preparation, menu shopping, equipment shopping, printing handouts. How: Division on tasks, shared kitchen set-up, food preparation stations, preparation leader, preparation facilitators Social Exchange Present? Yes</p>
CK Orientation	To orient participants to the community kitchen.	<p>Who: CK leader, researcher, volunteers, community members Where: in the kitchen at the community center When: 6:45 p.m. to 7 p.m., immediately prior to food production activity Duration: 15 minutes What: Sign in and money collection, name tags, childcare drop-off, volunteer orientation, How did the food taste? feedback, education, introductions, question and answer, feedback, choose stations How: orientation leader, orientation facilitator Social Exchange Present? Yes</p>
CK Food Preparation	To successfully prepare and cook food together.	<p>Who: CK community members, Ck leader, researcher, volunteers Where: community center kitchen When: once a month, after CK orientation activity Duration: 1hr 30 minutes What: Hands-on cooking/assembly, familiar and unfamiliar foods, cooking activity for children How: Participatory, hands-on production, recipe instructions, childcare, stations, cooking leader, cooking facilitators, buffet snacks Social Exchange Present? Yes</p>
CK Distribution	To distribute food, recipe packets and fliers to participants.	<p>Who: Community members, CK leader, researcher, family members, volunteers Where: community center kitchen and multipurpose room</p>

		<p>When: during and post food production activity</p> <p>Duration: 50 minutes</p> <p>What: Print Reminders, Print Partnership Information, recipe packets, prepared and unprepared foods</p> <p>How: Food distribution facilitator, kitchen equipment, food storage, food item labeled, assembly line, boxes labeled by name</p> <p>Social Exchange Present? Yes</p>
CK Food Consumption	To eat together, socialize, debrief, plan and share.	<p>Who: Community members, CK leader, researcher, family members, volunteers</p> <p>Where: multipurpose room and everyone sat at the main table</p> <p>When: Post CK food production, distribution</p> <p>Duration: thirty minutes to one hour</p> <p>What: Eat, debrief, dinner discussion, education</p> <p>How: Participatory, food consumption facilitator, food distribution service and buffet dinner, eat as a family</p> <p>Social Exchange Present? Yes</p>
CK Clean-Up	To clean up community kitchen areas.	<p>Who: Community members, CK leader, researcher, family members, volunteers</p> <p>Where: community center kitchen and eating room and childcare room</p> <p>When: It occurs throughout the food production and on into dinner, after and during</p> <p>Duration: over 3 hour time period</p> <p>What: Clean counters, clean childcare room, clean kitchen, clean multipurpose room, clean tables, tables and chairs break down, sweep, food storage, packing up car, debriefing</p> <p>How: Participatory, clean-up facilitators, washing dishes during food production, washing dishes after everyone is gone</p> <p>Social Exchange Present? Yes</p>
CK Evaluation		
<i>Group Discussions</i>	To assess participant needs, expectations, concerns, outcomes of participation, and ideas for program improvement.	<p>Who: Researcher, CK leader, community members</p> <p>Where: community center multipurpose room</p> <p>When: Pre-post group discussions at first and third months</p> <p>Duration: ~ 2hours</p> <p>What: Pre-Post Structured Questions, Pre-Post Group Discussion Guide, Focus Group Question Field Note Guide, Focus Group Question Summary</p> <p>How: Sign in, name tags, provide a meal, childcare drop-off, consent for participation, facilitator, audio recording, introductions, icebreaker, closure statements, group summary, Safeway gift card, clean-up, data management</p> <p>Social Exchange Present? Yes</p>
<i>Questionnaires</i>	To explore participant demographics, needs, confidence in cooking skills, and food practices	<p>Who: Researcher, community members, CK leader</p> <p>Where: community center childcare room, community center multipurpose room</p> <p>When: each month, prior to cooking session.</p> <p>Duration: ~30 minutes prior to food preparation, 10 minutes to complete</p> <p>What: Introduction, question instructions, consent, coversheet, structured questions</p> <p>How: In-person, paper administration, staggered administration. Questionnaire Facilitator. 1 page, double sided. pre-post participation questionnaires, data management, questionnaire field note</p> <p>Social Exchange Present? Yes</p>

<i>Observational Reflections</i>	To facilitate project reflections and improvements over time	Who: Researcher, CK leader Where: CK activities When: Throughout 3 months Duration: 2 hours What: Survey observations, FG observations, CS observations, direct observations, participatory observations How: Dictation – audio, written, typed Social Exchange Present? Yes (Limited to CK leader and researcher only)
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Other community kitchen authors have also described community kitchen formats as including activities such as food preparation, food consumption, menu planning, and food shopping aimed at reaching program goals of food security and health promotion (Crawford & Kalina, 1998; Marquis et al., 2001; Milligan, 2010; Tarasuk & Reynolds, 1999). Tarasuk and Reynolds (1999) composed observed CK formats into three separate groups: collective kitchens, communal meals programs, and cooking classes. They described collective kitchens as kitchens “characterized by the pooling of resources and labor to produce large quantities of food” (Tarasuk & Reynolds, 1999, p. 13). Communal meal programs were defined as places where some or all participants cooked a single meal and ate together (Tarasuk & Reynolds, 1999). Cooking classes were characterized by larger groups (~20 people) where participants played a supportive role while teachers demonstrated cooking skills (Tarasuk & Reynolds, 1999). Fernandez’s (1996) three abstractions of community kitchens describe the importance of kitchen formats. Her abstractions emerged from participant reflections with the purpose of encouraging the development of the potential of community kitchens along an empowerment continuum and not as a way to classify them. These abstractions are described in the following paragraphs and a discussion on the Family CK Project location within these formats follows.

Format 1. These kitchens focused on technical aspects such as cooking nutritious food within a budget (Fernandez, 1996, p.129). Fernandez (1996) reported that these kitchens faced

challenges in developing quality relationships among participants and could encourage competition for resources among participants rather than collaboration and friendship (p.133).

Format 2. The second format described community kitchens that balanced a focus on both technical and nontechnical concerns, such as development of quality relationships (Fernandez, 1996). When the kitchens moved beyond a dominant concern with cooking to economize, gains were made in improving quality of relationships, such as learning to deal with difficult situations in a respectful manner (Fernandez, 1996, p.135).

Format 3. Beyond both technical and friendship development, political/critical kitchens emerged as the third format (Fernandez, 1996). These kitchens focused on increased consciousness and reflection about the purpose of the kitchen through knowing personal stories in relation to other participant stories (Fernandez, 1996). Increasing personal awareness was suggested by Fernandez (1996) as the beginning of a critical orientation for members and could result in taking action. Social consciousness is often the first step in building social relationships across diverse social locations.

Both Fernandez (1996) and Tarasuk and Reynolds (1999) kitchen formats and abstractions suggest that project structures have important implications for shaping group structure and relationship characteristics and dynamics, social support provision, food security and health outcomes, and social network building for social integration, social capital and further social support exchange. The Family Community Kitchen Project is located between Format 2 and Format 3 of Fernandez's (1996) abstractions. The project had components of all three formats as described by Tarasuk and Reynolds (1999). In the beginning, the kitchen leaned more towards what has been described as a collective kitchen. Over time, an emphasis on communal dining and relationship building became most prominent in the kitchen. Aspects of this Family

Community Kitchen Project location are described further in the remaining section of this chapter.

Downstream Major Facilitators and Barriers Themes in Group Structure.

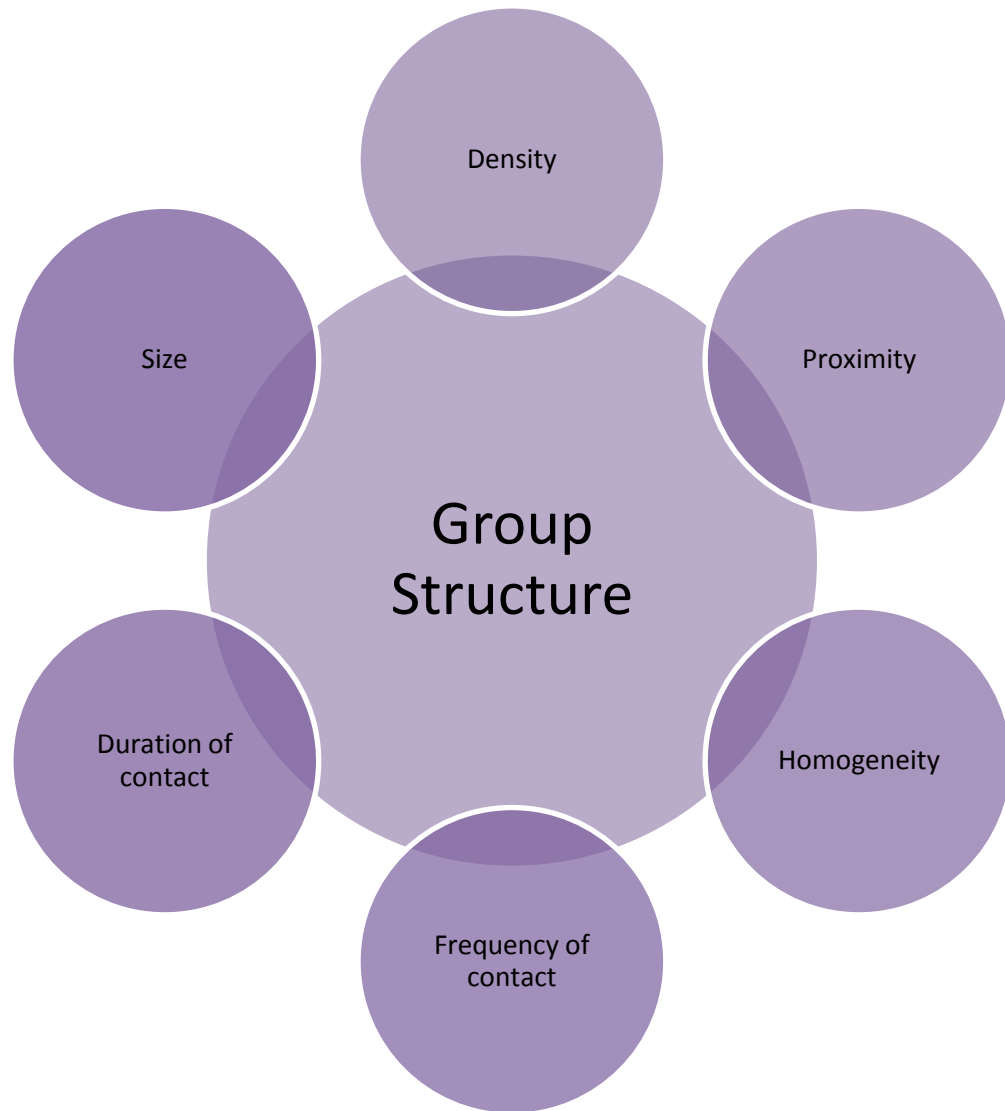


Figure 23. Major Group Structure Themes identified in the Family CK Project

The third major category of facilitators and barriers to social support provision that emerged from an analysis of the Family CK Project was group structure. This type of social support provision facilitator and barrier includes analysis findings that capture characteristics of

the group (Berkman & Glass, 2000; Heaney & Israel, 2008, p. 191; Wheelan, 2005). Several major themes emerged from the data related to group structure. These included size, homogeneity, proximity, density, frequency of contact, and duration of contact (see Appendix G for thematic definitions).

Homogeneity. Homogeneity includes analysis findings that capture the extent to which members are similar in terms of demographic characteristics (Heaney & Israel, 2008, p. 191). Demographic questionnaire results (Table 4, 5) demonstrate that the Family Community Kitchen Project was primarily composed of mothers with children and those who identified as African American. Almost half of the participants received WIC food vouchers. Mothers and low-income families have been previously described as the largest groups of community kitchen participants in Canada and Peru (Crawford & Kalina, 1997; Ripat, 1998; Immink, 2001; Milligan, 2010). A small minority of men participated in the Family Community Kitchen; this was also consistent with other CK study findings (Engler-Stringer, 2005). To date, few community kitchen studies have reported on the demographic characteristics of the researchers or leaders of community kitchen groups.

