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Understanding The Utilization Of Community-Based Services In Late Old Age: A Participatory Approach For Connecting Through The Communication Ecology

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**UNDERSTANDING THE UTILIZATION OF COMMUNITY-BASED SERVICES
IN LATE OLD AGE: A PARTICIPATORY APPROACH FOR CONNECTING
THROUGH THE COMMUNICATION ECOLOGY**

by

CARRIE ANN LEACH

DISSERTATION

Submitted to the Graduate School

of Wayne State University,

Detroit, Michigan

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for the degree of

DOCTOR OF PHILOSOPHY

2019

MAJOR: COMMUNICATION

Approved By:

Advisor

Date

DEDICATION

For my husband Jason, this belongs to you as much as it does to me;
this is our legacy as the beginning and end of our namesake.

For my mom Sandy, whose healthy skepticism and investigative proclivities
calcified in my bones, and whose art inspired me to imagine who I might become.

She thought she could, so she did.

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CHAPTER 1: INTRODUCTION

Independent living in one's own community is a priority for older adults (Kohon & Carder, 2014; van Bilsen, Hamers, Don, Groot, & Spreeuwenberg, 2010). Research demonstrates that loss of independence is more feared than death (Thomas & Blanchard, 2009), and that autonomy and self-sufficiency are desired to remain in one's home (Wiles, Leibing, Guberman, Reeve, & Allen, 2012), neighborhood (Michael & Yen, 2014), community (Black, Dobbs, & Young, 2015; Blanchard, 2013).

To be able to stay in one's home and community, the social support system becomes more important with increasing age. Cantor (1979) defined the social support system as mutual assistance essential to maintaining social, physical, and mental well-being and independence. According to Cantor, social support can be derived from either informal sources (relative, friend, or neighbor) or formal agencies.

Individuals first consult those in their personal network for support during stressful times (Cantor, 1980). Support is primarily sought from family members and particularly children, though changing familial norms, declining reproduction rates, and out-migration relocate children away from their aging parents leave many without support (Denton et al., 2008; McCulloch & Lynch, 1993; Stoller & Lee, 1994).

When familial sources of support are unavailable, people next turn to their friends, neighbors, and acquaintances (Antonucci & Akiyama, 1987). Friends and neighbors are increasingly vital to remaining a part of one's community (Pierce, 2001). People tend to be more engaged with those proximally situated near their homes,

particularly as they age and environmental docility results from challenges posed by physical or mental conditions (Michael & Yen, 2014).

In the absence of friends and family, people look to their community for support. With increasing age, community sources of support are relied on at higher rates (Gallagher & Truglio-Londrigan, 2004). Unprecedented demographic phenomena, including older adults outnumbering children and more very old Americans than ever before, requires a better understanding of how this may impact families, aging service and support providers and agencies, as well as the communities where they are located (He, Goodkind, & Kowal, 2016).

Communities will be faced with the “challenge of assuring that sufficient resources and an effective service system are available” (Knickman & Snell, 2002, p. 849), as the pool of eligible recipients continues to grow. Considerable research has focused on understanding service system utilization and barriers. Such studies have pointed to multi-level issues including reluctance to ask for help due to self-reliance and independence (Wacker & Roberto, 2015), cultural norms (Lau, Machizawa, & Doi, 2012), and issues of awareness (Denton et al., 2008; 2010) and utilization by geography (McDonald & Conde, 2010). Despite a study by Wallace and colleagues (1999) that found “rarely was a demographic characteristic indicative of service use” (Wallace, Fields, Witucki, Boland, & Tuck, 1999, p. 15), provision and allocation models continue to be based on these correlates and repeatedly call for research to better inform decisions.

Recently, researchers have examined social influences and informal and community-based support linkages. Recommendations from such studies include

strengthening (Denton et al., 2008; 2010) or infiltrating (Schoenberg, Coward, & Albrecht, 2001) older adults' informal networks, and synergies between informal and community networks to legitimize, improve access to, and augment service delivery. Theorists continue to call for research focused on connections and interactions from an aging well perspective (Ryser & Halseth, 2011) to determine how best to provide services and to support elders (Thomas, Akobundu, & Dosa, 2016).

Relationships are central to understanding the lives of older adults (Craig, 1994), however, little is known about their role in service utilization (Blieszner, Roberto, & Singh, 2002). Older recipients of informal support are more likely to use community-based services (van Bilsen et al., 2010), but studies have failed to elucidate potential explanations for *why*. Utilization is influenced by interactions with health care professionals (Blieszner et al., 2002), friends, family, caring connections (Gallagher & Truglio-Londrigan, 2004), and caregivers (Strain & Blanford, 2002) who may help bolster awareness. Awareness of community-based services is also predicted by social network integration (Tindale et al., 2011). However, awareness alone does not ensure service use (Gallagher & Truglio-Londrigan, 2004).

There is a dearth of research examining community-based service utilization from an interactional or communication perspective. A communication lens attunes to messages, interactions, and relationships of a given phenomenon (Burlison, Albrecht, & Sarason, 1994). This approach is pertinent, "Because much support is accomplished through interaction, how support is communicated must be studied if researchers are to provide useful instruction to those interested in behaving more supportively" (Burlison,

Albrecht, & Sarason, 1994, p. xviii). There is a clear need for greater understanding of the interactional influences on seniors' decisions to community-based services (Blieszner et al., 2002).

Community-based services help older adults remain independent, reduce the risk of institutionalization (Chapman, Keating, & Eales, 2003), and contribute to well-being (Gardener, 2011). Recent trends in home-based services are on the rise. These include the cost-saving Independence at Home (IAH) model that seeks to shift care from offices and institutions to seniors' homes (Dejonge, Taler, & Boling, 2009). As mounting evidence suggests that investment in community-based services translates to fewer people in nursing homes and that government dollars are saved (Thomas & Mor, 2013), the need for more information about how to provide support is paramount. Understanding service utilization can benefit older adults, their families and friends, and the communities where they wish to remain. The purpose of this qualitative study is to examine how interactions influence community-based service use in later life.

Historical Overview of Community-Based Services for Older Adults

Those over the age of 60 are eligible for formal support as defined by the Older Americans Act (OAA) signed into law in 1965 by President Lyndon B. Johnson. This legislation was enacted to safeguard the physical, social, psychological, and financial well-being of older Americans. The current function of organizations in the Aging Network were formalized in 1972, via amendments to the Older Americans Act of 1965, providing community-based services and support. The nationwide system includes the Administration for Community Living (ACL), their regional offices, State Units on

Aging (SUAs), 665 national Area Agencies on Aging (AAAs), hundreds of tribal and native agencies, and thousands of community-based providers that receive funding through contracts with such agencies. The formal support system provides: 1) community resources such as education programs, volunteer and social programs, i.e. senior centers, income assistance programs, information and referral; 2) support services such as home delivered meals, transportation, health and wellness programs, and mental health and legal services; and 3) long term care services such as case management, in-home services, adult day care or respite services, and nursing homes (Wacker & Roberto, 2015).

In the State of Michigan, only 6% of 1.9 million older residents were registered users of services in 2014 (unduplicated count of service recipients in 2014=121,475; Michigan Department of Health and Human Services, 2014). The State of Michigan Offices of Service to the Aging allocates \$93 million through 16 Area Agencies on Aging (AAAs) to more than 1,000 agencies to provide services to seniors. Most users are recipients of nutrition services (55%), followed by community services (31%) and in-home services (10%; see Table 1 below for list of services). Service recipients are largely female (65%) and over the age of 75 (58%). Approximately one-third (34%; n=41,301) of service recipients are classified as low-income according to the poverty index. Although only 6% of eligible, older Michiganders took advantage of community-based services in 2014, it is likely that the remaining 94%, regardless of income level, could benefit from reception.

Table 1

State of Michigan Office of Services to the Aging by Category

Community-Based Services	In-Home Services
Counseling	Care Management
Community Support Navigator	Case Coordination & Support
Crisis Energy Assistance	Chore Services
Disease Prevention	Homemaker
Elder Abuse Prevention	Personal Care
Friendly Reassurance	Nutrition Services
Health Screening	Congregate Meals
Hearing Impaired Services	Home-Delivered Meals
Home Repair	Nutrition Education/Counseling
Home Injury Control	Caregiver Services
Information & Assistance	Adult Day Care
Legal Assistance	Caregiver Supplemental Services
Medication Management	Caregiver Training
Outreach	Counseling & Support Groups
PERS/Assistive Technology	Home-Delivered Meals-Respite
Senior Center Operations/Staff	In-Home and Other Respite Care
Transportation	Information & Access Services
Vision Services	
Wellness Center Support	

Community Driven Study

This dissertation addresses a number of pressing issues that were uncovered over many years while conducting community-based studies with and for community organizations and governmental agencies that serve older adults in Michigan. These experiences include conducting older adult needs assessments in the Metro Detroit tri-county area, i.e. Macomb, Oakland, Wayne (Jankowski, Leach, & Graham, 2010), Calhoun County (Jankowski & Leach, 2013), and most recently in Monroe County

(Jankowski & Leach, 2015), among others. The most recent needs assessment, a 15-month study conducted from 2014 through 2015, identified the health and social service needs of independent-living Monroe County older adults (Jankowski & Leach, 2015). The assessment, guided by community-based participatory research (CBPR) principles, was conducted with a seven-member Community Advisory Group (CAG) appointed by the Monroe County Commission on Aging. We gathered and analyzed data from secondary sources and collated primary data using multiple methods from 1,870 people. This data included: 1) residents age 60 and older via focus groups (n=31), a County-wide population survey (n=959), face-to-face, in-depth interviews (n=19), and a service recipient survey (n=676); 2) care providers via a focus group (n=9) and survey (n=67); and 3) key informants via electronic survey (n=109).

The needs assessment (Jankowski & Leach, 2015) identified the complexities of living independently in later life. Although the needs assessment provided greater resolution for our community partners, including how to prioritize their supportive efforts and allocate funding, it also ignited new questions. Our 262-page report provided in-depth characterizations and explanations of Monroe County seniors' needs and challenges. The report highlighted the communication disjuncture between community-based service agencies and older adults. One of their biggest challenges identified by key stakeholders was reaching seniors, and likewise, seniors had low levels of awareness of services and support available to them. In response, the Community Advisory Group convened a post assessment working group that focused on communication and outreach. Members of the Community Advisory Group determined that additional research could

better inform how service providers could engage the most senior members of their community.

In light of past research, this study aims to understand why seniors use (or do not use) community-based services, and more specifically, how communication plays a role in utilization. Having gained in-depth insight into Monroe County, community-based services for older adults, where and who delivered them, in addition to working closely with community partners, made the county an ideal place for conducting this research. Moreover, at the conclusion of several post-project trips to Monroe County, the Community Advisory Group graciously invited me to “use their community as a lab” (in the words of one CAG member) for my dissertation.

Monroe County demographic trends reflect national statistics. Older adults are the fastest growing segment of the population, currently expanding at a higher rate than any other age group in Monroe County. The older population is expected to grow by nearly 69% from 2010 to 2040 (SEMCOG, n.d.). Even more striking, the oldest segment (those age 75 or older) whose need for support is the most pressing, is expected to grow by about 167% during this same period: from just over 9,000 to nearly 25,000 individuals (Jankowski & Leach, 2015). Based on the communication disjuncture revealed by the county-wide needs assessment including community-based aging service organizations difficulty reaching older adults and older adults’ low awareness of services, additional research is needed to understand how the disjuncture between the two groups could be addressed. Without fully understanding the dynamic interplay among older adults and

their informal networks and community-based services, a community's ability to support its most vulnerable residents runs the risk of falling short.

CHAPTER 2: CONCEPTUAL FRAMEWORK, LITERATURE, AND RESEARCH QUESTIONS

This community-based participatory research study will use an ecological health communication framework to understand the complexities of service utilization. Such studies require conceptual tools, such as Community Based Participatory Research (CBPR), to help reveal the manner in which older adults navigate and experience “the range of communicative activities that link networks of individuals, groups, and institutions” within the Monroe County, Michigan communicative ecology (Friedland, 2001). Communication scholars have advocated for multilevel examinations of dynamic interactions within the communication ecosystem (Moran et al., 2016). Ecological approaches have the advantage of orientating research to the internal and external influences at multiple levels and the connections among those levels.

Community-Based Participatory Research

The goal of CBPR, with a foundation in social justice and empowerment, is to create effective translational processes to improve community circumstances and inform action (Hacker, 2013). The equitable partnership casts community members and researchers as experts who work together to address problems and help improve conditions (Tracy, 2013). CBPR projects attend to the implications of the researcher being an outsider and distribution of power as it “integrates and achieves a balance between knowledge generation and intervention for the mutual benefit of all partners,” cyclically (Israel, Eng, Schulz, & Parker, 2013, p. 10). Any project that begins with, “the community’s felt needs is more likely to be successful in the change process and in fostering true community ownership of programs and actions” (Viswanath, 2008, p. 288).

CBPR is a useful tool for responding to community driven issues and guiding collaborative research efforts to co-generate knowledge (Hacker, 2013). CBPR projects improve community partners' capacity as well as researchers "who gain a whole new set of skills that stems from their understanding of appropriate language, methods, meaning, and context" (Hacker, 2013, p. 17). Data collection and analysis comprise a cyclical process that relies on shared decision-making and transparent communication (Hacker, 2013). In summary, CBPR builds on the strengths and resources within the community to produce locally informed, culturally appropriate research projects that strive to promote social change (Hacker, 2013).

Ecological Framework

An ecological approach is ideal for addressing community health matters (Lounsbury & Mitchell, 2009) and examining complex phenomenon aimed at improving community circumstances. Ecological research "produces a more comprehensive understanding" (Moran et al., 2016, p. 137) of the factors that impact individual health and well-being. This approach to research focuses on understanding the person and their environment, and considers a "single system of interacting influences" (Bookman, 2008, p. 433).

Ecological models have evolved considerably beyond early conceptions of Lewin's (1951) ecological psychology that examined the influence of the external environment on an individual. Bronfenbrenner's (1977, 1979) Systems Theory was developed in response to limitations of such developmental psychology approaches, which he regarded then as "the science of the strange behavior of children in strange

situations with strange adults for the briefest possible periods of time” (Bronfenbrenner, 1977, p. 513). He called for broader inquiries that accounted for the “progressive accommodation, throughout the lifespan, between the growing human organism and the changing environments in which it actually lives and grows” (p. 513). Bronfenbrenner advocated for a more naturalistic approach to science conducted outside of laboratories to understand behavior as it occurred through place-based interactions with individuals and their environment. His ecological approach placed the developing person at the center of the model who is embedded among contextual forces of influence each that contain roles, rules, and norms (Bronfenbrenner, 1979). His model accounted for interactions among individuals, micro-, exo-, macro-, and meso-system influences.

Ecological models have since evolved from initial considerations of broad behavior towards an examination of the forces influencing health behavior to guide health promotion and interventions. Contemporary models, such as the Ecological Model of Health Behavior, were designed to guide multi-level behavioral intervention strategies that focused on five sources - intrapersonal factors, interpersonal processes and primary groups, institutional factors, community factors, and public policy – of influence on health behavior (McLeroy, Bibeau, Steckler, & Glanz, 1988). The model has been modified for more specific contexts, including use by environmental gerontologists who emphasized the importance of the home environment due to the increased amount of time a person spends in their home as age progresses in the person-environment model (Oswald & Wahl, 2005). Such inquiries inform interventions to help reduce disability and prolong independent living for as long as possible.

More recently, health communication scholars have advocated for more comprehensive incorporation of ecological perspectives. Moran et al. (2016) conceptualize a framework for *ecological health communication research* aligned with Bronfenbrenner (1977, 2009), which they define as scholarship that, “(a) acknowledges the multiple contexts, ranging from individual-level to macro-level; (b) acknowledges the mesosystems that capture the interrelatedness of these contexts; and (c) seeks to understand how communication operates in these multiple contexts to affect health outcomes” (Moran et al., 2016, p. 135).

The ecological health communication framework includes constructs and processes that influence behavior at five levels. First, the *individual-level* context accounts for perceptions, attitudes, beliefs, self-efficacy, personality traits, and biological and physiological responses that collectively influence behavior. Second, *microsystem* forces of influence include interpersonal discussions with family and friends and group social norms with people in our close social environments. Third, the *exosystem*, including neighborhoods, institutions, and systems, accounts for community norms, community health, neighborhood storytelling networks, and community health communication capacity of institutions as forces that influence on behavior. Fourth, the *macrosystem* includes broader societal norms, values, and ideologies that influence behavior. Fifth, Moran et al. (2016) contest that “communication is a fundamental social process that links together different contexts and facilitates trans-level effects. In other words, we view communication as a glue that binds together *mesosystems*” (p. 136).

Researchers have attempted to understand and predict community-based service utilization, yet little is understood about the multiple levels of influence. The dearth of community-based services studies prompted a broader review of research that could provide insight into the behavior of older adults when utilizing health services. To understand the complexity of service utilization behavior, this review was organized using the ecological health communication framework offered by Moran et al. (2016). It begins by identifying intrapersonal factors that influence older adults' community-based and health services utilization. Next, the review moves outward to understand influences imposed by the settings where the individual is embedded. These studies identified the most proximal sources of influence that occur within the microsystem, and then focus on more distal settings that influence behavior including the exosystem and the macrosystem. Lastly, the review included studies that explicitly report how connections among two or more settings influence service utilization knowing that the "interactive effect" of more intervening at more than one level "is greater than the mere additive effect of the two levels" (p. 136).

Community-Based and Health Services Literature

To best advance the state of knowledge it was imperative to comprehensively review past research to assess how the current study "builds, problematizes, or extends" our current understanding (Tracy, 2013, p. 99). Using an ecological model, "produces a more comprehensive understanding" (Moran et al., 2016, p. 137) of the forces that influence decision-making and behaviors. The reviewed research was organized by level,

however, focusing on social or environmental causes of behavior seldom result in outcomes that can be easily categorized.

