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PUBLIC HOUSING RELOCATION AND UTILIZATION OF THE FOOD SAFETY NET:  
THE ROLE OF SOCIAL CAPITAL AND CULTURAL CAPITAL

by

MARCIE HAMBRICK

Under the Direction of Deirdre Oakley, PhD

ABSTRACT

HOPE VI, instituted in 1993 and subsequent related policies, resulted in the demolition of traditional public housing and the relocation of former residents. For former residents living on low incomes, combining housing subsidy and other social services is important to survival. One crucial type of social services support provides food supplements. Research indicates that among low-income families, many do not receive necessary food social services. For example, among eligibles, food stamp utilization is at 50 to 60%, and for Special Supplemental Nutrition Program for Women Infants and Children (WIC) rates vary from 38 to 73%. Research indicates that 35% of food insecure older adults are ineligible for the Elder Nutrition Program, and approximately

60% of eligibles are wait-listed upon application. Social services utilization patterns among eligibles are affected by neighborhood contexts. Relocation due to public housing transformation policies has been shown to change neighborhood context. This in turn has affected former public housing resident's cultural capital and social capital. But how this affects food social services utilization has not been studied. I use Klinenberg's (2002) activist client thesis as a framework to investigate the effect of cultural capital and social capital for housing subsidy recipients (relocated public housing residents) in Atlanta on their utilization of food social services using secondary longitudinal data from the Georgia State University Urban Health Initiative analyzed using ordered logistic regression. Most specifically, my research investigated how varying neighborhood contexts affect food social services utilization for former public housing residents in Atlanta. This research informs public policy on the provision of housing subsidy and the provision of food social services.

**INDEX WORDS:** Food safety net, Social services, Welfare, Utilization, Food insecurity, Self-esteem, Locus of control, Housing subsidy, Public housing, Public housing relocation, Dislocation, Social capital, Cultural capital, HOPE VI, Poverty deconcentration, SNAP, WIC, ENP, Food pantry

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THE ROLE OF SOCIAL CAPITAL AND CULTURAL CAPITAL

by

MARCIE HAMBRICK

A Dissertation Submitted in Partial Fulfillment of the Requirements for the Degree of

Doctor of Philosophy, Sociology

in the College of Arts and Sciences

Georgia State University

2016

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THE ROLE OF SOCIAL CAPITAL AND CULTURAL CAPITAL

by

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December 2016

## DEDICATION

I dedicate this dissertation to all of the strong women in my life who have given me wonderful examples to follow. My great grandmothers, who immigrated, worked hard in their agricultural families, and believed that a woman's contribution was important, have influenced me greatly. My grandmother, one of the first women to have a career in her community, always conducted herself with integrity and dignity, which inspired me from early childhood. My two daughters, Markette and Ruveanna, continually impress me with their creativity, brilliance, passion, and kindness to others, along with their unending support. Professional women who have mentored me throughout my education and career development also deserve thanks. Norah Stevens is the perfect example of professionalism, humility, and success. Marnie Dodd, Holly Rice and Dana Cooley-Keith nurtured my early development. Caroline Pence, through her gentle guidance, helped me become an effective leader. All of the impressive women at the Family Support Council have demonstrated a level of concern for others that has moved me. Adia Harvey-Wingfield is one of the most brilliant, hard working women I have ever had the pleasure to learn from. Cynder Verheyen has provided sustained mentoring, and her wry sense of humor has helped me to find balance within the helping profession. I appreciate Dr. Jodie Vangrov and Dr. Memo Konrad for their dissertation stories and their encouragement. I have the utmost gratitude for my talented dissertation committee. Dr. Jenny Zhan aided me with her enthusiasm and ability to tease out my strengths. Dr. Erin Ruel's attention to detail and authentic desire to make my project extraordinary and publishable has been crucial to my success. Dr. Deirdre Oakley has been my rock. She is always consistent, very open to my needs, endlessly encouraging, and matter-of-fact in her belief that I would accomplish this. Without her, I would not have had the courage to finish this race. I am indebted to all of these strong women!

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## 1 INTRODUCTION

Social welfare is a societal institution that acts as a safety net for people living on low incomes (Quadagno, 2010). Two social service programs that are vital to survival for low-income families provide for the essential needs of housing and food. For families with limited resources, subsidy programs that aid with housing and food can make a real difference. For example, utilization of food social services has been linked to better physical and mental health (Gregory and Deb, 2015; Leung et al., 2015). But, food insecurity has negative repercussions for children such as worse health and more developmental delays (Cook et al., 2013). Housing instability also correlates with worse health for children (Cutts et al., 2011). For adults, the combination of both insufficient food resources and housing instability is worse for health. (Vijayaraghavan et al., 2011). Social services policy is not static, and policy changes affect access to benefits. There have been significant policy changes in the last two decades in the provision of housing and food for the poor. Research has investigated the effects of these separately, but little is known about how policy changes in both housing and food social support affect low-income families.

Low-income housing policy has gone through noteworthy changes over the last several decades. Beginning in the late 1980s, concern grew about the concentrated poverty associated with traditional public housing and about the social problems that appeared to stem from it (Oakley, Burchfield, 2009). In 1993 Congress legislated HOPE VI (Housing Opportunities for People Everywhere) which provided funds for the demolition of traditional public housing and its redevelopment into mixed-income housing communities. The policy has caused forced relocations of former public housing residents (Fraser et al., 2013). The effects of displacement

resulting from such housing policies are complicated by policy changes affecting food support for the poor during the same time frame.

The three federal food social services programs are: Supplemental Nutrition Assistance Program (SNAP, formerly called food stamps), Special Supplemental Nutrition Program for Women Infants and Children (WIC), and Elderly Nutrition Program (ENP). In addition, non-profit food pantries provide assistance as well. The programs in the food safety net have become increasingly difficult to access during the last two decades resulting in a heightened burden for those in need of this type of support (Currie et al., 2001; Ferro and Grogan, 2013). The purpose of my study is to discover what effect HOPE VI policy and resultant changing neighborhood contexts have on utilization of these four food social services in Atlanta.

The theoretical model that guided my research was derived from Klinenberg (2003), who asserted that in a social service system designed as a marketplace, those applicants who have cultural capital and social capital resources are better placed to garner benefits. I refer to Klinenberg's argument as the activist client thesis. Cultural capital includes mannerisms, accolades, and possessions that are convertible into other forms of capital (Bourdieu, 1986). The activist client thesis predicts that those with personal cultural capital have an advantage in accessing social services. Social capital can be defined as resources that are accessed through networks of relationships (Bourdieu, 1985). The activist client thesis proposes that those who have ongoing relationships have an easier time accessing social services than those who are isolated socially. I augment this model by including a priori theory that parses out the elements of cultural capital and social capital. Bourdieu (1986) identified three elements of cultural capital (embodied, objectified and institutional), which I add to the model to enhance the



analysis. Also, Putnam (2001) and Szreter and Woolcock (2004) recognized that social capital has bonding, bridging, and linking elements, which I have added to further specify the model.

Given that the literature views neighborhood characteristics as social capital (Clampet-Lundquist, 2010; Curly, 2009; Keene and Ruel, 2013; Kissane and Clampet-Lundquist, 2012), housing policy that relocates people from their neighborhoods theoretically would affect the ability of former public housing residents to access food social services. However, this has not been investigated to date. My research adds to the sociological understanding of how housing policy changes affect access to food support. More specifically, my research investigates how changing neighborhood contexts that result from relocating public housing residents affect food social services utilization and food insecurity.

### **1.1 Background on Social Welfare Policy for Housing**

According to the activist client thesis, changes in cultural capital and social capital alter the activist client resources of individuals, which then has an effect on their utilization of social services (Klinenberg, 2003). A brief discussion of the history of federal housing and food assistance, as well as food pantries, is necessary to provide context for my study.

The first housing subsidy policy in the United States was part of the 1933 New Deal which established the Public Works Administration (PWA), an entity that among its other accomplishments built the first public housing that was federally funded (Fraser, Oakley, and Bazuin, 2012). The PWA built 21,000 large scale, multiple unit, low-rent housing complexes across the nation, which is referred to in my research as *traditional public housing*. The first traditional public housing community to begin accepting residents, in 1936, was Techwood Homes in Atlanta, Georgia (Keating, 2000; Fraser, Oakley, Bazuin, 2012).

Then, the Housing Act of 1937 established Public Housing Authorities (PHAs) to build and operate the traditional public housing to “alleviate present and recurring unemployment and to remedy the unsafe and insanitary housing conditions and the acute shortage of decent, safe and sanitary dwellings for families of low income” (United States, 1937). This policy resulted in increased building of traditional public housing ([Stoloff, 2004](#)).

Later, the 1949 Housing Act focused on renewing distressed urban spaces and stimulating the economy by incentivizing building traditional public housing in these areas ([Turbov and Piper, 2005](#); [Oakley, Ruel, Reid, 2013a](#)). The 1949 Housing Act had a multi-faceted approach: funding slum removal (Title I), additional funding for the existing mortgage insurance program (Title II), and funding the construction of 810,000 new traditional public housing units (Title III) ([Oakley, Ruel, Reid, 2013a, p. 208](#); [Oakley and Burchfield, 2009](#)). The Brooke Amendment to the HUD Acts of 1969, 1970, and 1971 placed caps on the proportion of income that residents could be charged as rent ([Turbov and Piper, 2005](#)). Though this made public housing more affordable for low-income residents, an unintended consequence of this change was that management and upkeep of the traditional public housing communities were now underfunded. This resulted in worsening conditions across time ([Turbov and Piper, 2005](#); [Goetz, 2011](#)).

The Brooke Amendment also instituted a different form of supplemented housing, which paid a proportion of recipients’ rents to private landlords on the open rental market ([Fraser, Oakley, Levy and Wooley, 2013](#)). This kind of housing supplement was later augmented by the Housing and Community Development Act of 1974, with Section 8 of the act providing for continued subsidization for private market rentals with some new construction sponsored by federal funds ([Freeman and Barconi, 2004](#), [Oakley Ruel, Reid, 2013](#)). During this era, the two

types of housing supplement, traditional public housing and subsidized market rental housing (Section 8), coexisted to provide for the housing needs of low-income families.

Concern in 1989 that the traditional public housing infrastructure had fallen into serious disrepair led to the establishment of the National Commission on Severely Distressed Public Housing, which was tasked with assessing the state of traditional public housing nationally. The commission reported that of the 1.3 million traditional public housing units nationwide 86,000 were severely distressed, characterized by “physically deteriorated buildings” and “economically and socially distressed surrounding communities”. (National Commission on Severely Distressed Public Housing, 1992 p. 3). The deterioration of public housing resulted from a number of factors: the design of the structures and grounds compounded by low maintenance of the facilities, locations in former slum areas, neighborhood class composition changes, and neighborhood racial composition changes (Goetz, 2011).

One issue leading to the decline of this type of housing was that the initial design of traditional public housing had large public open spaces that at the outset were nicely landscaped, but as funding decreased these spaces were not maintained and became desolate, unattractive, and not suitable for family use (Goetz, 2011). There was inadequate funding to maintain public housing properties, which resulted in dangerous and unsanitary conditions for residents (Popkin, Levy, Buron, 2009). Additionally, security was a cost that was increasingly constrained by low funding, which resulted in heightened criminal activity within public housing buildings and grounds (Popkin, Levy, Buron, 2009; Goetz 2011).

Another issue that led to the decline of public housing is location. Traditional public housing communities were built in the inner city in spaces that were formerly slums. These areas were initially socially isolated with few job opportunities and became even more so as

manufacturing left the cities (Goetz, 2011; Quane and Wilson, 2012). Additionally, the housing had originally been utilized by the working poor, but increasingly the residents were welfare recipients who were unemployed. This was due to amendments to the Housing and Community Development Act in 1979 that required a preference be given to the neediest applicants such as those who currently were living in substandard housing or who were homeless. Later the Supplemental Appropriations Act of 1984 adjudicated that families paying more than 50% of income on rent be given preference as well (Spence, 1993; Goetz, 2011). Then, housing shortages among African Americans, induced by both institutionalized and informal racism in the housing market, led to public housing becoming increasingly racially segregated. The Federal Housing Authority, in the 1934 operational handbook, placed mortgage restrictions based on the racial composition of neighborhoods, a practice termed redlining, which made affordable home loans nearly impossible for African Americans (Woods, 2012; Popkin, Levy, Buron, 2009). As the populations utilizing traditional public housing became poorer and more likely to be Black, the political interest in the programs waned and funding suffered further (Popkin, Levy, Buron, 2009; Goetz, 2011). The decline of traditional public housing, as it was publicized through the commission and by researchers, led to the national dialogue on housing policy for low-income families becoming focused on poverty deconcentration (Fraser, Oakley, Levy, 2013).

Poverty deconcentration ideology, which has become a hot-bed in the last two decades, is a concern that traditional public housing is a contributing factor in worsening inner city conditions since the 1960s (Goetz, 2000; Crump, 2002). Inner city poverty and the presence of public housing developments were found to be associated in research (Oakley, Ward, Reid, Ruel, 2011). Spatial concentration of poverty began to be viewed in political discourse, by neoliberals,

conservatives, and advocacy groups, as a cause of a number of social ills such as joblessness, gangs, crime, single headed families, and welfare dependency (Peterson, 1991; Wacquant, 1996; Crump, 2002). Though neoliberals were more likely to focus on inequality, and conservatives were focused on culture of poverty ideology (Peterson, 1991), both groups began to discuss demolition of public housing as a possible solution (Crump, 2002). The dialogue of deconcentration of poverty was followed by housing policy changes called The Housing Opportunity for People Everywhere program (HOPE VI). There were two objectives of HOPE VI: to revitalize inner cities and to improve living conditions and opportunities of former public housing residents (Popkin et al., 2004). The mechanism chosen to deconcentrate poverty was large scale demolition of traditional public housing (Popkin et al. 2004). This policy had impact on those residents who were forced to move, including the subjects of this study in Atlanta.

HOPE VI, instituted between 1993 and 2010, provided money to demolish traditional public housing developments on the condition that mixed-income housing with replacement units for low-income individuals be provided (Kleit & Manzo, 2006). The replacement rate of units for low-income residents is low, around 20% across the nation (Oakley, Ruel, and Reid 2013a). Some displaced former public housing residents can receive another kind of housing subsidy, Housing Choice Vouchers, formerly called Section 8 vouchers (Feins & Patterson, 2005).

Interestingly, the first city to house the poor in traditional public housing, Atlanta, was also among the first to demolish these complexes under HOPE VI policy in the early 1990s (Oakley, Ruel, Reid, 2013a). The political will to demolish traditional public housing in Atlanta was initially motivated by the city's selection to host the 1996 Summer Olympics (Oakley et al., 2011; French and Disher, 1997). Two traditional public housing communities, Techwood

Homes and Clark Howell Homes, became a topic of concern due to their proximity to the site of the intended Olympics and the consensus among decision-makers that the impoverished conditions there would disgrace Atlanta on the world stage (Oakley et al., 2011). The demolitions of these two public housing communities, accomplished in 1995, were followed by additional demolitions until a total of 50,000 Atlanta former public housing residents had been displaced by the policy (Keating, 2000; Oakley, Ruel, Reid, 2013b). The second round of demolitions in Atlanta, which began in 2007, are a special case, because rather than using HOPE VI, with its requirement of replacement units for low-income individuals, the decision-makers proceeded under section 18 of the 1937 Housing Act, which reduced former residents' options to only the Housing Choice Voucher (Oakley et al., 2010). Since 2007, 10,000 traditional public housing residents have been displaced, and research indicates that the rate of receipt of vouchers is 84% (Oakley, Ruel, & Wilson, 2008).

In summary, theory suggests that changes in social capital and cultural capital affect utilization of social services. Relocation due to housing policy changes is expected to have an effect on social capital and perhaps to a lesser extent on cultural capital, which, according to the activist client thesis, will affect social services utilization. This study investigates how relocation, either with or without vouchers, for former public housing residents in Atlanta affects their social capital and cultural capital and in turn how this affects their ability to utilize food social services.

## **1.2 Background on Social Welfare Policy for Food**

Food social services come from diverse sources, are funded in varied ways, and have unique eligibility requirements. The four main food provision programs are: SNAP, WIC, ENP, and food pantries. These programs have gone through policy changes across time that trend

toward a market model of provision that has increased the burden on applicants and recipients (Klinenberg, 2003; Greenberg, Greenberg, and Mazza, 2010).

The major federal food provision social service, called food stamps originally, was piloted in 1961 and became national law in 1964 as the Food Stamp Act. It is funded by the federal government and administered by the states (Wellman, and Kamp 2004; Laird and Trippe, 2014). The original program required applicants to purchase food stamps with money to receive a higher buying power to purchase food at regular grocery outlets with high agentive leeway in choosing which foods to buy. In 1977, policy changes removed the requirement that the stamps be purchased and instituted poverty guidelines based on a federal standard for eligibility, the Federal Poverty Level (FPL), a measure that was developed in the 1960s to establish which families were living in poverty (Mukhopadhyay et al., 2011). The FPL is calculated yearly by the federal government based on the cost of food by family size, which is assumed to be one-third of a family budget (Cauthen and Fass, 2008, p. 2).

This is the model still in use today for the program renamed Supplemental Nutrition Assistance Program (SNAP) in 1980 (Landers, 2007). The paper stamps were replaced by Electronic Benefit Transfer (EBT) cards similar to credit cards in 2000. The current federal eligibility level for SNAP is 130% of the FPL or below, but states often have additional determinants of eligibility: assets limits, work requirements, and other determinants (Ferro and Grogan, 2013). The trend in policy for food stamps by the federal government and state administrations in the last two decades has been to institute more highly regulatory standards for applicants and recipients. For example, the amount of time required to apply for and later recertify for SNAP benefits has increased over time particularly for families with children

(Currie et al., 2001). Work requirements, for some applicants to SNAP, have been implemented and have increased the burden for garnering and maintaining these benefits (Currie et al., 2001).

Like SNAP, another food supplement social service, the Special Supplemental Nutrition Program for Women Infants and Children (WIC), is funded by the federal government and administered by the states. This program targets pregnant women and young children (Neuberger, 2011). WIC was piloted in 1972 and became national in 1975. The program has always been a voucher program in which participants can get highly specific food categories, such as dairy products, meat products, and fruit and vegetable products, with minimal choices in the food that can be picked up at regular grocery stores. A few changes in the dietary choices have occurred over time, and nutrition counseling was instituted in 1978. Compared to SNAP, the program is relatively unchanged over time. For WIC, each state sets the income level eligibility, which cannot exceed 185% of the FPL, by federal mandate. WIC eligibility is interesting, because income is not the only determinant of eligibility. WIC applicants must also be determined to have a “nutrition risk” as defined by reporting a poor diet, having anemia, being underweight, or having a history of poor pregnancy outcomes (USDA, 2014). Thus, regular medical exams are one burden to application and remaining eligible.

Another type of food social service, the Elderly Nutrition Program (ENP), was instituted through the Older Americans Act of 1965, which provided grants to states and communities for nutrition provisions for the elderly, aged 60 and over, and spouses of the elderly regardless of age. The grant funds are administered by either public or non-profit private organizations with oversight by the states (Ponza, Ohls, and Posner, 1994). The ENP provides hot nutritious meals daily that are delivered to the home by program workers, and efforts are made to accommodate seniors with special dietary needs due to health conditions (Wellman and Kamp, 2004).



Eligibility is determined by age qualification, nutritional risk, and homebound status with priority given to lower income applicants (Ponza, Ohls, and Posner, 1994; Meals on Wheels Atlanta, 2014). The policy changes in this program are minor compared to the earlier mentioned programs and were mostly aimed at defining the nutrition targets for determining eligibility (Ponza, Ohls, and Posner, 1994).

It is much more difficult to find documentation on the history the fourth type of food social services, food pantries. According to Daponte and Blade (2006), the first food pantry was started at St. Mary's Church in Phoenix, Arizona. It was established in 1967 by John Van Hengel. Early on, food pantries were locally funded, and some still are, but many joined a network of food banks established in 1979 originally called Second Harvest and later renamed Feeding America. This organization briefly received federal funding that ended in 1982. Now, food pantries associated with Feeding America are largely supported by food industry donations (Daponte and Bade, 2006). Locally funded food pantries are much more likely to be funded by individual donations from food drives (Berner, Ozer, and Paynter, 2008). Food pantries, since these are administrated by private non-profit organizations, have unique eligibility requirements at each agency. Food pantries give boxes of food, mostly non-perishable foods that can be stored well at the sites, with recipients having few choices about what foods are included.

Recently, demand at food pantries has increased due to the negative effects of the recession on family incomes, decreases in SNAP benefits, and increasingly stringent eligibility guidelines for SNAP (Greenberg, Greenberg, Mazza, 2010). During the same time period, donations to food pantries were either stagnant or only increased slightly (Greenberg, Greenberg, Mazza, 2010; Starr, 2011). In order to deal with the scarcity that resulted from these events, food pantries imposed stricter eligibility guidelines across time as a way to deal with a supply that was

not meeting demand (Starr, 2011). For example, food pantries increasingly required that applicants prove citizenship status in order to qualify. Providing identification is often a difficulty for marginalized and low-income citizens, since studies show that 15% of those earning below \$35,000 per year and 25% of African Americans do not possess a photo ID (Sullivan, 2014). In 2010, the majority of food pantries would not provide food to undocumented immigrants (63.4%), and 42.8% refused services to legal immigrants (Mabli et al., 2010). Additionally, during the same time period in which SNAP benefits were reduced approximately 25% of food pantries decreased the amount of food given (Mabli et al., 2010). Policies that included restrictions on the frequency of receiving food became stricter, and services were more often denied to those residing outside of the designated service area (Starr, 2011). For the four food social services programs policy changes have largely made these increasingly more difficult to access for eligible applicants.

Little is known about whether forced relocation due to housing policy affects the ability of former public housing residents to access the social services that provide food. The burdensome system of food provision for the poor could present additional challenges to individuals during a disruption caused by relocation. My research compares food insecurity pre and post relocation and social services access post-relocation to discover if changes in social capital and cultural capital post-relocation have an effect on their ability to utilize food social services.