Proximity. Proximity includes analysis findings that capture the "extent to which network members are located near each other" (Heaney & Israel, 2008, p.191). Family CK data analysis findings revealed that most participants were located in the same or a neighboring zip code to the site of the community kitchen (Table 4, 5). Seventy percent of participants resided in the southern part of the city where community kitchen activities were held. A few CK participants also came from the city's western and northern parts to be a part of the kitchen group. The CK leader resided in the southern part of the city while the researcher came from the northeast. Living in relatively close proximity facilitated ease of access for community kitchen participants

to each other as well as to the activity site. In a study of community kitchens in Peru, Garrett (2001) found that CKs that implemented a rule of only accepting participants from the area in which the CK was located increased the effectiveness of the kitchen that depended on people coming to work. The literature also finds that differences in both location and demographic characteristics between participants can serve to inhibit understanding and relationship development in the group (Fernandez, 1996; Wheelan, 2005). In heterogeneous groups, the role of the group facilitator becomes increasingly important in creating spaces where connection can happen. Group facilitation in the Family CK will be discussed in the following section.

Density. Density includes analysis findings that capture “the extent to which network members know and interact with each other” and “are connected to each other” (Berkman & Glass, 2000, p.145; Heaney & Israel, 2008, p.191). In addition to both proximity and homogeneity of group participants, researcher observations revealed that many of the community members who became part of the Family CK Project knew each other prior to participation. Three CK participants were related by family ties: two sisters and their mother. Another group of three CK participants were related by both family and significant other ties: a sister, brother, and female significant other. A few participants came alone. This finding is similar to another author’s observation that CK participants had strong ties prior to CK participation (Fernandez, 1996). Israel and Heaney (2008) suggest that strong or dense ties help to facilitate discussion between network members and also support the provision of empathy.

Size. Size includes analysis findings that capture the “number of network [or group] members” (Berman & Glass, 2000, p. 145). The number of group members observed in the community kitchen was around eight households per activity. Some participants perceived this group to be large, complicating the ability to work together. One community member showed his

surprise in a CK group discussion that a large group was able to work so well together: “There was what like ten or eleven people you know, we all got to know each other [work] well with each other” (Community member, Focus group). Tarasuk and Reynolds (1999) found that groups that focused on cooking skills tended to be larger while groups that focused on emotional and tangible support were often smaller in size. One Family CK Participant reported some of the perceived challenges to larger group size: “It’s hard to get a bigger group of people together and everyone come so close as we did here” (Community member, Focus group). The group and social network literature also suggest that small size often facilitates emotional support exchange while larger size tend to expand social networks and offer informational support to participants (Israel & Heaney, 2008).

Duration and frequency of contact. Frequency of contact captures the “number of face to face contacts or contacts by phone” or emails (Berkman & Glass, 2000, p. 145). Family Community Kitchen Project community members were involved in the Project on a monthly basis. Participation was open and thus start dates for each community member varied. The following Table 13 below shows the frequency and duration of community member involvement in the Family Community Kitchen Project at the time of their participation in CK group discussions, questionnaires, and cooking sessions (where observations occurred).

Table 13. Frequency and Duration of Involvement by Family CK Project Activity

Community member	Group Discussion (Focus group)		Questionnaire		Cooking Session Observations		
	Pre	Post	Pre	Post	1	2	3
1	0 months		1 month	3 months	0 months	1 months	2 months
2	0 months	3 months	0 months	3 months	0 months	1 months	2 months
3	0 months	3 months	0 months	3 months	0 months	1 months	2 months
4	0 months	3 months	0 months	3 months	0 months	1 months	2 months
5	0 months		0 months	3 months	0 months	1 months	2 months
6	0 months	3 months	0 months	3 months	0 months	1 months	2 months
7	0 months	1 month	0 months		0 months	1 months	2 months
8	0 months	3 months	0 months	3 months	0 months	1 months	2 months
9			0 months		0 months	1 months	2 months
10			0 months		0 months	1 months	2 months

Closely related to frequency of contact, duration of contact or “the length of time an individual knows another” was also a facilitator or barrier to relationship development and social support provision in the project (Berkman & Glass, 2000, p. 145). At each CK cooking session, community members were together for an average duration of three hours. The CK leader described the effect duration had on a community member during a group discussion:

That is one thing that I definitely noticed. that each time you came it really looked like you were tired from a day’s work, which is fully understandable, but then when we left I noticed that you picked up your energy, so that was a really great observation that I made, it was worth it, it wasn’t like you were more drained after two hours worth of cooking.

(Leader, Focus group)

During group discussions, some community members described the duration of cooking sessions as too short. One participant commented on the lack of time in the cooking session, “I think that maybe and I mean it’s hard because I have to work and maybe I think we actually need more time” (Community member, Focus group).

In Garrett's (2001) study, women often worked in the comedor (community kitchen) two times a week preparing food for group members. Unlike the Family CK Project, these women often did not hold jobs outside of the home and considered the comedor as a short-term hunger and nutrition strategy until they found jobs. CK studies often note the frequency of contact as ranging anywhere from daily to once a month. Engler-Stringer and Berenbaum (2007) found that participants reported enhancements in food resources in CKs that met at least once a month and cooked at least five meals to take home. The duration of time spent in a community kitchen has ranged anywhere from preparing food three times a day to two to three hours a month in the literature. The implications of duration on social support provision are underexplored.

Group structure summary. The characteristics of the group as whole including: size, homogeneity, proximity, density, frequency of contact, and duration of contact are facilitators and barriers of social support provision found in the literature (Berkman & Glass, 2000; Israel & Heaney, 2000). These factors also facilitate or inhibit social networking for social capital and social integration (Dominguez & Arford, 2010; Labonte & Laverack, 2008). While some of these factors have been described in the CK literature their implications on social integration, social support and other health-promoting outcomes have not been well-explored in the literature to date.

Downstream Major Facilitators and Barriers Themes in Group Dynamics and Relationship Characteristics.

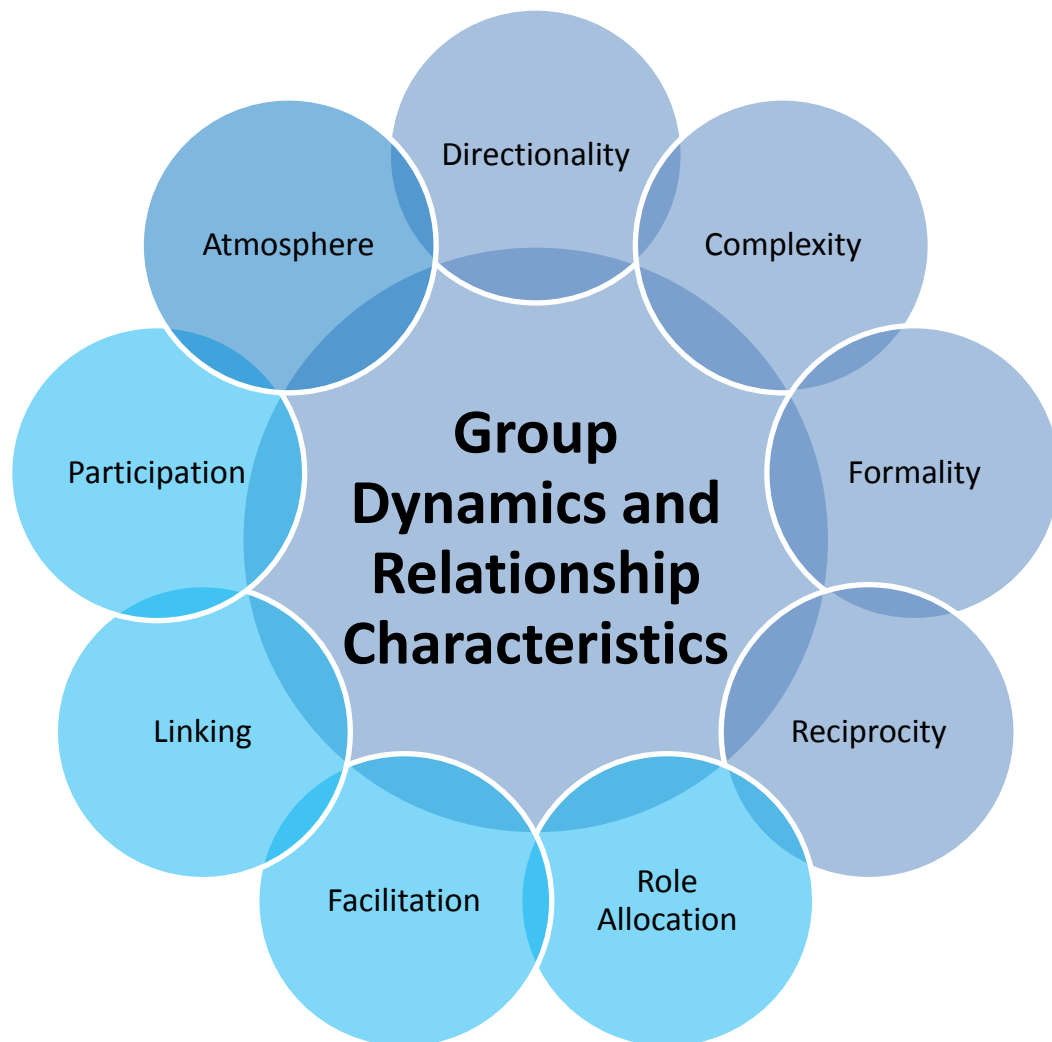


Figure 24. Major Group Dynamics and Relationship Characteristics Themes Identified in the Family CK Project

Group dynamics and relationship characteristics are the fourth and final major category of facilitators and barriers to social support provision in the Family CK Project that emerged. This type of social support provision facilitator and barrier includes analysis findings that capture: (a) the underlying processes or behaviors that give rise to a set of relations, and (b)

characteristics of relationships between individuals in the Family CK group (Berkman & Glass, 2000; Heaney & Israel, 2008, p. 190-191). Several major themes emerged from the data related to group dynamics and relationship characteristics. These included: role allocation, facilitation, participation, linking, formality, directionality, reciprocity, complexity, and atmosphere (see Appendix G for thematic definitions). These themes are described in further depth.

Role allocation and formality. Formality is the “extent to which social relationships exist in the context of organizational or institutional roles” (Heaney & Israel, 2008, p.191). Social relationships existed within the context of participation in the Family Community Kitchen Project although the formality of these relationships varied with activity. Relationships between many of the group members had developed outside of the Family CK Project. As a result, informal interactions occurred during cooking sessions as noted upon observation:

[Participants were] always interacting with each other, talking about all sorts of things from: how it went, to school, to where they are from, to what they are doing, to how did they hear about it. (Researcher, Field note)

Informal interactions were also noted during food consumption:

While [participants] were consuming the food they were giving [the CK leader] feedback on what they wanted to make and what they learned and they were also monitoring their children and helping them try new things. (Researcher, Field note)

The influence of formality of community kitchen interactions was noted in Tarasuk and Reynolds (1999) community kitchen study. In their study, cooking classes appeared to have formal relationships with “groups [gathering] to watch individual members demonstrate the preparation of one or two dishes;” whereas, in collective kitchens roles and knowledge were shared to produce large quantities of food (Tarasuk & Reynolds, 1999, p.13; Engler-Stringer,

2005). The former was more effective in increasing preparation skills while the latter was more effective in increasing participant food resources and social interactions.

Role Allocation is participants taking part in any number of positions within a group (Wasserman & Faust, 1994; Staples, 2004, p.93-96). Observations revealed that shared roles between community members, volunteers, the CK leader and the researcher existed and included: teacher, learner, developer, cleaner, planner, food distributor, child caretaker, food preparer, recruiter, and cook. Shared roles contributed to the informality of relationships in the CK Project; however, roles such as, facilitator, orienteer, and data collector were primarily held by the CK leader and researcher. Formality existed in these roles between community members and the CK leader and researcher.

Engler-Stringer (2005) found diversity in the observed roles of leaders in community kitchens observed in three Canadian cities. The author noted that all leaders were responsible for ensuring the smooth running of their collective kitchen but some leaders had specific responsibilities, such as taking care of the finances, making sure that evaluation forms were filled out, ensuring the borrowed kitchen was clean at the end of a cooking session, and other organizing tasks. In other cases, who performed these administrative tasks was more diverse. For example, in several groups, the participants took care of the finances (Engler-Stringer, 2005). One group did not have a leader; the participants shared leadership responsibilities (Engler-Stringer, 2005). Paid leaders were more likely to have significant responsibility in carrying out administrative tasks, but not in all cases (Engler-Stringer, 2005). Volunteer leaders were observed to share somewhat more of these responsibilities with participants (Engler-Stringer, 2005). In most groups, leaders and community members equally shared in cooking tasks.