Individual Level

Individual level studies commonly focus on demographics and characteristics of users, as well as evaluating awareness, knowledge, and attitudes towards services.

Demographics and characteristics of users. Demographic attributes guide “policy, allocation, and delivery decisions” in regard to community-based services despite the fact that these indicators are not always predictive (Wallace et al., 1999, p. 15). Studies have identified social characteristics as predictors of service utilization, including living alone (Wilby & Chambless, 2012) and women who live alone (Wallace et al., 1999). Explored personal and health related characteristics of those at risk of institutionalization, van Bilsen et al. (2010) reported that service users were less functionally impaired and experienced fewer accessibility issues. This study also reported that users were more often supported informally, stating that reception may impact knowledge and awareness or that care recipients may be “more stimulated and enabled to access” services (p. 108).

Lack of awareness. Lack of awareness is a barrier to service utilization, a matter that persists in the literature and in practice (Black, Dobbs, & Young, 2012; Denton et al., 2010; Gallagher & Truglio-Londrigan, 2004; Tindale et al., 2011) not only for older adults but also for their caregivers (Strain & Blanford, 2002). Denton et al. (2008) employed a vignette methodology to compensate for over-claiming bias of service knowledge. This study revealed that older adults’ awareness levels of services were,

“much lower than previously thought” (p. 359). Tindale et al. (2011) investigated the social determinants of awareness of community support services and found that people with higher incomes and who were middle aged were more aware of available services. They also pointed to the microsystem as a facilitator of knowledge, reporting that having social support available and being a volunteer or affiliate of a club predicted awareness of services. Knowledge does not resolve the issue of why people use or do not use services because, as Gallagher and Truglio-Londrigan (2004) contend, awareness alone “does not precipitate service use” (p. 19).

Perceptions and attitudes. Blieszner et al. (2002) examined service utilization and found that users were more likely to have reduced family contact and demonstrated a preference for formal forms of assistance over informal. They reported that service utilization was “directly related to attitudinal preferences for such care” (p. 112), in other words those who had positive views about the service would be more likely to use it in the future. Schoenberg et al. (2001) examined older adults’ attitudes about services via in-depth interviews. They revealed positive and negative attitudes about services though older adults most frequently discussed and evaluated the quality of support and staff providing it. Lau et al. (2012) examined Japanese Americans community-based service use and identified attitudinal hindrances to utilization. These included attitudes of pride and privacy; the elders did not want to disclose their problems particularly to strangers working in an agency. They also reported participants preference for interacting with a provider who was the same ethnicity, “Someone who was Asian would notice things that need to be done without being asked...I also don’t want to teach someone how to cook

rice” (p. 157). Shared similarities meant that elderly individuals would more positively evaluate the experience. Behavior is complex, and multilayered. Attitudes toward support are one piece of the puzzle, but those attitudes are influenced and shaped with and through communication networks.

Physiological changes. Life expectancy has increased dramatically in the last century; consequently, this study focusing on “70- and 80-year-olds is a very new scientific enterprise” (Harwood, 2007, p. 27) particularly as it relates to communication. Very old age results in cognitive and sensory losses. These changes influence the decisions of older adults to interact or avoid interactions, such as those with community-based service providers. Undoubtedly, “We age not only chronologically, but also communicatively” (Harwood, 2014, p. 9).

Time to express oneself. Physiological losses including information processing speed, hearing, and vision complicate and influence interactions. Patient-provider interaction studies have suggested the need to increase interaction time with older patients so that they have ample time to process information and retrieve information from memory (Sparks & Nussbaum, 2008). Likewise, studies have identified communication barriers in hurried doctor-patient visits that resulted in older adults feeling rushed (Vieder, Krafchick, Kovach, & Galuzzi, 2002). Nussbaum and Fisher (2009) suggest that older adults exhibit improved narrative competence with age and prefer to embed medical information in larger narratives. Longer visits and interactions allow older adults to fully express themselves, embed relevant information in a broader life story and in narrative form, and provide adequate time to ask questions (Nussbaum &

Fisher, 2009). There are many factors that can affect communicating with older adults, many of which are manageable until very old age. Poor communication that results from sensory changes and stereotypes can have profound implications for social interactions.

Hearing. Hearing deficits can negatively impact communicative interactions and inhibit engaging others including service providers. Considerable attention has been paid in communication and aging research to the issue of presbycusis, referring to the loss of high-frequency tones and the ability to distinguish sounds (Botwinick, 1984; Harwood, 2007). Loss of tone affects the ability to hear specific consonants such as “s” and “th” and affects the ability to distinguish words and phrases, an issue that can be compounded by other noise (Villaume, Darling, Brown, Richardson, & Clark-Lewis, 1993). Presbycusis listeners have reduced confidence in their ability to communicate and are less likely to ask for clarifications; they may also avoid or reduce participating in social activities as communicative interactions become increasingly more difficult (Pichora-Fuller & Carson, 2001).

Background noise interferes with communicative reception as does competing noise, distractions, and distance between interlocutors (Pichora-Fuller & Carson, 2001). As hearing declines older adults become reliant on vision to compensate by relying on visual cues such as lip reading. Thus, where and whom older adults communicate with becomes important with increasing age.

Vision. Vision problems increase with age for everyone. Difficulties in vision decline such as motion perception, reading small print, seeing in low-light conditions, and spatial acuity make activities of daily living challenging (Nussbaum, Pecchioni,

Robinson, & Thompson, 2000). Presbyopia also affects the ability to see objects at a distance (Nussbaum et al., 2000). Vision impairments associated with aging can hinder interactions, abilities, and self-esteem. Strained communicative interactions may result in older adults avoiding interactions to reduce stress and embarrassment and listeners avoiding them as well.

Because there is a lack of research on who uses services, Wilby and Chambless' (2012) statement is problematized: "By knowing what types of characteristics determine current program use – it is possible to examine and predict what the needs for the programs will be given the anticipated increase in the aging population" (p. 95). If programs are created and curtailed to current users and the demographics of users, it leaves little room for understanding and attracting new users and innovating and adjusting programs beyond current user preferences. Individual level research highlighted awareness and attitudinal barriers as well as how communicative changes can shape decisions. "How we conceive of and present ourselves communicatively" (Nussbaum, 2014, p. 23) influences our interactions and behaviors with friends, neighbors, and family, and service providers. Transitioning to the discussion of microsystem, studies will now be reviewed to understand how interactions and social networks play a role in service utilization.

Microsystem

van Bilsen et al. (2010) explored personal and health related characteristics of those at risk of institutionalization and reported that service users were more often supported informally. They speculated that supportive others may impact knowledge and

awareness or that care recipients may be “more stimulated and enabled to access” services (p. 108). Gallagher and Truglio-Londrigan’s (2004) qualitative study sought to understand older adults perceived facilitators and barriers to service utilization. Prompted by the life-span theory – articulating how opportunities for informal interactions decreases with age, Cartensen (1992) argued that as informal resources inevitably decrease, the need to draw from community-based sources of support increases. The results highlighted the importance of the social network as a conduit to services. Knowledge facilitators were cumulative life experience and learning from others (Gallagher & Truglio-Londrigan, 2004). Likewise, the systems theme identified caring connections as a pathway to service utilization including those individuals concerned with their well-being. This is of particular concern in very old age; as the network shrinks there are fewer communication resources to draw information about community-based services.

The microsystem is an important conduit for information that can improve the quality of life; consequently, health promotion and diffusion scholars are reconsidering their approach to reaching seniors. In what can be considered a paradigm shift, health promotion is transitioning from less effective strategies targeting individuals or groups towards understanding and mobilizing social relationships (Levy-Storms, 2005). Denton et al. (2008) corroborated a microsystem approach, “Since many older adults would seek assistance from their informal networks, strengthening informal networks is an important strategy to improve access to services” (p. 368). Understanding microsocioal dynamics in old age may inform how relationships can be mobilized to aid in community-based

service use, a resource that becomes increasingly important in old age (Gallagher & Truglio-Londrigan, 2004).

The microsystem is an important resource for older adults to be able to gather first-hand experience and appraise community-based services (Black, 2008). Denton et al. (2010) point to strengthening networks as an “important strategy” for narrowing the gap between seniors and services (p. 573) though they do not indicate how this might be achieved. Examining interpersonal communication activities in the microsystem will point to how interactions enable service utilization and likewise, how obstructions may be adapted to do so.

Exosystem

Service utilization studies are less common beyond the individual level and the microsystem. Individuals social network often shrink with increasing age due to illness, death, relocation, and institutionalization of individuals. Interactions with less familiar, *others* as identified by Gardner (2011) may be underappreciated resources in the communication environment. Gardner’s “dynamic and spatially inclusive” (p. 268) qualitative study examined experiences of older adults using a friendly visiting methodology. The study focused on the interactions of seniors during everyday life. Gardner found that family members, who are generally considered focal microsystem members, were not a part of everyday activities. Rather, *others*, who Gardner identified as a “new informal network type” occurred in three under-recognized yet important exosystem sites: 1) *transitory zones*, although inconsequential to younger people, are meaningful places passed through in daily life via lobbies of buildings, seats on busses, or

a line at the bank that allow for exchanges such as smiles and simple remarks of hello; 2) *third places* where public life takes place at cafés, the post office, diners, or public parks offer chances for feeling welcome, comfort, and being known, and; 3) *thresholds*, hybrid places outside the home but *in* the neighborhood such as porches, driveways, and yards that present opportunities for interacting. These unexpected places and under recognized *others* that dwell in the “natural neighborhood networks do not replace or negate the importance of informal systems of family and friends, or formal support systems provided by public and private agencies and services. They complement them” (Gardner, 2011, p. 269). Local *others* may represent underappreciated resources for connecting seniors to community-based services. Likewise, Gardner’s research with seniors highlights an interesting methodology to examine and understand the communicative environment.

Scholarship focused on institutions serving seniors is scarce despite the unresolved need: “We must understand the gap between the knowledge systems of providers and clients. Only then can we begin to cope with existing difficulties” (Williams, 1994, p. 225). The overlooked gap between service providers and organizations began in the 1970s and persists today. To illustrate, McKinley’s (1972) review of health and (then referred to as) *welfare* use research highlighted the need to examine the relationship between providers and users:

In view of developments in the provision of services—where there appears to be increasing bureaucratization and the erosion of predominantly individualistic services—the whole question of the relationship between officials and clients is of obvious importance in the study of utilization behavior, both as a social and as a theoretical problem (p. 135).

Despite the paucity of exosystem studies, findings from community-based services studies at other levels have noted institutional deficiencies and possible solutions. Scholars have speculated that staff and health professionals lack of training and sensitivity to aging matters of (Wallace et al., 1999). Black (2008) supported this pointing to the need for training service providers to improve interactions:

Services delivered to elders would benefit from principles of gerontological practice. Providers serving elders in the neighborhoods could receive training in gerontological competencies to enhance their interactions with seniors in the provision of services. This would require basic understanding of the biological, social, and psychological aspects of old age and skills in communicating with elders. In addition, respect for autonomy should be incorporated in all service and program goals (p. 91).

Such training would ensure service providers were sensitized to sensory impairments that are common impediments to communicating with older adults and improve the user-provider interaction. The problem is that little attention has been paid specifically to communicative hindrances between providers and older adults (Menec, Means, Keating, Parkhurst, & Eales, 2011) to fully appreciate how interactions may be improved.

Additional institutional adaptations were reported in articles that were not service specific. Waites' (2012) ecological study noted that African Americans beliefs that healthy aging and spiritual beliefs were closely connected. This study points to the importance of multi-level inquiries so that agencies can produce contextualized interventions and recommendations; the findings highlighted the importance of culturally compatible and faith-based programs. Additionally, Williams (1994) found that Mexican Americans norms were in conflict when interacting with an "organization" versus an "authentic person" (p. 231) pointing to communication problems and a lack of

appreciation for multi-level influences beyond the organization where the exchange occurs.

As frailty, disability, illness, and age increase and social ties to those who can provide support decreases, the importance of the proximal environment plays a broader role in well-being (Michael & Yen, 2014). The built environment and transportation are common hindrances to service use (Hallgreen, McElfish, & Rubon-Chutoro, 2015; Lau et al., 2012). Schoenberg and Coward (1998) conducted focus groups with older adults and found that attitudes “toward obstacles to the receipt of community-based services” fluctuated by residence (p. 302). Rural dwelling older adults reported lack of awareness, transportation, and perceived eligibility as barriers to use. Although rural seniors reported obstacles more frequently than urban seniors, the authors did suggest that regardless of the geographic setting where one resides, services should “conform to [older adults] environmental contexts” (Schoenberg & Coward, 1998, p. 303).

Ecological theories assert that influence occurs beyond the individual level and microsystem. Behavior is influenced by a variety of forces depending on where a person is situated, whom they are speaking with, in what culture, and at what time. “Social action is always changing; therefore, contextual explanations and situated meanings are integral to ongoing sensemaking” (Tracy, 2013, p. 4) so that services can best be delivered. Further, research is needed to “capture communicative phenomena” (Moran et al., 2016, p.137) to identify communication impediments so that adaptations can be made to improve interactions between users and providers and also the social network member that may link her to community-based service organizations.

Macrosystem

Behavior is influenced by numerous macro-level forces that include societal ideologies, norms, and values, as well as being impacted by regulations, laws, and the built environment. Self-sufficiency is prized in Western culture especially among older adults (Kohon, & Carder, 2014; Thomas & Blanchard, 2009) who are unwilling to disclose information about needs or challenges (Chernesky & Gutheil, 2008) to avoid being perceived as a burden (Bacsu et al., 2012; Bell & Menec, 2015). Bell and Menec (2015) reported older adults were reluctant to express the need for assistance because they thought it might result in social exclusion. Bacsu et al. (2012) found that gender norms play a role in service use. Specifically, senior women were reluctant to disclose their need for instrumental support related to housekeeping or preparing meals, while men were reluctant to ask for help with yard work or home repairs. The findings were affiliated with guilt of not being able to perform the tasks themselves and perhaps stigma attached to reception (Bacsu et al., 2012). Lau et al. (2012) identified frugality, privacy, and stoicism as barriers to using formal support when interviewing Japanese American elders who, “tend not to verbalize their unmet needs due to cultural factors such as *enryo*-reservation and restraint to prevent others from thinking badly of one” (p. 158).

Mesosystem

Research on community-based services is lacking, as are examinations of how communication influences utilization of those services. Researchers have called for health communication studies to better understand how behavior is influenced more broadly through ecological inquiries (Moran et al., 2016). Broader examinations of

communication activities can help reveal “connections among the various communication resources in an individual’s life” (Moran et al., 2016, p. 137). As of now, empirical evidence is limited for how communication in the mesosystem operates to facilitate service utilization or how the communication disjuncture between service agencies and older adults may be addressed. Denton et al. (2010) proposed a multilevel intervention to address the information gap involving community-based services in old age by providing informational seminars to seniors and also middle-aged adults who seniors may learn from. Even more broadly they take into account the physical environmental barriers to accessing services and information about them by advocating for outreach that is geographically compatible. They suggested outreach be delivered to seniors in the places they frequent and also to network members in their workplaces or on-line forums incorporating microsystem strategies designed to target older adults.

Recently, scholars have investigated how community-based service interactions can be leveraged for enhanced benefit. For example, Rubin and colleagues (2014) reported that Meals on Wheels volunteers, who are trusted contacts, were trained as effective health coaches for senior recipients (Rubin, Freimuth, Johnson, Kaley, & Parmer, 2014). Thomas and Mor (2012) identified peripheral benefits of receiving home delivered meals. They reported that Meals on Wheels recipients felt the delivery was an important opportunity for a social interaction, as well as having a secondary benefit of providing a safety check. Another study of Meals on Wheels recipient’s found indirect effects on health including reduced feelings of loneliness that coincided with reduced falls (Thomas, Parikh, Zullo, & Dosa, 2016). The benefits of community-based services

in old age continue to be discovered, as do novel approaches for optimizing interactions that meet tangible needs with the co-benefit of also supporting emotional needs. Despite the multi-level benefits, more often than not, service providers remain disconnected from seniors they aim to serve.

A disconnection between community-based organizations (CBOs) and residents is not solely an old age issue. Matsaganis, Golden, and Scott (2014) developed an intervention to close the gap between reproductive service organizations and urban African American women by understanding barriers and facilitators of utilization informed by communication infrastructure theory (CIT). “From a social-ecological perspective, a lack of consistent connection between community residents and CBOs can be construed as a problem of communication between two different levels of a community: the meso-level of the community-based health and human service organizations and the micro-level of individuals” (Matsaganis, Golden, & Scott, 2014, p. 1496). CIT can help diagnose a community’s communication infrastructure, which is a “basic community communication system available within a community and is relied upon by residents for the information needed in their everyday lives” (Wilkin, Stringer, O’Quin, Montgomery & Hunt, 2011, p. 202). The communication infrastructure is comprised of storytellers whose environment can constrain and enable connections (Kim & Ball-Rokeach, 2006). CIT posits that the storytelling network (STN) is made of up three actors that participate in a dynamic, networked conversation about their community (Wilkin et al., 2011). First, micro-level agents such as informal network members exchange information and stories about their everyday lives as they take place in their

neighborhoods. Second, meso-level agents such as organizations and local media tell stories focused on the local community. Third, macro-level agents express knowledge about the state, nation, or the world. CIT is oriented to community stories of micro- and meso-agents that the macro-level does not seek to address. “The communication infrastructure approach extends the scope of media systems dependency (MSD) theory’s focus on the relation between the mass media and the individuals to the interplay of communication environments, individuals, and communities” (Kim & Ball-Rokeach, 2006, p. 175). Finally, CIT asserts that the built and social environment of the communication action context (CAC) where networks are embedded constrains and enables how information flows in story telling network (Broad et al., 2013). As a mesosystem theory, CIT has been shown to be useful in research focused on community-level health disparities (Wilkin, Moran, Ball-Rokeach, Gonzalez, & Kim, 2010), community-based health communication outreach and mobilization (Wilkin & Ball-Rokeach, 2011), and community-based interventions (Wilkin, 2013).