### **1.3 Theoretical Framework**

A body of research has considered the separate effects of policy changes in social welfare for housing and food. But, a sociological study of the effects of the confluence of the policy changes in both housing and food social services has not been conducted. Research has

indicated that housing policy that relocates former public housing residents results in changes in their social capital and cultural capital (Curly, 2009; Clampet-Lundquist, 2010; Keene and Ruel, 2013; Kissane and Clampet-Lundquist, 2012; Popkin and Cove, 2007; Dorrington, 2014). The activist client thesis proposes that social capital and cultural capital aid individuals to utilize social services benefits in the current social services system, but the theory has not been tested beyond the original study by Klinenberg (2003). This dissertation fills the gap in the field by testing the activist client thesis and by answering the question: “How does demolition of traditional public housing and relocation of residents affect their utilization of food social services in Atlanta?”

### ***1.3.1 Activist Clients and Social Services Utilization***

Klinenberg (2003) noted that due to policy changes in the recent era, like those outlined previously with regard to housing and food, the social services provision system had become a “market model” rather than a citizen entitlement model, “whereby people with the weakest capabilities and greatest needs are the least likely to get” social services benefits (Klinenberg, 2003, p. 232). He researched assets that corresponded with better access.

He found that particular neighborhood contexts affected the utilization of social services by eligible low-income citizens. Neighborhoods marked by social isolation and fear of crime had worse utilization of social services by those eligible to receive them. Those living in traditional public housing, in his Chicago study, were less likely to access social services than those living in other neighborhoods. His observations led him to propose that social capital was an asset in accessing social services support. Social capital is resources derived through networks of relationships (Bourdieu, 1985). Theorists have further delineated social capital as having three distinct types: bonding, bridging, and linking (Putnam, 2001; Szreter and Woolcock, 2004).

Bonding social capital is support by trusted individuals at the same social positions (Putnam, 2001). Bridging social capital is support from those who are from different social positions (Putnam, 2001). Linking social capital, unlike the other two types, which operate between individuals, is related to support across authority gradients between individuals and institutions in the community (Szreter and Woolcock, 2004). Additionally, he proposed that not only was social capital important to social services utilization, but cultural capital was too.

Cultural capital is “widely shared, legitimate culture made up of high status cultural signals (attitudes, preferences, behaviors, and goods) used in direct or indirect social and cultural exclusion” (Lamont and Lareau, 1988, p. 164). Cultural capital has three components (Bourdieu, 1985). One component of cultural capital is the embodied state defined as “long lasting dispositions of mind and body” (Bourdieu, 1985: 47). Another component, the objectified state, is composed of goods which are physical resources (Bourdieu, 1985). The institutionalized state cultural capital is the educational level of an individual (Bourdieu, 1985). Klinenberg describes applicants to social welfare programs who are able to use social capital and cultural capital to garner benefits as “activist clients” (2003, p. 158). His data indicated that personal cultural capital characteristics affected social services utilization among eligibles.

Though Klinenberg’s model is revolutionary, it does not fully represent the theoretical field, since it does not incorporate all elements of social and cultural capital that have been identified. I enhance the original model to account for embodied, objectified, and institutional cultural capital (Bourdieu, 1986) and bonding, bridging, and linking social capital (Putnam, 2001; Szreter and Woolcock, 2004). The new fully specified model serves as the framework to examine how social capital and cultural capital factors affect food social services utilization among displaced former public housing residents from differing age categories.

### ***1.3.2 Neighborhood Social Capital and Cultural Capital***

Research on relocations due to the HOPE VI program has found that few relocated residents return when mixed-income developments replace traditional public housing (Kingsley, Johnson, and Pettit, 2003; Popkin et al., 2004). For those who relocated using a Housing Choice Voucher, most people moved only a short distance from the public housing project that was demolished, on average less than or about five miles (Cooper et al. 2012; Kingsley, Johnson, and Pettit, 2003; Buron, 2002). The receiving neighborhoods were slightly better off in terms of poverty but were still neighborhoods marked by economic disadvantage (Kingsley, Johnson, and Pettit, 2003; Oakley and Burchfield, 2009). Though much is unchanged post-relocation, there are differences in the social capital in post-relocation neighborhoods in two areas; community ties (Curly, 2009; Clampet-Lundquist, 2010; Keene and Ruel, 2013; Kissane and Clampet-Lundquist, 2012), and perceived safety or fear of crime (Popkin and Cove, 2007; Kissane and Clampet-Lundquist, 2012). Additionally, there are also cultural capital changes in levels of self-efficacy of relocated residents, which the researcher found were connected to changes in both social disorder and fear of crime (Dorrington, 2014). Research thus far has not addressed whether the social capital and cultural capital changes due to relocation have any effect on food social services utilization.

Since research and theory indicate that social capital and cultural capital affect social services utilization, and other research indicates that HOPE VI relocations affect both social capital and cultural capital, the lack of research on how HOPE VI relocations affect food support is of concern. This study contributes to the sociological understanding of the effects of social capital and cultural capital on food social services utilization among former public housing residents in Atlanta. It examines social services utilization to discover if there was any impact on

food insecurity that resulted from relocation policy. It compares younger adults with older adults among relocated former public housing residents to discover if this is a factor in food social services utilization. Additionally, by testing a fully specified model of the activist client thesis with quantitative data I further Klinenberg's findings using a prospective methodology that can add to his retrospective findings on factors affecting social services utilization by disadvantaged, urban families.

In choosing a dataset for this dissertation, I wanted to use subjects who were similar to those who were the most at-risk in Klinenberg's original study. Though his study was of one disastrous event, a heat wave, he hoped that his research would "expand our understanding of the conditions in which urban residents continue to live" rather than be viewed as only applicable to one disastrous event in one city (2003, p. 230). The most obvious trait of those Klinenberg studied was that they were urban dwellers. Secondly, he found that African Americans had worse social services utilization that placed them more at risk during crisis. Thirdly, his study noted that the elderly were less participatory in social services which increased their risk during a natural disaster. Then, those who were socially isolated in their neighborhoods, either living in public housing or in single occupancy rentals, were also less likely to access social services during a crisis.

The dataset I utilize for this secondary data analysis is the Georgia State University Urban Health Initiative (Oakley, Ruel, and Reid 2013b). The study participants live in an urban environment in Atlanta, Georgia; are primarily Black; have lived in public housing; and a proportion of them are elderly (Oakley et al., 2010). Another very appealing aspect of this dataset is that it is a longitudinal study that follows these public housing resident participants during a transition from living in traditional public housing to living in private rental market

housing. Data was collected on food support pre and post relocation as well as on aspects of cultural capital and social capital. I examine how pre-relocation and post-relocation cultural capital and neighborhood social capital contexts affect food social services utilization and food insecurity.

I hypothesized that social capital variables, such as tenure in public housing, neighborhood cohesion, isolation, fear of crime, and social services network disruption affect utilization of food support, and that changes in these variables due to relocation are associated with corresponding changes in food support utilization. Then, I hypothesized that cultural capital variables, such as self-esteem, locus of control, education, and transportation affect utilization of food support, and that changes in these variables due to relocation results in corresponding consequences in utilization of food support. The methodology used to test these hypotheses is ordinal logistic regression.

In addition, since little is known about the effects of social capital and cultural capital on food insecurity among relocated public housing residents, I included a second analysis to discover how social capital and cultural capital variables along with food social services utilization impact food insecurity. The methodology for this second analysis is ordinal logistic regression.

This research tests the activist client thesis to discover how housing policy relocations affect social and cultural capital, and what effect this has on food support utilization in Atlanta. Chapter 2 provides an in-depth discussion of the theoretical framework from Klinenberg's activist client thesis, including the theories related to social capital and cultural capital. The activist client thesis is modeled to include the three types of social capital and the three elements of cultural capital. Chapter 3 investigates the relevant empirical research on housing relocations,

social capital, cultural capital, and food social services utilization. Chapter 4 outlines the methodology to be used. Chapter 5 provides the results on food social services utilization from the ordinal logistic regression. Chapter 6 provides the results on food insecurity from the ordinal logistic regression.



## **2 THEORETICAL FRAMING**

This chapter connects the activist client thesis to the historical treatment of poverty in the field. I cover the evolution in understanding the sociological significance of culture and poverty. Then, I discuss why the treatment of cultural capital and social capital in the thesis is a limited interpretation. Next, I use a priori theory as the basis for an expanded model of the activist client thesis that will provide a more inclusive and exhaustive picture of how social capital and cultural capital affect social services utilization.

### **2.1 Activist Client Thesis**

The utility of the activist client thesis for this research is that it situates the experiences of disadvantaged individuals in the socio-political landscape of welfare policy and the urban environment. The thesis added knowledge about how urban low-income residents interact with neighborhood and social services at a time of crisis. In the same vein, it will also lend structure to the investigation of access and utilization of food social services for displaced residents of traditional public housing during the crisis of relocation. Three elements of the activist client thesis are particularly relevant to this research. Firstly, as detailed in Chapter 1, both housing subsidy and the food safety net function as market-model institutions. Secondly, the framework accounts for the effects of neighborhood, which is very relevant to public housing redevelopment policy. Thirdly, it recognizes that agentic actions, such as utilization of food social services, must be viewed through the lens of cultural capital and social capital.

The activist client thesis proposes that the urban environment and market-model social services create an ecology in which the most vulnerable and needy residents are excluded and isolated due to a number of neighborhood and individual level factors. The social services

system in this country has been described as a market model, because needy people must actively seek services, like consumers, choosing among an array of public, private, and non-profit providers (Klinenberg, 2001; Halpern, 1999). A number of changes in the provision structure have added to this phenomenon. Firstly, the social services provision system has become more fragmented over time. In the case of food social services, these are provided by a patchwork of state-federal collaborations, federal–non-profit collaborations and private non-profit entities (Laird and Trippe, 2014; Neuberger, 2011; USDA 2014; Ponza, Ohls, and Posner, 1994; Wellman and Kamp, 2004; Berner, Ozer, and Paynter, 2008). This means that each different kind of food support requires separate application, different standards of need, and unique maintenance policies. The burden to potential recipients in the areas of knowledge of services and the ability to navigate bureaucratic hurdles is high (Klinenberg, 2003; Halpern, 1999).

Another structural impediment for applicants is that the system has been decentralized to place more control and administrative governance responsibility on the community (Halpern, 1999). Federal funding became available to independent non-governmental service providers, which had a number of consequences (Abramson & Kieffaber, 2003). To garner funds, agencies began to compete in open bidding for grant resources, which often resulted in “perverse incentives for agencies to underestimate the costs of services, and overestimate their capacity to provide them” (Klinenberg, 2001, pp. 521-522). Grant winners subsequently experienced scarcity of resources at agencies which was often addressed by adding more cumbersome bureaucratic burdens on applicants, so that the numbers who qualified for benefits would match resources. Additionally, social services workers in that climate of scarcity develop a tendency to favor applicants with better skills who perform tasks with less assistance from the worker (Klinenberg, 2001; Lipsky, 1979). Privatized services are marked by “information and technical

assistance to clients [that are] incomplete and inconsistent” (Van Slyke, 2003, p. 299).

Decentralization of the social services provision system has led to less uniformity in requirements, which disadvantages less sophisticated applicants. Despite the impediments to access inherent in the system, some low-income people successfully navigate the system (Woodward, 2013). The activist client thesis proposes that social services seekers who can leverage social capital and cultural capital are “activist clients”, and therefore they are more likely to successfully get the necessary social services benefits from the market.

## **2.2 Poverty Theory**

To fully understand the activist client thesis, some background in poverty theory is needed. Historically sociologists took two separate approaches to viewing urban isolation and poverty. One path focused on the culture of poverty, which considered the construct of agency while ignoring structural forces (Lewis, 1971). The other approach disavowed agentic choice altogether, which made it difficult to explain how similarly disadvantaged individuals had differential outcomes (Small, Harding, and Lamont, 2010). More recent theorists take a multilevel approach to urban poverty.

One view that has undergone some revision over time is the idea that poverty is linked to a particular cultural orientation (Small, Harding, Lamont, 2010) (See Table 2.1). The earliest theorizing focused on how cultural attributions, such as beliefs and customs among the poor, would cause dependence on welfare that would be transmitted intergenerationally (Lewis, 1971). This micro line of thinking was critiqued strongly as victim blaming by scholars (Ryan, 1976; Fave and Della, 1973), who pointed out that focusing only on the cultural practices of the poor ignored obvious structural macro factors that contributed to their continued impoverished circumstances (Harvey and Reed, 1996; Wacquant and Wilson, 1989). For a period of time,

studying culture in relation to poverty was nearly a taboo topic in the field (Small, Harding, Lamont, 2010).

Then, Wilson (1987) reopened the discussion by asserting that marginalization, exclusion, and isolation, largely due to concentrated poverty, led to particular cultural strategies among the poor that aided in their ability to cope with the decline of the inner city. The flight of the middle class from the inner city marginalized inner city dwellers. Though white middle class members used geographic relocation to leave the inner city, blacks from the middle class were more likely to move to better income neighborhoods adjacent to inner city low-income neighborhoods or to move to mixed-income neighborhoods that were still segregated by race (Pattillo, 2013). White flight combined with decreases in business and employment opportunities in the inner city resulted in extreme marginalization. Declines in objectified and institutional cultural capital led to adaptations in the embodied cultural capital of low-income inner city dwellers. Multilevel theories of cultural capital acknowledged social structural pressures and considered neighborhood effects in addition to individual characteristics (Wilson, 1987; Sampson and Wilson, 1995). Once cultural capital began to be viewed as an asset to people in poverty there was engagement in the field as to what kinds of benefits it might provide.

Unlike the mainly status-related cultural capital of the elite class, the embodied cultural capital assets of the lower class are more functional “social abilities and competence for action” (Abel, 2008, p. 2). These distinctive strategies, knowledges, motivations, and outlooks are learned through socialization (Lareau, 2003; Smyth and Banks, 2012; Lamont and Lareau, 1988). For example, those who experience stigma from dominant groups develop non-dominant schemas to determine self-worth (Carter, 2003; Crocker and Major, 1989; Goffman, 2009; Lamont and Lamont, 2009). Also, self-efficacy is an embodied characteristic that has been

observed in lower class actors that increases resilience in the face of challenges (Hall and Lamont, 2013; Carter 2003). Embodied cultural capital traits are important, because they are transferable to economic capital (Bourdieu, 1986). In this case, low-income individuals must mobilize cultural capital to get access to resources from the food safety net. The activist client thesis does a good job of considering embodied cultural capital, but it ignores that differences in objectified and institutional cultural capital may also be factors in survival for low-income residents of the inner city.

Table 2.1 presents the evolution of theorizing on culture as it intersect with the study of poverty. It clearly shows that the activist client model has not fully accounted for the three elements of cultural capital. Additionally, it shows how my contribution to the model is applied in this study.

### **2.3 Cultural Capital as an Asset**

One issue is that the activist client thesis treats cultural capital as a singular, micro construct rather than a multilevel concept as described by prior theorists (Bourdieu, 1986; Van de Werfhorst, 2010) (see Table 2.1). The only type of cultural capital included in the thesis is embodied type. These activist client embodied traits are an advantage in accessing food safety net services, but objectified and institutional cultural capital could also potentially act as assets that aid in utilizing services.

One type of cultural capital that is ignored in the activist client thesis is objectified cultural capital, which are material objects that are possessions (Bourdieu, 1986). Though low-income people are not likely to possess the objects of high culture originally described in the theory, material objects that are functional are cultural capital elements that aid in procuring needed resources (Lee and Bowen, 2006; Robbins, 2000). For example, having access to reliable

transportation is a form of objectified cultural capital that improved middle and lower class children's outcomes in school and increased success in welfare-to-work programs (Lee and Bowen, 2006; Gurley and Bruce, 2005; Ong, 2002). The utility of practical, non-dominant objectified cultural capital for low-income people has received less attention in the field than embodied cultural capital. The possibility that objectified cultural capital would be an advantage to accessing food social services necessitates that it be included in the activist client model.

Another type of cultural capital that was ignored in the activist client thesis is institutional type. Institutional cultural capital is mainly the possession of academic credentials (Kraaykamp and Van Eijck, 2010; Bourdieu 1988). Those in the lower class tend to have less education than those in the middle or upper class (U.S. Census Bureau, 2011). While marginalized members of society recognize that education is a dominant cultural capital that has rewards, there are often significant barriers to achievement (Carter, 2003). Since education level is a continuous variable, all social classes have some level of this institutional cultural capital (Lamont and Lareau, 1998). Higher educational level within the lower class is an advantage, since those who have more education have better outcomes in the labor market and in incarceration rates (Campolieti, Fang, and Gunderson, 2010; Bjerk, 2012). Education level could be an advantage in navigating the obstacles to application and maintenance of social services for food, therefore institutional cultural capital must be added to the activist client model.

The poverty deconcentration discourse proposes that since cultural capital is not intransigent across the life course or only based on early socialization, moving to neighborhoods that are mixed-income may provide increased access to the cultural capital elements that contribute to better advantages in society (Cisernos and Engdahl, 2010). Using all elements of cultural capital will help unpack the effects of neighborhood changes due to HOPE VI era

policies on utilization of food social services. In the same way that the model is improved by inclusion of all the elements of cultural capital, only using one element of social capital in the activist client model is also problematic.

#### **2.4 Social Capital as an Asset**

The activist client thesis uses the concept of social capital in a limited way. Background on social capital theory will exemplify why a more expanded use of the concept is needed (See Table 2.2). Social capital is a relational construct “that is the property of individuals, but only by virtue of their membership in a group” (Szreter and Woolcock, 2004, p. 654). Social capital resources are derived through network connections and are “convertible, on certain conditions, into economic capital” (1986, p. 47), in this case, food social services. Social relationships lead to economic benefit through a number of different paths. Social capital can be associations with people who are experts, in which case the resource passed between the social actors is knowledge. Then, social contact with people who are considered by the society at large to be refined or who have status can raise the societal statuses of other individuals in the same social network, which is seen as an advantage in institutions that offer economic resources (Bourdieu, 1984).

Deficits in social capital can result from having networks with people who have few resources and low status (Wilson, 1987). This kind of social capital can marginalize individuals, such as racial minorities, to the point that their potential may not be fully realized (Loury, 1977; 1981). The marginalized individual is “deprived of information from distant parts of the social system and ... confined to the provincial news and views of their close friends” (Granovetter, 1973, p. 202). Also, since social capital is often requisite on reciprocity, it is important to understand how this affects the net benefit from social networks (Small, 2009). Merely having

social ties does not necessarily always mean advantage, because low-income people often experience a loss of resources by associating with those who are more in need than themselves. These ties are characterized as draining (Curley, 2009).

Another kind of social capital deficit is when people become isolated from all social ties (Klinenberg, 2001). For elderly and disabled people, reclusive behavior can decrease social contacts to the point of virtual isolation. Also, the perception of safety within the urban environment can manifest as fear of crime resulting in more social reclusiveness (Lorenec et al., 2012). Stigma, if experienced by housing subsidy recipients in mixed-income neighborhoods could result in social reclusiveness and reduced social capital (McCormick, Joseph, Chaskin, 2012). Decreases in social capital would likely negatively affect access to economic capital such as food social services.

While the motivations to gain resources from social capital are straight forward, the motivations to pass on social capital to others are much less so. Simply being in a social network does not necessarily facilitate the receipt of resources, because there are informal expectations of reciprocity (Portes, 1998). Social actors expect that resources given will be in some way rewarded, whether directly by the recipient of the resource or indirectly by the group (Bourdieu, 1984; Coleman, 1987). For example, norms of obligation in some groups increase the likelihood of passing social capital without the expectation of repayment from the recipient. The reward for philanthropic giving is honor or merit bestowed on the giver by the group (Bourdieu, 1984; Coleman, 1987). Yet unanswered is whether mixed-income neighborhoods have norms of obligation and merits for altruism. If yes, then poorer neighbors would be recipients of social capital, but if not, richer neighbors would not be motivated to give.



Social capital networks are not uniform. Networks of similarly low-income neighbors (bonding ties) are qualitatively different from networks of mixed-income neighbors (bridging ties). Social capital networks are composed of strong and weak ties. Strong ties are those that result from close knit social relations that form dense networks of people who know each other (Granovetter, 1973) called bonding ties. These ties, among individuals from similar social locations, are characterized by trust, mutual aid, and shared experiences (Szreter and Woolcock, 2004; Kawachi et al., 2004). The other type is among more distant acquaintances that are characterized as weak ties that create bridges between clusters of bonding social groups (Granovetter, 1973). Bridging social capital is comprised of relationships between individuals from differing social locations such as different social classes, age groups, ethnicities, etc. (Szreter and Woolcock, 2004, Kawachi et al., 2004). Though the term weak ties has been supplanted by the term “bridging ties” the former term accentuates the lower cohesion between members. Frequently the higher status member of a weak tie link may not receive the requisite reciprocity from the lower status member. In these cases, group norms that reward altruism may be the motivation rather than anticipated reciprocity. As mentioned earlier, it is unclear if mixed-income neighborhood are characterized with these kinds of obligation norms.

Aside from this question, the richest benefit of bridging ties that theorists note is wider access to knowledge of resources. The classic example is that bridging ties are useful for those seeking employment, since bonding ties information is limited to the dense group from similar social location, while bridging ties have additional, expanded sources of information (Granovetter, 1973). A problem here is that all knowledge is classified equally, and there is an assumption that those with privilege have better access to information than marginalized people do. Perhaps this is too simplistic.

Given that knowledge of social services is a specialized knowledge that people from the lower classes may actually have more expertise in than people from the middle or upper classes (excluding professionals who work in the field of social services), bonding ties networks within the lower class may actually be more productive to knowledge than bridging ties from mixed-income networks. Some types of knowledge that do not confer status may not be valued by dominant societal actors, and so this subjugated knowledge may only exist within the lower status group (Collins, 2002). Those with knowledge of social services resources and ways to access these would likely not derive any special status for acquiring this knowledge, so motivation to have this knowledge would only be high for those who have unmet needs and view social services as an avenue to meet these. Additionally, if neighbors in mixed-income neighborhoods do have knowledge of food social services, either by virtue of having experienced deprivation in the past or from working in that profession, would there be sufficient reciprocity or norms of philanthropy to motivate more well-off neighbors to share the information? For these reasons, I anticipate that social capital bonding ties among public housing residents in low-income neighborhoods may be richer with regard to accessing food social services than the bridging ties in mixed-income neighborhoods. The inclusion of bridging ties in the activist client model clearly enhances the analysis by allowing comparison between homogenous low-income neighborhoods and mixed-income neighborhoods.