According to the literature on group dynamics, role sharing facilitates team building, while exclusive roles can constrain social support provision between participants (Wheelan, 2005). In most cases, roles were tailored collectively to the needs and experiences of participants. Tailoring facilitated overall group goals.

Directionality. Directionality captures the extent to which members share power and influence in project development (Heaney & Israel, 2008, p. 191) and is closely tied to formality of relationships and role allocation. Control in project development was shared between participants over the course of a three-month CK session. Feedback from community members indicated that they wanted to take the role of recipe leaders in the next session and that the CK leader and researcher were supportive of this idea:

Everyone gave feedback to [the CK leader] on what they want to make for next time. In the process they also suggested that they be recipe leaders for the next time and make their own recipes and show each other how to make their own recipes. This is great news and...we want this to happen (Researcher, Field note).

The leader also elicited feedback on learning topics from community members for upcoming CK cooking and dining sessions.

Engler-Stringer (2005) found that paid staff leaders, especially those in groups with new immigrants were more likely to maintain more control over the group by taking on some planning and other decision-making tasks without first asking participants to share their opinions. Conversely, in groups without language or cultural barriers, facilitators (often volunteers in these groups) did not seem to focus as much on facilitation and left more of the control over group decisions to the group members (Engler-Stringer, 2005). Community

member control over project development is a key facilitator in community building with women of color (Gutierrez & Lewis, 2006; Stall & Stoecker, 2006)

Facilitation. Facilitation includes analysis findings that captured participants helping forward or assisting the progress of someone or something (Wheelan, 2005). In the Family CK Project three facilitation processes were present: facilitating conversation, facilitating inclusion, and facilitating conflict. These findings are discussed in the paragraphs that follow.

Facilitating conversation. There were several times in group discussions when the CK leader redirected conversation. In a discussion on gentrification the group leader redirected the conversation back to the question at hand:

Well guys, this is a great discussion and I do want to get into it, but this idea of the whole gentrification going around I really want to hear your perspective. I think today is not the day to do that because we still have a few more things to go through... (Leader, Focus group)

At other times the CK leader encouraged participants to share feedback: “No it’s fine; we want it all to come out of the woodwork” (Leader, Focus group). In cooking sessions, CK recipe leads were observed facilitating cooking and sharing of conversation between participants.

Facilitating Inclusion. The CK leader was often observed giving group members who had not spoken during group discussions an opportunity to share. After a community member participant discussed his thoughts on whether or not the community kitchen met his expectations, the CK leader stated, “Okay. Anyone else, your thoughts on what you thought it was like” (Leader, Focus group)? Engler-Stringer (2005) found that paid staff leaders paid more attention to the inclusion of participants who were less vocal about their ideas and opinions, often by asking them directly to share their ideas.

Facilitating conflict. Conflict occasionally arose in group discussions. Disrespectful comments (“Who hasn’t heard of Costco?” (Community member, Focus group)), blaming others for how the food turned out (“Well, you cooked them.” (Community member, Focus group)), or disregarding others feelings (“Why you got to tell me that I was tripping?” (Community member, Focus group)), were often origins of the conflict that arose. Conflict was facilitated by allowing time for participants to respond to each other. On a few occasions the CK leader offered some additional ideas about why the food did not turn out as planned and/or refocused attention to the question at hand. Modeling respectful behavior reduced conflict and facilitated conflict resolution in the group.

In one group discussion the researcher noted the CK leader showing sensitivity to a comment on the poor taste of greens made in the CK. In response to the poor taste of greens she stated:

I already knew it was going to be different and actually the way I had wanted to cook them was the Brazilian style, my husband is Brazilian and so they cook it this way where you just finely chop up the greens and then you just sauté it...and it gets kind of crazy so sometimes what I think it’s going to be doesn’t necessarily end up to what it is. I would like to try it again because I think everyone who has ever tried them thinks they are amazing. They are very different than the kind when you stew them like half the day but it is different and different cultures eat [greens] different ways. (Leader, Focus group)

This response might have inhibited further critique of the food by community members during the group discussion. Additional food sensitivity to personal food critique was noted in the Family CK Project by participants. Kalcik (1984) and others (James, Kjørholt, and Tingstad, 2009) have identified food as “a significant way of celebrating ethnicity and group identity”

(Kalcik, 1984, p.38). Sensitivity to food comments can be situated and understood in the idea of food ways as an extension of self. Facilitation can either inhibit or promote social integration, social support provision, and food security and health-related outcomes in these scenarios.

Linking. Linking includes analysis findings that captured connections made for facilitating access to resources and information (Dominguez & Arford, 2010; Labonte & Laverack, 2008, p. 35-36). The CK leader highlighted the role linking played in the CK Project for social support provision among community partners:

That is a big part of what we want to do is connect with local businesses and people who have a vested interest in giving us a deal because then you [are] going to go back and get their thing and if they are getting quality products than we should definitely hook up with them. (Leader, Focus group)

Community members facilitated links between the group and outside resources. During a discussion on what will bring community members to the CK, one community member suggested potential future CK partners to the CK leader:

[The youth program] on [street name] they are always looking for people to come in and train and talk to their girls. That would be really excellent for them because you got mommas up in there, sixteen years-old with kids, you know what I'm saying, if they could get that type of guidance and really hold onto it at an early age it might circumvent some of the health issues that their children might go through. (Community member, Focus group)

Community members also shared information with each other on where to obtain quality kitchen equipment:

There's this store called Tuesday Morning. It's kind of like, it's a little bit of a raw TJ Maxx, Linens and Things. It's like that kind of store rolled in one. There's one [south of us and east in the suburb]. They have some really nice name brand stuff, knives, but they have it at a good price. (Community member, Focus group)

Linking was also noted as an important function in the community kitchens observed by Engler-Stringer (2005). Participants often viewed the CK as a place to learn about services they needed that are readily available in the community (Engler-Stringer, 2005, p. 99). Involvement with churches, other community-based organizations, and community centers seemed to increase over the course of CK involvement for many CK participants in the CKs studied (Engler-Stringer, 2005).

Participation. Participation is active engagement in CK project activities (Minkler, Wallerstein, & Wilson, 2008, p. 294; Labonte & Laverack, 2008, p. 32; Staples, 2004). Participants often commented that one component they liked most in the Community Kitchen Project was working together: "Working together was good" (Community member, Focus group). Almost all CK activities required active participation and communication by CK members in order to achieve collective outcomes. The CK leader and researcher ensured participation in group discussions by structuring questions that elicited feedback from everyone involved. In cooking sessions, participants were observed actively serving as cooks, cleaners or childcare attendants. Engler Stringer (2005) noted that participants would discuss personal issues or share advice during cooking time. Participation is a key factor in facilitating social support provision between participants.

Engler-Stringer (2005) also found that the vast majority of community kitchen groups had group members who came each time the group met, although in most groups at least one

participant would leave and another join every few months. Groups that did not have a set group of participants operated as drop-in groups where some participants were regulars while others came and went (Engler-Stringer, 2005). Similar participation trends were also found in the Family Community Kitchen Project. A core group of six families attended all three of the CKs offered from October to December 2009. Three families participated in two of three CKs during this time. The first family dropped out after the completion of the second CK while the other two families began participation at the second CK and also attended the third CK. Two additional participants attended one of the three CKs offered. One participant attended in the first CK only and the second participant attended the second CK only. Follow-up was conducted with all three participants who dropped out after the first or second CK. Personal reasons such as a school conflict were noted for absence. Food prepared in the CK was delivered to participants who could not attend by a volunteer. Group participation in the Family CK Project was open until the group filled up its allocated spaces in the kitchen. The Family CK operated at or over full capacity at each CK cooking session.

Reciprocity and complexity. Reciprocity means the “extent to which resources and support are both given and received in a relationship” (Heaney & Israel, 2008, p.191). Reciprocity in social support provision was observed in a number of areas such as, informational support provision on planning a meal or how to prepare foods. Table 14 describes an example of the reciprocity observed in the Family CK Project by social support provision type and who provided social support to whom. Reciprocity in labor was noted during observations as a key component to getting things done: “It really takes all the time and all the cooperation with people to get the things done” (Researcher, Field note). Community members were also noted discussing the reciprocity they felt during cooking sessions in the group discussion:

Sharing; everyone shared a part of themselves every time they came so you get to learn more about people, and learning, because everybody learned something that they didn't know from before, and I put helping because everyone helped each other, especially me, so that's why I have helping on here and working together because everybody worked together really well. Cooking, because we all cooked, and I have caring and teaching and family and the heart says love because I felt a lot of love being here. (Community member, Focus group).

There was a high level of reciprocity observed and reported in the project. While the CK leader, researcher, and partners provided high levels of informational and tangible support to participants, community members offered each other and the CK leader and researcher with high levels of appraisal and emotional support provision. All types of social support provision were exchanged among community members, the CK leader, and the researcher in this study.

Table 14. Example of Reciprocity Observed in the Family CK Project by Support Provision

Informational Support Provision	Appraisal Support Provision	Emotional Support Provision	Tangible (Instrumental) Support Provision
How to prepare foods P-How to Prepare Foods L-How to Prepare Foods	Program Value P-AS-Program Value	Understanding L-ES-Understanding K-ES-Understanding P-ES-Understanding	Set-Up Labor K-TS-Set-Up L-TS-Set-Up Food Preparation Labor K-TS-Food Prep L-TS-Food Prep Childcare Labor CC-TS-Childcare V-TS-Childcare Cleanup Labor K-TS-Cleanup L-TS-Cleanup V-TS-Cleanup
Planning a Meal P-IS-Planning a Meal L-IS-Planning a Meal	Childcare P-AS-Childcare	Relating L-ES-Relating K-ES-Relating P-ES-Relating	Food K-TS-Food L-TS-Food
Food Characteristics P-IS- Food Characteristics L-IS- Food Characteristics	Food Preparation in CK P-AS-Food Preparation L-AS-Food Preparation	Caring P-ES-Caring L-ES-Caring K-ES-Caring	Eating Utensils CC-TS-Eating Utensils K-TS-Eating Utensils
Nutrition and healthy foods P-IS-Nutrition and Healthy Foods L-IS-Nutrition and Healthy Foods	Recipe Leads and CK Participants P-AS-Leads and Participants	Recognizing L-ES-Recognizing K-ES-Recognizing P-ES-Recognizing	Gift Card PH-TS-Grocery gift cards
Healthy Food Substitutes P-IS-Healthy Food Substitutes L-IS-Healthy Food Substitutes	WIC Incorporation P-AS-WIC Incorporation	Appreciating L-ES-Appreciating K-ES-Appreciating P-ES-Appreciating	Meeting Facility CC-TS-Meeting Facility
Diet and Disease P-IS-Diet and Disease L-IS-Diet and Disease	Program Education Component P-AS-Program Education Component	Respecting L-ES-Respecting P-ES-Respecting	Supplies K-TS-Childcare Supplies CC-TS-Childcare Supplies

Note. *P = community member; L = CK leader; K = Researcher; V = Volunteers; CC = Community center; PH = Public health partner

Complexity is closely related to reciprocity and defines the “extent to which social relationships serve many functions” (“the number and type of transactions or support flowing through a set of ties”) (Berkman & Glass, 2000, p. 145; Heaney & Israel, 2008, p. 191). All four social support provision types - informational, appraisal, emotional, and tangible - were found to flow through ties between all CK participants including the leader, researcher, community members, and volunteers. While the Family CK Project began with an imbalance of informational support provision being provided by the leader, the CK leader helped to facilitate shared learning and information; by the end of the third session, the community members had taken up leader and educator roles.

Increasing complexity can often result in social support burnout. For example, in a study on African-American caregivers for family members with cancer noted that almost forty percent of caregivers studied reported high caregiver strain (Cooper, Smith & Powe, 2013). These caregivers provided instrumental support, emotional support and to a lesser extent informational support to family members with cancer (Cooper, Smith & Powe, 2013).