Old age often heightens disparities in communication resources and contracts social networks. For those who may not be integrated in STNs, alternative approaches have been proposed. “The growing evidence suggesting that people who suffer the most from health disparities may not have integrated connections to the STN has led researchers to suggest that we shift our focus to *communication ecologies* for improving health outreach” (Wilkin, 2013, p. 189). Such approaches are needed and compatible with the present study, to be able to understand how communication resources facilitate, or can be adapted, to forge connections between older adults and service agencies.

Understanding the *communication ecology* that older adults construct in their everyday lives would help, “determine which resources or combination of resources will lead to the most efficient health communication outreach at the community level” (p. 189). Moreover, and more pragmatically, these tools may inform how community-based service providers may connect with older adults who they have difficulty reaching.

Summary

The literature review highlights a substantial deficiency in examining how communication operates to inhibit or enable service utilization. In addition to the theoretical gap, pragmatically this dissertation attends to the omnipresent communication gap between older adults and service providers established in a county-wide older adult needs assessment. In response, this study aims to identify the facilitating and inhibiting forces that influence human and mediated interactions among older adults in Monroe County. This action-oriented study aims to inform interventions that can bridge the senior-provider divide by understanding how interpersonal, mediated, and organizational connections can be improved or leveraged as communication resources in Monroe County to improve communication and connections with older adults.

Attitudes, beliefs, self-efficacy and physiologic responses influence how older individuals receive and respond to human and mediated communication. Microsystem interactions among aging adults are mutually influential through exchanging perceptions, attitudes and experiences of community-based services that can hinder or induce utilization. The exosystem includes community-based service organizations and their practices, policies, and how affiliates of those agencies influence use. The macrosystem

forces of influence include societal norms, values, and how policies and the built environment obstruct or facilitate community-based service utilization. Finally, exploring the mesosystem may help bridge the user-provider disjuncture by revealing connections among the levels. Understanding how interactions constrain and enable utilization will be particularly useful for informing the application of inventions through older adults' communication ecologies.

Altering any of the perceptions, attitudes, conversations, narratives, messages, or policies requires a broad inquiry beyond frequently studied individual and micro-level forces. Behavior is shaped by our social and physical milieu, both in the past and present, and the communication streams that occurs with and among our surroundings. Understanding elder communication patterns, forces that influence their interactions, and how and why they express their concerns, or seek and accept services are important foundations for narrowing the gap between agencies and the growing number of eligible service recipients (Kivett, Stevenson, & Zwane, 2000). This ecologically focused, community inclusive study hopes to inform the adaptation of mediated, interpersonal, and organizational communication so that it might be *ecologically sensitized* (a term coined by Coward and Lee, 1985 in Stollor & Lee, 1994) and informed by seniors' priorities and perspectives. This attunement is fundamental for those in late life and for vulnerable elders with diminishing communication resources to draw from. A CBPR approach can safeguard overlooking important influences to uncover, "how communication contributes to health behavior change within the constraints of social structure" (Finnegan & Viswanath, 2008, p. 364), particularly when studying hard to reach groups such as our

eldest members of society. Using an ecological framework may help build a more “comprehensive understanding” (Moran et al., 2016, p. 137) of the forces that impact health and is “especially well-suited for conceptualizing aging in place as a dynamic person-environment process” (Greenfield, 2012, p. 9).

Research Questions

This dissertation was designed to identify how interactions, i.e. human, mediated, occurring in the social ecological system enabled or inhibited community-based service utilization and likewise, how elements of the communicative environment (where they were occurring) promoted or dissuaded use. The overarching research question for this dissertation was: How does communication influence service utilization and how does the communicative environment where those interactions occur play a role?

This dissertation sought to understand: (a) how older adults’ beliefs, attitudes, knowledge, age and history influenced community-based service; (b) how the microsystem influenced utilization; (c) how the exosystem influenced community-based service utilization; (d) how macro-level forces influenced community-based service utilization; and (e) how connections among levels influenced community-based service utilization. Though the communicative contexts are interrelated and difficult to partition, the specific levels of inquiry were revealed using the ecological health communication framework forwarded by Moran et al. (2016). Specific research questions for this dissertation were:

RQ1: How do individual-level constructs affect utilization of community-based services?

RQ2: How does the microsystem influence community-based service utilization?

RQ3: How does the exosystem influence community-based service utilization?

RQ4: How does the macrosystem influence community-based service utilization?

RQ5: How do connections among the levels play a role in community-based service utilization?

CHAPTER 3: METHODS

This chapter summarizes the qualitative design of the study that was developed cooperatively with a Community Advisory Group (CAG). This chapter begins with a justification for employing qualitative methods to examine the complexities of older adults' communicative interactions with service agencies, followed by my role in discovery informed by my experiences. I then detail the process of collaborating with my CAG and highlighting the imperative role they played in sensitizing this study to older adults. I review and discuss the methods used and how they evolved through discovery including recruitment, sampling, and format, which required several amendments to be approved through the IRB. Lastly, I describe the procedures for managing, analyzing, and interpreting the data with my CAG.

Qualitative Methodology

Qualitative methods are best suited for this dissertation, which is aimed at understanding older adults' community-based service use and non-use in Monroe County. Lindlof and Taylor (2002) asserted qualitative methods are well suited for applied communication research in that it “assists real-world individuals and groups in the diagnosis and solution of practical problems” (p. 26). Likewise, qualitative methods effectively explore the intrinsic issues in a specific context, such as in Monroe County. Qualitative methods are compatible with the goals of this research: to examine the everyday contexts that influence decision making, without concern for generalizability to other contexts or populations. Lounsbury and Mitchell (2009) assert:

That the utility of using qualitative methods to develop a basic understanding of multi-level, dynamic, interacting structures and processes with an ecosystem

cannot be understated. Arguably, qualitative methods and data analyses can more easily generate the contextual data and narrative needed to see the system or the problem of interest than traditional quantitative methods or analyses alone (p. 219).

Further, ecological studies using qualitative methods combined with CBPR approaches help researchers to uncover personal narratives - highlighting the multilevel complexities of environmental and structural forces impacting individuals and their social world (Lounsbury & Mitchell, 2009).

Kreps (2012) contends that “Health communication research is inherently applied,” (p. 5) though he expresses concern that it fails to address the implicit goal of improving health care or promotion. To ensure this research is tied to action it abides by Hacker’s (2013) three-step process for conducting CBPR: 1) Stage one is defining the community, engaging the community, assessing the community’s needs, and identifying the research question; 2) Stage two is the design, assigning the roles and responsibilities for conducting the research; and, 3) Stage three includes analysis, interpretation of results, dissemination, and action. The first stage of the CBPR inquiry of community engagement and needs assessment was achieved using previous research conducted in Monroe County (see Chapter 1). The research questions for this dissertation were derived from the former study and discussed in one-on-one meetings with community partners, involved in the initial study, beginning in early to mid-year in 2017.

In August of that year, I obtained commitments from three current and retired service providers, all over the age of 65 who would form my dissertation Community Advisory Group (CAG). The second stage of a community-based participatory research process, identified by Hacker (2013), is this dissertation. The third stage will be

addressed in part later in this chapter as data analysis and interpretation and will also be presented with a focus on how the research can inform interactions between seniors and service agencies.

Researcher's Role

“Choosing which methodology to use depends on the research goals as well as your personal proclivities, preferences, and talents” (Tracy, 2013, p. 25). My proclivity is to conduct research that places elders and wisdom at the forefront, my preference is collaborative inquiry addressing questions that are community placed, and my talent is connecting and communicating through listening and chronicling.

My position as a researcher is shaped by experiences conducting research on aging-related to poverty (Jankowski, Booza, & Leach, 2010), mental health (Russo, Leach, Lysack, Paulson, & Lichtenberg, 2012; Lysack, Leach, Paulson, & Lichtenberg, 2013), environmental health (Lichtenberg, Leach, Schroeck, Smith, & Blessman, 2017), and gender disparities (Booza, Jankowski, & Leach, 2009). Additionally, 2018 marks a decade of my conducting and participating in community-based research with the goal of improving service provision to elders. Hacker (2013) suggests researchers ask themselves the following five questions before the work begins:

1. Do I have connections in the community?
2. Do I know enough about the community, its makeup, assets, and challenges?
3. Do I have the time to invest in and develop relationships?
4. Do I have the support of a mentor who has experience in CBPR?
5. Do I possess cultural humility? (Hacker, 2013, p. 34).

Based on Hacker's (2013) CBPR readiness assessment, I was equipped to complete a CBPR dissertation. This confidence was based on my response to the above

questions as well as my former research and experience as a conduit for community learning. Having completed a Master's degree in Public Administration based in helping local units of government determine how to support older adults, I was motivated to continue my research and improve service delivery to Monroe County seniors.

Over the last four years, I have managed the engagement activities of an environmental health P30 center at Wayne State University situated in Detroit, Michigan. The center's focus on increasing awareness urban environmental impacts on health and translating environmental health research for lay consumption; has broadened my worldview and the way I think about decision making and behavior, to consider multiple spheres and contexts of influence. Environmental health research requires evaluating multiple pathways of chemical and non-chemical exposures, making an ecological framework a tool that resonates with my worldview. "However, it is not simply the fact that we experience something that matters. What matters is how we think and feel about the experience. In other words, *we problematize our experience*" (Lindlof & Taylor, 2002, p. 73). These cumulative experiences inform my passion, approach, and dedication to conducting senior-driven research that strives to improve the circumstances of older adults.

In 2014 the Monroe County Commission on Aging hired the Institute of Gerontology to conduct a county-wide needs assessment (NA). Since then, I have spent a considerable amount of time with my CAG. Visits included planning and collaborating with a seven-member NA Community Advisory Group who I conducted face-to-face interviews alongside, at meetings where findings were presented, other more formal

(strategic planning, national conferences) and informal (lunch, coffee) visits, and countless emails and phone calls. Though participatory approaches are laborious and challenging, older adults and researchers mutually benefit from collaborations (Blair and Minkler, 2009). My anti-ageist approach to research aligns with Bookman (2008) who advocates:

Elders themselves could be studied neither just as individuals, nor just as members of institutions, but rather as players in a dynamic group process that is constantly being constructed and reconstructed to meet the needs of its members and their changing life and health circumstances. It also allows a shift away from a paradigm that sees old age as a problem – particularly a medical problem – and towards a paradigm in which elders are seen as assets in the community (p. 433).

This dissertation is unique in that it is a follow-up to a CBPR NA study with aging experts and collaborators. With my three-person CAG, who agreed to participate as co-learners, we sought to cultivate and pursue answers to questions borne out of our former collaboration and shared a passion for improving service delivery. Conducting research that addresses social concerns requires more than showing up and doing the work; as a community-based participatory researcher, I value commitment, collaboration, and equity for knowledge that is reflective of Monroe County and improves available support for community-dwelling seniors. CBPR doctoral dissertations remain uncommon (Khobzi & Flicker, 2010); this research honored my commitment of offering myself as an instrument and resource for the benefit of community elders and close the gap between them and service providers, who struggle to reach them.

In-Depth, Face-to-Face, Semi-Structured Interviews

This dissertation used in-depth, face-to-face, semi-structured interviews with older adults who reside independently in Monroe County. The goal of this dissertation

was to understand how contextual forces shaped communication that influenced community-based services. Older adults were interviewed to understand how multi-level forces facilitated or inhibited community-based service utilization.

Interviewees were matched with my research goals to uncover local explanations of older residents' experiences as they "comment on the world surrounding them" (Lindlof & Taylor, 2002, p. 178). According to Lindlof and Taylor (2002), these interactions will reveal localized communication "customs and rituals" (Lindlof & Taylor, 2002, p. 176) that influence service utilization. Qualitative interviewing helps uncover "native conceptualizations of communication," and serves as a tool for "eliciting language forms used by social actors in natural settings" (Lindlof & Taylor, 2002, p. 173). Using a semi-structured, in-depth interview approach was optimal based on prior experience and interaction studies with older adults.

Healthcare interaction studies found that communication improved when older adults have ample time to fully express themselves (Fisher & Canzona, 2014) and personal biography is acknowledged (Nolan, Davies, & Grant, 2001). Vieder, Krafchick, Kovach and Galluzzi's (2002) study of older patients reported that time constraints and feeling "rushed" was a barrier to communication (p. 392). Leach and Jankowski (2017) reported a seniors' willingness to share personal information is greatest when seniors have ample time to express themselves and interlocutors are patient, personable, and friendly.

Likewise, there are communicative gains in wisdom and storytelling ability (Harwood, 2007) that in-depth interviews allow to unfold. Older adults exhibit higher

levels of narrative competence than their younger counterparts and tend to embed stories in larger narratives (Sparks & Nussbaum, 2008). This may be a strategy employed by those who value privacy and are less likely to disclose information for fear that expressing their concerns might portray vulnerability (Sparks & Nussbaum, 2008).

Attending to both communication and context, the interviews are aligned with social ecological positions that summon attention toward everyday naturalistic occurrences as a way to understand behavior (Bronfenbrenner, 1979). In response, I met seniors at locations of their choice where their daily lives occurred at volunteer sites, county fairgrounds, in their homes, senior centers, in a Snack and Yack group, senior housing apartments, libraries, and in one county building. These spaces and places were opportunities to observe older adults' performance and practices (Lindlof & Taylor, 2002). I intended to allow meaning to emerge from interviews that captured recalled stories, sparks of interest, and experiences.

Participatory Approach

The research questions emerged from former collaborations; thus this research was infused with the combined subjectivities, personal interests, and concerns of myself as well as my CAG. Individual conversations and meeting in 2017 allowed for settling on research focus, the utility of the research study for the CAG, and willingness to contribute as partners. The methods discussed below were developed through face-to-face meetings, phone calls, and countless emails. The approach was also informed through discovery as interviews progressed and surprised us all, forcing methodological adaptation to the social and physical ecology of community-residing elders.

Community Advisory Group

Each of the three members was over the age of 65 and experts on aging through personal and professional experience working in aging services and support for a combined 60+ years. Having spent a considerable amount of time working in the community, I was fortunate to have established relationships and shared goals with my CAG that were built over the past four years.

Pam LaPan is a 73-year-old, lifelong Monroe County member, and appointed member of the Monroe County Commission on Aging representing District 7. She accompanied me during former interviews and stressed the importance of the “transfer of trust” between participants and an *outsider* (me, the researcher). In 1978 Pam was hired as an outreach coordinator at the Monroe Senior Citizen Center and has been retired since 2006. She currently receives between five to ten phone calls per day from people needing her help. She is an aging well advocate and resource to many in her community.

Joe Grifka is 72 years old and in an encore career as Director of the RSVP (Retired & Senior Volunteer Program) at the Monroe Center for Healthy Aging. Joe spent eight years working with abused children and nearly 30 years focused on homelessness. Contact has been maintained with Joe through emails and aging conferences including his attendance at a Monroe County based presentation (Leach & Jankowski, 2017) at the annual conference of the American Society on Aging; where he spoke, reinforcing our findings and speaking to the collaborative nature of our work.

Sandie Pierce is 69 years old and currently the Executive Director of the Monroe Center for Healthy Aging. Sandie was instrumental in assisting with NA project logistics

and reporting. She has 39 years of experience working in non-profit and 14 years of experience at the Monroe Center. Sandie has continued to remain engaged with the NA project, despite it concluding more than two years ago, including reviewing and providing critical feedback for a manuscript being prepared for publication.

Our first dissertation related group meeting was in February of 2017 at the Monroe Center for Healthy Aging (MCHA). Sandie Pierce is the Executive Director of the [senior] center, and her office is located on site. Joe Grifka directs the Retired and Senior Volunteer Program (RSVP) that is housed at the MCHA and has an office there as well. The MCHA is approximately one hour south of my house and approximately 15 minutes north of my third CAG members' home. Pam LaPan is a retired outreach coordinator for the MCHA and currently an appointed member of the Monroe County Commission on Aging. Collectively it was decided that the best meeting place would be the MCHA at predetermined meeting times, though in one case an emergency meeting was called with two days notice after an interview prompted concern for the well-being of an interviewee. One final note, the MCHA is housed in an affordable housing complex serving 200 older adults in Monroe County, making for a very active environment. Rent is based on 30% of seniors' income after medical expenses.

The CAG shaped the study design at many levels. My original focus was on seniors age 65 and older; the CAG was more interested in people age 75 and older who are in greater need of assistance than younger cohorts. Likewise, I began this inquiry with a focus on rural dwelling seniors, though the geographic boundary had little relevance for the CAG and more broadly the Commission on Aging who may use this study's findings

to inform policy and practice in more populated areas. The interview approach and instruments were also designed with the CAG and are detailed later in this chapter. Meeting details are listed in Table 2 to illustrate the progression of our work.