The third type of social capital, which was left out of the activist client thesis, is linking social capital between individuals and institutions. These relationships are across power gradients, and social service providers are an example of a linking social tie (Szreter and Woolcock, 2004). The political structure of linking social capital sources constrains “composition and utilization of social capital”, thus analysis of this aspect is essential (Lin, Fu,

Chen, 2013, p. 3). Social services are regionally provided using political boundaries such as city and county lines. Each entity that provides services could have different access rules due to the fragmentation of the market-model food safety net system as mentioned in detail previously (Laird and Trippe, 2014). Relocated former public housing residents may have changes in the social services providers available to them in their new neighborhoods. This could affect their knowledge of linking social capital in their area and also their ability to adapt to any changes in requirements compared to previous providers. Given that the activist client premise is that social capital is an asset in accessing public goods, such as food social services, linking type must be included in the model to reflect the ties with formal representatives of these institutions.

Table 2.2 illustrates the theories in the field on social capital. The activist client thesis only addresses one form of social capital, bonding type. To advance this theory, I add bridging and linking types in this research.

This chapter has shown that although the activist client thesis is revolutionary in suggesting that in a market-model social services provider system cultural capital and social capital make a difference, it fails to fully exemplify both of these constructs. My version of the model considers six elements: bonding social capital, bridging social capital, linking social capital, embodied cultural capital, institutional cultural capital, and objectified cultural capital as activist client factors that impact utilization of the network of social services for food. This model more clearly represents all of the theoretical viewpoints in the field on the topic.

In conclusion, the full modeling of the activist client thesis aids in investigating how changing neighborhood contexts due to HOPE VI era relocations affect utilization of food social services. This improved model parses out the particular assets that relocated public housing residents in Atlanta wield to access food social services. The model is sensitive to changes in

social capital and cultural capital and facilitates comparison of how these assets impact utilization pre-relocation and post-relocation.

Table 2.1

<b>THEORY</b>	<b>THEORIST</b>	<b>EMBODIED</b>	<b>OBJECTIFIED</b>	<b>INSTITUTIONAL</b>
<b>CULTURE OF POVERTY</b>	Lewis (1973)	Beliefs and customs of the poor are pathological and cause intergenerational transmission of poverty	Not addressed	Not addressed
<b>CULTURAL CAPITAL</b>	Bourdieu (1984)	Tastes and preferences separate the elites from other classes	Possession of material objects valued by the elite class contribute to status	Educational degrees contribute to status for elites
<b>CULTURAL EXCLUSION</b>	Wilson (1987)	Adaptations in culture occur as strategies to cope with marginalization	City centers become degraded and services decrease causing marginalization	Job opportunities and educational quality decrease due to white flight, and business exodus causing marginalization
<b>CULTURAL CAPITAL</b>	Lareau (2003)	All classes have distinct habitus and none are viewed as pathological (value neutral)	Not Addressed	Not Addressed
<b>ACTIVIST CLIENT THESIS</b>	Klinenberg (2003)	Skills aid in accessing social services, such that, the least skilled and most vulnerable are less likely to get aid	Not Addressed	Not Addressed
<b>MY CONTRIBUTION</b>	Hambrick	Skills , such as self-esteem and internal locus of control, aid in accessing food social services	Practical material goods aid in accessing food social services (example: transportation)	More education aids in navigating challenging application and maintenance of food social services

*Table 2.2*

<b>THEORY</b>	<b>THEORIST</b>	<b>BONDING</b>	<b>BRIDGING</b>	<b>LINKING</b>
<b>SOCIAL CAPITAL</b>	Wilson (1987)	Social connections within marginalized groups are resource-poor	Concentrated poverty decreases the chances of connections to resource-rich social networks	Not Addressed
	Putnam (2001)	Norms of reciprocity and trust define bonding ties which are decreasing in society today	Community building ties are on the decline in society	Not Addressed
	Szreter & Woolcock (2004)	Trusting cooperative relationships between those in similar social location aid in accessing resources	Relationships between people of different statuses are assets in accessing resources	Connections with formal representatives of institutions are useful for accessing resources
<b>ACTIVIST CLIENT THESIS</b>	Curley (2009)	Close ties can be both draining and gaining	Not Addressed	Not Addressed
	Klinenberg (2003)	Social connectedness is an asset in utilizing social services and public housing and single occupancy rentals are isolating		
<b>MY CONTRIBUTION</b>	Hambrick	Close reciprocal ties aid in knowledge of food social services even in traditional public housing	Ties in mixed-income neighborhoods are weakened by stigma and information-poor in the specialized knowledge of the social services system	Relocation disrupts networks of food social services providers

### 3 LITERATURE REVIEW

This study addresses a gap in the field in knowledge of the effects of HOPE VI era relocations on social capital and cultural capital as these relate to utilization of the food safety net. In this chapter, I begin by covering what is known about food social services utilization. Then, I outline the knowledge in the field on HOPE VI relocations as these affect social services access. This will help to uncover gaps in the current knowledge of the topic. Next, the knowledge base on social capital and cultural capital in the general population and among relocated public housing residents is reviewed. Then, I outline the hypotheses that emerged from the literature. Finally, I present the model to be tested.

#### 3.1 Food Social Services Utilization

As background for my research, I outline the knowledge thus far in the field on utilization of the food safety net. Food stamp utilization among eligible families and individuals decreased by about 33% between 1995 and 1999. It is not surprising that during the same time period food insecurity rose for those low-income households not participating in SNAP (Nord, 2009). This effect is due to the previously mentioned changes in the provision system toward a more market-model system with rising burden to applicants and recipients due to more stringent requirements (Greenberg, Greenberg, Mazza, 2010; Liard-Muriente and Burton, 2014). SNAP participation rose beginning in 2001 with a plateau in 2005 that is attributed to high rates of unemployment and not to an easing of restrictions on participants (Liard-Muriente and Burton, 2014). WIC participation rose as well during this time frame, but not as steeply, which is thought to be due to the declining birth rate during the same period (Liard-Muriente and Burton, 2014). Despite rises in participation to food social services programs, food insecurity in the U.S., since 2007, is up indicating unmet need (Gundersen, 2013). Many who qualify for food social services benefits are

not utilizing them. The SNAP utilization rate among eligibles (50-60%) is similar to that of WIC (60%) and far better than for ENP (3%) (Nord, 2009; Purtell, Gershoff, Aber, 2012; Johnson, 2014; U.S. Government Accountability Office, 2011).

Strangely, food insecurity was not predictive of higher use of SNAP among eligible families (Purtell, Gershoff, Aber, 2012), which gets at the point that some who need food resources have access barriers. The family characteristics that relate to higher likelihood of utilizing of SNAP are: being a racial minority, having less education, being a single mother, being an unemployed mother, having a disability, having more children, being non-elderly, and not owning a vehicle (Rank & Hirschl, 2009; Teitler et al., 2007; Zedlewski, 2002; Chaparro, Harrison, Pebley, 2014; Purtell, Gershoff, Aber, 2012). Families who had more residential moves (Purtell, Gershoff, Aber, 2012) and housing subsidy recipients also had higher utilization rates for SNAP (U.S. Dept. of H.U.D., 1998; Sard and Waller, 2002; Meyers et al., 2005).

WIC utilization is at a relatively high rate among eligibles at more than 60% (Johnson, 2014). Participants in WIC compared to those who were eligible and chose not to apply were similar in terms of risks such as low incomes, lower education levels, having had four or more live births, being unmarried, and late initiation of prenatal care (CDC, 2013). One difference was that non-participants tended to live in urban high density areas (Stopka et al. 2014). With regard to race, 14% of eligible non-participants were Black, 21% were Hispanic, and 57% were White nationally.

Food pantry use is less studied than use of SNAP and WIC, but some facts are known. Food pantry use, unlike SNAP utilization, is linked to food insecurity in families (Bhattarai, Duffy, and Raymond, 2005; Purtell, Gershoff, Aber, 2012). Those who have more chronic rather than emergency economic problems are more likely to use food pantries (Daponte et al. 1998).



Rural food pantry users are more likely to be White, while urban participants are more likely to be Black (Clancy, Bowering, and Poppendieck, 1991). Food pantries were more often accessed in conjunction with rather than as an alternative to SNAP (Bhattarai, Duffy, and Raymond, 2005). Barriers to accessing food pantries were stigma and knowledge of service (Duffy et al., 2002). The use of food pantries among relocated public housing residents has not been researched to date.

ENP utilization research has been called for by the U.S. Government Accountability Office (2011), but to date empirical study is scant. Utilization of home delivered meals by those age 65 and over is a low 3% nationally. One measure of unmet need among eligibles is the number who apply and are placed on a waitlist for services. The rate of wait-listing of applicants is high in Georgia at 60% (Lee et al., 2011). These numbers do not account for those who are eligible and do not choose to apply. The reasons for low utilization of this program are not fully understood in the field.

### **3.2 HOPE VI Relocations and Social Services Utilization**

Research on HOPE VI and other involuntary relocations from public housing has yielded some information about social services utilization by former residents. Economic status in employment and overall income for displaced residents does not change after they move (Clampet-Lundquist, 2004; Levy and Wooley, 2007). Proximity to social services was not prioritized by relocated residents over proximity to transportation, shopping centers, and schools (Smith, 2002). Welfare utilization of TANF for relocated families did not change pre and post move for those using housing vouchers (Clampet-Lundquist, 2004). Among relocated public housing residents, SNAP food assistance is much more common than TANF, and those who receive utility subsidy frequently have bills that exceed the subsidized amount (Freiman et al.

2013). Though some research has provided information about food social services utilization for displaced public housing residents, there is still much that is unknown. There has been no study to date of the utility of social capital and cultural capital in accessing the food safety net, which is the purpose of this study.

### **3.3 Social Capital**

Social capital research both on the general population and on those affected by HOPE VI era relocations informs this research in several important ways. Poverty deconcentration discourse has hinged on the idea that relocating people to better neighborhoods would mean that the collective social capital of the new neighborhood would improve movers' lives (Cisernos and Engdahl, 2010). Some effects of social capital that have been identified relate to food insecurity, confidence venturing out, and access to opportunities. I will explain how all these findings connect to the utilization of food social services.

### **3.4 Food Insecurity and Social Capital**

To date, study of the effect of social capital on utilization of food social services has not been done. Studies have investigated the effect of social capital on food security, however. Bonding social capital is associated with more food security (Dhokarh et al., 2011; Dean et al. 2014). Also, among recipients of TANF bonding and bridging social capital were associated with having enough food (Henley, Danzinger, and Offer, 2005). Knowledge of social services is positive to access (Kurtz et al., 2005), which may be one explanation of the mechanism of food security in the presence of social capital. Bonding social capital in traditional public housing is high and is associated with having enough food. Relocation, on the other hand, is associated with lower levels of bonding social capital and corresponding heightened food insecurity (Keene and Geronimus, 2011a; Keene and Geronimus, 2011b). Surprisingly, in Atlanta, relocation resulted

in lower bonding social support but better food security (Ruel et al., 2013). This research provides more context to understand this paradox, since it measures bonding, bridging and linking forms of social capital as these affect the use of food social services. Additionally, this study considers if activist client traits contribute to lessened food insecurity, because these traits result in better access to food social services.

### **3.5 Perceived Safety, Food Security, and Social Capital**

One factor connected to neighborhood that affects food social services utilization and food insecurity is perceived safety (Klinenberg, 2003; Kimbro, Denney, Panchang, 2012; Chung et al., 2012). Neighborhood affects both fear of crime and crime (Lorenc et al., 2012). Neighborhoods marked by disorder have higher incidences of crime and more fear of crime (Raleigh and Galster, 2014). Neighborhood collective social capital elements, such as collective efficacy and social cohesion, act as buffers for fear of crime (Putnam, 1993; Stein, 2014; Uchida et al. 2014). Individual level social capital, bonding type, also mediated fear of crime even in circumstances such as living in neighborhoods characterized by disorder and prior victimization (Gainey, Alper, and Chappell, 2011). Also, trusting bonds related to decreased likelihood of being a victim of crime. Additionally, freedom of movement of women was more likely in the presence of bonding social capital (Ball et al., 2010; Mohnen et al., 2012). Perceived safety, crime victimization, and freedom of movement will be important to discussions of the experiences of former public housing residents in the new environment as these relate to leaving the home to apply for and maintain food social services.

### **3.6 HOPE VI Relocation, Social Capital and Opportunity**

Research provides some doubt that HOPE VI era relocation necessarily decreases fear of crime due to changes in bonding and bridging social capital. Prior to relocation bonding ties were

positively associated with perceived safety (Clampet-Lundquist, 2010; Curly, 2009). After relocation, former public housing residents reported significantly fewer bonding ties in the new neighborhoods, but a limited ability to stay connected with former neighbors from public housing (Clampet-Lundquist, 2010; Kissane and Clampet-Lundquist, 2012). Having limited bonding ties within new neighborhoods contributed to lower perceived safety (Clampet-Lundquist, 2010; Curly, 2009; Keene and Ruel, 2013). Prior to relocation, public housing residents did have productive bridging ties (Curly, 2009). Those living in traditional public housing had bridging ties primarily with people employed in professional fields (Curly, 2009). Adult former public housing residents in the new neighborhoods had lessened or unchanged access to bridging ties (Curly, 2009; Kissane and Clampet-Lundquist, 2012; Kleit, and Carnegie, 2011), but youth experienced a lack of bridging ties in mixed-income neighborhoods post-relocation (Chaskin, 2013). Since bonding and bridging ties are reduced in new neighborhoods, heightened fear of crime might in turn affect venturing out to secure food social services and correspond with more food insecurity.

Research on other outcomes post-relocation, besides fear of crime, also calls into question whether the hopefulness of HOPE VI pundits was justified. Compared to housing voucher recipients, traditional public housing residents had higher levels of neighborhood and individual level bonding social capital (Clampet-Lundquist, 2010) and could more readily mobilize these linkages for help with transportation and information about resources including social services (Keene and Geronimus, 2011; Curly, 2009). Job prospects, critical to survival for low-income people, did not improve uniformly for relocated public housing residents, since unemployed movers who moved to mixed-income neighborhoods were less likely to find

employment than those who moved into low-income homogenous neighborhoods (Barrett, 2013). This indicates that bridging ties are less helpful to employment than bonding ties.

One possible factor in differences in outcomes based on neighborhood income mix is the effect of stigma. In mixed-income neighborhoods, former public housing residents felt stigmatized and were “othered” by their new neighbors post-relocation due to their status affiliation with low-income housing subsidy (Rosenblatt and DeLuca, 2012; Fraser et al., 2013; Curly, 2009; Kissane and Clampet-Lundquist, 2012). Stigma as a barrier to building relationships with new neighbors could be a factor that could have indirect repercussions on utilization of food safety net resources and corresponding worsened food insecurity.

### **3.7 Social Capital and the Life Course**

Social capital is differential by age. Social networks decrease in size beginning in the early 30s and across the rest of the life course (Wrzus et al., 2013). Lower levels of social capital in older adults are moderated by sense of place and neighborhood cohesion with regard to perceived safety and venturing out (De Leon et al., 2009). Older adults living in traditional public housing pre-relocation reported high levels of attachment, a sense of belonging, and trusting relationships with neighbors (Tester et al., 2011; Keene and Ruel, 2013), and post-relocation they reported increased isolation (Keene and Ruel, 2013). This would indicate that elders are more at risk of isolation in general and that relocation may impact social capital worse for this segment of the population of movers. How this would impact food social services utilization is under investigation here.

### **3.8 Cultural Capital**

Cultural capital research to date has only rarely considered all three elements of cultural capital at once (Kraaykamp and Van Eijck, 2010). Also, cultural capital as a factor in food social

services utilization has not been studied. Cultural capital has been linked empirically to positive outcomes in life tasks and health. Since cultural capital aids in accessing resources of all kinds (Bourdieu, 1984), I cover the known cultural capital benefits to accessing resources.

### **3.9 Implications from Social Services Research about Cultural Capital**

In the absence of research specifically on cultural capital and food safety net utilization, empirical findings on the effects of cultural capital on utilization of other forms of welfare provide some clues. Access to transportation, objectified cultural capital, was a factor in food security for families (DeMartini et al., 2013). Cultural capital was also positive for transitioning TANF clients to work and self-sufficiency. Agencies that approached welfare-to-work programs by identify the existing cultural capital of recipients and also training recipients with dominant cultural capital had more clients who transitioned to self-support (Woodward, 2013). Those who felt “empowered, capable, and confident” (Woodward, 2013, p. 40) were more likely to do well finding employment and transition off of welfare. This indicates that embodied cultural capital is transferable to other resources for low-income people.

### **3.10 Implications from Education Research about Cultural Capital**

The effects of cultural capital on educational attainment apply to this research, because possessing dominant cultural capital has been shown to be an asset in dealing with professionals. Social work is a profession manned by middle class, educated personnel, so cultural capital effects in education may be transferrable to garnering food social services. All three forms of cultural capital are correlated with educational achievement. For middle-income parents embodied cultural capital has been shown to positively affect educational performance and college preparedness of their children, and the parents were better placed to provide assistance in navigating application and completion of college (Lareau, 2003; Tramonte and Williams, 2010;

Lareau and Calarco, 2012). International study of the effects of parental objectified cultural capital on child school performance finds that there are national differences in how impactful this variable is, but it is an asset in the United States. (Byun, Schofer, Kim 2012). Non-dominant cultural capital may manifest as a relational style that is not preferred by dominantly cultured education professionals, which is a disadvantage to the student (Carter, 2003). Like staff in the education system, social services workers are professionals from the middle class with advanced educational levels, which may disadvantage those with less embodied and institutionalized cultural capital.

### **3.11 Cultural Capital and Success in Life Tasks**

Cultural capital embodied characteristics have been studied in general and in relation to being low-income. Research has tied high self-esteem to better performance across the life course in a number of life tasks, such as, job performance, coping with setbacks, educational attainment, income attainment, and relationship satisfaction, and has determined that self-esteem was a cause rather than an outcome of these variables (Judge, Hurst, and Simon, 2009; Orth, Robins and Widaman 2012). Given that self-esteem is a cultural capital embodied characteristic that aids some low-income individuals to have better achievement, I investigate its effect on food social services utilization and food insecurity.

### **3.12 HOPE VI Research on Cultural Capital**

HOPE VI research has some important findings on the effects of cultural capital. Cultural capital in the embodied state, self-esteem, was associated with community attachment for those living in traditional public housing pre-relocation (Tester, et al., 2011). Living in a traditional public housing development is linked to feelings of shame, but stigma is also experienced post-relocation in new neighborhoods (Bartz, Joseph and Chaskin, 2011). Internal locus of control

was expressed as a resiliency in those exposed to adversity (Shippee, 2012). Internal locus of control had no connection to community attachment for traditional public housing residents before relocation (Tester, et al. 2011). Six months post-relocation both self-esteem and self-efficacy were better (Dorrington, 2014). It is not known if either self-esteem or locus of control has impact on food social services access among relocated public housing residents.

Cultural capital institutionalized state has been investigated with regard to public housing. Research indicates that education opportunities for residents of traditional public housing have been noted to be disadvantaged (Lipman, 2012). Post-relocation the quality of schools was no different for former public housing residents, and some students with low cultural capital experienced rejection in admissions to mixed-income public and charter schools (Keels, 2013; Lipman, 2012) Achievement of children post-relocation was not improved (Keels, 2013). Level of education was important to employment post-relocation for single mothers (Barrett, 2013). It is not known how the adult education level of relocated public housing residents impacts utilization of a network of food social services or food insecurity.

As previously mentioned, information on how factors affect health care outcomes are relevant to this study due to the similarity between the health care system and the food social services provision system. Study of all three forms of cultural capital for health are rare, but one study finds that all three are positive for reported mental and physical health (Pinxten and Lievens, 2014). Embodied cultural capital in the form of self-esteem was protective of depression among low-income people with draining ties (Taylor, Budescu, McGill, 2011). Other studies recently redefine the embodied form of the concept as a specific “cultural health capital”, with situation-specific embodied characteristics that only apply to the doctor-patient relationship. The idea is that, in communications with doctors, some possess “cultural skills, attitudes,



behaviors and interactional styles” that are useful in procuring better outcomes from treatment (Shim, 2010; Dubbin, Chang, Shim 2013 p. 113). For youth, cultural health capital was positive for self-rated health regardless of socioeconomic status (Abel et al., 2011). It is possible that having better cultural communication patterns would also be an asset in garnering food social services resources from dominantly cultured professionals.

Objectified cultural capital has been analyzed in research as access to transportation, shopping centers, medical facilities, social services, and schools pre and post relocation (Smith, 2002). Since most former public housing residents relocate about or less than five miles from the previous address, it follows that access to objectified cultural capital is changed very little (Cooper et al. 2012; Kingsley, Johnson, and Pettit, 2003; Oakley Ruel Reid, 2013a). Although relocated public housing residents in Atlanta were largely still living near Marta, public transportation lines (Ruel et al., 2013), the distance to medical facilities increased (Cooper et al., 2012). It is not known if transportation access changed enough to be a barrier to access to food social services.

### **3.13 Hypotheses**

Social capital resources, according to the activist client thesis, lead to better utilization of food social services and lowered food insecurity. The three types of social capital: bonding, bridging and linking (Putnam, 2001; Szreter and Woolcock, 2004) are reflected in the following hypotheses to ascertain the effect on food social services utilization and food insecurity.

1. As neighborhood cohesion increases participants will be more likely to utilize food social services and have less food insecurity.
  - a. Post-relocation decreases in neighborhood cohesion will decrease the likelihood that participants will utilize food social services and increase food insecurity.