Reciprocity has also been noted in prior CK studies. In Engler-Stringer and Berenbaum’s (2007) study on exploring social support in three Canadian cities, participants provided one another with informational and emotional support in giving advice about children (p.102). In addition, tangible support occurred between participants when they shared items such as clothing and baby supplies (Engler-Stringer & Berenbaum, 2007, p.103). When participants did not have the resources to return tangible support, they often volunteered their time or provided other forms of support, such as emotional support (Garrett, 2001). Reciprocity enhanced participants’ own self worth (Garrett, 2001). Few CK studies to date have examined reciprocity and

complexity that occurs between CK participants and their impacts on social support provision and social support outcomes in a CK.

Atmosphere. The final major characteristic of the group was the atmosphere or tone of the group. The atmosphere of the CK was often characterized by CK participants as positive and fun: “We came together and had fun and you know it was enjoyable time, nothing negative, it was all fun” (Community member, Focus group). An atmosphere that is both positive and comfortable for group members is known to promote group sharing and satisfaction with the group (Wheelan, 2005).

Flexibility was an important process in the development of the tone of the group. Flexibility was noted in data collection, for example, with the staggered administration of questionnaires, as well as in cooking session planning in regards to the development of a diabetic menu:

I know that is something you mentioned at the beginning and I definitely can and maybe we can spend one evening around focusing on [a diabetic menu] because maybe not everybody has it but maybe you have a family member or maybe you are pre-disposed [to diabetes]. (Leader, Focus group)

Leadership flexibility in program activities to meet participant needs facilitated a group atmosphere that was comfortable and stimulating for participants. Participant comfort and meaningful stimulation contributed to a fun or enjoyable environment.

In addition, special care was taken to explain activities and answer questions participants had before they began. For example, before the group discussion the CK leader explained its purpose to participants: “The goal of this it to develop a model so that other people can start them” (Leader, Focus group). This comment typifies a number of comments by the CK leader to

enable program activity transparency. Furthermore, member checking was also used to facilitate comfort and trust in participants. Member checking was performed at the end of each group discussion and food consumption debriefing to ensure what was recorded reflected participants' thoughts and ideas for the following CK activity and for program improvement. The sharing of personal stories throughout the CK Project between participants also facilitates relationship-building and trust between participants (Heaney & Israel, 2008).

According to Minkler (2005), in relationships that facilitate emotional support and trust, confidentiality, member checking and transparency appear to be key factors (Minkler, 2005). Staples (2004), also suggests that successful organizing efforts have lines of communication that are open and inclusive, flowing in a two-way fashion rather than top down. In addition to flexibility of leadership in producing an enjoyable environment, confidentiality was facilitated in the community kitchen through stating to participants "Everything is confidential" (Leader, Focus group). Trust was facilitated through respect, transparency, and dependability within the group. Group discussion ground rules were laid out at the beginning of each group discussion to promote respect as follows:

Please don't feel like there is anything right or wrong to say again just say what you feel and let's make sure to respect other people's opinions if we want to disagree then we should be able to disagree and just be able to understand that people have different opinions. (Leader, Focus group).

Transparency occurred through providing participants with program information and including them in program design and improvement over time. Dependability was observed in project structure from holding monthly CK sessions to conducting phone calls on a regular basis with

participants prior to each cooking session. Trust and confidentiality increases comfort and enjoyment for participants and facilitated an enjoyable atmosphere.

The role that group atmosphere plays in the success of CKs has been discussed by a few authors in the literature. For example, Garrett (2001) found that the attitude of partners as friendly, transparent and sincere in CK groups contributed to CK partnership success (p.21). In a study by Marquis et al. (2001), CK participants reported that making the instruction times more fun would improve the program (p.131).

Group dynamics and relationship characteristics summary. In summary, an analysis of the data collected in the Family CK Project captured group dynamics and relationship characteristics as facilitators and barriers of social support provision. Major findings in group dynamics and relationship characteristics include the thematic areas of formality, role allocation, directionality, facilitation, participation, linking, atmosphere, reciprocity, complexity, and atmosphere. These characteristics directly assisted or constrained social support provision in the CK Project as well as had an upstream influence on the shape of group structure, project structure, and broader social-structural conditions. In general, few reflections on the ways CK intra-group dynamics influence social support provision have occurred in the CK literature; this analysis significantly expands the field.

Chapter Summary

This chapter has explored data analysis findings in the categories of social support provision and facilitators and barriers of social support provision to address two study aims:

1. To identify and describe the types of social support provision that occurred within the Family Community Kitchen Project.

2. To identify and describe facilitators and barriers to social support provision in the Family Community Kitchen Project.

The following paragraphs will summarize thematic results by study aim and will provide a discussion on the relationship between social support provision and food security and health outcomes.

The first section of this chapter presented the results and discussion related to identified types of social support provision found in an analysis of the Family Community Kitchen Project. These results included four types of social support provision: informational, appraisal, emotional, and tangible. Data analysis captured the provision of information that a participant could use to address problems in the thematic areas of: how to prepare foods, food ways, meal planning techniques, food characteristics, food substitutes, diet and disease, health promotion strategies, resources, food-health environment, people, and Family CK Project. Data analysis also captured the provision of information in the areas of: program value, project components, CK participants, and topics that were being learned, which a participant could use for self-evaluation purposes, constructive feedback, and/or affirmation. The exchange of different types of emotional support was noted between participants, including: understanding, relating, caring, recognizing, appreciating, respecting, and trusting emotional support exchanges. Major types of aid exchanged between participants included: labor, food, utensils, financial resources, facility, and supplies for CK activities.

Appraisal support provision findings were closely related to emotional and informational support provision findings and in some cases overlapped with the others. This is the first CK study to identify and distinguish appraisal support provision from emotional and informational

support provision findings. In addition, this is the first known study to identify and describe types of social support exchanged between participants in each social support provision category.

The second section of this chapter presented the results and discussion related to identified facilitators and barriers of social support provision discussed in section one. These results included four layers of facilitators and barriers from upstream to downstream: social-structural conditions, project structure, group structure, and group dynamics and relationship characteristics. Thematic areas in the category of social-structural conditions included: community resources, city disparities, community socioeconomic status (SES) conditions, community health conditions, cultural conditions, beliefs, project goals, and project partners, resources, and policies.

The Family Community Kitchen Project had eight main structured activities that emerged during data analysis including: CK planning, CK preparation, CK orientation, CK food preparation, CK distribution, CK food consumption, CK clean-up, and CK evaluation (group discussions, observational reflections, and questionnaires). The characteristics of the group structure theme findings included: size, homogeneity, proximity, density, frequency of contact, and duration of contact. Finally, group dynamics and relationship characteristics included analysis findings in the thematic areas of: formality, role allocation, directionality, facilitation, participation, linking, atmosphere, reciprocity, and complexity.

Group structures and group dynamics and relationship characteristics are well known facilitators and barriers of social support provision in the literature (Berkman & Glass, 2000; Israel & Heaney, 2000). Social-structural conditions and project structures shape group structure, social relationship characteristics and dynamics, and social support provision. At different points in time, themes within each category served as both facilitators and/or barriers of social support

provision in the Family Community Kitchen Project. Data analysis results provide more depth to the understanding of the social aspects of community kitchens and their promotion of food security and health.

There are two main proposed pathways to explain the link between social networks and social support case study findings and health: (a) social networks and social support “protects (or “buffers”) people from the bad effects of stressful life events” (such as, losing a job or food insecurity) by providing needed resources and (b) social networks and social support have a direct effect on health (Heaney & Israel, 2008, p. 193). Tarasuk & Reynolds (1999) and others have described community kitchens primarily as a social support coping mechanism that buffers participants from the full effects of food insecurity and hunger. Perceived emotional social support in particular has been shown to buffer the effects of stressful life events such as food insecurity on the risk of depression or anxiety disorders (Berkman & Glass, 2000). Community kitchen studies have also reported positive participant outcomes in the areas of knowledge and skill development, self-efficacy and self-esteem, and affordable access to quality food resources which serve to buffer the full effects of food insecurity and hunger (Engler-Stringer & Berenbaum, 2005). In addition, social support works to improve physical health through influencing healthy eating behaviors (Rychetnik, Webb, Story & Katz, 2003). Community kitchen studies have reported the following health promoting outcomes of participation in community kitchens: increases in fruit and vegetable consumption, reduction in consumption of fats and sugars, and increases in variety of foods consumed for participants. According to Rychetnik, Webb, Story and Katz (2003), with adequate social networks and social support, people will be able to share the cost of food, as well as the time involved in shopping and cooking activities.

While food and financial aid and skills and knowledge are important resources needed for low resource households to facilitate food security, they are not a solution to the underlying causes of food insecurity. Within the buffering hypothesis, strengthening groups and social networks to enhance the exchange of social support can contribute to the capacity of an individual, group, or community to identify local food security issues and to collaborate on initiatives to solve those problems, such as addressing structural issues in the local food supply (location of food outlets, availability in outlets, price, quality, variety and media promotion) or in the social and economic determinants of health (employment, education, housing, social isolation) (Heaney & Israel, 2008; Rychetnik, Webb, Story & Katz, 2003). This collaboration can also be expanded to address broader food and nutrition system food security determinants.

The process of social network building has additional health benefits: empowerment, self-esteem and perceived control outcomes (Minkler, 2006; Labonte & Laverack, 2008). Group confidence in organizing can contribute to the capacity of a group to solve food security problems, thus increasing self-esteem and perceived control in group members (Labonte & Laverack, 2008). Self-efficacy in a group can contribute to the building of collective efficacy (Heaney & Israel, 2008). In addition to psychological mechanisms, social network building can reduce social isolation which is considered a chronically stressful condition (Heaney & Israel, 2008). The pathophysiology of chronic stress through multiple pathways works to increase aging and morbidity and mortality in socially isolated individuals (Dallman, 2010; Tomiyama et al., 2012). Thus, social isolation contributes to health damaging behaviors such as smoking, alcohol consumption, physical inactivity, and consequent obesity.

These findings bring us to the second proposed pathway to explain the link between social networks, social support and health. In the direct effects hypothesis, people with high

social support are in better health than people with low social support, regardless of stress (Berkman & Glass, 2000). In addition to buffering effects, perceived support also shows consistent direct effects for mental health outcomes (Heaney & Israel, 2008). Social support positively impacts the immune, endocrine, and cardiovascular systems through biopsychosocial pathways (Berkman & Glass, 2000; Ditzen & Heinrichs, 2013).

Community kitchen and nursing implications of study findings presented in chapter 4 of this dissertation will be discussed in the final chapter of this dissertation.

Chapter 5: Conclusions and Recommendations

This case study is the first CK study to focus specifically on understanding social support provision and facilitators and barriers of social support provision within a community kitchen (Engler-Stringer & Berenbaum, 2005, 2007b). Almost all CK authors to date have concluded that CK social support provision and social network building are two of the most important contributions of community kitchens to food security and health. The Family Community Kitchen Project case study both identified and described social aspects related to community kitchens in the literature including social support provision, and facilitators and barriers of social support provision in a Family Community Kitchen Project that occurred over a three-month time period.

While, community kitchens operate in Canadian, Australian, and Peruvian communities, this is also one of the first known studies of community kitchens as they exist in the United States. This study's findings suggest that there exist both similarities and differences between CKs in other countries and the Family Community Kitchen. The results of this study provide more depth to the understanding of community kitchens as they exist in the United States. Community kitchen and nursing implications of study findings presented in chapter 4 of this dissertation will be discussed in the following sections. In addition, recommendations for future exploration of community kitchens and for decision-making bodies for enhancing food security and health in vulnerable groups will be described. Final study conclusions are provided at the end of this chapter.

Community Kitchen Implications

This is the first CK study to focus specifically on understanding social support provision and facilitators and barriers of social support provision within a community kitchen. In addition,

this study is the first to identify, describe, and label themes within different social support types or categories such as emotional or informational support. New thematic findings that enhance the current CK literature to date occurred in all four social support provision categories. The exchange of information on food ways met one of the CK leader's project goals to share food cultures between participants. Informational exchanges on the food and health environment, healthy food substitutes, community resources, people, and CK Project development strategies not previously described in the literature were brought forward in this study. This is the first study to delineate the different types of emotional support provided in a Family CK setting including exchanges of respect and trust between CK participants. This is also the first CK study to identify appraisal support provision as a major type of social support provided between participants in the Family CK Project. Tangible support thematic findings in the areas of kitchen equipment and food storage emerged as significant CK social support provision themes not previously discussed in the CK literature. One CK leader community kitchen statement exemplifies the entwinement of different categories of social support provision (emotional support, informational support, and appraisal support) in the CK:

We don't need bleach in our bodies so that's why I focus on trying to get rid of things that aren't good for our bodies. What I tell in my classes is brown is beautiful. (Leader, Focus group)

These findings significantly enrich the current CK literature on social support provision by identifying and describing the depth of social support exchange in a community kitchen context and focusing on enacted rather than perceived social support.