Table 2

Community Advisory Group Meeting Summary Outcomes in 2018

Date	Outcomes
February 12	<ol style="list-style-type: none"> 1. Overview and summary of dissertation, what is a dissertation? 2. Reviewing the Community-Based Participatory Research approach 3. Determining focus including setting, e.g., rural v. urban or metropolitan 4. Establishing boundaries for sample, e.g., age 75+ most vulnerable and growing group of service users 5. Determining community-based services focus, use Monroe County Guide as a primer for discussion; leave each person with a guide 6. Reviewing qualitative methods and approach, focus groups v. interviews, lessons learned from previous study 7. Setting meeting times and frequency, roles, goals, and future research
June 5	<ol style="list-style-type: none"> 1. What is the IRB? 2. The social ecological model, an overview 3. Research documents discussion, language changes to discussion guide re friends; technology use of phone for timing problematic, advice on collecting income information 4. Oral consent form language changed 5. Budget discussion and prioritizing 6. Projected timeline 7. IRB amendment submitted
July 25	<ol style="list-style-type: none"> 1. Vulnerable subjects and protocol for reporting, e.g., bed bugs, fraud 2. Resources for veterans 3. Illiteracy and disseminating the questionnaire 4. Recruitment, reach out to those already made contact with in former study to reduce barriers of trust 5. Maximum variation sampling for action research, clustered in Monroe City, need greater span per Commission on Aging 9 Districts, geography less important than older, living alone, low income

	6. Selection, first 10 participants were largely women, more men, less clustering in Monroe City
	7. IRB amendment submitted
October 18	1. Interviews summary, sample, recruitment, mapped interviews
	2. Interview format and length of interactions
	3. Questionnaire results, 100% response rate, e.g., income question per CAG recommendation to explain why I'm asking the question
	4. Data processing and management report, e.g., Otter app, data cleaning using ExpressScribe and foot pedal, uploaded to Atlas.ti
	5. Social Ecological Model review, how it's used at this stage
	6. Looking at the data with a SEM lens, preliminary codes as determined by level
	7. Analysis: Individual and interpersonal level
October 30	1. Analysis: Organizational level
November 8	1. Analysis: Organizational level
November 29	1. Analysis: Community level
	2. CBPR: Reflections and evaluation

Meeting times ranged from 70 to 180 minutes with an average meeting time of 120 minutes (two hours). The brief snapshot of our meetings illustrated in Table 2 does not fully represent the amount of effort the partners put towards the research project. For example, when we gathered at our first research study meeting in February one of my CAG members stated she had read my dissertation prospectus three times to ensure she gathered every morsel of information. I explained the goals and requirements posed by a group of academic advisors and how the academic goals may converge from the CAG goals and anticipated outcomes. Throughout the process, I was committed to being transparent and sent meeting documents in advance for review, followed up with requests for additional information and questions, and kept in touch regularly via phone calls and

email. As I talked through the process of Community-Based Participatory Research, I illustrated how the work could continue once the academic portion of the research concluded.

Data Collection

This study used in-depth, face-to-face, semi-structured interviews with men and women aged 75 years and older who resided independently in Monroe County, Michigan. Interviews were conducted and analyzed using a participatory process with the CAG to ensure the “authenticity of findings” (Cashman et al., 2008, p. 295). Interviews lasted between 55 and 117 minutes; the average interview times was 82 minutes per person. Nearly twenty-six (25.8) hours of qualitative interview data were audio recorded. Conduct a study that was community-based, participatory, and naturalistic, required extensive travel. A total of 830 miles were traveled, accruing an additional 13.4 hours devoted to the research project. The next section will describe the criteria, selection, size, recruitment, format, and procedures used to assess the study participants. Followed by details regarding resulting data management and analysis.

Participants

A total of twenty people, aged 75 years and older, participated in this research study. This section outlines the ecologically attuned methods used for during the in-depth interviews, including criteria for participant selection, size, recruitment, interview format, and procedures and how a participatory process informed my approach.

Criteria. To be eligible as a participant for this study the person needed to be at least 75 years old and reside in Monroe County. Individuals residing in institutional

settings, such as a nursing home or assisted living facility where support is easily available, were excluded. This ensured that the participants had the experience and knowledge relevant to the research purpose - understanding multi-level influences of service utilization in later life. Lastly, the criteria required participants be willing to meet for an anticipated one-hour, audio-recorded interview.

Recruitment. Participants were recruited through community contacts. My CAG assisted by referring contacts matching the criteria and recommended contacting former research participants from interviews or focus groups during research conducted in the community in 2014 and 2015. Of the 33 former participants, one was able to participate. I attempted to contact the other former participants; however, they were either too young (4), too busy or not interested (3), picked up and hung up the phone during repeated attempts to communicate via a landline telephone (2), relocated out of Monroe County (1), had their phone lines disconnected (9), or their health was too poor to allow participation (1). After leaving phone messages for another five participants and not hearing back, I continued to call the final eight up to three times each but did not leave messages and was unable to connect with them. One former participant, who was too young for the current study, was a caregiver for her two parents who had died since our last meeting and eagerly assisted with recruiting. She and other community contacts continued to assist, verifying that a “chain referral strategy” (Schensul, Berg, and Nair, 2013, p. 173) was an effective way to recruit community insiders. Community contacts were instrumental in referring participants including Suzy Hurley, Chronic Disease Prevention Coordinator at the Monroe Family YMCA; Joe Grifka, Retired Senior and

Volunteer Program Director; Sandie Pierce, Monroe Center for Healthy Aging Director; Pam LaPan, senior advocate and District 7 Commission on Aging Board Member; Dianne Carroll, Bedford Senior Center contact; Jeff McBee, Director for the Monroe County Commission on Aging; Amy Driehorst, Bedford Township Facebook page administrator; and Carrie Pitzen and Brandon Roof of the Monroe County Opportunity Program, and one interviewee who distributed my study flyer to a friend (snowball sampling = 1).

Reaching research participants was challenging as phone calls were made leading up to the primary voting cycle, leading several people to immediately pick up and terminate phone calls to their landlines without speaking. To counter this response one senior center director, advised I make calls to participants she had identified as over the age of 85 from her location's phone. The participants quickly recognized the phone number and answered the telephone calls, establishing contact with three interviewees. The same director also mailed fliers to people matching the research criteria, which one recipient responded to and was subsequently interviewed.

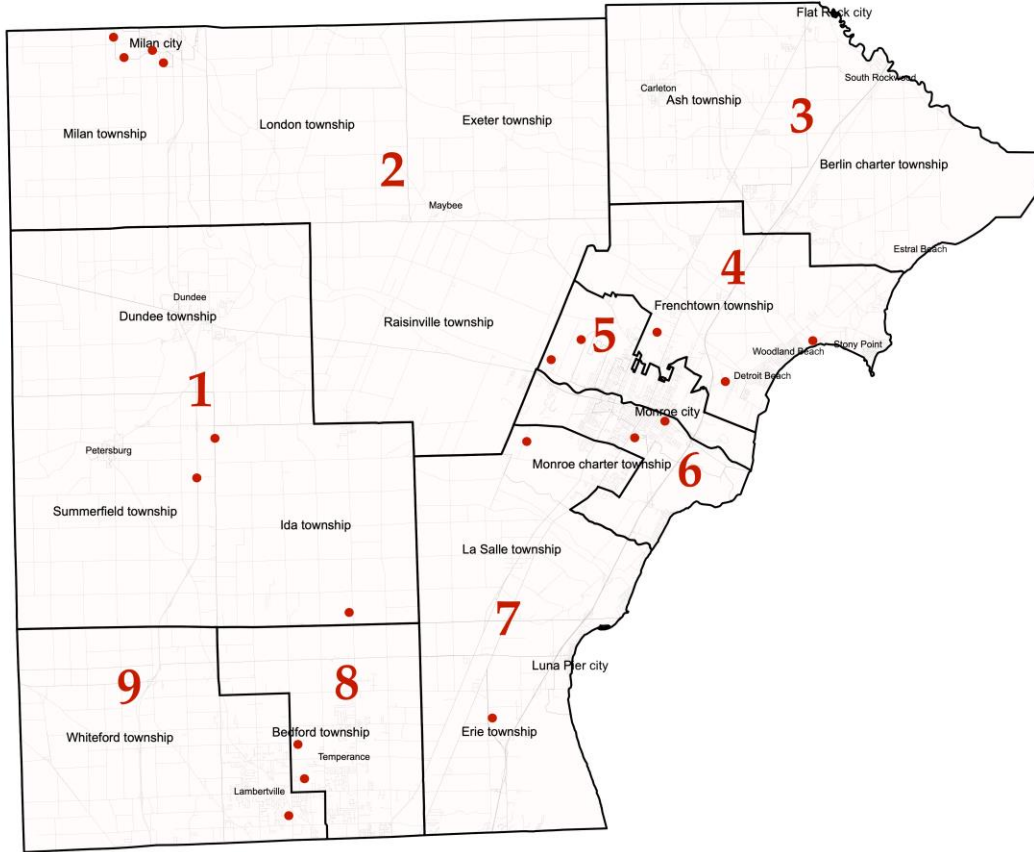
Selection. This qualitative study sought participants “who fit the study’s criteria” (Tracy, 2013, p. 134), and represented maximum variation regarding, 1) the CAGs focus and concern for the county’s most vulnerable seniors including those over the age of 75, and 2) geographic location to be able to gain insight from each of Monroe County’s nine Commission on Aging districts. The sample of participants lived in metropolitan residential neighborhoods, rural homes, low-income HUD housing, senior condominium communities, beach houses, and low-income apartments; with varying interpersonal

circumstances including being married, widowed, separated, partnered, single, isolated, and one woman who at 96 was providing care for her 70-year-old son who suffered a stroke and lived with her. Each person that I spoke with over the phone was screened for eligibility, as per the criteria attached in the appendices.

Ecological validity can only be achieved by considering the differences in physical settings, but I also sought macro-level setting variance (see Figure 1 below) among institutions and the governing environments where they were situated (e.g., Commission on Aging districts). Conducting an ecological study that was community-based required interviews be conducted in settings identified as familiar by participants. Interviews were conducted in a community room of a low-income housing building (2), senior condominium (1), county building (1), libraries in different parts of the county (2), as well as in senior housing apartments (2), senior centers (3), county fairgrounds (1), and residential homes (8). A total of 830 miles were traveled, accruing more than 13 hours of drive time. The map below illustrates geographic variation by Commission on Aging district represented by nineteen marks. The 19 marks approximate each participant's residential location, one which was duplicated because a couple was interviewed individually but shared a home address.

Figure 1

Interview Locations Per Monroe County Commission on Aging District



The CAG expressed concern that participants may not respond to questions about income and advised I explain the purpose of collecting that information in detail, which resulted in 100% survey completion by all 20 participants. Participants ranged in age from 75 to 96 years old, with a mean age of 83 years overall; the female group leaned slightly older with a mean age of 84 years, male participants had a mean age of 81 years. Female participants largely lived alone (see Table 3), though two were married, and one (96 years old) had her son living in her home for whom she provided care. Half of the male participants lived with their spouse, and four were widowed. The remaining and

oldest male participant, who was 93, was married though his wife resided separately in an assisted living facility, and his grandson lived in his basement.

Table 3

Socio-Demographic Profile of Participants

	Female	Male	Total
Number of Participants	10	10	20
Age (mean)	83.6	81.4	82.5
Range	77-96	75-93	75-96
75-79 years old	1	4	5
80-84 years old	6	2	8
85-89 years old	2	3	5
90+ years old	1	1	2
Education			
9 th – 12 th grade	-	1	1
High School/GED	2	1	3
Some college, no degree	4	6	10
Associate's degree	1	-	1
Bachelor's degree	1	-	1
Graduate/Professional	2	2	4
Income (per month)			
\$800 – < \$1,200	1	-	1
\$1,200 – < \$1,700	5	-	5
\$1,700 – < \$2,100	-	4	4
\$2,100 – < \$2,500	1	-	1
\$2,500 – < \$2,900	-	1	1
\$2,900 – < \$3,400	-	1	1
\$3,400 or more	3	4	7
Marital Status			
Single/Divorced	5	-	5
Widowed	3	2	5
Married/Partnered	2	8	10

Household			
Live Alone	7	4	11
Live with spouse	2	5	7
Live with grand/child	1	1	2

In terms of education one participant had not graduated from high school or pursued a GED, three did finish high school, and ten went on to college, though did not receive a degree. The remaining six went to college and earned an Associate degree (1), a Bachelor degree (1), or Master's degrees (4). Seniors were asked to report monthly household income, as opposed to annual, due to easier recall of social security check amounts and other sources of income. Female participants had fewer financial resources than males. One female participant reported earning between \$800 and \$1,200 per month, five reported between \$1,200 and \$1,700, one between \$2,100 and \$2,500, and the remaining three reported \$3,400 or more per month (two of whom were married). Monthly income for men started at a higher level with four reporting \$1,700 to \$2,100, one between \$2,100 and \$2,500, one between \$2,900 and \$3,400 and the remaining four participants earned more than \$3,400.

Size. In qualitative research, sample size cannot be predicted (Lindlof & Taylor, 2002). Sample size is one spoke on a wheel of what drives excellent qualitative inquiries. Utilizing a participatory approach, constructed through and with people who possess contextualized knowledge and expertise on aging and service provision communication, lends itself to an authentic and credible study. My immersion in Monroe County preceding this study is not separate from the activities of the current one, and hours spent

in the field are facilitated by input from community insiders to achieve multivocality (Tracy, 2013).

Sample size was contemplated when conducting the interviews and during analysis, considering whether the data “attend[ed] to my research foci in an interesting and significant way” (Tracy, 2013, p. 195). As a researcher, in terms of sample size, I believe “the most salient issue to consider is whether the data collected will substantiate meaningful or significant claims” (p. 232). In later stages of analysis, sample size was deemed ample when a “critical threshold of interpretive competence” was reached, and new insights were not being discovered (Lindlof & Taylor, 2002, p. 129). Based on this information, 20 interviews were completed.

Interview format. As mentioned previously, in-depth, face-to-face, semi-structured informant interviews were the best methodological approach for several reasons. First, this approach fosters the preference of older adults to not feel rushed during the conversation (Vieder et al., 2002) and allows them ample time to express themselves (Fisher & Canzona, 2014). The approach allows for lengthy narratives, which older adults often embed with their concerns (Sparks & Nussbaum, 2008), and time to share personal biographies (Nolan, Davies, & Grant, 2001).

The ecological health communication goals of this dissertation were achieved by conducting the interviews in native settings, as determined by the participating seniors. Theorists warn that inquiries conducted in contrived settings fall short. “If researchers do not connect with the people they study or situate those individuals into the contexts in

which they live, their capacity to capture the phenomenological features that affect health will be limited at best” (Moran et al., 2016, p. 137).

A semi-structured interview guide (Appendix C) was used “to stimulate discussion rather than dictate it” (Tracy, 2013, p. 139). Unlike strict interview *schedules* used in large-scale telephone interviews, a less structured *guide* allowed for “emic, emergent understandings to blossom, and for the interviewees’ complex viewpoints to be heard” (Tracy, 2013, p. 139). The guide allowed room for spontaneity through a flexible interview approach (Lindlof & Taylor, 2002) and attuned to seniors’ strengths and preferences to embed information in narrative form. The interview questions were written to attend to my research questions and research goals - to understand the contextual influences of community-based service use. Questions were revised with the CAG to ensure questions were ecologically sensitized to participants. This included changing the questioning language for inquiries regarding interactions with friends and family. The CAG explained that late old age means outliving lifelong friends and encouraged changing language about interactions with friends and family, to asking who participants interacted with on a typical day. A considerable amount of time was allotted to hear autobiographical accounts of participant’s lives at the beginning of the interview to allow for friendly visiting instead of questioning (Lindlof & Taylor, 2002).

Procedure. Once participants were deemed eligible to participate in the study, they identified their preferred meeting location. We then established a date and time that worked for both of our schedules. Prior to commencing the interview and questioning process, I explained the process to the participants, per the University’s informed consent

policy. I provided participants with a size 12 font information sheet that I verbally reviewed; ensuring that even if the text was illegible, potentially due to a lack of reading glasses or illiteracy, our intended communication was clear. After my first interview, I scheduled a meeting within days with my CAG to discuss making edits to the informed consent based on my experience in that home – both the inability to read and the situation detailed next.

Upon entering the first participant's home, I was invited to join him in front of his picture window sitting in two large upholstered Lazy Boy rocking chairs. Approximately 90 minutes into that interview I observed what I believed were bed bugs swarming my left arm, which I then noted were also on my right arm. I asked the participant to show me a lockbox that the fire department had recently installed on the back door. I gathered my two bags and phone, and we walked outside together, where we talked for nearly another 30 minutes. After returning home, I followed instructions regarding how to address potential bed bug infestation exposure, so that I could confirm my observations were accurate. After viewing stock pictures of bed bugs and subsequently experiencing the bite patterns on my torso for the next three weeks, my initial observations were confirmed. In response to this first interview, the CAG helped amend the consent form to include language for reporting vulnerable circumstances to recommended outlets. The edited consent form was submitted to the IRB for amendment and approval.

Each person that read the consent form agreed to continue with an audio-recorded interview. The CAG deterred me from using a cellular phone to keep time for the interviews; in fact, they recommended I not have my cell phone visible during the

interview. This was in response to recent complaints by elderly citizens about employees being in their homes on cell phones, which was a source of frustration. Before my first interview was scheduled, I familiarized myself with a transcribing software application that I could access and utilize through my phone.

To determine how best to use this time-saving application while respecting the participant's cell phone concerns, I met with the CAG to discuss options. The CAG agreed to the cell phone use but that each participant should be informed about why the phone was present. I explained the process of transcribing interviews to each participant, the length of time it generally took to complete a transcription, and the amount of time I estimated using the application would save. I assured each person that I had enabled the "do not disturb" function on my phone so that any text or telephone communication I received would be silenced until I disabled the function.

At the start of each interview, I spent time disclosing my background, employment, student status, and my interest in aging matters working at the Institute of Gerontology as well as former research conducted in Monroe County. This initial engagement set the tone for the informal interview approach by putting participants at ease and building rapport (Lindlof & Taylor, 2002). I alerted participants before the interview started that I would be taking notes so that I could circle back to statements and points of interest if needed.