This hypothesis was suggested by the literature review, since bonding social capital was positive to food security in research (Dhokarh et al., 2011; Dean et al. 2014; Henley, Danzinger, Offer, 2005). Additionally, bonding and bridging social capital of relocated public housing residents did decrease post-relocation (Clampet-Lundquist, 2010; Kissane and Clampet-Lundquist, 2012; Keene and Ruel, 2013). Lessened bonding social capital related to lowered food security post-relocation compared to pre-relocation (Keene and Geronimus, 2011a; Keene and Geronimus, 2011b) except in one case (Ruel et al., 2013). This might indicate that lowered neighborhood cohesion post-relocation would negatively impact food social services utilization.

2. As isolation increases participants will be less likely to utilize food social services and have heightened food insecurity.
  - a. Post-relocation increased isolation will decrease participant utilization of food social services and contribute to heightened food insecurity.

This hypothesis was suggested by the literature review, because isolation was associated with lower utilization of social services in general (Klinenberg, 2001). Also, lack of bonding ties decreased outings, particularly for women (Ball et al., 2010). Relocated public housing residents in the empirical review were more isolated (Clampet-Lundquist, 2010; Curly, 2009; Keene and Ruel, 2013; Kissane and Clampet-Lundquist, 2012; Kliet and Carnegie, 2011; Chaskin, 2013) and experienced stigma post-relocation (Rosenblatt and DeLuca, 2012; Fraser et al., 2013; Curly, 2009; Kissane and Clampet-Lundquist, 2012), which could manifest as worse food social services utilization.

3. As fear of crime increases participants will be less likely to utilize food social services and will have heightened food insecurity.
  - a. Post-relocation increases in fear of crime will decrease the likelihood of

participants utilizing food social services and increase food insecurity.

This hypothesis was suggested by the literature review, because lower levels of fear of crime were associated with freer movement, less food insecurity, and better social services utilization (Mohnen et al., 2012; Klinenberg, 2003; Kimbro, Denney, Panchang, 2012; Chung et al., 2012), which should translate to confidence to travel to agencies to procure food social services. Research indicates that fear of crime increased post-relocation for HOPE VI movers (Clampet-Lundquist, 2010; Curly 2009; Keene and Ruel, 2013), which is expected to decrease participation in food social services due to reclusiveness.

4. Moving to a mixed-income neighborhood rather than a low-income homogenous neighborhood will decrease the likelihood of food social services utilization and increase food insecurity.

This hypothesis is suggested by the literature review since some types of knowledge that do not confer status may not be valued by dominant societal actors. This subjugated knowledge may only exist within the lower status group (Collins, 2002). Thus, knowledge of social services is a specialized knowledge that people from the lower classes may actually have more expertise in than people from the middle or upper classes (excluding professionals who work in the field of social services), bonding ties networks within the lower class may actually be more productive to knowledge than bridging ties from mixed-income networks.

5. Pre-relocation, longer tenure in public housing will increase the likelihood that participants will utilize food social services post-relocation and decrease food insecurity.

This hypothesis was suggested by the literature review since bonding social capital and bridging social capital were better pre-relocation (Clampet-Lundquist, 2010; Kissane and Clampet-Lundquist, 2012; Keene and Ruel, 2013), and these types of social capital are positive

to food security (Dhokarh et al., 2011; Dean et al., 2014; Henley, Danzinger, Offer, 2005). Also, knowledge of social services facilitates utilization (Kissane, 2003), so length of time in an area would mean more familiarity with sources of food subsidy.

6. Post-relocation, housing subsidy recipients who have not experienced a disruption in social services network will be more likely to utilize food social services and have decreased food insecurity.

This hypothesis was suggested by the literature review since one important aspect of utilization was knowledge of services (Kissane, 2003), therefore those who did not change service area for food social services post-relocation would have better utilization than those who experienced disruption of the network due to moving to a different county or moving outside of city limits.

The activist client thesis indicates that not only does social capital aid in utilization of social services, but also that cultural capital resources increase utilization. In developing the hypotheses, I operationalized all three cultural capital forms: objectified state, institutionalized state, and embodied state (Bourdieu, 1985).

7. Higher self-esteem will increase the likelihood that participants will utilize food social services and decrease food insecurity.

- a. Post-relocation improvement in self-esteem will increase the likelihood that participants will utilize food social services and decrease food insecurity.
- b. Alternatively, post-relocation decreases in self-esteem will decrease the likelihood that participants will utilize food social services and increase food insecurity.

This hypothesis was suggested by the literature review, since self-esteem is associated with successful achievement in obtaining resources (Judge, Hurst, Simon, 2009; Orth, Robins,

Widaman, 2012) even among low-income individuals (Woodward, 2013). It follows that changes in self-esteem would be an asset in food social services utilization. Post-relocation, self-esteem has been shown to increase (Dorrington, 2014), but stigma is significant in new neighborhoods (Rosenblatt and DeLuca, 2012; Fraser et al., 2013; Curly, 2009; Kissane and Clampet-Lundquist, 2012). Given these contradictory findings, it is not certain whether food social services utilization will be improved or not.

8. As internal locus of control increases the likelihood that participants will utilize food social services will increase and food insecurity will decrease.

a. Post-relocation increased internal locus of control will increase the likelihood that participants will utilize food social services and decrease food insecurity.

This hypothesis was suggested by the literature review, because feeling empowered was positive to becoming self-sufficient for TANF beneficiaries (Woodward, 2013). Also, relocated public housing residents did have increased internal locus of control post-relocation (Dorrington, 2014), which could potentially make utilization of food social services better.

9. Higher levels of education will increase the likelihood that participants will utilize food social services and decrease food insecurity.

This hypothesis was suggested by the literature review, since more education is useful in socializing one to the dominant habitus, which is an advantage in dealing with professionals (Byun, Schofer, Kim, 2012; Carter, 2003). This advantage, knowledge of the dominant habitus, would be useful in communicating with bridging and linking ties such as neighbors in mixed-income neighborhoods and social services workers at food social services agencies.

10. Better transportation access will increase the likelihood that participants will utilize food social services.

- a. Post-relocation transportation access will have no effect on utilization of food social services or on food insecurity.

This hypothesis is suggested by the literature review, because transportation access was a barrier to accessing necessary services within the community (Demartini et al., 2013). This should also apply to utilization of food social services. Given that most relocated public housing residents did not move far from previous traditional public housing addresses (Goetz, 2010; Keene and Geronimus, 2011; Oakley, Burchfield, 2009; Oakely, Ruel, Reid 2013a), it is likely that pre and post transportation access will be similar and will not affect food social services utilization.

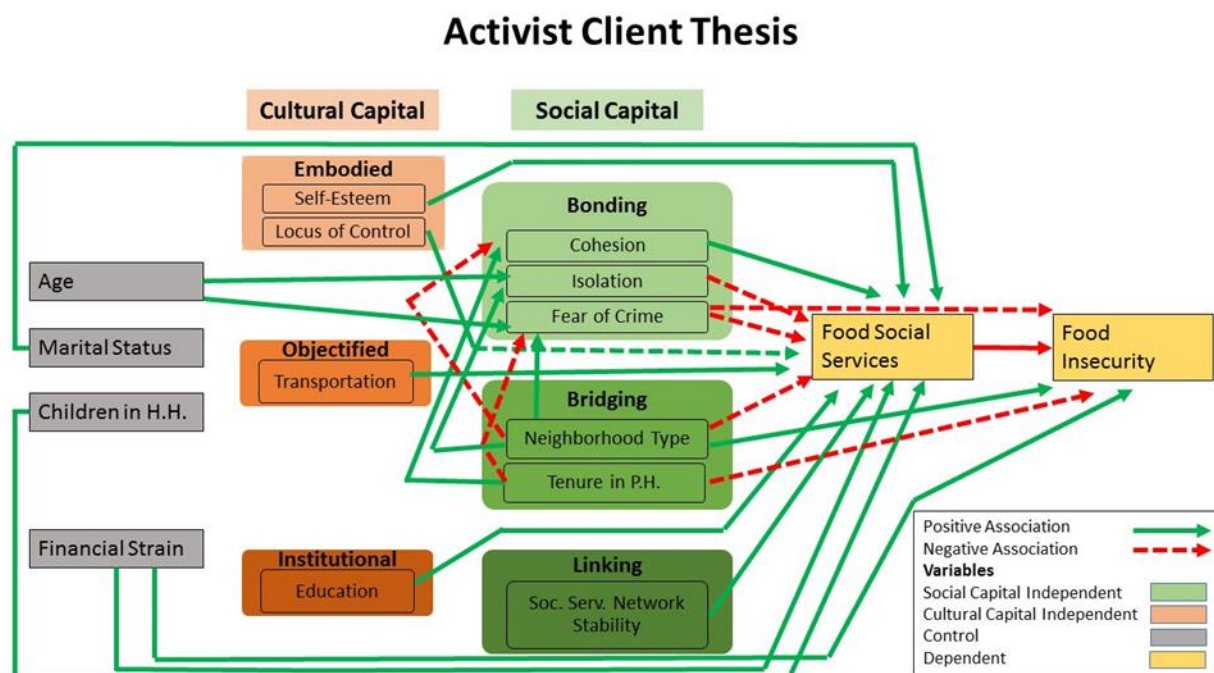
11. Elderly participants will have worse utilization of food social services and higher food insecurity than other households.

- a. Post-relocation the elderly will have worse utilization of food social services and higher food insecurity compared to other households.

This hypothesis is suggested by the literature, because SNAP utilization is worse among older adults (Chaparro, Harrison, and Pebley, 2014). Also, the literature indicates that ENP as a food source has the worst utilization rates compared to the other 3 programs measured (U.S. Government Accountability Office, 2011). Also, older former public housing residents had stronger attachment to place in traditional public housing and had bonding ties that were productive to “surviving with few formal resources” (Tester et al., 2011). This would benefit food social services utilization pre-relocation in two areas, freedom of movement and information sharing. Post-relocation older adult movers experienced isolation in new neighborhoods (Keene and Ruel, 2013), which could result in worse food social services utilization.

In summary, the literature indicates that cultural capital and social capital elements are assets that aid in procuring resources. Social capital is positive to food security directly and through increased perception of safety. It is currently not known if social capital activist client traits improve social services access enough to decrease food insecurity. HOPE VI relocations affect social capital negatively, since most movers are more isolated in their new neighborhoods. Under investigation here is the effect of this on food social services utilization. Cultural capital in all three forms has impact on success in navigating two market-model systems, education and health, but its effects on traversing the food safety net to gain better food security has not yet been determined. Relocation changes cultural capital for former public housing residents, but it is unknown how this affects food social services utilization. The full model is depicted in figure 3.1. My research adds to the current field by discovering how social capital and cultural capital elements affect food social services utilization and food insecurity for relocated public housing residents in Atlanta.

*Figure 3.1 Activist Client Thesis*



## 4 METHODOLOGY

The confluence of housing policies and food safety net policies in the past decades has affected those living on low-incomes. HOPE VI era policies have resulted in large scale relocation of people formerly housed in traditional public housing. During the same time period, food safety net policies have become increasingly more burdensome on applicants and recipients. I use the activist client thesis as the theoretical framework to consider the following research question: How do social capital and cultural capital affect utilization of food social services among relocated public housing residents in Atlanta? Additionally, I examine how cultural capital, social capital and food social services utilization affect food insecurity using a second research question. How do social capital, cultural capital, and food social services utilization affect food insecurity among relocated public housing residents in Atlanta? This chapter outlines the methodology of my research. First, I discuss the secondary dataset that will be drawn from for the analysis, including the survey instrument and sampling. Next, I cover the specific constructs used to form variables in the analysis. Next, I describe the analysis method. Finally, I provide diagnostic and descriptive statistics.

### 4.1 Data

This research utilizes secondary longitudinal survey data. The dataset is drawn from the Georgia State University Urban Health Initiative (Oakely, Ruel, Reid, 2013a). The original researchers used a prospective, longitudinal, survey methodology to investigate the effects of HOPE VI era relocations on residents of traditional public housing in Atlanta. The original research team interviewed public housing residents in three waves (pre-moved, 6-8 months post-move, and 24 months post-move) beginning in 2008 and continuing to the most recent wave



ending in 2013. The impetus for their study was the proposed demolition in 2007 of the majority of the large public housing projects in Atlanta, which resulted in nearly 10,000 public housing residents having to relocate (Ruel et al., 2013; Oakley et al., 2010: 2). Affected public housing residents, whose housing was slated for demolition in September 2008 and some public housing residents who remained in place were sampled (Oakley, Ruel, Reid, 2013a). The original research design called for a disproportionate random sample with equal numbers of residents from 6 traditional public housing communities. Letters were sent to the leaseholder of a random sample of still occupied units inviting participation. But, unforeseen interference from the Atlanta Housing Authority resulted in low response among the randomly sampled. The primary reason for non-participation was fear of losing their housing voucher if they spoke to the researchers (Ruel et al., 2010). The response rate for the randomly chosen respondents was 49% (Oakley, Ruel, Reid, 2013b). Due to these constraints, the primary researchers' sample was composed of both randomly chosen respondents, 208, and non-randomly chosen respondents, 103, for a total N of 311 (Oakley, Ruel, Reid, 2013b). Since the interference that disrupted the sampling frame had nothing to do with the characteristics of the subjects, it is likely to be unbiased (Ruel et al., 2010; Oakley, Ruel, Reid, 2013b). Though having a sample that is not entirely randomly chosen is a limitation, the original researchers tested for differences between the random and the non-random participant responses on all variables and found no significant differences on any variables (Ruel et al., 2013). Sampling weights were developed by the originators of the data to "make the sample proportionate of the six public housing communities" (Ruel et al., 2013, p. 3). Weighting is commonly used to account for complex sampling designs, in this case, combining randomly and non-randomly drawn samples. The weights are applied to

each case to give the two strata the same relative importance, or proportionality, in the sample as it has in the population (DuMouchel and Ducan, 1983).

## **4.2 Survey Instrument**

The Georgia State University Urban Health Initiative primary researchers designed a survey instrument with more than 400 questions. Thematic elements included in the survey were “neighborhood, home, and fear of crime characteristics, as well as household composition, social support, transportation, demographic, income, and other socioeconomic measures” (Oakley, Ruel, Reid, 2013a). This survey was administered with full IRB approval from Georgia State University with confidential and voluntary participation by subjects. Each participant was interviewed face to face with responses recorded using Computer Assisted Personal Interviewing (CAPI) software (Ruel et al., 2013).

## **4.3 Census Tract Data**

In addition to the secondary data from the Georgia State University Urban Health Initiative survey responses, national census tract data on neighborhood income level is used. Census tracts are designed to represent neighborhoods, have on average 4,000 people, and can range from about 1,500 to 8,000 people (U.S. Census Bureau, 1997; Iceland and Steinmetz, 2003). This type of data is useful in neighborhood centered research such as investigations of HOPE VI era relocations (Oakley, Ruel, & Wilson, 2008; Turbov and Piper, 2005; Goetz, 2010; Oakley, Ruel, Reid, 2013a). The census definition of income is “income received on a regular basis (exclusive of certain money receipts such as capital gains) before payments for personal income taxes, social security, union dues, [and] Medicare deductions” (U.S. Census Bureau, 2015). The census data will be used in this study to assess if receiving neighborhoods were homogenous low-income neighborhoods or mixed-income neighborhoods, which will be

important to determine if social capital is bonding type (most likely in homogenous neighborhoods) or bridging type (more common in mixed-income neighborhoods).

#### **4.4 Sample**

The population of interest is former public housing residents in Atlanta. These individuals have qualified for at least one social services support, housing subsidy. This group membership is based on shared income level characteristics, in fact, the average income level of the respondents is below \$1000 per month (Ruel et al., 2013). The standard income requirements set by the Department of Housing and Urban Development to qualify for subsidized housing require that family income fall below 50% of the median income for the county with an adjustment for family size (U.S. Dept. of H.U.D, 2011). The benefit of studying a group this homogenous in income is that any differences in social services utilization would easily be attributable to variables other than income. All of the respondents are at least 18 years old (Oakley, Ruel, Reid, 2013a). The sample is homogenous by race, 95% Black (Oakley et al., 2010). Table 4.1 illustrates the demographics of the sample. Since the original sample (N=311) included both public housing residents who moved and a small number who remained in place, I filtered the sample to only include movers (N=248) in the sample I analyzed.

#### **4.5 Constructs**

From the secondary data from the Georgia State University Urban Health Initiative (Oakely, Ruel, and Reid, 2013a), I computed a dependent count variable from 3 survey items relating to the four food social services, SNAP, WIC, ENP, and food pantries (Figure 4.1). I created a dummy variable reflecting those who were ineligible for both WIC and ENP. The variable food social services utilization was recoded to form a categorical variable. The categories related to the number of food social services accessed during a 12 month period: not

utilizing food social services, utilizing one food social service, utilizing two food social services, and utilizing all food social services one is eligible to access. For the second analysis, I utilize the dependent variable food insecurity, an item present in both waves of the data. I computed the change in food insecurity variable by comparison between pre-moved food insecurity and 24 months post-relocation food insecurity. I recoded the variable to reflect 3 categories: more food insecure post-relocation, no change, and less food insecure post-relocation.

The independent variables are in two categories: social capital and cultural capital. The social capital variables: isolation, neighborhood cohesion scale (5 items), fear of crime scale (10 items), tenure in public housing, mixed-income neighborhood, and social services network stability correspond to survey items on the secondary data source (Georgia State University Urban Health Initiative, 2011), and census data yielded the variable mixed-income / homogenous low-income neighborhood (Figure 4.2). For the neighborhood cohesion scale I estimated the internal consistency reliability of the scales by assessing Cronbach's Alpha, and the value was 0.738 for wave 3, a good reliability (DeVellis, 2003). I conducted the Kaiser-Meyer-Olkin Measure of Sampling Adequacy test, which measures the degree of common variance of scale items on the full sample (including the control group Cosby Spears for wave 1: N of 311). The Kaiser-Meyer-Olkin Measure of Sampling Adequacy statistic is .699, indicating "middling" degree of common variance among the 5 items (Friel, 2008). The Catell's Scree Plot indicate that two extractions were required (Friel, 2008). Unfortunately, scales with too few items may lack content and be difficult to replicate (Davis and Buskist, 2008). To remedy this one would usually seek additional items to replace the item, but as covered earlier, the additional items in the secondary dataset on this construct were not asked of a majority of the sample. Given that there are not any other items to add, the scale with less than optimal degree of common variance

will have to suffice. I found that three items in the proposed fear of crime scale had more than half of cases with no response for wave one of data. To address this, I did not include these items in the scale. The resulting fear of crime scale, with 7 items (Tester et al., 2011) ranged from 7 to 35 indicating ‘no fear’ and ‘very afraid’ respectively. I estimated the internal consistency reliability of the scales by assessing Cronbach’s Alpha, in the case of the fear of crime scale (7 items) the value was .943 for wave 3, a good reliability (DeVellis, 2003). I conducted the Kaiser-Meyer-Olkin Measure of Sampling Adequacy test on the full sample (including the Cosby Spears control group for an N of 311). The Kaiser-Meyer-Olkin Measure of Sampling Adequacy statistic for the fear of crime scale is .912, indicating “marvelous” degree of common variance among the 7 items (Friel, 2008). The Catell’s Scree Plot indicate that one extraction was required. With one component extracted using Principal Component Analysis, the values for the components from the component matrix were as follows: 0.981, 0.900, 0.895, 0.864, 0.839, 0.793, 0.755. Components with values above 0.30 should be included in the scale, therefore the scale is efficient as it is (Friel, 2008).

For each scale I computed difference between waves by subtracting Wave 1 from Wave 3. Since there has not been consensus in the field on the definition of mixed-income neighborhood (Levy, McDade, Dumlao, 2010), I set the cutoff point at 14 percent and higher encompassing low-income and below 14% as mixed-income, since the percent in poverty in the dataset prior to relocation ranged from 14.3 to 28.6 percent poverty by census tract and the national average percent poverty by census tract over 5 years was 13.8 (Bishaw, 2011) (see Table 4.3).

The cultural capital independent variables: self-esteem, locus of control, education, and transportation correspond to items on the secondary data source (Georgia State University Urban

Health Initiative, 2011) The primary investigators constructed a scale for self-esteem based on the work of Rosenberg (Rosenberg, 1953; Tester et al., 2011) and a scale for locus of control based on Gecas (Gecas, 1989; Tester et al., 2011). The self-esteem scale (10 items based on Rosenberg) ranged from 10 to 50 (higher numbers indicating higher self-esteem) with a good Cronbach's Alpha of .812. According to Gray-Little, Williams, and Hancock (1997), a factor analysis of the scale revealed that all ten items of the scale are significantly unidimensional to the construct self-esteem. The locus of control scale (7 items) ranged from 5 to 35 (higher score indicating internal locus of control) with a Cronbach's Alpha of .742, indicating good reliability (DeVellis, 2003). I conducted the Kaiser-Meyer-Olkin Measure of Sampling Adequacy test, which measures the degree of common variance of scale items. The Kaiser-Meyer-Olkin Measure of Sampling Adequacy statistic is .768, indicating "middling" degree of common variance among the 7 items. The Catell's Scree Plot indicate that two extractions were required. With one component extracted using Principal Component Analysis, there were five factors correlated with factor one, which seem thematically to relate to current sense of being in control of one's life. The second factor was correlated to two items that appear to be more related to thoughts about one's control of the future or upcoming events. The research is very interested in the participant's feelings about the future in regard to locus of control as well as their current situation, so rather than remove the two items and unify the scale, I decided that the two thematic dimensions were both important to the research questions. An interesting project for the future would be to develop scales that differentiate between current situation locus of control and future expectations of locus of control as unique, separate constructs. For each scale I constructed variables to compute difference between waves by subtracting Wave 1 from Wave 3. The difference variable reflecting change in self-esteem ranged from -17 to 19 with higher values

reflecting improved self-esteem. The difference variable for change in locus of control ranged from -18 to 17 with higher values reflecting improved internal locus of control. Also, I constructed variables to reflect change in car ownership between waves coded as 1 'Got a Car post-relocation' 0 'no change' -1 'Lost a Car post-relocation'. Additionally, I calculated change in time to Marta transportation between waves and coded to reflect whether time to travel to a Marta stop had 1 'Worsened' 0 'Was Unchanged' or 1 'Improved' post relocation. I created a variable from census data to reflect whether movers moved out of their original county (all originally lived in Fulton County) or outside of city limits (all originally lived in Atlanta) as a way to measure social services network disruption, which was coded 0 'No Change' 1 'Changed One (either county or city or both)' (Figure 4.3).