In addition to social support provision, this study is the first to describe, and label categories of facilitators and barriers to social support provision in a community kitchen. These categories included: social-structural conditions, project structure, group structure, and group dynamics and relationship characteristics. These four categories influence the formation of social ties and related characteristics from which social support provision occurred in the Family CK Project. Like social support provision, themes within each category that emerged were also delineated and described. These categorical findings and major themes provide a structure from which further exploration of CK facilitators and barriers to social support provision for food security and health can begin. Their exploration will be essential in interpreting the success or failure of future CK's in promoting participant health and food security outcomes. This case study described the different structural components of the project and their goals that extended far beyond food preparation and consumption currently used in the CK literature. In order to understand the effectiveness of CKs in achieving their goals it will be important to delineate CK structural components in future research.

This is also the first study to label group structure thematic findings such as homogeneity and proximity. To date, few community kitchen studies have reported on the demographic characteristics of the researchers or leaders of community kitchen groups. These critical concepts must not be overlooked because differences in both location and demographic characteristics between participants can serve to inhibit understanding and relationship development in the group (Fernandez, 1996; Wheelan, 2005). In heterogeneous groups, the role of the group facilitator becomes increasingly important in creating spaces where connection can happen. The Family CK Project was relatively homogenous which facilitated social exchanges. In addition, the link between density findings (community members knew each other prior to participation)

and emotional support provision and the development of trust was a key consideration that can inform future group development. Furthermore, a group size of eight households both facilitated emotional support exchange and informational support exchange between participants. Duration and frequency in the CK allowed for mutual trust and understanding to develop. The effect differences and duration have on CK group cohesion remains a promising avenue to explore.

Another major contribution this study has made to the CK literature is in identifying group dynamics and relationship characteristics as significant facilitators and barriers of social support provision in a CK. In the Family Community Kitchen, participation was characterized as active and hands-on by all participants involved, facilitating social interactions. Continuous participation occurred for the majority of participants; however, participants who came without a friend or family member were more likely to drop out than those who did not. This possible lack of support from family members or friends for continuous participation is rarely discussed in the community kitchen literature. This is an area for further CK research.

A major contribution to the CK literature in group dynamics and relationship characteristics is the finding of ‘facilitation’ as a particularly strong facilitator to social support provision in the Family CK Project. The leader played a major role in the CK’s success; without it, there would have been multiple barriers to success. Leader facilitation was utilized in the Family CK Project to facilitate conversation, inclusion, and conflict between and among CK participants. The development of social relationships for social support provision rested on the facilitation of positive social interactions among participants who were unfamiliar with each other including between the CK leader, researcher, volunteers, and community members. As a leadership style, facilitation required a high degree of social skills, experience in cross-cultural

communication, flexibility, confidentiality, trust, respect for others, dependability, and transparency.

Furthermore, CK participants needed to be able to identify with the CK leader and the CK leader needed to possess a level of competency in food knowledge and skill and reside in the community in which the kitchen took place to lead the CK, gain the respect and trust of participants, and to partner with others to obtain key resources to begin and sustain the CK over time. Prior activism in the community and the CK leader's work as a registered dietician gave her working knowledge and experience about available community partners. Through this unique knowledge and experiences the leader was able to forge partnerships for CK resources. While other CK studies have highlighted the needs, confidence and training of CK leaders in starting their own kitchens (Marquis et al., 2001; Fano et al., 2004), this study highlights the characteristics of the grassroots CK leader that facilitated the success of the Family CK within its community context.

The unique community context of the Family CK Project was characterized by a rich history of community organization and support in the area, a vibrant cultural landscape, successful expanding alternative food initiatives, gentrification and rising property values. The location of the CK within an urban environment provided ease in accessing many types of resources. The composition of the CK was affected by the recruitment strategies used by the CK leader as well as her individual strengths and characteristics. The participants did not closely mirror the diverse racial and ethnic composition of the area where one-third of the population identified as Black or African American, one-third as White or Caucasian, and one-third as Asian. Eighty percent of the participants in the CK identified as Black or African American and all participants were born in the United States. Several factors most likely contributed to this

make-up: (a) CK recruitment materials – including the use of English-only and pictures used, (b) location of CK recruitment – WIC, Church Health Fair, the community in which the CK leader was a part of, and (c) the composition of Community Center participants. Despite this racial homogeneity diversity in food practices, preferences and strengths characterized the Family CK.

In addition, the CK context was characterized by recent changes in the types of food distributed by WIC and the ability of the CK to fill a programming gap related to food preparation skills. Furthermore, the CK context included a number of strengths that community members brought to the kitchen such as confidence in current cooking skills and openness to new and different foods.

Staples (2004) reports that the success of grassroots organizing initiatives is dependent on the leadership of such organizations and their ability to engage in praxis (action and reflection). Leadership training should develop the capacity for critical consciousness by using every organizational activity as a learning experience. Consciousness-raising was an important component of the project through observational reflections. In addition, the CK leader identification with other members of the group, her recognition of injustices suffered by the group, her opposition to those injustices, and her awareness that the group has a shared interest in working to address those injustices through collective action contributed to the development of social ties in the group (Staples, 2004, p. 195). The leader's structuring of the CK to promote: (a) shared roles between community members, volunteers, and the CK leader, (b) an informal and fun atmosphere, (c) shared participant control in project development and leadership, and (d) reciprocity, facilitated team building and enhanced participants' own self worth (Garrett, 2001). In most cases, roles were tailored collectively to the strengths of participants. Tailoring facilitated overall group goals. The leader's commitment, motivation, dedication and

determination to address injustices made an important contribution to the sustainment of the CK over time.

Overall, this study has made unique and significant contributions to the CK literature. Recommendations for continued community kitchen development include further exploration of community kitchens started by and for community members. It is within these initiatives that we might continue to find new and effective strategies that are value-congruent in addressing food security and health issues at the local level (Miller & Shinn, 2005). Formal recognition and distribution of effective community strategies for food security and health can serve to advance and sustain these initiatives and develop a public health practice that highlights the voices of those they aim to serve.

Going forward, specific recommendations for the exploration of community kitchens include:

- support and build upon ways communities already use to address food security and health issues,
- implement a research practice that is collaboratively created with leaders
- include self and group action and reflection as a major process, and
- share knowledge achieved from critical consciousness to influence related program and policy development and to enhance community health nursing science and practice over time.

These recommendations are particularly pertinent for working with community kitchens already in existence, implemented by and for community members. The addition of a reflective practice can overcome some of the barriers that researchers and practitioners encounter in

working with communities including ensuring community members and partners participate fully in assessments and planning. The Family CK Project is a model for participatory change.

Additional practice recommendations include the incorporation of social support assessment into community kitchen evaluation to provide a more proximal assessment of program outcomes as well as an understanding of downstream behavior and knowledge changes. The addition of group discussions into community kitchen evaluation can provide an opportunity for open program outcome assessment. More importantly, group discussions can enable participant social support provision and social integration through facilitating both social connections and ownership in community kitchen activities. For example, discussion questions such as “How can we improve the community kitchen?” (Leader, Focus group) provided participants with the opportunity to shape the structure of the kitchen to better reflect their needs and desires. In this way, group discussions became an active component of the community kitchen evaluation and program improvement over time.

In addition, group discussions served as an additional community kitchen space for the provision of informational, appraisal, emotional, and tangible support outside of cooking sessions. Group discussions were also important spaces for building group solidarity, as noted in the Family CK Project findings. Group solidarity can enhance all aspects of the community kitchen initiative by strengthening the teamwork needed in food preparation, distribution, and consumption activities, as well as in further organizing initiatives. Dialogical action in group discussions creates a space for an open discussion about the themes that underlie everyday issues (Montoya & Kent, 2011, p.1004). By creating a forum for coming together, reflecting, and acting, researchers and practitioners can join communities in meaningful action (Montoya & Kent, 2011, p.1004). Furthermore, group discussion can create “a space for productive

collaboration and conflict” often needed in cross-cultural and feminist work (Montoya & Kent, 2011, p.1004; Guitierrez & Lewis, 2006). (See Appendix B for group discussion questions used in this study).

A final community kitchen evaluation recommendation includes the addition of CK leader self-reflective practice in the areas of: (a) project goals, (b) project structure, (c) project partners, (d) resources and policies, (e) social-structural influences on program outcomes, and (f) group dynamics and relationship characteristics. These additions can assist leaders in creating a CK environment that achieves participant behavior, knowledge change, and empowerment outcomes over time. CK leader and researcher self-reflection on the homogeneity of CK participants with CK recipe lead volunteers led to the incorporation of recipe leads who could relate with CK participants over time. (See Appendix H for an example of self reflective questions).

Recommendations for decision-making bodies to enhance food security and health-related aims in vulnerable communities include:

- learn from and analyze the effectiveness of a community’s current approach to address food-related issues, and apply effective principles to current practice
- involve communities in the design of interventions to enhance food security and health,
- incorporate a community’s effective strategies into local and national initiatives (e.g., WIC) or support alternatives, and
- design structures that naturally link social service and community organizations.

Evidence from this case study supports a strong recommendation that community centers and local public health services actively invite and provide spaces for CK comparable opportunities for building community, social integration, social networks and social support

provision. Additional areas for partnership development include: non-profit organizations and local churches. This approach highlights the potential contribution of decision-making bodies to enhancement of food security and health-related aims in vulnerable communities. In addition, community-driven organizations that work towards supporting vulnerable families in food security and health should be supported financially by local governments aiming to this very work. Funding should be allocated to provide adequate support services that are essential to address food security and health inequities in urban areas with vulnerable children and their families.

In summary, recommendations as described will enhance understanding of CK outcomes as well as increase the ability of CKs and social service workers to meet goals and the unique needs of the community in which they occur. A real danger exists when governmental safety net organizations, such as WIC, rely on community organizations like community kitchens to fill program gaps without adequate compensation. Community efforts are often not compensated equitably for their work and time. Immink (2001) and Hays-Mitchell (2002) identified the existence of reliance of government entities on women's work to fill significant social policy gaps. The risk to any grassroots initiative is often its dependency on volunteers that can result in burn out. Consequently, it is essential for community health practitioners, researchers and others in positions of power to advocate for the equitable compensation of community efforts for the significant contributions they are making to food security and health. The role of nursing in initiatives such as community kitchens in moving community kitchen groups along the empowerment continuum to social and political action and social movements will be discussed in the paragraphs that follow.

Community Kitchens and Nursing Practice and Science

Nursing is a science with various schools of thought that constitute the knowledge of the discipline (Barrett, 2002, p. 51). Public health nursing practice has contributed significantly to this diverse body of nursing knowledge. The term Public Health Nursing was first coined by Lillian Wald in 1893. According to Wald, the public health nurse was the link between households and the services they required to promote health. As nurses began to specialize, public health service agencies became increasingly isolated and uncoordinated. Wald and followers sought to end this change that increased agency unresponsive to community needs (Buhler-Wilkerson, n.d.). Many nursing leaders continue to campaign for the (re) creation of comprehensive, coordinated community-based nursing services.

The critical roles nurses have played in both Canadian and USA Community Kitchen movements suggest that nurses have not stopped their ‘invisible’ work to network and coordinate community-based services at the local level despite a lack of institutional recognition of the importance of this work in promoting population health. The Family CK Project was made possible through the social connections and partnerships the public health nurse forged with a local senior center, a public health coalition in the area, a parks and recreation department, and many community volunteers. She was linked into these resources as part of her practice as a nurse in the area. She also played an active role in linking health professions together in a collaborative effort to address complex health problems not being addressed through specialization. She also used her status in the local health department to forge relationships between community organizations and health institutions for financial support. In this way, she served as an advocate for local groups and community health needs in the area.