Demographic information was collected from participants via questionnaire (see Appendix E). To prompt discussion about services, and to also provide information about them, each participant received a copy of the "Senior Source & Family Guide." A booklet

and guide to all programs and services available to Monroe County seniors. Often, the first page was opened to this Monroe County Guide (referred here forward as the MCG) to services, and the index was reviewed and discussed. In many events, I encountered military veterans that were not aware of benefits they were eligible to receive. In meeting with the CAG about this matter, they advised I circle two phone numbers in the book for the seniors to reference. I followed this advice three times during the interviews.

In keeping with the principles of a CBPR approach, each participant was notified that the study findings would be presented throughout Monroe County. I offered to follow up via telephone and to invite them to future presentations, which many expressed interest in attending. Participants were provided with a \$25 gift certificate to compensate for participating in the study. The CAG advised I offer Kroger gift certificates, as it was the most accessible store for residents across the county.

Aligned with Bronfenbrenner's (1979) assumption, this CBPR approach attended to my "strangeness," or being an outsider, by having a community partner connect me with participants. We were able to establish common ground by discussing how we each knew the person who connected us. Talking about the time I spent in Monroe County conducting former research also sparked the interest of participants and allowed for discussion about matters relevant to them (*e.g.*, the work of the Commission on Aging). Bronfenbrenner's ecological approach was created in response to limitations of developmental psychology conceived as, "the science of strange behavior of children in strange situations with strange adults for the briefest possible periods of time" (Bronfenbrenner, 1979, p. 19). Conducting face-to-face interviews using a participatory

approach attended to the “social relevance” of Monroe County senior’s environment (p. 19) and preference for visiting and having company.

Data Analysis

Data collection and iterative analysis often occurred in tandem through a reflexive process (Tracy, 2013). This section describes the methods for managing the audio recordings of interviews, field notes from interviews, and participant questionnaires. This section also includes a description of the participatory process of being immersed with the data as the CAG and I progressed through analysis, and I continued to collect insight from new participants. Methods for managing and analyzing the data are discussed in this section.

Data Management. All qualitative data was captured using an audio recording and transcribing application, Otter.ai Version 2.0.5 voice note software, via my Apple 7 iPhone iOS 12.2. The recording outputs were accessed through the Otter.ai online website where the audio recordings and transcriptions could be downloaded. The software and website were not user-friendly for “cleaning” the data. The software had limited capability in accurately recording phrases and words.

It was evident that uploading the audio files individually to ExpressScribe and using a foot pedal to “clean” the inaccurate exported transcription from Otter.ai was effective. The text files were downloaded in Microsoft Word format, and audio recordings were downloaded as MP3 files. Each audio recording and transcription pair was assigned a matching numeric code, identifying the participant. The downloaded text transcriptions were edited to reflect the conversations verbatim and typically completed

within one to seven days following the interview. This is an intensive process though Tracy (2013) contends, “One of the most important parts of transforming embodied interviews into usable data is transcribing” (p. 177). Carefully listening to conversations during the transcription process, provided an opportunity to being immersed in the data. Transcribing data allowed for clarification of words and meaning without the distraction of being an active participant in the research event (Tracy, 2013).

Once the interview data were transcribed and “clean,” the completed files were uploaded into ATLAS.ti version 8.2.4, a computer program for systematically analyzing qualitative data. My written observations and field notes were revisited frequently during the transcription and analysis phases to resolve information gaps.

Analysis and Collaborative Interpretation. I began my analysis through open coding, or *in vivo* coding. I read through the interviews and used the ATLAS.ti software function “Code In Vivo” to code interesting keywords and phrases to ensure that the individual’s perspectives were acknowledged and not restricted by preconceived notions (Tracy, 2013). “A priori theory can sensitize one to what *could* be important, but it should not override or overshadow the meanings that the researcher discovers in the scenes being studied” (Lindlof & Taylor, 2002, p. 215). I recorded memos while coding the data *in vivo* and revisited my field notes for points of clarity and to jog my memory of the circumstances regarding (*e.g.*, location, participant) the conversation. Reading through the transcripts, writing memos, revisiting notes, and coding was part of the data immersion phase where conceptions and sense-making are not resolved, but steeping towards development (Tracy, 2013).

After the inductive coding activity, I used a deductive approach to analyze the data in ATLAS.ti. I recorded memos in the ATLAS.ti software while deductively coding the data to capture analytic asides, reactions, and to note ideas that could be referenced later. Each transcription was reread and responses categorized using an ecological framework (Moran et al., 2016). Tracy (2013) advises coding to begin with broader categories, such as those in the SEM, and then fracturing those data into second-level codes, which results in “finer distinctions” made later in the analysis process (p. 190). Excerpts were categorized using the SEM into individual, interpersonal, institutional, community, or systems level by assigning quotations a color code, or in some cases more than one. Two additional categories were assigned a color during coding, including meso level interactions and an emic category labeled “technology,” which was ambiguous in fit but recurring in conversations. I allowed the data to dictate the analysis and focused on topics as they emerged and less on the text in this early stage of open coding (Lindlof & Taylor, 2002). Emic *in vivo* codes were then revisited to identify where they might overlap with the etic themes coded per level of the social ecological model.

Once the data were organized into the general eight categories, I felt confident that fracturing the codes with specificity was the best approach before working collaboratively with the CAG. The CAG expressed an appreciation for the social ecological model in early meetings and the sub-themes that were identified per contextual level.

The ATLAS.ti software was incredibly helpful for reducing hundreds of pages of data into manageable categories, so I turned to a manual approach and extracted the

coded data from the software (see Appendix F for a screenshot example of this data coding). The “Quotation Manager” function of ATLAS.ti allowed me to sort all 443 coded excerpts. I then filtered the data by color code and exported reports grouped excerpts by code enabling export at the individual level (116 coded quotations), interpersonal level (105 coded quotations), institutional level (181 coded quotations), community level (28 coded quotations), systems level (28 coded quotations), meso level (19 coded quotations), as well as quotations coded as “technology” (20 coded quotations). The number of coded data points extracted was 497, due to some excerpts being assigned more than one code, thus when split into categories, 54 quotations appeared in more than one categorical report.

The data were transferred into a Microsoft Excel workbook, and individual worksheets renamed per each category and formatted for printing. I used the printed copies to code the excerpts into sub-categories using the SEM as a legend and adding codes *in vivo* when possible so that the CAG could review and interpret the words of the participants. During this phase, I revisited the literature and frequently revisited my research questions to ensure the themes were relevant to my inquiry.

In keeping with a CBPR approach, and to ensure they participated in the process as a measure of quality, the CAG was included in the analysis. When the categories were split into finer level codes, I scheduled a meeting with the CAG to analyze the data. Before meeting an overview of the SEM and [a brief educational video link](#), that described qualitative data coding and analysis, was provided to the CAG as well as our four-page discussion guide. The initial coding was purposely broad enough for the CAG to

understand what I did and be immersed with the data. This also allowed for determining as a group, what “key codes, definitions, and examples” would be used to focus the analysis (Tracy, 2013, p. 191). During our first meeting to read through excerpts, one of the CAG members speculated (though I did not confirm or deny) who the comments belonged to. The CAG member was able to accurately match comments with at least two individuals that I could recall without referring to the coded version of the data. It became clear that in order to protect the study participants’ anonymity, I needed to employ a strategy that made the excerpts more difficult to match. Therefore, I decided to fracture the quotations and attribute to more than one pseudonym so that it would be more difficult to distinguish each of the participant’s voice. Thus, the results section includes twenty-three pseudonyms though only twenty individuals were interviewed. In addition, identifying characteristics and references were omitted, such as “the oldest female participant said,” so that the excerpts were identifiable, which resolved the issue during our next meeting.

The CAG assisted in clarifying questions and interpretations, resolving specific questions as they arose as early as the first interview, but also problematized some of the categories and quotations, which guided the analysis and reinforced the integrity of my interpretations so that they were *our* interpretations. This collaborative effort is said to “enhance collection and interpretation of data” (Baker, Motton, Barnidge, & Rose, 2013), by capitalizing on contextual wisdom and assigning meaning.

After meeting with the CAG, I returned to a manual analysis approach though this time with input from the CAG to inform the synthesis of codes, which included a deeper level of “interpretation and identifying patterns, rules, or cause-effect progressions”

(Tracy, 2013, p. 194). Field notes were referred to regularly to reexamine thoughts, analytic asides, lessons, connections, and interpretations (Mayan, 2009). Second level coding informed the number of interviews I completed to ensure the analysis “attends to my research foci in an interesting and significant way” (Tracy, 2013, p. 195).

The third stage of a CBPR dissertation includes analysis and interpretation of results as reviewed above but also requires dissemination and action (Hacker, 2013). Results will be widely disseminated through relevant networks and to the Monroe County Commission on Aging so that implications for practice are understood. Decisions about how to implement future actions, post-dissertation, will be determined with the CAG in a later phase and are described in Chapter 5.

Quality Measures

This study’s inclusion of older adults as co-learners, while uncommon in studies, was a quality measure to capitalize on the typically underused community resource and wisdom accumulated over their life course (Bailey, 2009; Blair & Minkler, 2009). The inclusion of older adults here is novel and improved the overall approach so that the study was sensitized to seniors, inclusive, and aging expert lead. Older adults’ cumulative life experiences should be considered assets when conducting research, ensuring that findings are relevant to addressing their well-being (Blair & Minkler, 2009).

Traditional research studies and dissertation studies in particular, often do not have the benefit of working with community members to identify participants, recruit those afflicted by the issues, and share in the decision-making that aims to increase quality, relevance, and novelty of the research (Hacker, 2013). Community-dwelling

seniors added value and strengthened this study's findings by increasing credibility through member validation and the capacity of the researcher and community. The CAG was involved in all aspects of the dissertation and responded quickly to unforeseen issues when they arose.

The quality of this dissertation is ensured by the topic, one worthy of study as it had both theoretical and practical value with the goal of improving the social conditions of Monroe County older adults. Integrating and synthesizing the varying components from multiple levels strengthened the research findings and added to the quality and credibility of the project. This dissertation gave a voice to older adults and honored those voices by collecting meaningful insight and perceptions on community-based services. Which can be used to resolve pragmatic service issues, improve interactions with community-based service providers, and meet the communicative needs of the community's elderly citizens.

Summary

There are multiple spheres of interacting contexts that influence people. These multi-level dynamics affect an older adult's quality of life and well-being and influence their behavior (Burlison et al., 1994). The proposed study aimed to unravel the complex interweaving of multi-level influences to help understand *why* services are used or avoided in later life. "It is only when research is predicated on the desire to answer the 'why' question that one can lay claim to engaging in 'theoretically driven' research" (Berger, Roloff, & Roskos-Ewoldsen, 2010, p. 10).

To address the looming, complex challenges of supporting the heterogeneous nature of community-dwelling seniors, multipronged approaches such as CBPR, ecological frameworks, and qualitative methods are congruent to the task. My background informs the yet to be explored foreground, and as a qualitative researcher, my exploratory approach implores introspection and infusion when “absorbing, sifting through, and interpreting the world through observation, participation, and interviewing” (Tracy, 2013, p. 3). My goal is to move closer to understanding the complexities of what it means to be supported by one’s community, through a dissertation that aspires to be theoretically, practically, and methodologically fruitful. “When ecological validity is considered, the data gathered during a study will capture a more robust representation of reality, which in turn can lend that data a persuasive weight it would otherwise lack” (Lerner & Gehrke, 2018, p. 40).

CHAPTER 4: RESULTS

The facilitating and inhibiting human and mediated communication findings were organized by level in order to respond to each research question. The research was attuned to influences on community-based service utilization at each level of the social ecological model. The findings are presented according to level of influence, starting with internal influences then moving to external influences from proximal others and ending with the most distal influences. The results begin by describing individual level influences including awareness and perceptions about community-based services and communication inhibitors experienced from technology skill limitations and physiological changes. Second, the microsystem findings reveal how network dynamics, group norms, and interpersonal interactions influenced utilization. Third, exosystem practices and processes within and among community-based organizations and the built environment influenced the ability of older adults to access and utilize services. Fourth, the macrosystem findings summarize how societal norms and values play a role in utilization. Lastly, the mesosystem findings illustrate the connections that bridge communication resources in the environment. Various and overlapping communicative phenomena are described according to participants interactions with individuals, organizations, and technological resources including message content, format, source, and channel.

Individual Level

Participants had minimal awareness about community-based services and noted deterrents to utilization that centered on misfit. This included perceptions about services

as well as fit to their preferences and interests. Participants discussed physiological changes that manifest later in life and how that impacted utilization as well.

Lack of Awareness

As revealed from the reviewed literature, the non-utilization of community-based services by seniors is driven largely by the lack of awareness. Thus, it came as little surprise that seniors reported being unaware of community-based services. When asked why older adults don't use services participants, a common reply was, "Probably they're not aware, a lot of them are not aware of what's available." They pointed to knowledge deficits and a lack of understanding; one participant explained, "I would think it's more in the communication, they don't know it's there. Not truly aware." Will¹ explained that individuals had little awareness and insight about specific features about services; and by extension, more information may encourage utilization:

A lot of people don't know about the features they can use, a lot of people don't know about em. It's getting the people to know. Then you think they would use them a lot more.

Other participants described how they became aware of services through interpersonal, mediated, and organizational connections. Ella, who was new to a senior housing site, described greater connection to information about community-based services after attending gatherings in the community room and reading the newsletter that was disseminated to residents. She explained, "Until I moved here, I did not know anything

¹ Participant names have been replaced with pseudonyms to preserve confidentiality, in some cases more than one pseudonym was used per participant to ensure anonymity during analysis with the Community Advisory Group.

about any of the services.” Participants described learning about services through senior centers, newsletters, the local newspaper and by engaging in volunteer activities. Ernie was motivated to spread information about community-based services, stemming from his positive experience learning from senior center employees. He viewed himself as an information ambassador who trumpeted information about services to anyone he met. He explained how he shared information while volunteering at the local food pantry:

So when I talk to people, you know, I tell them, you know, well, you know, you can get these different services. And I tell them how to get in contact with them. I keep a card like yours with both RSVP, the center and the food pantry you know, and I tell, I'll give them their phone numbers.

Individuals who were active members in their communities and volunteered or were involved with a senior center reported feeling well informed about community-based services. Mabel had refused to seek help when caring for her husband while he was dying. Since then, she began volunteering at a senior center and disclosed, “I am reminded that when I need help, I can get it and Monroe has help. I've changed, I've changed my opinion.” Clarence also felt like he had access to knowledgeable people and inside information about community-based services through volunteering:

It's been helping me a lot by working here, as a volunteer. Because I get some inside information, so I'll point that out as a positive, it's helped me a lot. [senior center staff] is a wealth of information, and she knows how to steer you in the right direction.

Perceptions of Community-based Services “Fit”

Participants conveyed that services did not fit their interests, preferences, and were misaligned to their self-perceptions. Albert referred to the senior center as a place

where he thought people just, “sit around [and] play cards all day.” Others talked about activities being offered either too early or too late in the day. Lee explained,

The thing of it is, down there. They meet in the mornings . . . they started at eight o'clock in the morning play cards. Whoa, well I'm still getting out of bed at eight o'clock in the morning!

Millie similarly complained about the time of day that activities occurred, though she hoped that they would take place earlier in the day:

But the thing I don't like. I like to get up early and do things and they have their senior stuff like ten o'clock, eleven o'clock. That shoots your whole day. So that's the main reason.

Likewise, Agnes viewed the hours of operation of community-based services as incompatible with caregiver's schedules:

These agencies so many of them are open either from eight to five or nine to five, okay it's the work hour, the daughter and their son, they all work!

Male participants described how self-perception deterred service utilization; they did not consider themselves as a target user either by age or role. For example, Eddie explained that he didn't visit the local senior center because he didn't want to interact with others in his age group, “I haven't got to where I want to go down and hang around with a bunch of old people, even though I'm 85.” Henry validated how age perception impeded utilization by recounting his father's perception of old age:

I can always remember my dad. He belonged to the Monroe center, and however he says I don't want to go over and see those old fuddy duddys, well he was one of them [laughing]. He didn't want to be real about it.

Albert, who was eighty-one, also echoed these sentiments, “I knew about the senior center up in [place] for a long long time. But I thought that was for old people.”

Individual's perceptions of age was not the only impediment to utilization; this experience also pertained to providing care. For example, targeting services to "caregivers", including those who provide assistance to a spouse, may not resonate or induce reception. To illustrate, Albert was frustrated by being unable to obtain information and resources from the doctor who diagnosed his wife with Parkinson's disease. He recalled discovering an important flier, five years after her diagnosis, at a local grocery store that informed them about a Parkinson's disease exercise program. Albert continued to describe a sequence of interpersonal relationships, information, brochures, and materials that they acquired through connections made through that program. When I asked Albert if he was aware of or had used any caregiver support resources, he firmly responded, "No." I then asked Albert, "Do you consider yourself a caregiver?" He again responded, "No, I hate that word." He went on to explain:

I really truly do not like that word. I'm a husband. Yeah. And I've been married for 58 years. That's my number one job. I took care of her when she we had five children. And she's raised them all when I was on the road traveling as a salesman off on my two weeks active duty in the Navy and all this other kind of stuff that I did. I tried to maintain it financially, and where she didn't have to worry about that. I gave her what she needed when she needed it. I thought she would outlive me.

I see these ads for caregivers. I just. I'm not [a caregiver], it's part of my personality. I'll take care of my own.

Attitudes Toward Technology

Older adults repeated conveyed difficulties associated with new technologies and how they felt inept to use some devices. They also expressed the limited skills they had for using computers, and perceived that the devices were conduits for fraudulent activity. Dorothy described feeling social pressures to adapt to technological advancements and

devices. She explained that her children were coercing her to update her cell phone which, at ninety-six years old, she found challenging. She said:

They keep trying to get me one. I'm an old lady. You don't teach an old dog new tricks. This [cell phone] is hard enough.