The control variables: age, marital status, children in the household, financial strain, and income correspond to items on the secondary data source (Georgia State University Urban Health Initiative, 2011). The marital status variable was recoded to 4 categories: married or living with someone, divorced or separated, widowed, and never married. The reference category for marital status was set at Never Married, since the majority of participants (54%) were never married, which is the most common marital status in public housing (Brooks et al., 2005; Conway, and Hachen, 2005; Wilson, 1987) (Figure 4.4).

#### **4.6 Analysis Method**

The first consideration for the analysis is missing data. Missing data in survey research has three main causes: noncoverage, total nonresponse, and item nonresponse (Brick and Kalton, 1996). Noncoverage was not a problem for this research, because I removed every subject who did not respond to both the first and final wave of the survey. The other two types of missing data, total nonresponse and item nonresponse, must not be ignored, since this can lead to bias in

the estimates (Brick and Kalton, 1996). One strategy to address this is to drop cases with missing items (Brick and Kalton, 1996). Dropping cases is problematic in multiple regression, since low item response in multiple survey items could result in loss of sizable proportions of data for a given analysis particularly if only cases with complete data are included, especially with datasets with low number of subjects (Brick and Kalton, 1996). Listwise deletion can result in loss of 20 to 50% of the data, and smaller sample size is associated with lessened power of the results (Acock, 2005; Schafer and Graham, 2002). A better solution is multiple imputation, since it avoids the bias caused by ignoring cases with missing data (Acock, 2005; Brick and Kalton, 1996). Imputation involves assigning values to missing responses (Acock, 2005). I conducted an analysis of missing data to determine if missingness led to a bias in the sample.

I ran frequencies to determine if any variables had missing data that was not random. An item in the fear of crime scale, fear of having my car stolen was missing responses in 30% of the sample. Many respondents did not own a car, which explains this missingness. Two other items related to fear of crime also had low response as well. To remedy this, I only included the other 7 items (with good response rate) in the fear of crime scale. Additionally, a number of items in the neighborhood cohesion scale were not asked of the entire sample, due to researcher design. It was important to know if this missingness led to bias.

To test the hypothesis that the missing data is missing completely at random, I used Little's MCAR test, which resulted a non-significant value of .431 indicating that the data are missing completely at random. Since the percentage of missing data points is above 5% for more than one variable in the analysis, deleting cases with missing data would not be a good choice, because it would significantly reduce the sample size (Allison, 2001). I choose multiple imputation as a strategy to deal with the missing data, because it is commonly used for



longitudinal data and is preferable to listwise deletion (Newman, 2003). SPSS statistical program utilizes the Markov chain Monte Carlo (MCMC) algorithm method of imputation. It is an iterative method used to treat missingness that is arbitrary. The fully conditional specification (FCS) method for a single dependent variable model uses all other variables in the variable list as predictors, then imputes missing values. The method repeats for the designated number of iterations (IBM, 2011a). I used five iterations to impute the missing values. Schafer (1997) demonstrated that relatively few iterations provide efficient estimates of standard errors. This process generated complete sets of data so that all of the ordinal logistic regressions were run on each of the five imputed datasets. Then, one pooled set of results is presented that represents the variations across all five imputations (IBM, 2011a).

For research question 1: “How do social capital and cultural capital affect utilization of food social services among relocated public housing residents in Atlanta?”, I determined that the best analysis methodology was ordinal logistic regression, since the dependent variable is an ordinal categorical variable. The Polytomous Universal Model (PLUM) method of calculating

ordinal logistic regression uses the formula:

$$\ln\left(\frac{F_{ij}}{1-F_{ij}}\right) = \beta_{0j} - (\beta_1 X_1 + \beta_2 X_2 + \dots + \beta_k X_k)$$

I regressed the dependent variable food social services utilized against the independent variables neighborhood cohesion, isolation, fear of crime, tenure in public housing, social services network stability, self-esteem, locus of control, education level, and transportation access, along with the control variables using ordinal logistic regression.

To address research question 2: “How do social capital, cultural capital, and food social services utilization affect food insecurity among relocated public housing residents in Atlanta?”, I also used ordered logistic regression to predict change in food insecurity from time one to time two as a function of the independent variables and include the control variables.

## 4.7 Diagnostics

Ordinal logistic regression is appropriate for data that meets the proportional odds assumption. This means that the relationships between the independent variables and the logits are the same for all the logits (Kim, 2003), which can be verified with the test for parallel lines. Non-significant results on this statistic indicate that the proportional odds assumption has been met, because there is no difference between the coefficients across models (Kim, 2003). The test for parallel lines for research question 1: “How do social capital and cultural capital affect utilization of food social services among relocated public housing residents in Atlanta?” had a significance level of 0.211, which indicates that the proportional odds assumption has been met.

Also, another assumption of ordinal logistic regression is that the error terms are independent, meaning that there is no or little multicollinearity (Rodgers and Nicewandder, 1988). Pearson’s Correlation Coefficient and variance inflation factors (VIF) are the two tests that assess multicollinearity (Rodgers and Nicewandder, 1988).

I tested for multicollinearity using the Pearson’s Correlation Coefficient, to measure whether variables were significantly correlated (Rodgers and Nicewandder, 1988). There was some multicollinearity between some of the variables in the model. To learn how much of an issue multicollinearity was in the model, I used the variance inflation factors (VIF). The VIF values for the variables were low, ranging between 1.026 and 1.220, far below the recommended threshold of 10 (Rovai, Baker, and Ponton, 2013). So I determined that multicollinearity was not a problem. The Cook’s distance statistic measures outliers and influential cases with values over 1 indicating an issue (Anderson et al., 2013). The Cook’s Distance values ranged from 0 to 0.083, so there was no issue with influential cases or outliers. To test for the goodness of fit of the model, I used the likelihood ratio, which is the best available choice currently for multiple

imputation datasets, but has been noted to be less than ideal (Manly and Wells, 2012). This statistic will evaluate the hypothesis: The data arise out of an ordinal logistic regression and the null hypothesis: The data do not arise out of an ordinal logistic regression. I report the likelihood ratio in Chapter 5.

The test for parallel lines for research question 2: : “How do social capital, cultural capital, and food social services utilization affect food insecurity among relocated public housing residents in Atlanta?” rendered the significance level 0.589, which indicates that the proportional odds assumption has been met. As in the previous analysis, I tested for multicollinearity using the Pearson’s Correlation Coefficient, to measure the linear association between variables (Rodgers and Nicewandder, 1988). This diagnostic indicated that multicollinearity was present between some of the variables in the model. To learn how much of an issue multicollinearity was in the model, I used the variance inflation factors (VIF). The VIF values for the variables were low, ranging between 1.026 and 1.220. Values over 10 indicate multicollinearity that reaches concerning levels (Rovai, Baker, and Ponton, 2013). So I determined that multicollinearity was not an issue. I used the Cook’s distance statistic to test for outliers and influential cases. The Cook’s Distance values ranged from 0 to 0.083. The values are all below 1 indicating no issue with influential cases or outliers (Anderson et al., 2013). I tested the goodness of fit of the model using the likelihood ratio, which though not ideal for multiple imputation datasets, may be among the best currently available (Manly and Wells, 2012). This statistic will evaluate the hypothesis: The data arise out of an ordinal logistic regression and the null hypothesis: The data do not arise out of an ordinal logistic regression (Cook and Weisber, 1982). I report the likelihood ratio statistics in Chapter 6.

## 4.8 Descriptives

I reported the means, standard deviations, and ranges of all variables used in the model in Table 4.2. The mean number of food social services used post-relocation was 1.7 out of a possible 3 that were measured. Between Wave 1 and Wave 3, self-esteem dropped on average - 2.16 points. Between waves, internal locus of control increased on average 0.1696. The average education level of the sample was 11.28 years. Neighborhood cohesion on average rose 2.95 points between Wave 1 and Wave 3. Fear of crime between Wave 1 and Wave 3 decreased by 3.35 points. The average number of years living in public housing prior to relocation was 6.34. The average age of participants was 48 years old and ranged from 19 to 98. The average number of children in the household was 1.82. Income levels on average ranged between \$500 and \$999 per month. I report the frequencies of some categorical variables, since the mean for these is reflective of a number that represents a category, so that the reader can associate the number with the more descriptive category (Table 4.3). Most movers in the sample saw no difference in car ownership post-relocation (76.2%). Most movers (64.5%) saw no change in distance to Marta post-relocation. Post-relocation, the most common response to the item “Sometimes I feel isolated in my neighborhood” was disagree (51.2%) and another 19.4% strongly disagree. The most common response on financial strain pre-relocation (44.8%) was “we had just enough to make ends meet” most months in the last 12 months. The most common marital status was ‘never married’ (54%) (see Table 4.4). Most respondents were using 2 food social services 43%. The rarest situation, for about 10% of respondents, was not using any food social services. The mean, standard deviation, and range for the remaining dependent variable, food insecurity are as follows: the mean is -.1792; the standard deviation is .72405; the range is -1 to 1. The

interpretation of the mean is that post relocation, on average post-relocation movers were slightly less food insecure.

**Figure 4.1 Food Social Services Dependent Variable and Food Insecurity Dependent Variable**

<i>Variable</i>	<i>Survey Item</i>	<i>Response Categories</i>
<i>SNAP Utilization (Q23W1 and Q59W3)</i>	In the last 12 months, was your family authorized to receive food stamps?	0=No 1=Yes -1=Don't Know -2=Refused to Answer -3=Not Applicable
<i>WIC or ENP Utilization (Q23aW1 and Q50W3)</i>	In the last 12 months, did anyone in your family (in your household) participate in the Women, Infants, and Children (WIC) Nutrition program or the Elderly Nutrition Program?	0=No 1=Yes -1=Don't Know -2=Refused to Answer -3=Not Applicable
<i>Food Pantry Utilization (Q18fW1 and Q54W3)</i>	In the past 12 months, how often did your family get emergency food from a church, a food pantry, a food bank, or eat in a soup kitchen? Would you say...	1=Never 2=Rarely 3=Occasionally 4=Frequently 5=All the time -1=Don't Know -2=Refused to Answer -3=Not Applicable
<i>Food Insecurity (Q18dW1 and Q48cW3) Compute change in F.I. Recoded into 3 categories</i>	In the past 12 months, how often did the food you buy run out, but you didn't have money to get more? Would you say...	1=Never 2=Rarely 3=Occasionally 4=Frequently 5=All the time -1=Don't Know -2=Refused to Answer -3=Not Applicable

Note: Values of -1=Don't Know, -2=Refuse to Answer, -3=Not Applicable will be set to missing for the analysis.

**Figure 4.2 Social Capital Independent Variables**

<i>Variable</i>	<i>Survey Item</i>	<i>Response Categories</i>	
<i>Isolation (Q7zW3)</i>	Sometimes I feel isolated in my neighborhood	1=Strongly Disagree 2=Disagree 3=No Opinion 4=Agree	5=Strongly Agree -1=Don't Know -2=Refuse to Answer -3=Not Applicable
<i>Tenure in Public Housing (Q10yearW1)</i>	Home many months or years have you lived in your house or apartment	Recorded by primary researchers Q10yearW1	
<i>Social Services Network Stability (2 items) 1=Unstable 0= Stable</i>	Address pre-relocation Address post relocation	Recorded for Same county / city=0 Different county / city=1	
<i>Fear of Crime Scale (10 items)</i> <i>1. Q6aW1 and Q12aW3</i>	1. Having someone break into your home while you are away?	1=Not at All Afraid 2=Not very Afraid 3=Somewhat Afraid 4=Afraid	5=Very Afraid 7=Don't Know 8=Refuse to Answer 9=Not Applicable
<i>2. Q6bW1 and Q12bW3</i>	2. Having someone break into your home while you are at home?	Same categories as above in 1	
<i>3. Q6cW1 and Q12cW3</i>	3. Having someone taken from you by force?	Same categories as above in 1	
<i>4. Q6dW1 and Q12dW3</i>	4. Being threatened with a weapon?	Same categories as above in 1	
<i>5. Q6eW1 and Q12eW3</i>	5. Being beaten by a stranger?	Same categories as above in 1	
<i>6. Q6fW1 and Q12fW3*</i>	6. Having your car stolen?	Same categories as above in 1	
<i>7. Q6hW1 and Q12gW3</i>	7. Finding out that someone was robbed near your home?	Same categories as above in 1	
<i>8. Q6iW1 and Q12hW3*</i>	8. Being robbed or mugged on the street?	Same categories as above in 1	
<i>9. Q236W15 and Q12iW3*</i>	9. Finding out that someone was murdered near your home?	Same categories as above in 1	
<i>10. Q237W15 and Q12jW3</i> <i>*This item was removed from scale due missingness</i>	10. Being murdered?	Same categories as above in 1	
<i>Neighborhood Cohesion Scale (5 items)</i> <i>1. Q1aW1 and Q7aW3</i>	1. This neighborhood is a good place to raise kids. Do you...	1=Strongly Disagree 2=Disagree 3=No Opinion 4=Agree	5=Strongly Agree -1=Don't Know -2=Refuse to Answer -3=Not Applicable
<i>2. Q1bW1 and Q7bW3</i>	2. People around here are willing to help neighbors. Do you...	Same categories as above in 1	
<i>3. Q1cW1 and Q7cW3 (reverse coded)</i>	3. People in this neighborhood generally don't get along with each other. Do you...	Same categories as above in 1	
<i>4. Q1dW1 and Q7dW3</i>	People in this neighborhood can be trusted. Do you...	Same categories as above in 1	
<i>5. Q1eW1 and Q7eW3 (reverse coded)</i>	People in this neighborhood do not share the same values. Do you...	Same categories as above in 1	
<i>Neighborhood Income Mix</i>	Derived from Census Tract Data	Mixed-Income or Homogenous Low-Income Neighborhood	

Note: Values of -1=Don't Know, -2=Refuse to Answer, -3=Not Applicable will be set to missing for the analysis.

**Figure 4.3 Cultural Capital Independent Variables**

<i>Variable</i>	<i>Survey Item</i>	<i>Response Categories</i>	
<i>Self-esteem Scale (10 items)</i> 1. Q104aW1 and Q135W3	1. I feel that I'm a person of worth at least on an equal basis with others.	1=Strongly Disagree 2=Disagree 3=No Opinion 4=Agree	5=Strongly Agree -1=Don't Know -2=Refuse to Answer -3=Not Applicable
2. Q104bW1 and Q136W3 (Reverse)	2. I feel I do not have much to be proud of.	Same categories as above in 1	
3. Q104cW1 and Q137W3	3. I feel I have a number of good qualities.	Same categories as above in 1	
4. Q104dW1 and Q138W3 (Reverse)	4. All in all, I am inclined to feel that I am a failure.	Same categories as above in 1	
5. Q104eW1 and Q139W3	5. I am able to do things as well as most other people.	Same categories as above in 1	
6. Q104fW1 and Q140W3 (Reverse)	6. I certainly feel useless at times.	Same categories as above in 1	
7. Q104gW1 and Q141W3	7. I take a positive attitude toward myself.	Same categories as above in 1	
8. Q104hW1 and Q142W3 (Reverse)	8. I wish I could have more respect for myself.	Same categories as above in 1	
9. Q104iW1 and Q143W3 (Reverse)	9. At times I think I am no good at all.	Same categories as above in 1	
10. Q104jW1 and Q144W3	10. On the whole, I am satisfied with myself.	Same categories as above in 1	
<i>Locus of Control Scale (7 items)</i> 1. Q106aW1 and Q169W3 (Reverse)	1. There is really no way I can solve some of the problems I have.	1=Strongly Disagree 2=Disagree 3=No Opinion 4=Agree	5=Strongly Agree -1=Don't Know -2=Refuse to Answer -3=Not Applicable
2. Q106bW1 and Q170W3 (Reverse)	2. Sometimes I feel that I am being pushed around in life.	Same categories as above in 1	
3. Q106cW1 and Q171W3 (Reverse)	3. I have little control over the bad things that happen to me.	Same categories as above in 1	
4. Q106dW1 and Q172W3	4. I can do just about anything I really set my mind to.	Same categories as above in 1	
5. Q106eW1 and Q173W3 (Reverse)	5. I often feel helpless in dealing with the problems of life.	Same categories as above in 1	
6. Q106fW1 and Q174W3	6. What happens to me in the future mostly depends on me.	Same categories as above in 1	
7. Q106gW1 and Q175W3 (Reverse)	7. There is little I can do to change many of the important things in my life.	Same categories as above in 1	
<i>Education</i> Q36W1	What is the highest grade or year of school you attended?	-1=Don't Know -2=Refuse to Answer -3=Not Applicable	
<i>Transportation</i> Q45W1 and Q75W3	Does anyone in your household own a car, van or truck that runs?	0=No 1=Yes -1=Don't Know -2=Refuse to Answer -3=Not Applicable	
Q46W1 and Q76W3	How long does it take you to get to the nearest bus or Marta station?	1=Less than 15 Minutes 2=15-30 Minutes 3=31-45 Minutes 4=46 Minutes to an Hour	5=More than an Hour -1=Don't Know -2=Refused to Answer -3=Not Applicable

Note: Values of -1=Don't Know, -2=Refuse to Answer, -3=Not Applicable will be set to missing for the analysis.

**Figure 4.4 Control Variables**

<i>Variable</i>	<i>Survey Item</i>	<i>Response Categories</i>
<i>Age</i> <i>Q24W1</i>	What year were you born?	-1=Don't Know -2=Refused to Answer -3=Not Applicable
<i>Marital Status</i> <i>Q29W1</i> <i>Recoded to 4 categories</i> <i>Reference Category:</i> <i>Never</i> <i>Married</i>	Are you currently...	1=Married 2=Divorced 3=Widowed 4=Separated 5=Never Married 6=Living with Someone but Not Married -1=Don't Know -2=Refused to Answer -3=Not Applicable
<i>Children in Household</i> <i>Q30W1</i>	How many children under 18 years old live in your household? (Children that you are rearing full time.)	1-30 Range -1=Don't Know -2=Refused to Answer -3=Not Applicable
<i>Financial Strain</i> <i>(Q22W1)</i>	During the past 12 months, at the end of most months, what was your household's financial situation?	1=We Had More Than Enough Money Left Over 2=We Had Some Money Left Over 3=We Had Just Enough to Make Ends Meet 4=We Did Not Have Enough to Make Ends Meet -1=Don't Know -2=Refuse to Answer -3= Not Applicable
<i>Income</i> <i>Q43aW1</i>	What is your total monthly income (Before taxes) (Including Earnings, SSI, Child Support, Public Assistance, and any other sources of money (Choose one)	1=Less Than \$250 2=Between \$250 and \$499 3=Between \$500 and \$749 4=Between \$750 and \$999 5=Between \$1000 and \$1249 6=Between \$1250 and \$1499 7=Between \$1500 and \$1999 8=Between \$2000 and \$2499 9=Between \$2500 and \$2999 10=More than \$3000 -1=Don't Know -2=Refuse to Answer -3= Not Applicable

Note: Values of -1=Don't Know, -2=Refuse to Answer, -3=Not Applicable will be set to missing for the analysis.



**Table 4.1 Demographics**

Weighted sample demographics at Wave 1: percents or means

Number of weighted cases                      187 (60%)    124 (40%)

	Family	Senior
Black	98%	95%
Female	97%	50%
Single	96%	95%
Years of Education	11.01	10.86
Monthly Income (\$)	837.40	782.84

**Table 4.2 Means, Standard Deviations, and Ranges of Variables**

	N	Mean/Prop.	SD	Range
Food Social Services Utilization	248	1.7284	.88624	0 to 3
Food Insecurity W1	248	2.17	1.215	1 to 5
Food Insecurity W3	248	1.83	1.144	1 to 5
Change in Food Insecurity	248	-.3458	1.32926	-4 to 4
Self-esteem W1	248	40.6255	6.20747	22 to 50
Self-esteem W3	248	38.5297	4.77172	22 to 50
Change in Self-esteem	248	-2.1558	5.85491	-17 to 19
Locus of Control W1	248	25.4669	5.12428	15 to 35
Locus of Control W3	248	25.5975	4.93134	15 to 35
Change in Locus of Control	248	.1696	5.19758	-18 to 17
Education	248	11.28	1.999	1 to 18
Car W1	248	.21	.411	0 to 1
Car W3	248	.26	.442	0 to 1
Got a Car	248	.0442	.46674	-1 to 1
Marta W1	248	1.22	.507	1 to 4
Marta W3	248	1.25	.574	1 to 4
Better Marta	248	-.0044	.55010	-1 to 1
Isolation	248	2.44	1.238	1 to 5
Neighborhood Cohesion W1	248	14.0840	3.89759	5 to 25
Neighborhood Cohesion W3	248	16.7164	4.04156	5 to 25
Change in Neighborhood Cohesion	248	2.9479	5.11925	-11 to 18
Fear of Crime W1	248	23.7220	9.31181	7 to 35
Fear of Crime W3	248	20.3485	9.72941	7 to 35
Change in Fear of Crime	248	-3.3532	10.52260	-28 to 28
Tenure in Public Housing	248	6.3424	6.76080	.17 to 38
Mixed-Income Neighborhood	248	.1529	.3603	0 to 1
Social Services Network Stability	248	.1322	.33944	0 to 1
Age	248	48	16.900	19 to 93
Number of Children	248	1.34	1.824	0 to 8
Income	248	3.64	1.747	1 to 10
Financial Strain	248	2.78	.748	1 to 4
Marital Status	248	4.03	1.370	1 to 4

**Table 4.3 Frequencies of Selected Variables**

		N	Frequency	Percent	Missing
		248			
Got a Car	Lost a car P.R.		21	8.5%	
	No Change in Car Ownership		189	76.2%	
	Got a Car P.R.		32	12.9%	6
Marta	Farther from Stop		35	14.1%	
	No change		160	64.5%	
	Closer to Stop		34	13.7	19
Isolation	Strongly Disagree		48	19.4%	
	Disagree		127	51.2%	
	No Opinion		14	5.6%	
	Agree		32	12.9%	
	Strongly Agree		26	10.5%	1
Financial Strain	More than enough \$ left over		5	2.1%	
	Had some \$ left over		85	34.3%	
	Had just enough to make ends meet		111	44.8%	
	Did not have enough to make ends meet		42	16.9%	5
Marital Status	Married or living w/ someone		15	9.3%	
	Divorced or separated		60	24.2%	
	Widowed		31	12.5%	
	Never Married		134	54%	0

**Table 4.4 Frequencies of Dependent Variables**

	N	Frequency	Percent
	248		
<b>Food Social Services Utilization</b>			
Not Using Any Food Social Services		24	9.7 %
Using 1 Food Social Service		65	26.2 %
Using 2 Food Social Service		107	43.1 %
Using All Eligible Food Social Services		47	19.4 %
	248		
<b>Food Insecurity</b>			
Less Food Insecure P.R.		88	35.5%
No Change		107	43.1%
More Food Insecure		45	18.1%

## **5 PUBLIC HOUSING RELOCATION AND UTILIZATION OF THE FOOD SAFETY NET**

### **5.1 Introduction**

The Activist Client Thesis was developed by Klinenberg (2003) to explain differential access to social services among low-income city dwellers during the crisis of a heat wave. He proposed that personal cultural capital embodied characteristics were assets in garnering social services. Theory in the field on cultural capital defines two additional types, objectified and institutional (Bourdieu, 1984; Wilson, 1987). I expand the Activist Client Thesis to include all three types of cultural capital. Additionally, the Activist Client Thesis suggests that bonding social capital is important to social services access. Theory has identified that social capital has two other types, bridging and linking (Wilson, 1987; Putnam, 2001; Szreter and Woolcock, 2004). I advance the Activist Client Thesis by including all three types of social capital. This theory has not been tested beyond Klinenberg's original study. This study will test his theory using a prospective quantitative methodology. I investigate the effects of cultural capital and social capital on utilization of food social services among relocated public housing residents in Atlanta.