Nurses have historically played a key role in moving groups along an empowerment continuum (personal action, small groups, organizations, partnerships and social and political action) through activities that link, meet community members where they are at in the process, and offer tailored, sensitive, and nonthreatening support. This support was critical to the success of the Family CK initiative. Nurses can continue to lead the way in creating a health care system that is transparent, inclusive, informative, meaningful, and comes from the people. As a renewed form of translational nursing science, nurses can also build on peoples' ideas for a reformed health care system by using our knowledge and positions as scientists and practitioners to recognize, enhance and strengthen the agency of those we serve. Knowledge gained from these practices will also strengthen nursing science and public health nursing practice.

Future Research

This study furthers our understanding of community kitchen initiatives and CK food security and health promotion. The findings highlight what communities can accomplish in the areas of addressing food security and health promotion issues. Future community kitchen research should focus on the strategies that grassroots community kitchens use to assist their groups and communities in moving towards advocacy for policy solutions to the structural problems of food insecurity and health inequities they face. These are the strategies at which *Healthy People 2020* (2013) goals to: (a) “promote health and reduce chronic disease risk through the consumption of healthful diets,” (b) “improve mental health,” and (c) “create social and physical environments that promote good health for all” will be met. Participant recommendations provide guidance for future research and give voice to their concerns:

- The taste and affordability of medically-prescribed diets: “I’ve done some research but as far as trying to figure out what tastes good [without having to] throw it away.”
(Community member, Focus group)
- Grocery store quality inequities by neighborhood: “If you want to do a really good survey go to somewhere [up north] and go to that QFC and it’s like another world, this really nice upscale store. [Then] go to QFC [down south].” (Community member, Focus group)
- Quality of healthcare provider – patient communication, and primary care – public health communication avenues:
 - We couldn’t figure out [why] she wouldn’t eat. I kept telling [WIC staff] that she did better drinking whole milk at this point, not 2%. I have an excellent pediatrician and they had to say no she needs to stay on whole milk until she gets to where she needs to be. They need to listen to the parents more, they know what they are feeding the kids because 2% milk, I don’t know why, but she could tell the difference and she wouldn’t drink it. (Community member, Focus group)
- Ways to forge linkages among community programming such as community kitchens into government-developed program such as WIC to enhance service delivery: “I would rather come to this instead of WIC.” (Community member, Focus group)

Study Strengths and Limitations

Findings from this study are based in a unique, localized context and corroborated with other CK studies in unique contexts, globally. The intention of this study is to begin meaningful discussions about how community kitchens can address issues of food security and health in vulnerable communities and some of the facilitators and barriers to their strategies. The

knowledge gained from this study can inform current CK strategies and mainstream food security and health promotion strategies for food insecure U.S. populations.

Limitations of this study include the positioning of the researcher as an ‘outsider’ to the group in relation to experiences and demographic background and an ‘insider’ into community kitchens in the area. Active listening, reflective practice, incorporation of community members in all phases of the project, and member checking were measures taken to reduce bias. The asymmetrical power relations of the researcher and study participant were thoughtfully considered through reflections made at the end of any CK project component involvement by both the researcher and the CK leader. These reflections contributed to an increased awareness of misperceptions and enabled the research and CK leader to design specific questions and activities for community members that helped to inform, clarify and/or improve the researcher and CK leader understands of findings and project activities over time.

Study strengths include: immersion in the setting, extensive data collection, and triangulation between data collection methods. The researcher’s experience in the setting prior to this study facilitated entry into the field and assisted in building trust between the CK leader and the researcher. Establishing an audit trail for data analysis strengthened this study. The auditor played a key role to insure trustworthiness in two ways: visibility and substantiation.

Conclusion

Community kitchens improve food security and health by facilitating social transfers and building networks. They build empowerment. The first step in empowerment is personal action triggered by a personal experience (Labonte & Laverack, 2008). Personal experiences of living in an unhealthy environment, discriminatory practices, disease, and/or inability to eat healthy led many community members to participate in the Family CK Project as a way to access resources

and services that provided much-needed emotional, informational, and tangible support.

Community kitchen problem-solving methods at the local level serve as an incubator for national and global solutions that require structural change.

Nurses have historically played a key role in moving groups along an empowerment continuum from small groups to social and political action through social networking. In light of the recent IOM reports *Integrating Primary Care and Public Health* (2012) and *The Future of Nursing: Leading Change, Advancing Health* (2010), nurses have an important role to play in building a health care system that is integrated and coordinated to meet the demand for quality and affordable care (Institute of Medicine, 2010, 2012). The time is right for nurses to take the lead in (re) creating Wald's vision of a coordinated and integrated healthcare system. For many nurses, as demonstrated in this study, this is the work they already do. The IOM agenda will be advanced when nurses have an equitable seat in health policy development where they can (should) advocate for local organizations and structures that serve the communities within which they work.

The potential of community kitchens in addressing food security and health in vulnerable groups rests significantly on the ability of the CK leader to facilitate an environment where social support provision and network building can happen. As a key stakeholder, public health nurses should continue to take an active role in assisting community efforts and leaders in moving as far along an empowerment continuum as they would like to go though leveraging their own social connections and ties. The Family Community Kitchen Project, in structure, activities, and leadership involved, facilitated the reciprocal distribution of social support between participants. The multiple types of emotional, tangible, informational and appraisal

support provision were useful to further food security and health aims. This study contributed significantly to the CK literature on the social and leadership aspects of CKs in local contexts.

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Appendix A: Observational guides

Example of one of seven direct observation program activity logs:

WIC CK Session Activities

Name:

Date:

Time Recorded:

Time and Length of Activity:

Place:

Who was present?

Purposes:

- To understand social and cultural phenomena from the perspective of participants.
- To help us describe and understand the value of the CK model for low-income families and how the model might be improved.

Name of Activity:	Food Production	
Framing Question (s)-What we are looking at today:	Direct Observations/Descriptive Notes (Concrete data) Record what you observe and what you hear .	Interpretations (Where record generalizations, cultural meanings, interpretations, and insights.)
What is the purpose of the activity?		
Goal (s) (the things you and the participants are trying to accomplish with this activity)		
Who carried it out (leader(s))?		
Who did it involve?		
When did it occur?		
How long did it take?		
Where did it occur? Setting: a. Your location on a map b. Brief description of where you were situated in the setting		

c. Visual Elements d. Atmosphere		
What was/were the role(s) of participants?		
What is the activity? *Please attach activity content documentation if available.		
What are people doing while conducting the activity?		
What are people talking about during the activity?		
Describe the interactions observed between people while performing the activity.		
Feelings (the emotions felt and expressed by participants) during the activity.		
Additional questions		
Recipes Made?		

How Chosen?		
Describe Food Made/Cooked (I.e. recipes: ingredients, cook times, boil times... etc.)		
Reflections		
Describe Your Reactions to the Setting/activity		
Reactivity (How did people respond to you)?		
How did it go?		
Is this activity acceptable, feasible, and sustainable? How so?		
Is there anything you would change for the next CK session? How would you change it?		
Thoughts?		
Aim: to become a part of what you are observing.		
Write about your experiences during this activity. Write about any conversations you had trying to include both verbatim quotes and reflections.		

Example of one of seventeen program logs:

Participation Flow Sheet			Name:		Date:
Who is participating?	What are they doing?	When are they doing it?	Where are they doing it?	How are they doing it? (Active or passive involvement?)	Why are they doing it?

Reflections	
How did it go?	
Is participation acceptable, feasible and/or sustainable? How so?	

<p>Is there anything you would change?</p> <p>How would you change it?</p>	

Date:

Pre-session Thoughts								
What do you hope to accomplish at this CK session?								
How will you accomplish this?								
What are your current health practices?	<p>Please tell us a little about your current health practices. Please circle the number that is most applicable to you. Please tell us a little about your current cooking and eating practices. Please circle the number that is most applicable to you.</p> <table border="1" style="width: 100%;"> <tr> <td style="background-color: #d9ead3;">I can cook a variety of foods at home.</td> <td> Never Always 1-----2-----3-----4-----5 </td> </tr> <tr> <td style="background-color: #d9ead3;">The food I cook tastes good.</td> <td> Never Always 1-----2-----3-----4-----5 </td> </tr> <tr> <td style="background-color: #d9ead3;">It is easy for me to cook meals at home.</td> <td> Never Always </td> </tr> </table>		I can cook a variety of foods at home.	Never Always 1-----2-----3-----4-----5	The food I cook tastes good.	Never Always 1-----2-----3-----4-----5	It is easy for me to cook meals at home.	Never Always
I can cook a variety of foods at home.	Never Always 1-----2-----3-----4-----5							
The food I cook tastes good.	Never Always 1-----2-----3-----4-----5							
It is easy for me to cook meals at home.	Never Always							

		1-----2-----3-----4-----5
I make foods that are new to me.	Never Always	1-----2-----3-----4-----5
I plan the meals I want to cook before shopping for food.	Never Always	1-----2-----3-----4-----5
It's easy for me to find the foods I want to eat in my community.	Never Always	1-----2-----3-----4-----5
The types of food I can buy are acceptable to me.	Never Always	1-----2-----3-----4-----5
When I cook at home people in my household help me prepare the food.	Never Always	1-----2-----3-----4-----5
At home, I eat food with others.	Never Always	1-----2-----3-----4-----5
I eat homemade food for dinner three or more times a week.	Never Always	1-----2-----3-----4-----5
I eat homemade food for lunch three or more times a week.	Never Always	1-----2-----3-----4-----5
I am tired of cooking meals at home.	Never Always	1-----2-----3-----4-----5
I don't have time to cook meals at home.	Never Always	1-----2-----3-----4-----5
I can't afford to eat grains, vegetables, fruits, dairy products and meats/beans daily.	Never Always	

		1-----2-----3-----4-----5
I decide what meals I will cook while I am shopping for food.	Never Always	1-----2-----3-----4-----5
The food I buy just doesn't last.	Never Always	1-----2-----3-----4-----5
I skip meals or eat less than I feel I should.	Never Always	1-----2-----3-----4-----5
It's hard for me to cook meals I like at home.	Never Always	1-----2-----3-----4-----5
I eat three or more meals a week from a fast food restaurant, convenient store or street vendor.	Never Always	1-----2-----3-----4-----5
I need more food than I have.	Never Always	1-----2-----3-----4-----5
I need more fruits and vegetables than I have.	Never Always	1-----2-----3-----4-----5
My health is important to me.	Never Always	1-----2-----3-----4-----5
I eat grains, vegetables, fruits, dairy products and meats/beans daily.	Never Always	1-----2-----3-----4-----5
I eat about 2 to 3 cups of fruits or vegetables each day.	Never Always	1-----2-----3-----4-----5
I enjoy cooking at home.	Never Always	

		1-----2-----3-----4-----5
	My household appreciates my cooking.	Never Always 1-----2-----3-----4-----5
	I cook the meals when I am at home.	Never Always 1-----2-----3-----4-----5
Post-session Thoughts		
What was it like to be a part of your community kitchen today?		

<p>What was one of your favorite meals you made today?</p>	
<p>Has your community kitchen been beneficial to you and your family today? In what ways?</p>	
<p>Do you have the tools at home to make the recipes learned in your community kitchen today? If not, what do you need?</p>	
<p>What was the best</p>	

<p>part of participating in your community kitchen today?</p>	
<p>Is there something you didn't like about participating in your community kitchen today?</p> <p>How could your community kitchen be improved for the next CK session?</p>	
<p>Did you accomplish your goals listed above?</p> <p>How or Why not?</p>	
<p>Is there anything else about your community kitchen you would like to write about today?</p>	

Appendix B: Focus group tools

QUESTIONS

Pre Focus Group 1:

1. Please tell us your name and one of your favorite meals you like to make at home.
2. Please draw a picture or write a description of what comes to mind when you hear “community kitchen” using the paper and markers in front of you. You don’t have to be an artist; stick figures are just fine.
 - Let’s go around and share your pictures or descriptions of what comes to your mind when you hear “community kitchen.” Who would like to start?
 - Follow-up: What questions do these pictures bring up?
3. You accepted our invitation to participate in a community kitchen. Think back to when you decided to come to a community kitchen. What influenced your decision?
4. What do you hope to get out of participating in your community kitchen?
5. What would you like to do or learn in your community kitchen?
6. There are a lot of questions we didn’t ask. Please tell us anything else you would like us to know before your community kitchen begins.