Lee didn't use any form of technology, he had a landline telephone, and noted how rapidly things moved today compared to the 1950s:

And computers. I don't have a computer and don't have a cell phone. Yeah, they showed me, but when I was growing up in the fifties, 'Hello. Hello. This is Dick Tracy.' [laughing]. Never had that before. It's so fast today.

Few participants were eager to adopt technological devices that were described as difficult to use and complex or use social media. Dorothy indicated that she thought older adults in general were "computer illiterate:"

Old folks can't run the computers. I tried that. I have a lot of trouble . . . most of old people are computer illiterate.

Leonard, agreed with Dorothy and likely would have categorized himself as computer illiterate as well:

Our son, he has email and stuff and does a lot of stuff on the internet like that. But that's all Greek and we don't even have a computer . . . They keep talking about Facebook, but I got no idea what they're talking about.

Lucy did engage with technology and social media platforms to connect with her family members. However, she also described her reluctance to adapt to the advancements:

I didn't want a computer. I wanted a typewriter. They said, 'No Mom, you need a computer.' Okay. I could type, well you gotta have email! So a little bit, you get pushed into this technology.

Younger participants were less overwhelmed by technology. As Stanley, who was seventy-five explained,

I was a little bit blessed. The technology was starting to come when I was in the end of my [career]. But I had an advantage that if I had a problem, I had a secretary, I had a media specialist, come on down and fix this thing!

Having been exposed to technology before he retired meant that he wasn't as overwhelmed when compared to older cohorts. Despite being less overwhelmed, he believed that his age was the beginning of where the disconnect began for many seniors, "the truth is, there's a lot of people my age and older that don't want to touch a computer."

Participants often expressed skepticism about technological devices and articulated the belief that they were sources of fraudulent activity. For instance, Albert was sitting in front an Apple computer in his office where we chatted. I asked about using it as a source of information for services. He said that he had done some searching for health information with it, but it was not a device he trusted in general. He used it for very limited purposes like banking and to communicate with his children who lived several states away, though with skepticism:

People are skeptical more and more and more with this Facebook stuff going on yeah and all your personal information is getting scattered all over the world and tweeters. I never even thought about doing that I bet there's no attraction to me whatsoever . . . I bought it for, I bought it for the convenience of online banking for communications with the kids, families, emails. And that's what it's supposed to work for. Yeah, so what all the rest of this stuff, get rich scams; we don't do any online shopping. Yeah once in a while I'll buy some from a seed catalog or something like that but that's about it.

Results from this study suggest that participants attitude toward and lack of experience with technology limit their ability to connect with community-based service organizations. This also limits their ability to connect with others who may be conduits to information about them as well.

Physiological Changes with Advancing Age

The interview discussion guide did not include questions about physiological changes or age-related sensory decline. However, participants frequently described how these intrapersonal factors, including those associated with vision, hearing, and cognition, played an important role in impacting connections. They described how physiological changes resulted in strained communication with others, and how this resulted in decreased ability to obtain information about community-based services. Participants also described how physiological changes impeded service utilization because of the inability to drive.

Participants described strained interactions with those who lacked sensitivity and skills for interacting with older adults. Leonard indicated that a lack of interaction with seniors was the crux of the issue. Before his wife was moved to an assisted living facility, she received services from individuals who lacked experience interacting with older people:

There was a couple of the ladies that came in that take care of my wife, was that way, that just didn't have the experience in it. It didn't work out. But you can't step out of high school and come in to take care of people if you've never been around [seniors].

Dorothy used her priest as an example of being incompetent when interacting with seniors, “He could, he couldn't communicate with the old people. Ah...he didn't know how to talk to old people.” She speculated that training or exposure to “what it’s like” to be old by visiting nursing homes may help:

He just couldn't seem to communicate with people and especially the old people. And you would think that as a priest they would have had that training, but evidently not. All the training he had growing up, took over. Because he had no, no social graces with the old people at all. I don't know how you'd even correct that. Possibly if at the schools they'd have a class that would that they would take, and maybe go into a nursing home for half a day and work, and they will find out how things are done and what it's like [to be old].

Strained communicative interactions were impacted by response time, hearing loss and vision decline as described below.

Response time. Participants often referred to the rapid pace of society, as George said, "It's so fast today." Participants often described time constraints as problematic when interacting with others. For example, Lucy described her interactions with a local organization, "It's usually just, yeah, let's just get this done as efficiently as possible." The quick and superficial exchanges were incompatible with participant's desires. They did not feel as though community-based service providers had the time to talk to them, as Lucy explained, "They're too busy. They are so overloaded." She felt that budget cuts resulted in service providers prioritizing efficiency over sensitivity or having the time to listen to seniors.

Mabel noted that processing information in interactions required adequate time to process information, "Yeah, it's going to take a little bit longer to get my thoughts, to get our thoughts together." Mabel and Lucy felt that people needed to spend more time communicating instead of rushed interactions. Lucy used our telephone conversation, when I called to remind her about our meeting, to illustrate how the pace of speaking can result in a communication breakdown, "And when you called, you talk so fast. I couldn't even figure out what you were talking about. She explained that hearing issues could

compound strained interactions and advised, “So you [need to] speak slowly,” when interacting with seniors.

Response times are impacted by memory retrieval, common in very old age, which also calls for less hurried interactions. This is a recurring theme that will be expounded upon as a utilization hinderance at other levels. For example, Opal paused while telling a story to recall a name, which prompted her to explain the memory retrieval difficulties she had been experiencing:

I don't remember. Yeah, that was the other thing that happened to me in the hospital. I started losing my memory. I feel like I can't, it's names and things that I can't think of. There's a restaurant called the Cracker Barrel. I, I just did think about it, but normally I *never* can think of that rest. And I have to describe it, ‘You know the one with the rocking chairs on the porch.’

Her next sentence was delayed by trying to recall an instructor who taught a memory class that she had taken:

I did take a class with, ah, what was her name? ----- [lists names] or no. Anyway, it was on memory. And you know, when you go for a wellness visit at the doctor's office they give you five names, and then they talk about something else through the rest of the appointment. And then they ask you what the five names were. When I'm anxious. I don't remember things. And that made me anxious, very much so. Cause I wanted to remember those names, but I didn't. I remembered maybe two or three out of the five, but I didn't remember em all.

George indicated that he had short-term memory problems as well and explained how he coped by having his daughter accompany him to medical appointments:

I can remember the day [children] were born and things like that . . . I can remember things from years ago. But the thing is I think, did I eat breakfast this morning? I don't know.

My daughter, she goes with me to all the doctor's appointments every place I go she goes. And she's got a tablet. She carries a bag with her and a tablet and everything and she writes down everything the doctors say.

Taken together, these examples illustrate how participants interact in their communication environments. This information helps build a foundation for understanding how connecting to community-based services may be impeded in seniors because participants learn about services through interpersonal discussions. When older adults spoke about becoming aware of services, this awareness was often driven by interactions with other seniors who had the time to volunteer, serve in a civic role, or were a retired member of a community-based service organization. Thus, their shared age and sensitivities of aging circumstances make them an optimal conversant for the other.

Hearing loss. Participants described their everyday experiences that were impacted by poor hearing. The descriptions below highlight a number of barriers that service providers might encounter when interacting with individuals, either in person or on the telephone. First, Lucy described how hearing negatively impacted interactions, but cautioned that seniors were reluctant to disclose the issue:

Especially when you're dealing with seniors. A good percentage of them, have hearing aids. But the biggest problem is the ones that have hearing problems and won't admit it. And they yell at you all the time. And it's confusing because they're yelling, but they can't hear you.

She offered strategies for mitigating the issue by facing an older person so they can read lips to supplement missed information, and by speaking slowly and clearly:

Talk to the person, to the person and because so many of them have that [hearing] problem you know, speak slowly and clearly. . you can tell when you're looking at them and you know if they can hear you.

While making recruitment calls from a Senior Center (advised by the Director so people would be more likely to answer), the center Director entered the private room while I was talking to Leonard. She must have heard my strained talk; she whispered and motioned

for me to lower my timber. My high-pitched voice wasn't resonating with him, when I started speaking in a deeper tone, our conversation immediately improved. Leonard was kind to explain that it could be his phone and not just my poor skills, or his poor hearing:

I can't, I don't hear on the phone like I used to. Yeah, and right now our old phones have gone berserk and just got this big receiver in and that one's worse. But my son's going to be getting new ones . . . I told him just get new ones.

One participant provided a specific example of how hearing loss occurred; Mabel offered to connect me with a man who had issues due to occupation:

We have a gentleman that flew a plane in World War two, 102 years old. He's a gem. And he's gone through (.) I think some. . . Oh, he lost his hearing, that's right. Because, he lost his left ear, the hearing somehow, he was a pilot.

Vision decline. Participants reported vision issues as a barrier to using services as a sort of peripheral issue. Dorothy explained:

I just gave it up, I gave it up myself. The kids kept threatening. I said, no, I know. Yeah. And, I, ah one day I was driving to Erie and all of a sudden about three or four seconds. I didn't see the car coming and I thought, ah, I guess it's time.

I got that macular degeneration. So a car was coming out this way. And I was going straight and then around the curve. It was in the right lane. And why couldn't they hit it, but I but I didn't see it. So that's when you have to give it up. So you know.

Our conversation moved to discussing the availability of services and whether or not she was familiar with the Monroe County Guide, Dorothy explained, "They may have one at the library, but when you don't drive, the library you know, no." As Dorothy indicated, vision loss results in seniors hanging up the keys, leading to an inability to get to locations where they might be exposed to information about services. She spoke more directly about [her vision and how] not driving impacting her ability to go to the senior center:

I used to go but, ya know, I don't drive anymore. I gave up driving a year ago. So I don't go down there. And the meals on wheels, are terrible. And I asked [name]. I said, 'Why don't they doing something?' And she said, because too many people really need them. No matter how bad they are, they have no food.

I used to go down there and eat, played cards. Once, twice a week. But that was it. But it was the same food, there was not good.

Eleanor talked about the stress that seniors experienced by the necessity of finishing community activities before dark. When I asked why, she explained, "Independence. Independence, they don't wanna lose that. They don't want anybody to know, they can't see." The fear of having to drive at night posed a potential threat to their independence and impacted their propensity to use services that were offered near dusk.

Microsystem

This section summarizes the structural and communicative dynamics of microsystem resources. Participants' described diminishing informal network connections with friends, family members, and neighbors who preferred to connect via computer-mediated modes. To the contrary, participants identified local companions as significant communication resources who they connected with in public settings, such as community rooms and various locations, where they volunteered and interacted. The interactions were viewed as important opportunities for connecting, acquiring information, listening and being heard, and being of service in their role but also to their informal network as well. Participants articulated the characteristics of microsystem interactions that they received as being largely helpful in nature.

Diminishing Informal Network

The microsystem represents an important communicative resource for people throughout life, particularly for friends and family who are exposed to information about community-based services. However, in very old age, communicative networks diminish significantly. As Dorothy, who was ninety-six, explained, “When you get this age and you're in the house, you don't get out, no you don't, you don't have that opportunity.” to learn about services through others. Albert said this notion had only recently occurred to him, “All our friends and kids we grew up with and knew and all this, they're all passed away. And I'm the last surviving member of my family.” The dynamics of contracting social networks and the diminishment of their communication resources are described below.

Friends are few in number. Many participants often did not interact with friends; it was common to have lost friends through illness, relocation, and death. This became increasingly apparent as the age of participants rose. Virginia reflected on her existing pool of friends, and noted, “There's not many of them left.” Eleanor also described an eroding friendship network:

I have some that are very long standing, a few, because there's not many of them. Yeah, yeah, they're gone. And yeah, even when you get to your class reunion, so you know, those are kinda ended.

Henry recounted successfully persuading a friend to go to the local senior center after three years of effort and persistence. I asked if his friend Jack continued to attend, to which he replied:

Oh he died about 10 years ago. You know, we end up being real good friends over this deal. I mean he used to be a real gruff guy and he want people to stay at arm distance, that shelf and that wall broke down after a while, and stuff like that.

Likewise, Mabel reflected on her wedding day four years earlier that took place in the senior center where we were meeting:

[Husbands name] and I had our wedding supper here. Reception. And that was 2014. I can look at a book that photo book and out of that book, I can count 10 people that are dead. They're not here anymore.

Death and loss of close others in participants communicative network was a frequent topic of discussion.

Family is too busy and geographically dispersed. Participants often lamented how families had devolved; they described family members who were geographic dispersed, inaccessible, and also how norms of care had shifted. Lucy provided historical depictions of her experience residing in Monroe County over the last nine decades, beginning with how families had changed. “It's always been family oriented . . . And, and people years ago, used to live in one home with different generations . . . [now people] are going off to find work.” She reflected on her past when families were not geographically dispersed:

When I moved to Monroe, in sixty-four, people never went any place. If they took a vacation and went on a cruise or something, that was shattering. But people didn't do that, you stayed right here. Maybe traveled up north or something, but you didn't go across the country. Was very family [oriented] and, you know, small town. [It's] different now, it's hard to find a family that doesn't have a child or two living across the country or across the sea.

Participants frequently described being located remotely from family members and contrasted past experiences with current family customs and the impacts of the disjuncture. Clarence explained, “We used to have family reunions, we knew about

everybody's problems when I was a child, now they don't care and they're moved away." He expressed frustration that resulted from the absence of support when caring for his mother, because his family members lived too far away. These microsystem rifts left many feeling uncared for and without sources of support. Clarence explained how this directly obstructed his ability to draw resources from community-based services:

The problem was she didn't want anybody in her house that she didn't know about and couldn't trust. And so we would have to cancel that, or not take advantage over [the service] in the first place. So I wound up as they say out of left field with no help.

Stanley framed the matter as novel in that familial norms of care in the past meant that people didn't think about seeking help or services. Like several others, he provided a historical account of the family unit as a self-sustaining communication ecology that was, at that time, not yet integrated with organizations as resources to draw from:

It's something that I think a generation ago they, just didn't have to do. Yeah, just wasn't necessary with children takin' care of parents. . . Families were the core institution, you know, and they took care of business of the health care or whatever, but it's a different era.

Agnes talked about providing care to family members, "I took care of a grandmother, I did a mother, I did a dad, you know that particular type of thing." She contrasted her past with her future, speculating that her children would not be helpful and that their distant geography and level of "busyness" would impede:

Kids in this day and age don't have time for their parents, they're busy working. They have kids of their own. Yes, I grew up where I took care of parents and had my own kids. But now that doesn't work.

Lee also felt that his family members were too busy to interact, "Nobody calls me. I don't call nobody, cause they're busy and they don't wanna be bothered." Agnes explained

how her children's workloads and travel limited her ability to access or rely on them for help:

I have a daughter that in Flint area. Okay, that's a two-hour jaunt down and two hour back. And she works 80 hours a week. She works for extension. She's over all the volunteers in the state of Michigan for [company name]. Okay, yeah, ask Oh, well are you on a plane? Where are you? Are you on a plane, train or are you driving? Or what are you doing? You know, how do I find you if I really need you? You can't. Like the son that called, he lives in Ohio and is a troubleshooter for [company name]. You ask him the same question. Where are you? He's no help.

To the contrary, Dorothy who had eight children, appreciated that she was able to get help from one of her daughters when she needed it. She noted that the school where her daughter was a teacher, enabled her to be immediately accessible:

Oh, yeah. If I need her, she's here. I call if I need her. And she's, even the school knows. 'I think my mom needs help.' And they'll send somebody in the classroom and she runs over here. So they're good because they know that we could run into a problem, you know, age and stuff.

Millie, like Opal, had children she could call on, "my kids are so close to help."

Neighbors and neighboring. Whereas younger individuals tend to be more residentially mobile, older adults are restricted to their immediate environments. As people age, they become more environmentally docile due to health limitations or illness and not driving. To illustrate, Albert said, "And more and more we're going out local where they can service us or you know where they have something that we want." His wife had Parkinson's disease, which greatly confined the distance they were willing to travel for care, services, or shopping. Thus, as individuals age and are more confined to their immediate environments, interactions are increasingly limited to proximal others.

Leonard described how norms of neighboring had changed, speculating that modern modes of technology interfered with interacting:

Years ago, used to talk with your neighbors and get acquainted now you don't even know who they are. . . Well, back then. They didn't have a television and all this stuff. And they did a lot of writing back and forth and stuff.

Ernie described a similar experience when he lived in a mobile home, where he found that younger residents were too busy to talk:

And you know what, when I first moved I lived in the mobile home park. You know, everything was just like regular community. But then a whole bunch of young people moved in, and I was much older and they didn't. They were too busy all the time to even talk.

Opal resided in a senior living community and described people in close proximity, who lived in the same senior condominium complex, as friends but not as people she would interact with:

No, I have a friend that lives across the way that I've known. Well, we worked together at the school years and years ago, and have remained friends. Oh, and I know the man next door to chat when I come and go, and I know the couple next door this way that's connected to me. And I know another lady. And they have like the second Tuesday of the month, they have a get together in the evening. And I've met people, but as far as neighboring or calling them, I don't.

Computer Mediated Communication

Geographic distance and disconnected families necessitate that seniors adapt to modern modes of communication to connect. Participants described their experiences using electronic devices aimed at connecting individuals.

Keeping in touch. Lucy was one of the few who utilized social media to stay connected with distant family members. She explained, “Everybody's working. There's no time to visit. So Facebook is great.” She talked about the process of becoming a user

by someone taking the time to explain it to her. Despite feeling pushed into using it, she did evaluate it as positive overall and ultimately accepted the communication mode that would allow connection with family. She explained:

Oh, I had an iPad, only good for playing solitaire. And my granddaughter came over yesterday. 'Oh, Grandma, I can fix it for you if you're going to use it. So she signed me up for messenger. And last night. I got a message from my grandson! Now I'm gonna learn how to use it. Yeah, because it's so much better than the phone. The phone gets expensive. Yeah, I have unlimited calling. But you can spend hours on the phone. So this will be fun.