Since 2007, food insecurity in the U.S. is up (Gundersen, 2013). Yet, many who are eligible for food social services do not access them, and rates of utilization among eligibles vary widely by program (Nord, 2009; Purtell, Gershoff, Aber, 2012; Johnson, 2014; U.S. Government Accountability Office, 2011). Of the three federal programs, SNAP and WIC have similar utilization rates, up to 60% (Purtell, Gershoff, Aber, 2012; Johnson, 2014), which is much better than the 3% utilization rate of ENP (U.S. Government Accountability Office, 2011).

Researchers have not compiled national data on food pantry utilization, since these programs are largely locally operated non-profits.

Factors impacting utilization of food safety net resources also vary by program. SNAP users compared to eligible non-participants were more likely to be a racial minority, less educated, disabled, non-elderly, and a single mother (especially if unemployed), (Rank & Hirschl, 2009; Teitler et al., 2007; Zedlewski, 2002; Chaparro, Harrison, Pebley, 2014; Purtell, Gershoff, Aber, 2012). Families who had more children, experienced more residential moves, did not own a car, and received housing subsidy were more likely to use SNAP than other non-participant eligibles (Zedlewski, 2002; Purtell, Gershoff, Aber, 2012; U.S. Dept. of H.U.D., 1998; Sard and Waller, 2002; Meyers et al., 2005). Food insecurity was not predictive of SNAP utilization (Purtell, Gershoff, Aber, 2012). WIC utilizers and non-participant eligibles did not differ in income, education, number of live births, marital status, or late prenatal care initiation (CDC, 2013). The main factor of influence was that those living in urban high density areas were less likely to participate (Stopka et al., 2014). Little is known about ENP utilization factors. ENP places applicants on waitlists when demand outstrips supply. The rate of waitlisting in Georgia is 60% (Lee et al., 2011). Aside from the high number who qualify and have to wait for service, research has not been done to discover factors that contribute to deciding not to apply. Food pantry use is associated with food insecurity and chronic economic problems (Bhattarai, Duffy, and Raymond, 2005; Purtell, Gershoff, Aber, 2012; Daponte et al. 1998). Participants at food pantries were likely to also be receiving SNAP benefits (Bhattarai, Duffy, and Raymond, 2005). Barriers to food pantry use were stigma and knowledge of services (Duffy et al., 2002).

People involuntarily relocated from public housing during the HOPE VI era had no improvement in employment or income post-relocation (Clampet-Lundquist, 2004; Levy and Wooley, 2007). Yet, proximity to social services providers was not a priority when deciding where to move (Smith, 2002). SNAP utilization was more common than TANF use for movers, and TANF use was unchanged post-relocation (Freiman et al. 2013; Clampet-Lundquist, 2004). Research on whether movers can access a range of food social services has not been done. Also, no study has investigated the effect of cultural capital and social capital in new neighborhoods on food safety net utilization.

Since research specifically on cultural capital and food safety net utilization has not been done, I draw from research on its effect on success using other types of welfare, getting an education, and using the health care system, because these systems require interfacing with middle class professionals to get needs met. Cultural capital, embodied type, is positive for transitioning from welfare to work (Woodward, 2013). Parents with more cultural capital (embodied, objectified, and institutional) had children who had better educational achievement (Lareau, 2003; Tramonte and Williams, 2010; Lareau and Calarco, 2012). A deficit in embodied cultural capital, such as non-dominant relational style, was a disadvantage for students (Carter, 2003) and health care patients (Shim, 2010; Dubbin, Chang, Shim 2013).

Embodied cultural capital has a mixed effect on those living in traditional public housing since they reported both community attachment (Tester et al., 2011) and feelings of shame (Bartz, Joseph and Chaskin, 2011). Additionally effects of embodied cultural capital are mixed post-relocation, since movers felt stigmatized in new neighborhoods (Bartz, Joseph and Chaskin, 2011), but had better self-esteem and self-efficacy six months post-relocation (Dorrington, 2014). Objectified cultural capital was changed little post-relocation, since most movers moved

about or less than 5 miles from their original address (Cooper et al. 2012; Kingsley, Johnson, and Pettit, 2003; Oakley Ruel Reid, 2013a). In Atlanta, most still lived near Marta transportation lines post-relocation (Oakley, Ruel, Reid, 2013a). However, the distance to medical providers increased slightly for Atlanta movers (Cooper et al., 2012). Moving did not affect institutional cultural capital, since educational opportunities both in traditional public housing and in post-relocation neighborhoods are disadvantaged (Keels, 2013; Lipman, 2012). Movers' children with dominant embodied cultural capital deficits experienced exclusion from mixed-income public and charter schools (Keels, 2013; Lipman, 2012). Student performance after relocation was not improved (Keels, 2013). I address the gap in our knowledge of how cultural capital impacts food social services utilization for relocated former public housing residents.

Though several studies have associated social capital, bonding and bridging types, with food security, we do not know if it affects via the mechanism of food social services utilization (Dhokarh et al., 2011; Dean et al. 2014; Henley, Danzinger, and Offer, 2005). Knowledge of social services is associated with utilization (Kurtz et al., 2005), which could be due to information-rich social capital ties. Movers had lower bonding social capital in new neighborhoods, but research has not identified how this affects food social services utilization. One identified mechanism of the effect of bonding social capital on food social services utilization is perceived safety (Klinenberg, 2003; Putnam, 1993; Stein, 2014; Uchida et al. 2014). Fear of crime decreases food social services participation, but is buffered by bonding social capital (Putnam, 1993; Stein, 2014; Uchida et al. 2014). Those relocated from public housing had heightened fear of crime in new neighborhoods (Clampet-Lundquist, 2010; Curly, 2009; Keene and Ruel, 2013), but it is unknown how this affected their food social services utilization. This

research fills that gap in understanding how bonding, bridging, and linking social capital affect food social services utilization among HOPE VI era movers.

In summary, the Activist Client Thesis has not been tested beyond the original study (Klinenberg, 2003). The model has been enhanced in this study to include all three types of cultural capital (embodied, objectified, and institutional) as well as all three social capital types, (bonding, bridging, and linking). The fully specified model is used as a framework to examine how activist client traits impact food safety net utilization among displaced former public housing residents in Atlanta. Research has provided some clues, but many unanswered questions persist.

## **5.2 Findings**

To address research question 1: “How do social capital and cultural capital affect utilization of food social services among relocated public housing residents in Atlanta?” I used ordered logistic regression to predict food social services utilized as a function of the independent variables and include the control variables. This methodology is useful in assessing proportional odds when the responses to the dependent variable are a set of ordered categories (Brant, 1990). Since the dependent variable, food social services has been transformed into a categorical variable with four ordered categories, this methodology is appropriate. Full description of the methodology along with diagnostics and descriptives are covered in Chapter 4, Methodology (see page 49). I report the coefficients and the confidence intervals in tables with .05 significance, .01 significance, and .001 significance denoted using stars (\*). In the narrative, I report the coefficients as the percent change in the probability of the outcome variable and note which levels of significance were achieved, if any (Hosmer, Lemeshow and Sturdivant, 2013).

### 5.3 Cultural Capital and Food Social Services Utilization

First, I regressed the dependent variable food social services utilization on the cultural capital independent variables and the control variables and report the results in Table 5.1. In Model 1, two objectified cultural capital variables represent the construct transportation: difference in time to get to a Marta stop from Wave 1 compared to Wave 3, and car ownership changes post-relocation. In Model 2, I added in the institutional cultural capital variable education. In Model 3, I added in the embodied cultural capital variables: locus of control and self-esteem. In Model 4, I included the control variables: age, marital status, children present in the home, income, and financial strain.

#### 5.3.1 *Non-significant Results*

Some readers like to see non-significant results in the narrative, while other readers find it misleading. In order to facilitate all readers, I have chosen to report non-significant findings in this section and avoid mention of these in the *significant results* section. No significant difference, which is signified by statistics that are non-significant, indicates support for the null hypothesis (Sterba, 2011). I report this in the hypothesis section.

In Model 1, a 15 minute improvement in Marta accessibility is associated with a 62.44% increase in the probability of utilizing food social services, though the relationship was not significant. Getting a car is associated with a 14.7% increase in the probability of utilizing food social services, but not at the significant level (Table 5.1). In Model 2, getting a car is associated with a 14.77% increase in the probability of utilizing food social services, though not at the significant level. A one unit increase in education is associated with a 3.69% increase in the probability of utilizing food social services, but not at a significant level (Table 5.1). In Model 3, getting a car is associated with a 73.61% increase in the probability of utilizing food social services,



though not at a significant level. A one unit increase in education is associated with a 3.70% increase in the probability of food social services utilization, though not at a significant level. A one unit increase in difference in locus of control between Wave 1 and Wave 3 is associated with a 3.70% increase in the probability of food social services utilization, though not at a significant level. A one unit increase in difference in self-esteem between Wave 1 and Wave 3 is associated with a 1.60% decrease in the probability of food social services utilization, though not at a significant level (Table 5.1). A 15 minute increase in Marta accessibility is associated with a 57.77% increase in the probability of utilizing food social services, though not at a significant level. Getting a car is associated with a 19.44% increase in the probability of utilizing food social services, though not at a significant level. A one unit increase in education is associated with a 0.45% decrease in the probability of food social services utilization, though not at a significant level. A one unit increase in difference in locus of control between Wave 1 and Wave 3 is associated with a 1.36% increase in the probability of food social services utilization, though not at a significant level. A one unit increase in difference in self-esteem between Wave 1 and Wave 3 is associated with a 1.71% decrease in the probability of food social services utilization, though not at a significant level. Being married or living with someone (versus other categories) was associated with a 61.67% increase in the probability of food social services utilization, but not at a significant level. Being divorced or separated (versus other categories) was associated with a 5.93 % decrease in the probability of food social services utilization, but not at a significant level. Having never married (versus other categories) was associated with no percentage change in the probability of food social services utilization. A one unit increase in the number of children living in the home was associated with a 14.47% increase in the probability of food social services utilization, though not at a significant level (Table 5.1)

### **5.3.2 Significant Results**

There were no significant results in Model 1. In Model 2, a 15 minute improvement in Marta accessibility is associated with a 63.67% increase in the probability of utilizing food social services at a .05 significance level (Table 5.1). In Model 3, a 15 minute increase in Marta accessibility is associated with a 73.61% increase in the probability of utilizing food social services at the .05 significance level (Table 5.1). In Model 4, a year older in age is associated with a 4.42% increase in the probability of food social services utilization at the .001 significance level. A one category increase in income is associated with a 17.61% decline in the probability of food social services utilization at the .05 significance level. A one category increase in financial strain is associated with an 82.90 % increase in the probability of food social services utilization at the .01 significance level. Being widowed (versus other categories) was associated with a 68.38% decline in the probability of food social services utilization, at the .05 significance level. (Table 5.1).

## **5.4 Social Capital and Food Social Services Utilization**

Then, I regressed the dependent variable, food social services utilization on the social capital independent variables and the control variables. In Model 1 of Table 5.2, the bonding social capital variables: isolation, neighborhood cohesion, fear of crime, and tenure in public housing are included. In Model 2 of Table 5.2, I added in the bridging social capital variable mixed-income neighborhood. In Model 3 of Table 5.2, I added in the linking social capital variable social services network stability. Model 4 of Table 5.2 I added the control variables: age, marital status, children present in the home, income, and financial strain.

### **5.4.1 Non-significant Results**

In Model 1, a one unit increase in isolation is associated with a 13.12 % increase in the probability of food social services utilization, though not at a significant level. A one unit increase

in change in neighborhood cohesion between Wave 1 and Wave 3 is associated with a 1.55 % increase in the probability of food social services utilization, though not at a significant level. A one unit increase in change in fear of crime between Wave 1 and Wave 3 is associated with a 0.95 % decline in the probability of food social services utilization, though not at a significant level (Table 5.2).

In Model 2, a one unit increase in isolation is associated with a 17.42 % increase in the probability of food social services utilization, though not at a significant level. A one unit increase in change in difference in neighborhood cohesion between Wave 1 and Wave 3 is associated with a 2.19 % increase in the probability of food social services utilization, though not at a significant level. A one unit increase in change in fear of crime between Wave 1 and Wave 3 is associated with a 0.99 % decline in the probability of food social services utilization, though not at a significant level. Living in a mixed-income neighborhood (versus living in a low-income homogenous neighborhood) is associated with a 51.53% decline in the probability of food social services utilization, though not at a significant level (Table 5.2).

In Model 3, a one unit increase in isolation is associated with a 16.07 % increase in the probability of food social services utilization, though not at a significant level. A one unit increase in change in difference in neighborhood cohesion between Wave 1 and Wave 3 is associated with a 1.75 % increase in the probability of food social services utilization, though not at a significant level. A one unit increase in change in fear of crime between Wave 1 and Wave 3 is associated with a 1.29% decline in the probability of food social services utilization, though not at a significant level. Living in a mixed-income neighborhood (versus living in a low-income homogenous neighborhood) is associated with a 54.73% decline in the probability of food social services utilization, though not at a significant level. Moving out of social services network (versus

staying within network area) is associated with a 57.25% increase in the probability of food social services utilization, though not at a significant level (Table 5.2).

In Model 4, a one unit increase in isolation is associated with a 0.98% increase in the probability of food social services utilization, though not at a significant level. A one unit increase in change in difference in neighborhood cohesion between Wave 1 and Wave 3 is associated with a 4.80% decrease in the probability of food social services utilization, though not at a significant level. A one unit increase in change in fear of crime between Wave 1 and Wave 3 is associated with a 0.87% increase in the probability of food social services utilization, though not at a significant level. A one year increase in tenure in public housing is associated with a 3.11% decline in the probability of food social services utilization, though not at a significant level. Moving out of social services network (versus staying within network area) is associated with an 80.14% increase in the probability of food social services utilization, though not at a significant level. Being married or living with someone (versus other categories) was associated with a 35.79% decrease in the probability of food social services utilization, but not at a significant level. Being divorced or separated (versus other categories) was associated with a 14.55% decrease in the probability of food social services utilization, but not at a significant level. Being widowed (versus other categories) was associated with a 68.76% decrease in the probability of food social services utilization, though not at a significant level. Having never married (versus other categories) was associated with no percentage change in the probability of food social services utilization. A one unit increase in the number of children living in the home was associated with a 13.40% increase in the probability of food social services utilization, though not at a significant level. A one category increase in income is associated with a 16.59% decline in the probability of food social services utilization, though not at a significant level.

### **5.4.2 Significant Results**

In Model 1, a one year increase in tenure in public housing is associated with a 5.22% decline in the probability of food social services utilization at the .05 significance level. In Model 2, a one year increase in tenure in public housing is associated with a 5.50 % decline in the probability of food social services utilization at the .01 significance level. In Model 3, a one year increase in tenure in public housing is associated with a 5.32 % decline in the probability of food social services utilization at the .05 significance level. In Model 4, living in a mixed-income neighborhood (versus living in a low-income homogenous neighborhood) is associated with a 62.70% decline in the probability of food social services utilization at the .05 significance level. A year older in age is associated with a 5.32 % increase in the probability of food social services utilization at the .001 significance level. A one category increase in financial strain is associated with a 67.56% increase in the probability of food social services utilization at the .05 significance level (Table 5.2).

## **5.5 Activist Client Traits and Food Social Services Utilization**

Then, I regressed the dependent variable food social services utilization on all of the independent and control variables in the model and report the findings in Table 5.3. In Model 1 of Table 5.3, I included the social capital variables: isolation, neighborhood cohesion, fear of crime, social services network stability, mixed-income neighborhood, and tenure in public housing. In Model 2 of Table 5.3, I added in the cultural capital variables: transportation, education, locus of control, and self-esteem. In Model 3 of Table 5.3 I added in the control variables: age, marital status, children present in the home, income, and financial strain.

### ***5.5.1 Non-significant Results***

In Model 1, a one unit increase in isolation is associated with a 16.07 % increase in the probability of food social services utilization, though not at a significant level. A one unit increase in change in difference in neighborhood cohesion between Wave 1 and Wave 3 is associated with a 1.75 % increase in the probability of food social services utilization, though not at a significant level. A one unit increase in change in fear of crime between Wave 1 and Wave 3 is associated with a 1.29 % decline in the probability of food social services utilization, though not at a significant level. Living in a mixed-income neighborhood (versus living in a low-income homogenous neighborhood) is associated with a 54.73% decline in the probability of food social services utilization, though not at a significant level. Moving out of social services network (versus staying within network area) is associated with a 57.25% increase in the probability of food social services utilization, though not at a significant level. (Table 5.3).

In Model 2, a one unit increase in isolation is associated with an 18.71% increase in the probability of food social services utilization, though not at a significant level. A one unit increase in change in difference in neighborhood cohesion between Wave 1 and Wave 3 is associated with a 0.72% increase in the probability of food social services utilization, though not at a significant level. A one unit increase in change in fear of crime between Wave 1 and Wave 3 is associated with a 1.37% decline in the probability of food social services utilization, though not at a significant level. Moving out of social services network (versus staying within network area) is associated with a 76.63% increase in the probability of food social services utilization, though not at a significant level. Getting a car is associated with a 12.73 decline in the probability of utilizing food social services, though not at a significant level. A one unit increase in education is associated with a 0.30% increase in the probability of food social services

utilization, though not at a significant level. A one unit increase in difference in locus of control between Wave 1 and Wave 3 is associated with a 2.20% increase in the probability of food social services utilization, though not at a significant level. A one unit increase in difference in self-esteem between Wave 1 and Wave 3 is associated with a 0.78% decline in the probability of food social services utilization, though not at a significant level. (Table 5.3).

In Model 3, a one unit increase in isolation is associated with a 0.25% decrease in the probability of food social services utilization, though not at a significant level. A one unit increase in change in difference in neighborhood cohesion between Wave 1 and Wave 3 is associated with a 5.20% decline in the probability of food social services utilization, though not at a significant level. A one unit increase in change in fear of crime between Wave 1 and Wave 3 is associated with a 1.79% increase in the probability of food social services utilization, though not at a significant level. A one year increase in tenure in public housing is associated with a 1.79% increase in the probability of food social services utilization, though not at a significant level. Living in a mixed-income neighborhood (versus living in a low-income homogenous neighborhood) is associated with a 60.40% decline in the probability of food social services utilization, though not at a significant level. Moving out of social services network (versus staying within network area) is associated with a 146.77% increase in the probability of food social services utilization, though not at a significant level. A 15 minute increase in Marta accessibility is associated with a 68.83% increase in the probability of utilizing food social services though not at a significant level. Getting a car is associated with a 15.23% decline in the probability of utilizing food social services, though not at a significant level. A one unit increase in education is associated with a 6.77% decline in the probability of food social services utilization, though not at a significant level. A one unit increase in difference in locus of control

between Wave 1 and Wave 3 is associated with a 1.06% increase in the probability of food social services utilization, though not at a significant level. A one unit increase in difference in self-esteem between Wave 1 and Wave 3 is associated with a 1.93% decline in the probability of food social services utilization, though not at a significant level. Being married or living with someone (versus other categories) was associated with a 6.86 % decrease in the probability of food social services utilization, but not at a significant level. Being divorced or separated (versus other categories) was associated with a 12.77 % decrease in the probability of food social services utilization, but not at a significant level. Being widowed (versus other categories) was associated with a 57.31 % decrease in the probability of food social services utilization, though not at a significant level. Having never married (versus other categories) was associated with no percentage change in the probability of food social services utilization. A one unit increase in the number of children living in the home was associated with a 19.62% increase in the probability of food social services utilization, though not at a significant level (Table 5.3).