Post-Focus Group 1:

1. Please tell us about a recipe you made in your community kitchen.
2. What was it like to be a part of your community kitchen? Please draw a picture or write a description that describes your community kitchen experience using the paper and markers in front of you. You don’t have to be an artist; stick figures are just fine.
 - Let’s go around and share your pictures or descriptions that describe your community kitchen experience. Who would like to start?

- Follow-up: What questions do these pictures bring up?
- 3. Think back to when you first joined our community kitchen program. Was your experience what you thought it would be?
- 4. Has your community kitchen been beneficial to you and your family?
- 5. Do you have the tools at home to make the recipes learned in your community kitchen?

Follow up: Did you make these recipes again at home?

- 6. Is there a best part of participating in your community kitchen?
- 7. Is there a worst part of participating in your community kitchen?

Follow-up: How could your community kitchen be improved?

- 8. There are a lot of questions we didn't ask. Please tell us anything else about your community kitchen you would like us to know.

Appendix C: Questionnaire tools

Pre-Session Questionnaire 1:

Please rank the top 3 things you hope to get out of participating in a community kitchen. Place a "1" next to your top/first choice, "2" next to your second choice, and "3" next to your third choice.

- _____ Save money on food
- _____ Take food home to eat
- _____ Try new and different foods
- _____ Make new friends or social connections
- _____ Learn cooking/baking skills
- _____ Learn how to plan and prepare a meal
- _____ Learn more about nutrition
- _____ Learn more about food safety
- _____ Learn how to best use the new WIC package

Please tell us a little about your current health practices. Check the box that is **most** applicable to you.

	Never True	Sometimes True	Often True
I feel confident with my cooking skills.			
I plan the meals I want to cook before shopping for food.			
My family and I eat at least one meal per day from a fast food restaurant, convenient store or cafeteria.			
I eat grains, vegetables, fruits, dairy products and meats/beans daily.			
I eat at least 5 servings of fruits and vegetables each day.			
I usually need more food than I have.			
I prepare or cook food with others.			
I usually eat food with others.			



Please tell us a little bit about yourself by checking a box or filling in a blank space below.

1. Please indicate Gender: Female Male
2. What is your Age? _____ years
3. What is your Zip code? _____
4. Do you receive WIC benefits? Yes No
5. What is your Marital Status?
 - Never married
 - Married/ living together
 - Separated/divorced
 - Widowed
6. How many people are currently living in your household? _____
7. How many children less than 18 years of age are currently living in your household?

8. How much do you typically spend on groceries (including cash and food stamps) in a week for your household?
 - Less than \$50
 - \$50 or more but less than \$100
 - \$100 or more but less than \$150
 - \$150 or more
9. Which one or more of the following would you say is your race or ethnicity?
 - Hispanic or Latino
 - Black or African American
 - Asian
 - Native Hawaiian or Other Pacific Islander
 - American Indian or Alaska Native
 - White or Caucasian
 - More than one ethnic group/multi-racial
 - Other [specify] _____
10. Were you born in the United States? Yes No
 If No, What is your country of origin? _____
 How many years have you lived in the United States? _____

Thank You!

Post-session Questionnaire:

Please rank the top 3 things that you got out of participating in a community kitchen. Place a "1" next to your top/first choice, "2" next to your second choice, and "3" next to your third choice.

- _____ Save money on food
- _____ Take food home to eat
- _____ Try new and different foods
- _____ Make new friends or social connections
- _____ Learn cooking/baking skills
- _____ Learn how to plan and prepare a meal
- _____ Learn more about nutrition
- _____ Learn more about food safety
- _____ Learn how to best use the new WIC package

Please tell us a little about your current health practices. Check the box that is **most** applicable to you.

	Never True	Sometimes True	Often True
I feel confident with my cooking skills.			
I plan the meals I want to cook before shopping for food.			
My family and I eat at least one meal per day from a fast food restaurant, convenient store or cafeteria.			
I eat grains, vegetables, fruits, dairy products and meats/beans daily.			
I eat at least 5 servings of fruits and vegetables each day.			
I usually need more food than I have.			
I prepare or cook food with others.			
I usually eat food with others.			

Please tell us about your **overall** community kitchen experience by filling in the blank spaces below.

1. If you had the opportunity, would you continue to participate in your community kitchen?

2. If funding were unavailable in the future, how much would you pay to participate in your community kitchen? \$ _____ per community kitchen.



Thank You!

Appendix D: Auditor summaries

Kala Mayer Dissertation Auditor Review

Aim One: Identify and Describe the Types of Social Support Provided by the Family Community Kitchen

I began the auditing process by reviewing Kala's dissertation literature review in order to familiarize myself with the core concepts used in her research. We also met in person to discuss her research and agree on the role of the auditor (myself) in the research process. At our second meeting we went over Kala's research methods, and discussed the types of social support identified in Aim One in greater depth. I then reviewed the transcripts from focus groups one and two alongside the master code sheet of the Aim One codes. I periodically reviewed the process of code development in the coding of these focus group transcripts, though I did not analyze the evolution of every identified code. In all cases tracing code development I found the process leading to the final (stage four) codes to be logical, clear, unique, and meaningful.

In the second part of the auditing process I reviewed all final codes identified in the focus group transcripts and observations, the survey tool and survey observations, and the Community Kitchen direct observations relating to consumption, distribution, food production, orientation, planning, preparation and clean up. For all coded data I highlighted any discrepancies or inconsistencies in orange. I found that almost all master codes identified by the researcher were appropriate, logical, and meaningful. In several cases I flagged questions regarding the applicability of unique codes, which were later discussed in our follow-up meeting. In each instance the researcher demonstrated thoughtful and rational explanations for her coding choices. For example, it was initially unclear to me why some comments regarding gluten-free foods were coded as *IS – Food Characteristics* and others as *IS – Nutrition and Healthy Food*. When questioned on this discrepancy, Kala identified the code of *IS – Food Characteristics* as relating to descriptions of gluten-free foods, and codes for *IS – Nutrition and Healthy Food* as relating to explanations regarding how and why to include gluten-free foods. Upon data review these distinction held true and appeared to be substantiated with evidence from the data. This example demonstrates that even in cases of subtle distinction, the researcher had clearly thought through the development and application of each code in a scientific and logical fashion that served to both eliminate coding redundancy and overlap as well as to provide a clear and consistent coding framework.

My review of the final codes also raised some questions for me regarding the role of race, class, and gender identifiers in the data. These questions were discussed in our subsequent meeting, and it was agreed that they would be addressed in the data codes of Aim Two: Facilitators and Barriers. Additional clarification regarding the coding of the survey was discussed, and again the researcher demonstrated a thoughtful, logical, and in-depth process regarding the decisions about how she choose to code her survey data. In the case of the survey data, the coding distinction identified was between coding outcome and proxy data. In keeping with her careful and methodical data review, Kala choose not to code for proxy data. This explanation helped also to solidify the validity of the codes used in the survey data. After these questions were

discussed and clarified, I then went back through the codes that I had previously flagged for review, and removed any flags that no longer appeared to be applicable.

The final audited documents that I submitted include no cases of incorrectly identified or unclear coding. Rather, data that remains flagged consists primarily of instances in which I felt that additional codes should be listed alongside identified codes. I justify these flags for additional codes through the cross-referencing of the data with the master-coding descriptions and with similarly coded data items. The addition of these codes serves primarily to reinforce the researcher's coding process and also to identify sites of additional instances of code applicability.

In sum, upon in-depth evaluation, the coding process developed by the researcher with the aim of identifying and describing the types of social support provided in the community kitchen appears to be clear and consistent, scientifically methodical and logical, and substantiated by evidence within the data. There appear to be no cases of redundant or inaccurate coding of the data, nor do there appear to be any inaccurate or unclear coding groups. As previously stated, the additional codes identified by the auditor serve mainly to reinforce the value of the social support sub-groups established by the researcher. In my opinion the research process demonstrated in this work is highly intelligible, methodical, and replicable, as well as valuable to the current state of knowledge in the field.

Please do not hesitate to contact me with any questions or concerns regarding the audit of this research project.

Kala Mayer Dissertation Auditor Review

Aim Two: Identify and describe Family Community Kitchen Project facilitators and barriers of social support

The review for aim two began similarly to the review process for aim one. Kala and I met to discuss the aim two goals and coding processes. There was some initial confusion on my part regarding the level of distinction between the social support facilitators and barriers. Kala explained that the facilitators and barriers were being measured on a continuum, and were not being distinguished within separate coding categories. She was able to clearly explain the logic behind pursuing this process of continuum coding, and provided sufficient background literature to uphold her coding choices. In addition, we discussed the background literature supporting the development of the aim two coding streams, including theories from Berkman and Glass, group dynamics and communication literature, and Community Based Participatory Action Research. This conversation was an extremely useful platform from which to proceed with the audit process for the aim two research goals.

I began the first stage of the aim two review process with an analysis of the transcript codes for focus groups one and two. The aim two coding review process differed from the aim one coding review in two distinct ways. Primarily, the quantity of codes used was much higher, and fewer codes were labeled within sub-categories. This difference made the initial coding review for aim two more laborious than the process of auditing for aim one, as the overarching categories for each code were not necessarily immediately clear. In addition, there was less transparency within the data documents about the code development process, which also slowed the reviewing procedure. The importance of sub-codes and code grouping labels was discussed with the researcher, who appeared to agree with this concern. It is important clarify here that the codes and coding groups themselves developed to address the aim two goals are both logical as well as supported by theory. The concern for the reviewer in this case was focused on the labeling of sub-codes within the document for purposes of analysis.

The coding of the focus group transcripts highlighted valuable facilitators and barriers to social support, demonstrating strong research and analytical skills. As with the previous review, I sought clarification on the distinction between codes that appeared to be similar, and in each instance the researcher was able to clearly distinguish her concept definitions. In one instance the researcher was also open to expanding or adding to her existing codes. I suggested broadening of the code "Context - Disease" to encompass concerns relating to both health and to disease by noting several instances in the text where focus group participants appeared to be motivated to act or think in certain ways not only in response to disease, influenced by negative consequences, but also to promote health, influenced by positive consequences. The researcher was open to, and appreciative of, this suggestion, demonstrating her primary incentive in this research as providing as accurate and meaningful data analysis as possible. In review, through the process reviewing the focus group transcript codes for the aim two (stage five codes), I found the coding development to be appear logical, clearly defined, and theoretically meaningful.

The second part of the aim two auditing process included a review of all the final codes identified in the survey and observation data, including direct observations relating to

consumption, distribution, food production, orientation, planning, preparation and clean up, along with additional observation notes regarding the focus group and survey logistics and processes. Similarly to the review process for aim one, I highlighted any questions or discrepancies regarding coding choices in orange. In these files I also found the majority of the aim two (level five) codes identified by the researcher to be appropriate, logical, and meaningful. In several cases I flagged questions regarding the applicability of unique codes, or coding groups, and addressed these with the researcher individually. In certain situations I suggested the use of slightly different coding choices, such as coding for “atmosphere” over “individual” if the feeling or mood described the majority of the group. As with the audit for aim one, the majority of flagged codes consist primarily of instances in which I felt that additional codes should be listed alongside identified codes. The addition of these codes serves primarily to reinforce the researcher’s coding process, and also to identify sites of additional instances of code applicability.

As in previous exchanges, Kala demonstrated thoughtful and rational explanations for all of her coding choices.

Upon completion of the initial audit the auditor and researcher discussed the implications for using the data collection tools as a component of the data collection process. Kala demonstrated a robust and well-designed methodology, fitting with the principals of participatory action research, outlining the importance of the data collection process as integral to the data outcomes and analysis. In sum, upon in-depth evaluation, the coding process developed by the researcher for both aim one and aim two appears to be clear and consistent, scientifically logical, and substantiated by evidence within the data. There does not appear to be redundant or inaccurate coding of the data, nor does there appear to be inaccurate coding within parent-coding groups. The research process demonstrated in this work, both part one and two, remains clear, comprehensive, logical, and highly valuable to the current state of knowledge in the field.

Please do not hesitate to contact me with any questions or concerns regarding the audit of this research project.

Appendix E: Community member consent form

UNIVERSITY OF WASHINGTON CONSENT FORM

Community Kitchen Pilot Program Evaluation

Primary Investigator: Kala Mayer, RN, University of Washington Graduate Student, MPH: SBS track.