Well, that's the only way I can see my great grandchildren. My daughter moved to Arkansas because of the work. And then her daughter moved to Texas. So I have great grandchildren in Texas, and one that was born on my birthday. I've never seen him, except for [on] Facebook. The rest of them are down near Cincinnati, and then Toledo. Oh, what's the difference? Everybody's working. There's no time to visit. So Facebook is great.

Eddie had acquired a cell phone recently to be able to communicate with family members who sent pictures of his grandchildren via text. He talked about his son who sent pictures while moving from Texas to California:

I just got it three months ago, I don't use it a lot . . . My son will send me pictures a lot of times of the grandchildren and things so I keep it with me most the time.

They just moved from California. So they spent about three or four days traveling and they tent up and everything so I got pictures when they're with the little kids and uh by the streams and stuff like that and everything. So when they were camping they send me pictures.

Surveillance. Technology was also used to connect families or “watch” parents via monitoring systems. Millie described the system that her children paid for:

After the stroke they made me get my button here. For emergency if I should fall or something, there's a monitor in there that calls and lets me know, asked me what I want. And there's see up there in the corner? It's just a motion device that lets them know when I'm in the kitchen or when I'm in the upstairs, upstairs bathroom, or when I go up to my door. And they can get it on their phone where I am anytime of the day and night. I tell them big brother's watching me [laughing].

You can get by with services you want and they decided they wanted those. It makes them feel better. And actually makes me feel better to. This is called, this one is medical guardian. I wanted to give it to my niece yesterday. I forgot to give it to her. Now I have to send it to her. She wants to get it for her mother in law. But there's a lot of these out a lot of different companies do that.

Opal pointed to a device in her home that she believed offered her family comfort:

That's a life alert. Set off twice by mistake. Which to tell you the truth, I don't think I need it and I had one once before. And I turned it back in. Because I don't think I need it. Well, then my friend fell. And broke her hip. And she's been away from home, a month in the hospital. And I think it's been at least six weeks in a facility and it says she's going to be there. I think a lot of its fear, that she'll fall again.

In addition to monitoring systems, participants described protective devices installed outside their homes so that emergency responders could enter the house if needed. For example, Millie had a lockbox type device installed outside her back door for emergency responders:

They know too if you live alone, and don't have children, at least somebody that you can contact, it will send medical help for you. Because they will you know, they'll alert medical people and they'll be here and I even have a little thing on the gate outside there on the handrail that can come in house. 'Cause sometimes they get there and the house is locked and they can't come in. So they know how to get in there and get my number so they can get some key so they can come in.

Lee had a lock box installed outside his front door as well:

I got a thing on the back of my house, a little plastic thing and uh they gotta push numbers to get into that. And inside that's my key. The fire department put it on the house. They put it on in case I drop dead over here.

Approximately ninety minutes into our conversation, I realized that the upholstered chair that I had been occupying while in conversation with Lee was swarmed with bed bugs. I asked Lee if he would take me outside and show me the lockbox, he agreed and during the walk he explained a motion surveillance device that his children had installed:

My daughter called, she called [name]. She called. She wants me to put cameras in the house. I got motion [sensors] now, back here if you walk and it turns things on.

Yeah, [the fire department] put it on. When I first had my robbery, I thought well maybe somebody from the fire department robbed me or somethin' like that. But they got, they got uh, code to get in there, there's a key inside, open the door right there.

Local Companions

Participants identified local companions as significant communication resources who they connected with in public settings, including community rooms and various locations where they volunteered and interacted. These interactions were important resources for connecting, acquiring information, listening and being heard, and being of service in their role.

Community rooms. Contrary to Opal's experience in an independent unit within a senior living community, shared spaces and places largely fostered connections. To illustrate, a group who resided in a senior living community who had a shared community room were highly interactive. The micro-social setting, however, was physically connected (unlike the separate unit Opal resided in) and the hallways led to a shared community room where they routinely gathered for potluck meals, coffee, and snacks. I was invited to join a morning coffee group by a participant who was eligible for the study. I called to remind her about our interview, and she explained that she had arranged for us to meet with her coffee group. The gatherings in the central community room were frequent. Ella recounted being new to the community, "Yeah, when you first, it gets scary when you first move in, even in a place as welcoming as this is just a little scary. You don't know who to trust, who to, you know, to be vulnerable with." The group had shared

space and a newsletter that they used as an informational tool to provide information broadly and even localized to their micro-ecology, Margaret explained:

Yeah, we worry about the ones that are in the hospital and we put it in our newsletter. I write an article for each building, put an article in the monthly newsletter to let people know who moved in and who's moved out. Yeah, just you know, whose family came to visit, and who took a trip. And just anything little bits of information, kids graduate, babies, whatever. . . You find out who is sick, and who isn't. And who's traveling and who's not. And that's good to know. And all that stuff. And we put all that stuff in the newsletter.

Ella, who was newest to the group and housing site found herself immediately plugged into information and resources. She explained, “Until I moved here, I did not know anything about any of the services.” Likewise, participants identified local companions as significant communication resources who they connected with through volunteering.

Volunteers. Participants reported that volunteering resulted in being more connected and informed, and often spent time spreading information about services, providing transportation, and assisting others with information and advice. Volunteering afforded participants bidirectional companionship. For example, Ernie was forthcoming, explaining how volunteering helped him feel less lonely, “You don't know you're lonely.” Ernie was a recipient of information from a senior center affiliate who helped him figure out how to obtain senior housing:

I decided I had to move. Yeah, go to senior housing. I knew about [place]. So, and I couldn't get in over there. I didn't know how to get in here. So I went over the [senior] center. And they were so nice to me. And they told me how to get in. And she gave me a book on the different senior places in town. And I was very happy with that.

Ernie continued to explain how he joined the senior center and how volunteered had an immediate impact on him, “And, you know, and then I joined that, and that was the best

thing I ever did.” Volunteering allowed Ernie to forge connections and to rebuild a microsystem that was negatively impacted by the death of his spouse:

I because, I liked it. You know, my wife died 20 years ago. And I didn't know you know, you don't know you're lonely. I thought I was happy. But I wasn't.

He explained how the experience motivated him to be more civically engaged:

I wish I would have known this 10 years earlier, because it just changed my life. 100% in volunteering. I never volunteered before in my life. Well, I did. But you know, not like I'm doing now.

I mean, I'm happier now. I'll put it that way. Yeah, I mean, I, I kept busy all the time. Yeah, but you don't realize how you miss people. Then. All sudden, one day I saw what I miss most about retirement. I mean, when I worked with the customers, I would come in and I could go talk to customers. They would ask for me and that. That's what I decided. I miss that. I want to start going to what I can, just meet people.

In addition to strengthen and increasing his own communication resources, this experience had a positive impact on Ernie's health and motivated him to assist others. Ernie was then motivated to spread information about community-based services; in other words, he viewed himself as an information ambassador who trumpeted information about services to anyone he met. He explained:

So when I talk to people, you know, I tell them, you know, well, you know, you can get these different services. And I tell them how to get in contact with them. I keep a card like yours with both RSVP, the center and the food pantry you know, and I tell, I'll give them their phone numbers.

Being informed. Individuals who were active members in their communities (i.e., volunteered or involved with a senior center) reported feeling well informed about community-based services. Mabel had refused to seek help when caring for her husband while he was dying. Since then, she started volunteering at a senior center and disclosed, “I am reminded that when I need help, I can get it and Monroe has help. I've changed,

I've changed my opinion.” Clarence also felt like he had access to knowledgeable people and inside information about community-based services through volunteering at a senior center:

It's been helping me a lot by working here, as a volunteer. Because I get some inside information, so I'll point that out as a positive, it's helped me a lot. [senior center staff] is a wealth of information, and she knows how to steer you in the right direction.

Time to talk and listen. Participants repeatedly expressed the importance of spending time interacting and listening to others. Mabel, who was a volunteer at a senior center, felt it was important to “take the time” to sit and listen to seniors. She recounted an interaction with a woman she had never met, who she felt needed companionship, and in which she provided empathically. She explained:

I know that there's a couple of women out here that acted like they didn't trust anybody. And one day, one of them teared up. And because she had somebody had taken her walker and left their walker. So, the next time she came in, I just started I walked over, and I sat with her. She was over here. And I just walked in, sat down with her and asked her how she was. I told her she looked pretty and da da da da da, and she's not that much older than me, you know. And the next time she saw me, she told me, she says, ‘Thank you for sitting with me.’ So I think you have to just get in there, get in there, and take the time and let us when we're older *please let us talk.*

As a volunteer at a local food pantry Earl believed that the food was important, but so too was the chance to talk to someone: “Because that's the reason the food pantry, just a lot of those people as important as the food is it's just as important that we just talked to them for that hour or so that they're there. Really, I think they come in just to talk.” Ernie validated his viewpoint as he described interactions with visitors at the historical site where he volunteered as mutually beneficial:

Even the [historic site]. We get single people in there, you know, all by themselves. They are and they just want to tell somebody their experiences and they're relaxed in there. And that's what I do. I just listen more. I kind of figured they're not interested in the history. They just want to come in and talk for a while.

When asked how long it took him to understand the importance of listening instead of talking as a historical narrator, he explained:

A while, I almost quit the [historic site], 'cause I thought I had to learn all this history, you know, 1812, the war and all that stuff. I found out I don't have to know none of that stuff. I tell 'em. I don't know very much about it. But they can talk to me for half hour. They come in to look at it. And, but then they find somebody like me that just likes to talk, and that's all.

I responded to Ernie's willingness to allow people to come and talk to him, by saying "Well that's good for them." Ernie replied immediately, "good for me." Having the time to visit with seniors in his community and being of service through listening was mutually beneficial.

Interaction Content

This section describes participant's experiences in more (and sometimes less) helpful interactions and messages they exchanged with local companion, and less frequently informal, network members. Participants were able to draw information, advice, and appraisals of community-based services from network members when they felt appreciated and had adequate time to fully express themselves and share personal stories. Exchanges were most effective when the interlocutor was well informed about the topic and shared similarities.

Message: Type. Participants learned about services through conversations with others and exchanged advice on navigating the service environment. Participants

described how they fostered utilization by appraising needs and barriers, identifying solutions to those barriers, and by using an incremental approach.

Information about services. Volunteers at community-based organizations described about how they were resources for others by providing information and advice about services. Agnes described helping a family who needed a ramp added to their home. She provided information based on an appraisal of their circumstance, and instruction on how best to proceed:

And, you know, I felt so sorry for a gentleman's son, the dad was like 77 . . . they were talking about taking one leg because he was diabetic. The gentleman's wife was in her 70s, she was blind and they lived together and the daughter-in-law was trying to help and the gentleman was a veteran. And they got to the veterans bureau to sign up for some of his benefits, which he had never signed up for before, and the son had no idea what he was doing. I ended up spending an hour with him because he came into the United Way building because they needed a ramp to get him in and out of the house. Had no idea how to go about it, where he was going to get it, or anything else. People have no idea.

Participants indicated how network members were important conduits for information and learning about services through word of mouth. Henry stated that, "Word of mouth is probably the best thing. Other people being aware of services that they could utilize." Lucy expressed concern about the broader implications of poor interactions with organizations. She warned that each poor interaction resulted in reports to microsystem members who may be dissuaded from utilization. She explained:

What usually gets 'round is word of mouth. One senior tells another senior and if that seniors not happy, with what, you know, the way he was treated it's gonna start going down. But you get one that thinks he was treated fairly, and you're on the right angle . . . And it's still in the town. In a small-town word travels rapidly.

Ernie learned about resources he needed from senior centers affiliates who provided printed resources:

I decided I had to move. Yeah, go to senior housing. I knew about [place]. So, and I couldn't get in over there. I didn't know how to get in here. So I went over the [senior] center. And they were so nice to me. And they told me how to get in. And she gave me a book on the different senior places in town. And I was very happy with that.

His positive experience motivated him to volunteer to help others as a way to reciprocate the support and needed information. Ernie viewed himself as an information ambassador who shared information about services to whoever he met:

So, when I talk to people, you know, I tell them, you know, well, you know, you can get these different services. And I tell them how to get in contact with them. I keep a card like yours with both RSVP, the center and the food pantry you know, and I tell, I'll give them their phone numbers.

Advice on navigating services. More than raising awareness about services available, participants often described advice they had received from others. For example, Millie stated, “the best advice you can get from anybody, you know, about how the services work now and everything.” Virginia provided advice to those who were dissuaded by interactions with agency staff members:

They'll tell me something. I says, “You know what, why don't you call em again?” “Uh, why would I call them again?!” Yeah? Why would I call them again? Because you're getting a person with a different personality, with a different answer. And maybe that person is more educated, on your question than the first person was, and can totally give you a different answer. I found that to be true. No matter who I call.... That's important.

Ella described the process of enrolling for low-income housing through a friend who persuaded her to enroll, knowing that waiting lists for such programs were long:

My girlfriend started telling me about this place. Yeah, I had a friend who lived here who told me about it. I had a friend that I took care of her dad and she was affiliated. She was on the board of Family Medical. And she worked for different aging places. And she came and she, she did my taxes and stuff. And she said, this house is going to get to be too much for you. And I said, No, I'm staying here forever!!! She says, ‘Well, I'll tell you what, I will help you get as much help as

you need. But I insist on one thing, that you sign up at [name of HUD housing place] housing.’ I said, ‘What is that?’ She said, ‘It’s a HUD housing and goes on your income.’ And I said, ‘Well, that’s the deal.’ So I had to sign up for it.

Finally, of special note is one participant who learned about a service from her daughter, she explained:

I think my daughter told me cuz she is her, her financial advisor is in the same building as that is in Monroe. So, she told me about it, and took me there. So word of mouth I guess.

This informal support connection to services illustrates the influence of living or working in close proximity for exposure. When families are geographically dispersed, exposure to community-based services through the microsystem often diminishes.

Appraisal of need. Participant’s descriptions of communicating about services included features that resulted in more persuasive messages. For example, Henry noted the importance of positively framing his message and to “keep putting out the good thing about it” to influence others and encourage utilization. He also probed with questions to understand perceived limitations, so he could respond with tailored solutions. In the example below, his neighbor said he couldn’t get to the senior center because he lacked transportation, so Henry offered to give him a ride:

Well you just keep putting out the good thing about it. Why? Why don't ya [use the service]? First, and like with Norman, I kept saying, you like to do this. Why? I'll drop I will pick you up drop your pick you up.

Henry knew that his neighbor enjoyed playing cards and that the information he was providing was relevant to his neighbors’ leisure preference. He pointed to the interaction as a process by explaining how he provided information matched to the persons interest:

And it fits their interests too . . . he had a car, used to go and play on this Wednesday so I already knew that and then friends or because they were playing

pinnacle, wives and maybe playing pool or eating or stuff like that. So then I knew it was something of you know, he was very interested in doing and plus it got him out of the house for a few hours.

Henry discussed how his neighbor required an oxygen tank with him at all time, which his neighbor perceived as a barrier as well:

Really, really, yeah it surprised me. I thought, I suggested to, I said ‘Jack, you like to play [cards].’ Well I think he was like a failure, he thought he was gonna be a burden 'cause he was on oxygen, so he thought it was gonna be a burden.

So, I said we’ll just throw two tanks in the car, and then hey yeah. It took three months to get him to agree to it. Because, then it gets him out of the house. You know, don’t have to deal with four walls.

He deployed an incremental approach that required persistence:

And yeah and as something he loved to do, and I knew he did. So, it fit his interests. Huh? But it took three months, I’m telling ya. He finally said okay. But he gave in. I wouldn’t give up on him . . . I’m persistent.

Henry explained that he attended the same church as his neighbor, which drew them closer and heightened his concern, “I’m just very convincing, to show that I’m genuinely concerned.”

Message: Delivery. Depictions of interactions uncovered notable properties of effective messages that included expressions of concern through sincerity, as Henry explained, as well as having the time to talk and feeling heard.

Signaling care and concern. Several participants were volunteers in different settings and self-proclaimed information ambassadors to community-based services. Therefore, their reports were a comingling of message strategies and channel for disseminating information. For example, Ernie was a recipient of information from

formal network members, which motivated him to reciprocate that support to others. He reflected on his first encounter at the senior center:

The first time I ate here, yeah I sat down, I was all by myself didn't know what was going on. I just know I had to go back for euchre later and this couple from Carleton came up and talked me the whole time. They're just strangers. They were headed for out west someplace the next day. But that's the first experience here. And that was nice. Very nice.

His experience had ultimately informed his personal approach at the senior center,

I try to talk to anybody that comes in, especially if they're sitting by themselves. Yeah. And I say hi to everybody. And smile.

Henry, a volunteer, was particularly motivated to get his neighbor engaged in positive, health bolstering activities, “So to extend his life, and whatever, and that's part of it.” Henry explained that he had difficulty communicating with Jack. Henry said, “Until you get into his inner circle.” I asked Henry to provide more details, and he called attention to the importance of sincerity to be able to, “win over their confidence.” He explained:

Well I think it's my sincerity. You know, if you hear me talk, I'm very sincere. . . . You know, you show you're concerned and being sincere with em and goes a long way. I guess you win over their confidence and stuff like that. That's part of it, the biggest part of a lot of people.

Likewise, when participants positively evaluated interactions with community-based service providers it often included the person being friendly, personable, caring, and passionate. This was also true of formal network members in health care settings.

Signals of concern could be subtle. Eleanor described an encounter where she felt unseen, “Like when the doctor walks in and he's just reading the phone.” She was frustrated that the doctor did make an effort to lift his head to make eye contact, “He

doesn't even know who [I am]." Millie felt that small gestures signaled care; she appreciated a doctor who greeted her by name when he walked into the room:

But he knew my name he knew who I was, and he now, he didn't have to look at the paper to know about me. And I said that's why I really like him. And [her two children] both said that too. They just felt so, even if you just read it outside the door at least it made me feel a little different about it. Because a lot of them you know, I don't know . . . Just you know, personal touch was just so reassuring.