### ***5.5.2 Significant Results***

In Model 1, a one year increase in tenure in public housing is associated with a 5.32 % decline in the probability of food social services utilization at the .05 significance level. In Model 2, a one year increase in tenure in public housing is associated with a 4.61 % decline in the probability of food social services utilization at the .05 significance level. Living in a mixed-income neighborhood (versus living in a low-income homogenous neighborhood) is associated with a 61.42 % decline in the probability of food social services utilization at the .05 significance level. A 15 minute increase in Marta accessibility is associated with an 89.18% increase in the probability of utilizing food social services, at the .05 significance level. In Model 3, a year older in age is associated with a 5.72% increase in the probability of food social services utilization at



the .001 significance level. A one category increase in income is associated with an 18.61% decline in the probability of food social services utilization, at the .05 significance level. A one category increase in financial strain is associated with a 65.47% increase in the probability of food social services utilization, at the .05 significance level.

## **5.6 Hypothesis Testing**

These findings provide information about the eleven hypotheses. I have amended each hypothesis to only address the dependent variable food social services, since the question of effects on food insecurity are taken up in Chapter 6 and will be reported in that section. Hypothesis 1 stated: As neighborhood cohesion increases participants will be more likely to utilize food social services, and Part a: Post-relocation decreases in neighborhood cohesion will decrease the likelihood that participants will utilize food social services. The findings indicate support for the null hypothesis. Hypothesis 2 stated: As isolation increases participants will be less likely to utilize food social services, and Part a: Post-relocation increased isolation will decrease participant utilization of food social services. The findings indicate support for the null hypothesis. Hypothesis 3 stated: As fear of crime increases participants will be less likely to utilize food social services, and Part a: Post-relocation increases in fear of crime will decrease the likelihood of participants utilizing food social services. The findings provide support for the null hypothesis. Hypothesis 4 stated: Moving to a mixed-income neighborhood rather than a low-income homogenous neighborhood will decrease the likelihood of food social services utilization. Moving to a mixed income neighborhood was significantly associated with decrease in food social services utilization. For Hypothesis 5: Pre-relocation, longer tenure in public housing will increase the likelihood that participants will utilize food social services post-relocation. The findings indicate that there is a significant association between the two variables,

but in an unexpected direction. Rather than increasing the likelihood of utilization of food social services, tenure was associated with a decreased utilization of food social services post-relocation. I discuss this more in the discussion section. Hypothesis 6 stated: Post-relocation, housing subsidy recipients who have not experienced a disruption in social services network will be more likely to utilize food social services. The findings provide support for the null hypothesis. Hypothesis 7 stated: Higher self-esteem will increase the likelihood that participants will utilize food social services, and Part a: Post-relocation improvement in self-esteem will increase the likelihood that participants will utilize food social services and decrease food insecurity, and Part b: Alternatively, post-relocation decreases in self-esteem will decrease the likelihood that participants will utilize food social services and increase food insecurity. The findings indicated no significant association between self-esteem and food social services utilization, which provides support for the null hypothesis. Hypothesis 8 stated: As internal locus of control increases the likelihood that participants will utilize food social services will increase, and Part a: Post-relocation increased internal locus of control will increase the likelihood that participants will utilize food social services. The findings provide support for the null hypothesis. Hypothesis 9 stated: Higher levels of education will increase the likelihood that participants will utilize food social services. The findings provide support for the null hypothesis. Hypothesis 10 stated: Better transportation access will increase the likelihood that participants will utilize food social services, and Part a: Post-relocation transportation access will have no effect on utilization of food social services. The findings are different for the two transportation modes measured, having a car and access to Marta. So, there is support for the null hypothesis in the case of car ownership, since change in car ownership was not significantly associated with food social services utilization. However, Marta access was significantly

associated with food social services utilization. In regards to Part a, our findings indicate that post-relocation access to Marta was significantly associated with food social services utilization, a surprising finding. I discuss the implications of this in the discussion section. Hypothesis 11 stated: Elderly participants will have worse utilization of food social services, and Part a: Post-relocation the elderly will have worse utilization of food social services compared to other households. The findings indicate a significant association between age and food social services utilization, but in an unexpected direction. Increased age was associated with better utilization of food social services, a surprising finding. I will discuss this more in the discussion section.

In summary, the cultural capital variable that was significantly associated with utilization of food social services was Marta accessibility which increased the probability of using food social services, but the effect was buffered by the control variables. Age was significantly associated with increased probability of utilization. Being a widow and better income were significantly associated with decreased probability of utilization (Table 5.1). Two social capital variables significantly decreased the probability of food social services utilization, tenure and moving to a mixed-income neighborhood, but the magnitude of the effect of moving to a mixed-income neighborhood was more than 10 times higher and the effect of tenure was mitigated by the control variables. Some control variables were significant as well. Age and financial strain were significantly associated with increases in utilization, but the magnitude of the effect of financial strain was more than 10 times higher. (Table 5.2). The activist client traits that were significantly associated with decreased food social services utilization were tenure and moving to a mixed-income neighborhood, but the effect of mixed-income was a much higher magnitude (more than 15 times). Better Marta accessibility was significantly associated with increased food social services utilization. The effects of all of the activist client traits were buffered by the control

variables. Age and financial strain were significantly associated with higher food social services utilization. Income was significantly negatively associated with utilization (Table 5.3).

## **5.7 Discussion**

The research indicates that objectified cultural capital in the form of accessibility to public transportation was helpful to relocated residents' ability to utilize food social services. This has implications and may be explanatory of another phenomenon that has been observed across studies, that residents move only 5 miles or less from prior traditional housing neighborhoods (Cooper et al. 2012; Kingsley, Johnson, and Pettit, 2003; Oakley Ruel Reid, 2013a). In Atlanta, Marta rail lines are very limited and only present in the inner city (Konrad, 2006). If relocatees need Marta accessibility to garner food social services, they may stay near old neighborhoods, which incidentally were also on Marta lines. Since most former public housing residents in this study had no change in Marta accessibility (64.5%), this could be a sign of rational choice in choosing where to move in order to keep food social services easily accessible. This could indicate that cities considering using HOPE VI policy to deconcentrate poverty may need to consider their city's transportation system as a factor to determine if it contributes to poverty concentration or if it facilitates deconcentration. More research to discover to what extent public transportation is a conduit for accessing social services for relocated former public housing residents is needed. Another policy recommendation that naturally springs from the finding that access to public transportation aids in utilization of food social services relates to application policies. The three state sponsored and federally funded food social services in this research all have separate application processes. It would lower burden of travel for low-income prospective applicants if a single application for all three programs could be implemented. It could mean that a person would, upon filling out one form, know his or her eligibility for all three programs. Travel to each different

facility could be reduced by a uniform application for all three programs. The exception would be the WIC requirement for the medical screen, but only applicants who otherwise qualify would have to take that last step. This would decrease bureaucratic burden to each agency as well.

The social capital variable tenure in traditional public housing had an opposite effect than proposed in the hypotheses. Longer tenure in traditional public housing related to less food social services utilization post-relocation. This may mean that disruption caused by relocation may have worse impact on food social services utilization for those who had become most accustomed to their old traditional public housing neighborhoods. This could be due to gaining bonding ties in traditional public housing communities in which food mutual aid replaced the need for formal food social services supports, which could lead to a reticence to use formal supports post-relocation. An alternative explanation could be that movers with more tenure had worse integration into the social fabric of new neighborhoods and resultant worse utilization of food social services. A policy recommendation for cities considering poverty deconcentration strategies based on HOPE VI is to provide support for longer tenured movers to connect them with food social services prior to and after relocation. Another social capital finding with implications is that moving to a mixed-income neighborhood was associated with worse utilization of food social services. Since most movers remained low-income post-relocation (Ruel et al. 2013), this could indicate that when one moved to a mixed-income neighborhood, there was a social desirability effect that decreased desire to utilize services despite income level. Since movers feel stigmatized in new neighborhoods (Bartz, Joseph and Chaskin, 2011), choosing not to use food social services could be a way of decreasing the experience of being “othered” in mixed-income neighborhoods. If income fails to motivate movers in mixed-income neighborhoods to seek help, this could result in worsened food insecurity or in scarce monetary resources being used for food rather than for other needs such as utilities.

More research on movers' strategies to decrease stigma or avoid "othering" in mixed-income neighborhoods is needed. Other cities considering HOPE VI poverty deconcentration strategies may choose to provide additional food social services outreach for movers who move to mixed-income neighborhoods. Another important finding that bears more investigation is that older movers used food social services at a higher rate than younger ones, which is the opposite of Klinenberg's findings. Given this, it is important to evaluate the strategies that food social service providers in Atlanta use to include older adults in the food social services safety net, since these strategies could be copied in other cities to decrease the marginalization of the elderly by the social services delivery system.

In summary, there is some support for the Activist Client Thesis as re-modelled in this study. Both cultural capital and social capital had significant impacts on food social services utilization. Objectified cultural capital, which was associated with food social services utilization, is rarely studied and more research is needed. The social capital types that had significant associations were bonding and bridging. However, having had high bonding through longer tenure in traditional public housing was a disadvantage in accessing food social services post-relocation. Similarly, living in a mixed-income neighborhood had detrimental effects on help seeking for food social services. More research is needed, since one primary objective of HOPE VI was to improve movers opportunities (Popkin et al., 2004), to discern how often social capital bonding and bridging effects are detrimental to help seeking among relocatees. Chapter 6 will elucidate these findings more since food insecurity is the dependent variable regressed with all of the activist client traits, the food social services utilization variable, and the controls.

*Table 5.1 Cultural Capital and Food Social Services Utilization: Estimated Odds Ratios and (Confidence Intervals)***Cultural Capital and Food Social Services Utilization: Estimated Odds Ratios and (Confidence Intervals)**

	Model 1 <b>Objectified</b>	Model 2 <b>Embodied</b>	Model 3 <b>Institutional</b>	Model 4
Got a Car	1.147 (.683- 1.925)	1.148 (.680- 1.938)	1.126 (.650- 1.951)	1.194 (.660- 2.160)
Better Marta	1.624 (1.035- 2.549)	1.637 (1.066- 2.513)*	1.736 (1.105- 2.728)*	1.578 (.900- 2.764)
Education		1.037 (.920- 1.168)	1.037 (.925- 1.162)	.995 (.864- 1.147)
Change in Self-esteem			.984 (.948- 1.021)	.983 (.935- 1.033)
Change in Locus of Control			1.032 (.976- 1.091)	1.014 (.952- 1.079)
Age				1.044 (1.017- 1.072)***
Number of Children				1.145 (1.145- 1.273)
Income				.824 (.692- .981)*
Financial Strain				1.829 (1.234- 2.710)**
Married / Living Together				1.617 (.604- 4.330)
Divorced / Separated				.941 (.434- 2.038)
Widowed				.316 (.113- .881)*
Never Married				1.000 (--)
Likelihood Ratio	3.251 P=.777	.906 P=.924	4.359 P=.930	26.401 P=.333

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Values are Odds Ratios and Confidence Intervals (95%) \*p<.05 \*\*p<.01 \*\*\*p<.001 N=248

**Table 5.2 Social Capital and Food Social Services Utilization: Estimated Odds Ratios and (Confidence Intervals)**

<b>Social Capital and Food Social Services Utilization: Estimated Odds Ratios and (Confidence Intervals)</b>				
	Model 1	Model 2	Model 3	Model 4
	<b>Bonding</b>	<b>Bridging</b>	<b>Linking</b>	
Isolation	1.131 (.909- 1.408)	1.174 (.937- 1.472)	1.161 (.925- 1.456)	1.010 (.774-1.318)
Change Nbrhd Cohesion	1.015 (.960- 1.074)	1.022 (.966- 1.081)	1.018 (.961- 1.077)	.952 (.888-1.020)
Change Fear of Crime	.990 (.964- 1.017)	.990 (.963- 1.018)	.987 (.960- 1.015)	1.009 (.976-1.042)
Tenure Public Housing	.948 (.909- .989)*	.945 (.905- .986)*	.947 (.907- .988)*	.969 (.922-1.019)
Mixed-Income Neighborhood		.485 (.219- 1.070)	.453 (.203- 1.011)	.373 (.143-.974)*
Social Serv. Network Stability			1.573 (.670- 3.692)	1.801 (.684-4.743)
Age				1.053 (1.022-1.085)***
Number of Children				1.134 (.918-1.401)
Income				.834 (.695-1.001)
Financial Strain				1.676(1.069-2.626)*
Married / Living Together				.642 (.208-1.986)
Divorced / Separated				.855 (.347- 2.103)
Widowed				.312 (.096- 1.018)
Never Married				1.000 (--)
Likelihood Ratio	8.700 P=.1991	14.673 P=.144	20.395 P=.060	47.738 P =.006
Values are Odds Ratios and Confidence Intervals (95%) *p<.05 **p<.01 ***p<.001				N=248



**Table 5.3 Activist Client Traits and Food Social Services Utilization: Estimated Odds Ratios and (Confidence Intervals)**

	Model 1	Model 2	Model 3
	<b>Social Capital</b>	<b>Cultural Capital</b>	<b>Activist Client</b>
Isolation	1.161 (.925- 1.456)	1.187 (.931-1.513)	1.000 (.748- 1.337)
Change Nbrhd Cohesion	1.018 (.961-1.077)	1.007 (.948-1.071)	.948 (.881- 1.020)
Change in Fear of Crime	.987 (.960-1.015)	.986 (.955-1.018)	1.018 (.980- 1.056)
Tenure in Public Housing	.947 (.907-.988)*	.954 (.911-.999)*	.982 (.928- 1.038)
Mixed-Incom Nbrhd	.453 (.203-1.011)	.386 (.276-.539)*	.397 (.139 - 1.132)
Social Serv. Network Stability	1.573 (.670-3.692)	1.766 (.692-4.511)	2.492 (.827- 7.506)
Change in Self-esteem		.992 (.942-1.045)	.981 (.922- 1.043)
Change in Locus of Control		1.022 (.990-1.055)	1.010 (.939- 1.087)
Education		1.003 (.925-1.087)	.933 (.783- 1.110)
Got a Car		.873 (.438-1.738)	.815 (.383- 1.736)
Better Marta		1.892 (1.057-3.387)*	1.688 (.866- 3.293)
Age			1.057 (1.022- 1.094)***
Number of Children			1.197 (.939- 1.527)
Income			.813 (.669- .988)*
Financial Strain			1.649 (1.012- 2.687)*
Married / Living Together			.938 (.278- 3.164)
Divorced / Separated			.873 (.337- 2.264)
Widowed			.425 (.120- 1.505)
Never Married			1.000 (--)
Likelihood Ratio	20.395 P=.060	27.875 P=180	61.619 P=.005

Values are Odds Ratios and Confidence Intervals (95%) \*p<.05 \*\*p<.01 \*\*\*p<.001 N=248

## 6 PUBLIC HOUSING RELOCATION AND FOOD INSECURITY

### 6.1 Introduction

The effects of HOPE VI relocations on food insecurity are not fully understood. The literature indicates that social capital is positive to food security directly and through increased perception of safety. There are clear links between bonding social capital and bridging social capital and food security (Dhokarh et al., 2011; Dean et al. 2014; Henley, Danzinger, and Offer, 2005). Research to date has not measured the effect of linking social capital on food security. The traditional public housing environment is rich in bonding social capital and this is a contributing factor in food security (Keene and Geronimus, 2011a; Keene and Geronimus, 2011b). After relocation due to HOPE VI, former public housing residents have lower bonding social capital, but research is mixed about whether this impacts food security (Keene and Geronimus, 2011a; Keene and Geronimus, 2011b, Ruel et al., 2013). One mechanism of the effects of social capital on food security is perceived safety. Feeling safe in one's neighborhood is more likely in the presence of social capital, which has positive benefit for food security (Klinenberg, 2003; Kimbro, Denney, Panchang, 2012; Chung et al., 2012). This research addresses some of the unanswered questions about how relocation from public housing affects social capital and food security.

Little is known about whether cultural capital affects food security. Cultural capital, particularly self-esteem, is positive to life performance in jobs, income attainment, and educational attainment (Judge, Hurst, and Simon, 2009; Orth, Robins and Widaman 2012). Additionally, self-esteem is positive to relationship satisfaction and community attachment (Orth, Robins, and Widaman, 2012; Tester et al., 2011). Relocation due to HOPE VI era policies improves movers cultural capital, such as self-esteem and locus of control, but does not improve

their educational opportunities, access to transportation, and proximity to community resources (Dorrington, 2014; Keels, 2013; Lipman, 2012; Cooper et al. 2012; Kingsley, Johnson, and Pettit, 2003; Oakley Ruel Reid, 2013a). This research will discover how changes in cultural capital due to relocation affect food security.

## **6.2 Findings**

In this analysis, I used ordered logistic regression to predict change in food insecurity from time one to time two as a function of the independent variables and included the control variables. This addressed research question 2: “How do social capital, cultural capital, and food social services utilization affect food insecurity among relocated public housing residents in Atlanta?” Full description of the methodology along with diagnostics and descriptives are covered in Chapter 4, Methodology (see page 49). I report the coefficients and the confidence intervals in tables with .05 significance, .01 significance, and .001 significance denoted using stars (\*). In the narrative, I report the coefficients as the percent change in the probability of the outcome variable and note which levels of significance were achieved, if any (Hosmer, Lemeshow and Sturdivant, 2013).

## **6.3 Cultural Capital and Food Insecurity**

In Model 1 of Table 6.1, I regressed the dependent variable food insecurity on the objectified cultural capital variable transportation and the institutional cultural capital variable education. In Model 2 of Table 6.1 I added in the embodied cultural capital variables: locus of control and self-esteem. In Model 3 of Table 6.1 I added in the variable food social services utilization. Model 4 of Table 6.1 included the control variables: age, marital status, children present in the home, income, and financial strain.

### ***6.3.1 Non-significant Results***

In Model 1, a 15 minute improvement in Marta accessibility is associated with a 9.39% decrease in the probability of food insecurity, but not at a significant level. Getting a car is associated with a 17.25% decrease in the probability of food insecurity, but not at a significant level. A one unit increase in education is associated with a 1.02% increase in the probability of food insecurity, but not at a significant level (Table 6.1).

In Model 2, a 15 minute improvement in Marta accessibility is associated with a 9.25% decrease in the probability of food insecurity, but not at a significant level. Getting a car is associated with a 17.37% decrease in the probability of food insecurity, but not at a significant level. A one unit increase in education is associated with a 0.82 % increase in the probability of food insecurity, but not at a significant level. A one unit increase in difference in locus of control between Wave 1 and Wave 3 is associated with a 0.02% increase in the probability of food insecurity, though not at a significant level. A one unit increase in difference in self-esteem between Wave 1 and Wave 3 is associated with a 0.69% decrease in the probability of food insecurity, though not at a significant level (Table 6.1).

In Model 3, a 15 minute improvement in Marta accessibility is associated with an 8.75 % decrease in the probability of food insecurity, but not at a significant level. Getting a car is associated with a 16.79% decrease in the probability of food insecurity, but not at a significant level. A one unit increase in education is associated with a 1.27% increase in the probability of food insecurity, but not at a significant level. A one unit increase in difference in locus of control between Wave 1 and Wave 3 is associated with a 0.05 % decrease in the probability of food insecurity, though not at a significant level. A one unit increase in difference in self-esteem between Wave 1 and Wave 3 is associated with a 0.72 % decrease in the probability of food

insecurity, though not at a significant level. A one unit increase in the number of food social services accessed is associated with a 6.39% decrease in the probability of food insecurity, though not at a significant level (Table 6.1).

In Model 4, a 15 minute improvement in Marta accessibility is associated with a 0.85% increase in the probability of food insecurity, but not at a significant level. Getting a car is associated with a 19.61% decrease in the probability of food insecurity, though not at a significant level. A one unit increase in education is associated with a 1.49% decrease in the probability of food insecurity, but not at a significant level. A one unit increase in difference in locus of control between Wave 1 and Wave 3 is associated with a 2.08% increase in the probability of food insecurity, though not at a significant level. A one unit increase in difference in self-esteem between Wave 1 and Wave 3 is associated with a 0.90% decrease in the probability of food insecurity, though not at a significant level. A one unit increase in the number of food social services accessed is associated with a 2.55% decrease in the probability of food insecurity, though not at a significant level. A year older in age is associated with a 0.61 % increase in the probability of food insecurity, though not at a significant level. Being married or living with someone (versus other categories) was associated with an 8.55% decrease in the probability of food insecurity, but not at a significant level. Being divorced or separated (versus other categories) was associated with a 7.92 % increase in the probability of food insecurity, but not at a significant level. Being widowed (versus other categories) was associated with a 133.50% increase in the probability of food insecurity, though not at a significant level. Having never married (versus other categories) was associated with no percentage change in the probability of food security. A one unit increase in the number of children living in the home was associated with a 5.35 % increase in the probability of food insecurity, though not at a significant level. A one category increase in income is associated

with a 4.01% decline in the probability of food insecurity, though not at a significant level. A one category increase in financial strain is associated with a 23.76% decline in the probability of food insecurity, though not at a significant level (Table 6.1).

### **6.3.2 Significant Results**

In Model 1, there were no significant findings. In Model 2, there were no significant associations between the variables. Model 3 did not yield any significant findings. Model 4 did not yield any significant findings (Table 6.1).

## **6.4 Social Capital and Food Insecurity**

Then, I regressed the dependent variable, food insecurity on the social capital independent variables and the control variables. In Model 1 of Table 6.2, I regressed food insecurity on the bonding social capital variables: isolation, neighborhood cohesion, fear of crime, and tenure in public housing. In Model 2 of Table 6.2, I added in the bridging social capital variable mixed-income neighborhood. In Model 3 of Table 6.2, I added in the linking social capital variable social services network stability and food social services utilization. Model 4 of Table 6.2 includes the control variables: age, marital status, children present in the home, income, and financial strain.

### **6.4.1 Non-significant Results**

In Model 1, a one unit increase in isolation is associated with a 7.60% increase in the probability of food insecurity, though not at a significant level. A one unit increase in change in difference in neighborhood cohesion between Wave 1 and Wave 3 is associated with a 0.90 % decrease in the probability of food insecurity, though not at a significant level. A one unit increase in change in fear of crime between Wave 1 and Wave 3 is associated with a 1.06% increase in the probability of food insecurity, though not at a significant level. A one year

increase in tenure in public housing is associated with a 1.51% increase in the probability of food insecurity, but not at a significant level (Table 6.2).