Investigators' statement

We are asking you to be in a research study. The purpose of this consent form is to give you the information you will need to help you decide whether to be in the study or not. Please read the form carefully. You may ask questions about the purpose of the research, what we would ask you to do, the possible risks and benefits, your rights as a volunteer, and anything else about the research or this form that is not clear. When we have answered all your questions, you can decide if you want to be in the study or not. This process is called "informed consent." We will give you a copy of this form for your records.

PURPOSE OF THE STUDY

During your participation in the Community Kitchen Pilot Program we would like to explore what you are getting out of being a part of your community kitchen. Also, we would like to explore how we can make your community kitchen experience a better experience for you and others who will come here after you by obtaining your feedback and observing what is going on in and around your community kitchen. This information will help us understand the value of the Community Kitchen Pilot Program.

STUDY PROCEDURES

We are asking you to be in a study about the Community Kitchen Pilot Program. If you choose to participate we will ask you to (1) fill out two short questionnaires and (2) take part in two group discussions. We will also be taking some notes about what happens during the sessions.

Questionnaires: There are two questionnaires, one before the program and one after. They will each take about 10 minutes. The questionnaires ask about topics like whether or not you plan for meals, whether or not you have enough food, and how much you spend on groceries every week.

Discussion Groups: There will be two discussion groups, one before the program and one after. The discussions will last no more than 90 minutes. We will take notes and audio-record the discussions. We will ask you about topics like why you came to the community kitchen, what you would like to learn here, and what it was like to participate in the program.

Observation Notes: We will take some notes during the program so that we can record the sorts of activities we do and how well they work. We will not record any names in our notes.

You can still be in the program even if you do NOT want to fill out the questionnaires or take part in the group discussions.

RISKS, STRESS, OR DISCOMFORT

Some people feel that providing information for research project is an invasion of privacy. You do not have to participate if you do not want to. Some people feel self-conscious when they are audio recorded. We have addressed concerns for your privacy in the following section of this consent form.

BENEFITS OF THE STUDY

We hope that the results of this study will provide the public with new knowledge about community kitchens. You will probably learn some new things about personal health practices and community kitchens from the program, but you may not directly benefit from the research.

OTHER INFORMATION

Your participation in the study is voluntary. You can stay in the program and quit the study without any negative consequences.

Data from this study are confidential. We will keep the audio-recordings for 5 years. We will keep your name linked to the data for 5 years. After that we will erase the recording and break the link between your name and the data. If we report results of this study, we will NOT use your name.

We will give you a \$10 Safeway gift card for the time you spend in the group discussions.

Subject's statement

This study has been explained to me. I volunteer to take part in this research. I have had a chance to ask questions. If I have questions later about the research, I can ask one of the researchers listed above. If I have questions about my rights as a research subject, I can call the Human Subjects Division at (206) 543-0098. I will receive a copy of this consent form.

Printed name of subject

Signature of subject

Printed name of study staff obtaining consent Signature

Date

Copies to:
 Researcher
 Subject

Appendix F: CK leader consent form

University of Washington Oral Consent Form

Community Kitchen Pilot Program Evaluation

Investigator: Kala Mayer, RN, Graduate Student, University of Washington School of Nursing

I am asking you to be in a research study. If you choose to participate I will look at data that was already collected as a part of your participation as a focus group leader, observer, and community kitchen leader. This information will provide further depth when describing impacts and the community kitchen model and how it can be improved.

Specifically, I would like to analyze your responses and notes and publish these responses and notes that occurred as a result of your participation as a community kitchen leader, focus group leader, and observer.

I would also like to analyze your Community Kitchen Pilot Program grant application and project description documents and will also ask you to fill out one short questionnaire. The questionnaire will take you about 10 minutes to complete. The questionnaire asks about topics like how much you spent on groceries every week during the Community Kitchen Pilot Program and your annual income level during this time. You will receive this questionnaire by email on Monday, November 24, 2013.

Some people feel that providing information for research is an invasion of privacy. You do not have to participate if you do not want to and you are free not to answer any questions you do not wish. Although I will not use your name in any publications, it may be possible for readers to identify you based upon your title, demographic information, and the geographical location in which the study took place. I will describe demographic information collected such as age, gender and income level in publication. The combination of demographic variables reported and the use of direct quotes in publications, even without the use of your name, may be enough for some readers to identify you.

You will probably learn some new things about community kitchens from this research, but you may not directly benefit from the research.

I will keep audio-recordings collected for 5 years or less. I will store your data separate from your name and will keep your name linked to the data for 5 years or less. After that I will erase the recording and break the link between your name and the data. If I report results of this study, I will NOT use your name.

Your participation in the study is voluntary. You may refuse to participate and you are free to withdraw from this study at any time without penalty or loss of benefits to which you are otherwise entitled. If you have questions later about the research, you can call me at 817-995-9528 or call the Human Subjects Division at (206) 543-0098.

Do you volunteer to take part in this research?

Appendix G: Thematic Definitions

Informational Support Provision Themes and Definitions

Theme	Definition	Reference
How to prepare foods	Prepare includes cooking, baking, washing, cutting, putting together foods	Merriam-Webster, 2013
Food ways	Behaviors around food	Merriam-Webster, 2013
Meal planning techniques	Planning involves thinking about and organizing activities required to achieve a meal	Merriam-Webster, 2013
Food Characteristics	Any feature or quality belonging to food and serving to identify it	Merriam-Webster, 2013
Food substitutes	Foods that look and taste like unhealthy foods but differs in composition such that it provides essential nutrients and energy to sustain growth, health and life while satiating hunger	Merriam-Webster, 2013
Diet and Disease	Issues around regular consumption of food and drink for nourishment and illness reduction for individuals and groups.	Merriam-Webster, 2013; Staples, 2004
Health promotion strategies	A method designed to influence targets to act in a manner that enables a person or group to achieve its goals and objectives of enabling people to increase control and improve their health	Staples, 2004; Labonte & Laverack, 2008
Resources	A stock or supply of money, materials, staff and other assets that can be drawn on by a person or organization in order to function effectively	Merriam-Webster Dictionary, 2004; Staples, 2004
Food-health environment	Area food and health conditions in which a person operates	Merriam-Webster, 2013
People	Any feature that helps to identify, tell apart, or describe recognizably a person or people	Merriam-Webster, 2013
Family CK Project	Family CK Project characteristics and the act or process of creating and recreating the Family Community Kitchen over time	Merriam-Webster, 2013

Emotional Support Provision Themes and Definitions

Theme	Definition	Reference
Understanding	The process of agreement of opinion or feeling	Merriam-Webster, 2013
Relating	To bring into or link in logical or natural association	Merriam-Webster, 2013
Caring	Displaying kindness and concern for others	Merriam-Webster, 2013
Recognizing	The action or process of formally acknowledging the quality, significance, or magnitude of someone or something	Merriam-Webster, 2013
Appreciating	The action or process of being grateful or thankful for someone or something	Merriam-Webster, 2013
Respecting	With reference or regard to	Merriam-Webster, 2013
Trusting	To rely upon or place confidence in someone or something	Merriam-Webster, 2013

Appraisal Support Provision Themes and Definitions

Theme	Definition	Reference
Program value	Appraisals of the importance, worth, or usefulness of CK activities	Merriam-Webster, 2013
Project components	Appraisals of aspects of specific project components	Merriam-Webster, 2013
CK participants	Appraisals of each other	Author
Topics that were being learned	Appraisals of the learning that occurred in the CK Project	Author

Tangible Support Provision Themes and Definitions

Theme	Definition	Reference
Labor	Human activity	Merriam-Webster, 2013
Food	The things that people eat	Merriam-Webster, 2013
Utensils	An implement, instrument, or vessel used in a kitchen	Merriam-Webster, 2013
Kitchen equipment	A set of articles or physical resources serving to equip a kitchen	Merriam-Webster, 2013; Rychetnik, Webb, Story, & Katz, 2003
Financial resources	Disposable income, food coupons, meal vouchers, financial assistance	Rychetnik, Webb, Story, & Katz, 2003
Facility	Something such as a building that can be used for cooking	Merriam-Webster, 2013
Supplies	Things such as paper, pens or napkins that are needed for a particular purpose	Merriam-Webster, 2013

Social-Structural Conditions Themes and Definitions

Theme	Definition	Reference
Community resources	A stock or supply of money, materials, staff and other assets that can be drawn on within a community	Merriam-Webster, 2013; Staples, 2004
City disparities	City-specific differences in structures and health, for example	Rychetnik, Webb, Story, & Katz, 2003
Community SES conditions	Community characteristics include (but is not limited to) age, income level, geography, race and ethnicity, culture, gender, education level	Mayer, 2009
Community health conditions	The health conditions e.g. physical, social, mental conditions that exist within a community	Mayer, 2009
Cultural conditions	Norms and values, social cohesion, racism, sexism, competition/cooperation	Berkman & Glass, 2000, p.143
Beliefs	A state or habit of mind of an individual in which trust or confidence is placed in some person or thing; conviction of the truth of some statement or the reality of some being or phenomenon.	Merriam-Webster, 2013
Project goals	A desired end result of the project	Merriam-Webster, 2013; Staples, 2004
Project partners	One that is united or associated with the project in an activity or a sphere of common interest.	Merriam-Webster, 2013; Staples, 2004
Project resources	A stock or supply of money, materials, staff and other assets that can be drawn on by the project in order to function effectively	Merriam-Webster, 2013; Staples, 2004
Project policies	A course or principle of action adopted or proposed by the project.	Merriam-Webster, 2013; Staples, 2004

Group Structure Themes and Definitions

Theme	Definition	Reference
Homogeneity	The extent to which network members are similar	Heaney & Israel, 2008, p191; Berkman & Glass, 2000
Proximity	Extent to which network members are located near each other	Heaney & Israel, 2008, p.191; Berkman & Glass, 2000
Size	"Number of network [or group] members"	Berkman & Glass, 2000, p.145
Density	"The extent to which network members know and interact with each other" ("are connected to each other")	Berkman & Glass, 2000, p.145; Heaney & Israel, 2008, p.191
Frequency of contact	"Number of face to face contacts and/or contacts by phone..." or email	Berkman & Glass, 2000, p. 145
Duration of contact	"The length of time an individual knows another"	Berkman & Glass, 2000, p. 145

Group Dynamics and Relationship Characteristics Themes and Definitions

Theme	Definition	Reference
Role Allocation	Taking part in a any number of positions within a group	Wasserman & Faust, 1994; Staples, 2004, p.93-96
Facilitation	Helping forward or assisting the progress of someone or something	Wheelan, 2005; Merriam-Webster, 2013
Participation	Active engagement in CK Project activities	Minkler, Wallerstein, & Wilson, 2008, p. 294; Labonte & Laverack, 2008, p. 32; Staples, 2004
Linking	Connections made for facilitating access to resources and information	Dominquez & Arford, 2010; Labonte & Laverack, 2008, p. 35-36
Atmosphere	The pervading tone or mood in the group	Merriam-Webster, 2013
Reciprocity	The “extent to which resources and support are both given and received in a relationship”	Heaney & Israel, 2008, p. 191
Complexity	The “extent to which social relationships serve many functions” (“The number of types of transactions or support flowing through a set of ties”)	Heaney & Israel, 2008, p190 Berkman & Glass, 2000, p. 145
Formality	“Extent to which social relationships exist in the context of organizational or institutional roles”	Heaney & Israel, 2008, p.191
Directionality	Extent to which members share power and influence in project development	Heaney & Israel, 2008, p.191

Appendix H: Example of project reflection questions for practitioners

Project structure

- Do community kitchen goals align with participant priority goals?
- Are program strategies (i.e. build meal planning and cooking skills) aligned with the purpose or goals (i.e. address issues of food insecurity and chronic disease) of the kitchen? How so?
- Are these strategies effective in achieving program goals?
- What are the tactics (i.e. food preparation, group size, frequency of contact) in the community kitchen used to achieve each program strategy?
- Are these tactics effective in achieving program strategy?
- How can you improve or enhance program tactics?

Project partners, resources, and policies

- What are the major CK partners? Do these partners enhance or restrict program goals? How so?
- Are CK resources adequate for program implementation?
- Do CK policies enhance or restrict program goals? How so?
- How can you improve or enhance project partners, resources and policies?

Social Structural Considerations

- Are there outside influences that inhibit or facilitate the goals of the CK such as city-wide food disparities, unemployment or low household incomes?
- If yes, how does the CK work to acknowledge, overcome or address these issues?