In Model 2, a one unit increase in isolation is associated with an 8.46% increase in the probability of food insecurity, though not at a significant level. A one unit increase in change in difference in neighborhood cohesion between Wave 1 and Wave 3 is associated with a 1.29% decrease in the probability of food insecurity, though not at a significant level. A one unit increase in change in fear of crime between Wave 1 and Wave 3 is associated with a 0.51% increase in the probability of food insecurity, though not at a significant level. A one year increase in tenure in public housing is associated with a 1.28% increase in the probability of food insecurity, but not at a significant level. Living in a mixed-income neighborhood (versus living in a low-income homogenous neighborhood) is associated with a 24.55% increase in the probability of food insecurity, but not at a significant level (Table 6.2).

In Model 3, a one unit increase in isolation is associated with a 7.79 % increase in the probability of food insecurity, though not at a significant level. A one unit increase in change in difference in neighborhood cohesion between Wave 1 and Wave 3 is associated with a 1.61% decrease in the probability of food insecurity, though not at a significant level. A one unit increase in change in fear of crime between Wave 1 and Wave 3 is associated with a 0.36 % increase in the probability of food insecurity, though not at a significant level. A one year increase in tenure in public housing is associated with a 1.41% increase in the probability of food insecurity, but not at a significant level. Living in a mixed-income neighborhood (versus living in a low-income homogenous neighborhood) is associated with a 22.85% increase in the probability of food insecurity, but not at a significant level. Moving out of social services network (versus staying within network area) was associated with a 26.70% increase in the

probability of food insecurity, but not at a significant level. A one unit increase in the probability of food social services utilization was associated with a 3.68% increase in the probability of food insecurity, but not at a significant level (Table 6.2).

In Model 4, a one unit increase in isolation is associated with a 1.68% increase in the probability of food insecurity, though not at a significant level. A one unit increase in change in difference in neighborhood cohesion between Wave 1 and Wave 3 is associated with a 4.12% decrease in the probability of food insecurity, though not at a significant level. A one unit increase in change in fear of crime between Wave 1 and Wave 3 is associated with a 1.19 % increase in the probability of food insecurity, though not at a significant level. A one year increase in tenure in public housing is associated with a 1.74% increase in the probability of food insecurity, but not at a significant level. Living in a mixed-income neighborhood (versus living in a low-income homogenous neighborhood) is associated with a 66.13% increase in the probability of food insecurity, but not at a significant level. Moving out of social services network (versus staying within network area) was associated with a 7.63% increase in the probability of food insecurity, but not at a significant level. A one unit increase in the probability of food social services utilization was associated with a 12.82% increase in the probability of food insecurity, but not at a significant level. A year older in age is associated with a 0.19% increase in the probability of food insecurity, but not at a significant level. Being married or living with someone (versus other categories) was associated with a 19.76% decrease in the probability of food insecurity, but not at a significant level. Being divorced or separated (versus other categories) was associated with an 11.18 % decrease in the probability of food insecurity, but not at a significant level. Having never married (versus other categories) was associated with no percentage change in the probability of food security. A one unit increase in the number of children living in the home was associated with a



15.73 % increase in the probability of food insecurity, though not at a significant level. A one category increase in income is associated with a 3.87 % decline in the probability of food insecurity, though not at a significant level. A one category increase in financial strain is associated with a 13.92 % decrease in the probability of food insecurity, though not at a significant level (Table 6.2).

#### ***6.4.2 Significant Results***

In Model 1, there were not any significant associations between the variables in the model. Model 2 did not yield any significant relationships between variables. In Model 3, there were not any significant findings. In Model 4, being widowed (versus other categories) was associated with a 254.63% increase in the probability of food insecurity, at the .05 significance level (Table 6.2).

### **6.5 Activist Client Traits and Food Insecurity**

I regressed the dependent variable food insecurity on all of the independent and control variables in the model and report the findings in Table 6.3. Model 1 of Table 6.3, included the independent social capital variables: isolation, neighborhood cohesion, fear of crime, social services network stability, mixed-income neighborhood, and tenure in public housing. In Model 2 of Table 6.3, I added in the cultural capital variables: transportation, education, locus of control, and self-esteem. In Model 3 of Table 6.3, I added the variable food social services utilization. Model 4 of Table 6.3 includes the control variables: age, marital status, children present in the home, income, and financial strain.

#### ***6.5.1 Non-significant Results***

In Model 1, a one unit increase in isolation is associated with a 7.88% increase in the probability of food insecurity, though not at a significant level. A one unit increase in change in difference in neighborhood cohesion between Wave 1 and Wave 3 is associated with a 1.56 %

decrease in the probability of food insecurity, though not at a significant level. A one unit increase in change in fear of crime between Wave 1 and Wave 3 is associated with a 0.41% increase in the probability of food insecurity, though not at a significant level. A one year increase in tenure in public housing is associated with a 1.32% increase in the probability of food insecurity though not at a significant level. Living in a mixed-income neighborhood (versus living in a low-income homogenous neighborhood) is associated with a 21.13% increase in the probability of food insecurity, though not at a significant level. Moving out of social services network (versus staying within network area) is associated with a 27.09% increase in the probability of food insecurity, though not at a significant level. (Table 6.3).

In Model 2, a one unit increase in isolation is associated with a 0.41% decrease in the probability of food insecurity, though not at a significant level. A one unit increase in change in difference in neighborhood cohesion between Wave 1 and Wave 3 is associated with a 2.32% decrease in the probability of food insecurity, though not at a significant level. A one unit increase in change in fear of crime between Wave 1 and Wave 3 is associated with a 0.90% increase in the probability of food insecurity, though not at a significant level. A one year increase in tenure in public housing is associated with a 1.70% increase in the probability of food insecurity, though not at a significant level. Living in a mixed-income neighborhood (versus living in a low-income homogenous neighborhood) neighborhood is associated with a 2.85% decline in the probability of food insecurity, though not at a significant level. Moving out of social services network (versus staying within network area) is associated with a 5.51% decrease in the probability of food insecurity, though not at a significant level. A 15 minute increase in Marta accessibility is associated with a 3.69% decrease in the probability of food insecurity, though not at a significant level. Getting a car is associated with an 11.58% decline in the

probability of food insecurity, though not at a significant level. A one unit increase in education is associated with a 9.67% increase in the probability of food insecurity, though not at a significant level. A one unit increase in difference in locus of control between Wave 1 and Wave 3 is associated with a 2.29% decrease in the probability of food insecurity, though not at a significant level. A one unit increase in difference in self-esteem between Wave 1 and Wave 3 is associated with a 0.65% decline in the probability of food insecurity, though not at a significant level. (Table 6.3).

In Model 3, a one unit increase in isolation is associated with a 0.27% decrease in the probability of food insecurity, though not at a significant level. A one unit increase in change in difference in neighborhood cohesion between Wave 1 and Wave 3 is associated with a 2.31% decrease in the probability of food insecurity, though not at a significant level. A one unit increase in change in fear of crime between Wave 1 and Wave 3 is associated with a 0.85% decline in the probability of food insecurity, though not at a significant level. A one year increase in tenure in public housing is associated with a 1.67% increase in the probability of food insecurity, though not at a significant level. Living in a mixed-income neighborhood (versus living in a low-income homogenous neighborhood) is associated with a 2.98% decline in the probability of food insecurity, though not at a significant level. Moving out of social services network (versus staying within network area) is associated with a 4.95% decrease in the probability of food insecurity, though not at a significant level. A 15 minute increase in Marta accessibility is associated with a 3.48% decrease in the probability of food insecurity, though not at a significant level. Getting a car is associated with an 11.51% decline in the probability of food insecurity, though not at a significant level. A one unit increase in education is associated with a 9.59% increase in the probability of food insecurity, though not at a significant level. A

one unit increase in difference in locus of control between Wave 1 and Wave 3 is associated with a 2.28% decrease in the probability of food insecurity, though not at a significant level. A one unit increase in difference in self-esteem between Wave 1 and Wave 3 is associated with a 0.64% decline in the probability of food insecurity, though not at a significant level. A one unit difference in food social services utilization is associated with a 0.84% decline in the probability of food insecurity, though not at a significant level. (Table 6.3).

In Model 4, a one unit increase in isolation is associated with an 8.96% decrease in the probability of food insecurity, though not at a significant level. A one unit increase in change in difference in neighborhood cohesion between Wave 1 and Wave 3 is associated with a 6.39% decline in the probability of food insecurity, though not at a significant level. A one unit increase in change in fear of crime between Wave 1 and Wave 3 is associated with a 2.62% increase in the probability of food insecurity, though not at a significant level. A one year increase in tenure in public housing is associated with a 3.73% increase in the probability of food insecurity, though not at a significant level. Living in a mixed-income neighborhood (versus living in a low-income homogenous neighborhood) is associated with a 13.32% increase in the food insecurity, though not at a significant level. Moving out of social services network (versus staying within network area) is associated with a 12.84% decrease in the probability of food insecurity, though not at a significant level. A 15 minute increase in Marta accessibility is associated with an 8.74% increase in the probability of food insecurity though not at a significant level. Getting a car is associated with a 0.17% decline in the probability of food insecurity, though not at a significant level. A one unit increase in education is associated with a 7.28% increase in the probability of food insecurity, though not at a significant level. A one unit increase in difference in locus of control between Wave 1 and Wave 3 is associated with a 0.10%

increase in the probability of food insecurity, though not at a significant level. A one unit increase in difference in self-esteem between Wave 1 and Wave 3 is associated with a 0.50% decline in the probability of food insecurity, though not at a significant level. A one category increase in the probability of food social services utilization is associated with a 4.43% increase in the probability of food insecurity, though not at a significant level. A year older in age is associated with a 0.95% increase in the probability of food insecurity, though not at a significant level. Being married or living with someone (versus other categories) was associated with a 5.66% decrease in the probability of food insecurity, but not at a significant level. Being divorced or separated (versus other categories) was associated with a 1.67% decrease in the probability of food insecurity, but not at a significant level. Having never married (versus other categories) was associated with no percentage change in the probability of food insecurity. A one unit increase in the number of children living in the home was associated with a 15.41% increase in the probability of food insecurity, though not at a significant level. A one category increase in income is associated with a 4.63% decline in the probability of food insecurity, though not at a significant level. A one category increase in financial strain is associated with a 21.36 % decrease in the probability of food insecurity, though not at a significant level (Table 6.3).

### ***6.5.2 Significant Results***

Model 1 did not yield any significant results. In Model 2, there were not any significant associations between the variables. Model 3 did not have any significant findings. In Model 4, being widowed (versus other categories) was associated with a 301.73 % increase in the probability of food insecurity, at the .05 significance level (Table 6.3).

## 6.6 Hypothesis Testing

In this section, I report on the findings related to the dependent variable food insecurity for each of the eleven hypotheses. The findings for each of the hypotheses with regard to food social services utilization appear in Chapter 5. Hypothesis 1 stated: As neighborhood cohesion increases participants will have less food insecurity, and Part a: Post-relocation decreases in neighborhood cohesion will increase food insecurity. The findings provide support for the null hypothesis. Hypothesis 2 stated: As isolation increases participants will have heightened food insecurity, and Part a: Post-relocation increased isolation will contribute to heightened food insecurity. The findings provide support for the null hypothesis. Hypothesis 3 stated: As fear of crime increases participants will have heightened food insecurity, and Part a: Post-relocation increases in fear of crime will increase food insecurity. The findings provide support for the null hypothesis. Hypothesis 4 stated: Moving to a mixed-income neighborhood rather than a low-income homogenous neighborhood will increase the likelihood of food insecurity. The findings provide support for the null hypothesis. Hypothesis 5 stated: Pre-relocation, longer tenure in public housing will decrease food insecurity post-relocation. The findings provide support for the null hypothesis. Hypothesis 6 stated: Post-relocation, housing subsidy recipients who have not experienced a disruption in social services network will have decreased food insecurity. The findings provide support for the null hypothesis. Hypothesis 7 stated: Higher self-esteem will increase the likelihood that participants will experience less food insecurity, and Part a: Post-relocation improvement in self-esteem will decrease food insecurity, and Part b: Alternatively, post-relocation decreases in self-esteem will increase food insecurity. The findings provide support for the null hypothesis. Hypothesis 8 stated: As internal locus of control increases food insecurity will decrease, and Part a: Post-relocation increased internal locus of control will

decrease food insecurity. The findings provide support for the null hypothesis. Hypothesis 9 stated: Higher levels of education will decrease food insecurity. The findings provide support for the null hypothesis. Hypothesis 10 Part a. stated: Post-relocation transportation access will have no effect on food insecurity. The findings indicate that transportation had no significant effect on food insecurity. Hypothesis 11 stated: Elderly participants will have higher food insecurity than other households, and Part a Post-relocation the elderly will have higher food insecurity compared to other households. The findings provide support for the null hypothesis.

## **6.7 Summary**

In summary, there were no significant findings for cultural capital variables: change in Marta accessibility, change in car ownership, education, change in locus of control, and change in self-esteem, indicating that cultural capital is not significantly associated with food insecurity. Additionally, there were no significant findings for social capital variables: isolation, change in neighborhood cohesion, change in fear of crime, tenure in traditional public housing, moving to a mixed-income neighborhood, social services network stability, and food social services utilization. This means that food insecurity is not significantly affected by social capital. The only significant finding was that being a widow is significantly associated with heightened food insecurity.

## **6.8 Discussion**

Firstly, cultural capital changes due to HOPE VI relocation had no effect on food insecurity post-relocation. Additionally, social capital changes due to relocation had no effect on food insecurity post-relocation. The variable of influence was being a widow. Perhaps the marital status variable, rather than being considered as a control variable, should have been conceptualized as a bonding social capital variable, though not one that would necessarily have changed due to relocation. One explanation of this may be that being a widow has an isolating or stigmatizing

effect in society whereas marriage, living with someone, separation, divorce, or choosing to never marry do not. Providers of food social services may consider increasing outreach to widows to engage these vulnerable members of society more fully in the food social services delivery system. This finding bears more scrutiny in research. Future research should consider household composition with regard to marital status to discover if this is a bonding social capital variable with implications for food insecurity for relocatees. It is interesting that food social services utilization was not predictive of food insecurity, but this finding is in line with prior research on SNAP (Purtell, Gershoff, Aber, 2012). Since this research considered four types of social services food aid, it adds to the knowledge base by indicating that the bundling of food social services, both public and non-profit, does not significantly affect food insecurity among relocated public housing residents. More research that considers the effect of bundling a range of food social services, rather than merely measuring these separately, is needed to determine if it allays food insecurity among other vulnerable groups in society. Policy to address the fact that food social services utilization does not significantly improve food security should raise the purchasing power that participants yield from the programs. In an era of state budget challenges, policy must consider other ideas besides increasing the amount of benefits to participants in food programs. One idea is suggested by the public-private partnership between physicians and the Medicaid program. Physicians who serve low-income Medicaid patients receive lower than market value for their services called the reimbursement fee. In the same manner, companies that produce food could engage in a public-private partnership by discounting food purchased by SNAP and WIC participants. This would increase the purchasing power of low-income participants, which would address their food insecurity better. It would not require that stores have any new technology, could easily be reported to food manufacturers just like coupons, and would improve the situation of



low-income people without burdening state budgets. Research has uncovered evidence that food manufacturers reap great profits from food subsidy programs. One study found inflated wholesale pricing for items required on WIC, for example, infant formula manufactures charge five times the cost of manufacture (Kent, 2006). Additionally, though data on corporate food industry profit from food subsidy programs is not currently a matter of public record, one example from a statement made by a representative of Kraft corporation, Chief Executive Vernon, is that SNAP sales represented a sixth of the company's revenues (Kaufman, 2014), which is a large sum for a company that net revenue of 18.7 billion in 2011 (Kraft Foods Group, Inc., 2012). The food industry could afford to partner with the food programs they profit from to decrease food insecurity for recipients and lower tax payer burden.

There is no evidence that adding food insecurity to the Activist Client Model improved the model by making it more explanatory. A possible future research path may be to consider variables such as locus of control and fear of crime as outcome variables to better understand the effects of relocation on the lives of movers. Also, more research to identify factors that are connected to food security among former public housing residents who have been dislocated by HOPE VI is needed.

**Table 6.1 Cultural Capital and Food Insecurity: Estimated Odds Ratios and (Confidence Intervals)**

	<b>Cultural Capital and Food Insecurity: Estimated Odds Ratios and (Confidence Intervals)</b>			
	Model 1 <b>Objectified</b>	Model 2 <b>Embodied</b>	Model 3 <b>Institutional</b>	Model 4
Education	1.010 (.889- 1.148)	1.008 (.886- 1.147)	1.013 (.889-1.153)	.985 (.854- 1.136)
Got a Car	.827 (.484- 1.416)	.826 (.482- 1.416)	.832 (.486-1.426)	.804 (.445-1.452)
Better Marta	.906 (.571- 1.439)	.908 (.570- 1.445)	.912 (.567-1.469)	1.009 (.586-1.735)
Change in Self-esteem		.993 (.947- 1.042)	.993 (.947-1.041)	.991 (.943-1.042)
Change in Locus of Control (.959-1.087)			1.000 (.943- 1.060)	1.000 (.942-1.061) 1.021
Food Social Serv. Utilization			.936 (.705-1.243)	.974 (.672-1.413)
Age				1.006 (.980- 1.033)
Number of Children				1.054 (.949-1.170)
Income				.960 (.805- 1.144)
Financial Strain				.762 (.513- 1.132)
Married / Living Together				.914 (.342-2.444)
Divorced / Separated				1.079 (.618- 1.885)
Widowed				2.335 (.834-6.540)
Never Married				1 (---)
Likelihood Ratio	1.347 P=.718	1.550 P=.907	14.163 P=.028	15.945 P=.252

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Values are Odds Ratios and Confidence Intervals (95%) \*p<.05 \*\*p<.01 \*\*\*p<.001 N=248

**Table 6.2 Social Capital and Food Insecurity: Estimated Odds Ratios and (Confidence Intervals)**

<b>Social Capital and Food Insecurity: Estimated Odds Ratios and (Confidence Intervals)</b>				
	Model 1	Model 2	Model 3	Model 4
	<b>Bonding</b>	<b>Bridging</b>	<b>Linking</b>	
Isolation	1.076 (.863- 1.341)	1.085 (.865- 1.361)	1.078 (.858- 1.355)	1.017 (.784-1.318)
Change Nbrhd Cohesion	.991 (.936-1.049)	.987 (.932- 1.046)	.984 (.928- 1.043)	.959 (.896- 1.027)
Change in Fear of Crime	.984 (1.038-1.06)	1.005 (.978- 1.033)	1.004 (.976- 1.032)	1.012 (.980- 1.045)
Tenure in Public Housing	1.015 (.973-1.059)	1.013 (.971- 1.057)	1.014 (.971- 1.059)	1.017 (.969- 1.068)
Mixed-Income Nbrhd		1.246 (.565- 2.745)	1.228 (.548- 2.753)	1.661 (.649-4.255)
Food Social Serv. Utilization			1.037 (.749- 1.435)	1.128 (.750-1.697)
Social Serv. Network Stability			1.267 (.544- 2.948)	1.076 (.417- 2.775)
Age				1.002 (.972- 1.032)
Number of Children				1.157 (.942- 1.422)
Income				.961 (.803-1.151)
Financial Strain				.861 (.551- 1.344)
Married / Living Together				.802 (.262- 2.459)
Divorced / Separated				.888 (.363- 2.174)
Widowed				3.546 (1.070- 11.749)*
Never Married				1 (---)
Likelihood Ratio	3.750 P=.441	3.820 P=.576	10.732 P= .151	23.297 P=.106

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Values are Odds Ratios and Confidence Intervals (95%) \*p<.05 \*\*p<.01 \*\*\*p<.001 N=248

**Table 6.3 Activist Client Traits and Food Insecurity: Estimated Odds Ratios and (Confidence Intervals)**

	Model 1	Model 2	Model 3	Model 4
	<b>Social Capital</b>	<b>Cultural Capital</b>	<b>Activist Client</b>	
Isolation	1.079 (.859- 1.354)	.996 (.782- 1.269)	.997 (.781- 1.273)	.910 (.687- 1.207)
Change Neighborhood Cohesion	.984 (.929- 1.044)	.977 (.922- 1.035)	.977 (.920- 1.037)	.936 (.870- 1.007)
Change in Fear of Crime	1.004 (.976- 1.033)	1.009 (.993- 1.025)	1.008 (.992- 1.025)	1.026 (.989- 1.065)
Tenure in Public Housing	1.013 (.971- 1.057)	1.017 (.971- 1.065)	1.017 (.970- 1.065)	1.037 (.982- 1.095)
Mixed-Income Neighborhood	1.211 (.544- 2.696)	.971 (.622- 1.518)	.970 (.617- 1.524)	1.133 (.409- 3.141)
Social Serv. Network Stability	1.271 (.547- 2.953)	.945 (.374- 2.389)	.951 (.375- 2.410)	.872 (.302- 2.517)
Change in Self-esteem		.994 (.942- 1.048)	.994 (.942- 1.048)	.995 (.937- 1.056)
Change in Locus of Control		.977 (.918- 1.040)	.977 (.918- 1.041)	1.001 (.932- 1.075)
Education		1.097 (.933- 1.289)	1.096 (.933- 1.288)	1.073 (.900- 1.278)
Got a Car		.884 (.437- 1.790)	.885 (.437- 1.790)	.998 (.466- 2.138)
Better Marta		.963 (.547- 1.695)	.965 (.544- 1.711)	1.087 (.548- 2.156)
Food Social Serv. Utilization			.992 (.829- 1.186)	1.044 (.672- 1.622)
Age				1.010 (.976- 1.044)
Number of Children				1.154 (1.023- 1.302)
Income				.954 (.865- 1.052)
Financial Strain				.786 (.484- 1.279)
Married / Living Together				.943 (.511- 1.742)
Divorced / Separated				.983 (.454- 2.131)
Widowed				4.017(1.168-13.814)*
Never Married				1 (---)
Likelihood Ratio	4.577 P=.599	7.221 P=.781	11.156 P=.516	18.570 P=.485

Values are Odds Ratios and Confidence Intervals (95%) \*p<.05 \*\*p<.01 \*\*\*p<.001 N=248

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