Having the time to talk. A frequently recurring theme throughout the interviews was the constraints imposed by not having enough time to interact. Participants appreciated individuals who went out of their way to “yack,” “chit-chat,” or “visit” as a valued expression of support. For example, Opal described someone she knew who delivered Meals-on-Wheels and spoke fondly of her experience:

And she often goes in and chats with them a few minutes and I think they're pretty good. There was a lady that brought her little girl and I have a cat collection, as you can see, and she loved my cats.

I think older people particularly, they'd like to have you talk to them. They like that. Rather than just drop it off and leave.

Quality time to interact was important for participants. Ernie described the interactions he had with people that visited the historical site where he volunteered as mutually beneficial:

Even the battlefield. We get single people in there, you know, all by themselves. They are and they just want to tell somebody their experiences and they're relaxed in there. And that's what I do. I just listen more. I kind of figured they're not interested in the battle or the history. They just want to come in and talk for a while.

I asked how long it took him to figure out that he needed to focus on listening instead of talking as a historical narrator in his role. He explained:

A while, I almost quit the battlefield, 'cause I thought I had to learn all this history, you know, 1812, the war and all that stuff. I found out I don't have to know none of that stuff. I tell 'em. I don't know very much about it. But they can talk to me for half hour. They come in to look at it. And, but then they find somebody like me that just likes to talk, and that's all.

Likewise, Mabel, who was a volunteer at a senior center, felt it was important to “take the time” to sit and listen to seniors. She recounted an interaction with a woman she had never met, who she felt needed someone to listen. She explained:

I know that there's a couple of women out here that acted like they didn't trust anybody. And one day, one of them teared up. And because she had somebody had taken her walker, and left their walker. So the next time she came in, I just started I walked over, and I sat with her. She was over here. And I just walked in, sat down with her and asked her how she was. I told her she looked pretty and da da da da da, and she's not that much older than me, you know. And the next time she saw me, she told me, she says, 'Thank you for sitting with me.' So I think you have to just get in there, get in there, and take the time and let us when we're older *please let us talk.*

Visiting community-based sites and using community-based services were opportunities for social interactions. As a volunteer at a local food pantry, Earl believed that the food was important, but so too was the chance to strike-up a conversation: “Because that's the reason the food pantry, just a lot of those people as important as the food is it's just as important that we just talked to them for that hour or so that they're there. Really, I think they come in just to talk.”

Story sharing. Participants often provided in-depth narratives and autobiographical accounts that allowed them to explain their behavior and decisions. The narratives were often used to contrast the current state of things, compared to how they were in the “olden days,” and in some cases how those experiences informed current behaviors. Clarence's depiction of caring for his mother informed why he currently

volunteered. He explained with additional details (omitted for pragmatic limitations but also upon request) as he intermittently asked me to stop recording to express his feelings. Clarence left his own career to care for his mother who, because she married and minimally participated in the workforce, did not qualify for assistance:

My mother had tremendous problems because she had a stroke. She wasn't covered under anything. And I was in the Navy Reserve and wanted me to go to Vietnam. And I said, I got a hardship situation and the troubles I got into. So I've been on hornet's nest a couple times because the Navy had been by one hand and my employer had me by the rack, by the other. Okay. And I was on the rack, so to speak legally.

I asked him to explain what “being on the rack was.” He talked about the stress of giving up his career to be able to care for his mother, and being stretched in “unbelievable directions:”

The rack, back in the medieval times, they grabbed your arms and your legs stretched you out on the rack. I feel like that's a term we use in the military. When you're getting put through the third degree and stretched in unbelievable directions. . .

And my father died, see, and I was in public works management and I was getting ready to go to Vietnam as an amphibious CB officer. But they said timeout, chaplain called me over set your father's dying and then all of a sudden, he was gone. And so, I had to get an emergency release from active duty to go home to take care of my widowed mother who was home alone, didn't drive. And there's where all my problems arose, because she got no benefits. I got no benefits for her. And I needed hospice eventually, cause she had got a stroke in '82 and I was, she stayed at home. She would refuse to go to a nursing home, and I had constant care for a stroke patient who was able to get around with a cane, but she didn't want to go to a nursing home or hospice or whatever. They didn't have it.

Clarence also experienced community-based services as a new concept, and that it didn't exist when he needed it. He spoke about the challenges attempting to get assistance for his mother who didn't qualify, as Clarence learned:

I asked around and they said she doesn't qualify because she has no long work history. She's had, she worked for [a person's name] as a clerk. She worked for florists [name of] greenhouse, and she had part time clerking jobs but she never developed a full time insurance provider position. And I had insurance coverage. But it was for me, or my family. And I didn't have a family other than my mother. And they didn't cover her because she was my parent, and they covered only my dependents.

Clarence was unable to re-enter the workforce after caring for his mother. At more than one point he asked me to turn off the recorder to express frustrations off the record, after which I sought permission to resume the audio recording device. While recording he explained, "I get frustrated when I have to revisit some of this because it was extremely frustrating because I, everywhere I turned, I got zip for help." Despite his frustration and experience, he felt that volunteering was a way to ensure others had more help than he was able to access. He explained how his past informed his current behavior to connect others with needed resources:

"That's why I come here [to volunteer] is because I, at least I feel like, I'm shoveling sand against the tide! But at least it makes some difference [exhales heavily]. It helps get some people the benefits I didn't get.

Clarence's narrative was not unique; many participants reflected on previous experiences that informed more recent decisions. The utilization or even conceptions of services cannot be separated from how life occurred and was experienced by participants, who had on average eight and a half decades of life experience to draw from. Many of those histories began before legislation existed to support our elders.

Message: Source Characteristics. In addition to characterizing the content of interactions and the effective features of messages used to deliver that content, participants also described those who delivered the messages. Henry highlighted that

despite information provision, having a connection with the provider of that information is important: “That's a hard deal because some people, no matter how much you communicate to ‘em, unless they feel comfortable, I guess, with the person. Or there's something that tie you together.”

The notion of trust permeated our conversations and informed how receptive participants were to insight about services. Clarence was frustrated by not being able to access assistance while caring for his mother due to her concern for having people in her house, particularly those who she didn't know or trust. This negatively impacted Clarence because his mother went without the help they needed. He explained:

The problem was she didn't want anybody in her house that she didn't know about and couldn't trust. And so we would have to cancel that, or not take advantage over [the service] in the first place. So I wound up as they say out of left field with no help.

Messengers who were well informed and shared certain similarities, such as geographical proximity or group affiliation, were more likely to be positively evaluated and trusted sources of information.

Competency and experience. Participants described interactions where someone was able to provide clear and concise insight and had some topical expertise about using or accessing community-based services. Lucy spoke about receiving information from a well-informed person who was able to address her needs with confidence. She explained:

She had the answers. Wasn't just guessing in the dark and saying, ‘Well, why don't you try this,’ you know, or ‘do that.’ But she was pretty positive about what could be done.

Individuals talked about being a source of support as a topic expert, as it pertained to health condition. For example, Mabel's experience of her late husband's dementia issues

prompted her to approach people at the senior centers where she volunteered who she suspected had cognitive issues. She explained:

I find myself knowing, knowing when somebody comes in and needs help. And I often walk over and will [approach them], um, especially with dementia issues.

Albert explained the frustration of becoming aware of resources for his wife's Parkinson's disease through an incremental and long process of discovery:

You know, like we stumbled around a couple of years ago, we didn't know who to talk to or where to go, what to say. And we gradually picked it up piece by piece by piece, put it together. How we found out about Dr. [name]. We found out about the senior center, how we found out about this exercise program. . . I wish it was easy steps. Yeah, we just stumbled across some things.

It prompted them to interact with others who had similar experiences to offer support, as a way to provide them with resources or information that might help reduce the challenge of learning. Albert's wife described an interaction with someone she observed and suspected was impacted by the disease:

I had saw somebody in church and I was watching for a while, and I had knew him for many years, and I kept watching his physical movements and all that. I thought, I bet he has Parkinson's, and he says, 'You know what? I do. I just got diagnosed.' 'Well I have some information.' I gave him a whole bunch. I said you can either pitch it or hang on to it and give it to someone else.

His wife felt that her health condition could provide purpose:

You can stay here and cry your eyes out the rest of my life. Or get out there, if you can be a help to somebody.

Having experience prompted individuals to interact with others who they perceived they might benefit from their knowledge.

Geographic proximity. Participants often talked about the trust that came with talking about others who they shared some similarities. Geographic proximity, being a

resident of Monroe County, and shared housing residency were frequent indicators of trustworthiness. Agnes suggested that disseminating information through senior complexes from inside through residents would be an effective way to reach them:

Somebody that lives in that unit that they trust. Like I probably could get in to most of the places. But it's got to be somebody they trust. This is the biggie because there's so many scams and so many rips offs, and it's so much cheaper to keep them in their apartment. Or their house than to put em into a nursing and they don't want to be in a nursing home.

Participants referred to people that were not from Monroe County as outsiders. Virginia explained, "That's the local joke. If you're not born in Monroe, you're not a real Monroe." Dorothy talked about receiving assistance from a 'local person' pointing to the desirability of being from the same place:

We have a gal comes in, she'll be here at four 30. She comes in and cooks breakfast for Frank and I and then once a week she does my grocery shopping. . . we pay her, she's a local person.

She and several others described their experiences of residing in a tightknit community. Dorothy said, "You know, but we're in a small community. You know everything about everybody. But sometimes too much [laughter]." In order to be considered an insider you must be born within the county. Virginia explained, "Monroe has a reputation, of if you weren't born in Monroe, you're not a Monroe person."

Homogeneity. Virginia was adamant that, "The real influence here in Monroe is the religious community." She recounted a time when health services were religiously segregated providing a backdrop for present day:

Everybody, in fact, at one time historically, and this probably goes back 30 years, Monroe used to have two totally separate hospitals. One was if you were Protestant and one was if you were Catholic. And then when you'd hire in, like

when I hired in Monroe public schools, they wanted to know which hospital, if you happen to get sick which hospital, you want us to take you.

Henry indicated shared faith and church facility as the reasons his neighbor was willing to accept a ride from him:

That's a hard deal because some people, no matter how much you communicate to 'em, unless they feel comfortable, I guess, with the person. Or there's something that tie you together. It's just like the one that I was takin' to church. Well, me, we were of the same church. But to take him to church, he and his daughter end up making such a big deal. I thought it was nothing. I'm going along the way.

Henry provided tangible assistance by driving him to church but also to the local senior center. I asked, "So by virtue of you having church in common, maybe that was it?" We were discussing the reason people accept help while others resist even when offered.

Henry approved,

That was it. And I know, he was at home, he couldn't get to church. So, I guess the good Lord asked me to do it. So that's how, how's that? I was just doin' what God asked me to do. Help the least of my brother [laughing]. We're gonna bring church into it now [laughter].

Stanley felt that the best way to persuade people to make decisions in their best interest was through established faith-based connections. He thought established rapport would be more impactful on making difficult decisions. He explained:

I think the church, not just ours, but other churches, I think, are very instrumental, sometimes in convincing people, they need to make a change, 'I'm your friend. But, you know, you really are not doing well where you're at.' And it takes somebody that knows somebody to, I think, have that rapport that, you know, 'We're, we oughtta think about a change for you.' And I don't know that a government representative or somebody is going to convince him any better. That's why I think that churches are really instrumental in helping people make some of these changes, then I think about while there's probably a lot of people that don't go to church, you know, they're elderly. So then, who does that? Who is their friend?

Shared similarities, including those reinforced by church affiliation, were a way for participants to connect with others. However, church attendance is diminishing. Virginia said:

Well, those [older people] are the only people that go to church these days are, [church name] is just going to close I'm sure. We're down to about 12 people on Sunday morning now, but the young kids don't go to church anymore.

Likewise, Eddie reported that participation and attendance at both senior centers and his church were decreasing:

We used to have on a Friday night at the senior center. We have maybe thirty or thirty-five, I don't think we ever hit forty but we had that many people come down every Friday night at the senior club and everything. Well, everything's going downhill. Now we have maybe fifteen people something like that. Last week we only had eight. But it goes up and down.

I asked Will what he meant when he said that everything is going downhill. He replied, "Participation. You know, I don't know. They just don't get out like they used to." He spoke about senior centers and churches as contracting social outlets. He described the great efforts his church was making to increase attendance. He got up from the kitchen table to get a copy of a book he handed to me titled, *Who Stole My Church: What to do When the Church You Love Tries to Enter the 21st Century*. He explained how his working group was using it as a tool to guide their efforts and increase their participant base:

This book was something else. We took two or three chapters at a time. Maybe fifty pages we do one week, and a hundred pages the next week. Something like that and we'd go over what was said.

The minister, everybody is actually, higher up using this book to try to change things around. Well you know, church gets kind of dull. We want to liven it up. Se we're bringing all these young people to form the bands, different things like

that. Then the old people come in listen to all this stuff like that and they don't like it. So they want to find some way they can blend the two together.

Sundays, well they're actually church songs, but they jazz it up a lot and they'll start playing really loud and some people don't like that. I know last Sunday I was there, and he was really quite loud, people didn't like that. But I kinda liked it cause of you know, keep things going, it's kind of lively.

Will explained how churches were in the process of a transformation by attempting to reframe what they do and who they appeal to. He said, "Some even changing the name." He spent a few minutes summarizing the history of the church, who the founders were, how they acquired the land to build on, and finished by stating, "But nobody knows that." The social spaces and places that he relied on for connection were diminishing, as were stories shared about them. I asked how participation rates could be increased to which he replied, "You have to get young people to get interested in the programs."

Exosystem

The study results thus far have depicted participant's experiences with their most proximal communication resources. Here, we turn to more distal, exosystem influences on community-based service utilization. This section will describe intra- and inter-organizational practices and policies and how interactions with their affiliates influence older adults utilization. This section will also describe how utilization is influenced by communication and spatial dynamics where those organizations are embedded.

Channels for Disseminating Information

Participants desired more information about community-based services, as Clarence exclaimed, "[You can't do anything] if you don't have information." Albert said it was a lack of sources to remind individuals about services, he remarked, "You don't

really see a whole lot published to remind them.” Albert and many others indicated that more information was needed, though views on how that information was best delivered varied. Below are participant’s descriptions and evaluations of approaches to disseminating information through mediated and face-to-face sources.

Mediated Communication. Local media and particularly print were key communication resources for participants to connect with community-based services. Opal, like others, advocated for increasing information dissemination regarding community-based services through a variety of channels and in print form. She was concerned, however, that technology was replacing such modes though she did not believe it was an effective communication strategy:

Communication. There’s got to be communication through the paper, actually through the churches, even through the schools a lot of the schools send all your monthly or bimonthly publication out. I know a lot of them do, there’s gotta be communication, and I don’t know the answer. Actually, the technology is taking over, and technology does not give communication.

Print media. Participants frequently shared local sources of print materials during our meetings. The newspapers, newsletters, brochures, and fliers were used to provide an overview of the source information about services could be located.

Local newspapers. Newspapers were regularly sited for community wide services and program insight. Mabel, Virginia, Irene, and Dorothy used newspapers to point out events and specifically to the “Senior Citizen” section of the Monroe News. The section included snippets of activities including meals, worship, technology assistance, card games, movies, quilting, billiards, painting, woodcarving, dancing, ceramics, fitness,

bingo, and health related services including massage therapy and blood pressure checks. The information was organized by location.

Senior center newsletters. Newsletters from senior centers were referred to as community-based informational devices. Albert and Opal explained how they used the devices to stay informed about community events and programs. Don referred to the newsletter as a mechanism to inform people about services, but also as a way to induce activity:

Well they are they are because you really are, they get sent to a month a monthly magazine to have all the different things and so you have a you have RN's there, you have RN nurses there because they have a daycare center for the aged . . . And if you've seen our, they send out a monthly newsletter so, tell you all our service, all their services, all the different things, they got the daily schedule. Something new, you like, if you're a member there you can do this and this. I mean you get . . . you got quilting, you got knitting, you got all the different painting, you got all kinds of [activities]. To make the people active. That's what you got to get to. A problem with a lot of older people they want to sit in it at Lazy Boy chair and watch that television, that's the worst thing in the world you can do.

Some described how they contributed to content and dissemination. Margaret was the writer for her senior housing newsletter; Clarence helped prepare the same newsletter for dissemination as part of his volunteer role, and Eleanor shared a copy that had her picture in it. She also said she used it as a tool to keep abreast of senior center attendees' names:

If you read the newsletter, you would know it, from this newsletter, from here. Well, not all the [people read it], another thing in the newsletter it gives you a great opportunity of seeing who won how many games in Pinnacle, I don't play Pinnacle. But I know the names that are in there.

Micro-social community newsletters. One senior living complex had a newsletter that included information about the broader community and also more narrowly including

housing policy updates. The newsletter also provided details about others who resided in the micro-social ecology. The writer of “The Taddler” explained:

You find out who is sick, and who isn't. And who's traveling and who's not. And that's good to know. And all that stuff. And we put all that stuff in the newsletter. And the office always has a page of information, depending on the holiday or some [what's going on] or some information thing, and then they have a page of rules and regulations that they remind us and FYIs, for your information.

Yeah, we worry about the ones that are in the hospital and we put it in our newsletter. I write an article for each building, an article in the monthly newsletter to let people know who moved in and who's moved out.

Finally, Henry, Don, and Agnes, who were volunteers and community advocates, kept printed materials such as fliers and the Monroe County Senior Source Guide on hand to share with other seniors who might benefit from the resources.

Face-to-Face Outreach. Participants spoke about the importance of disseminating information during face-to-face interactions at local events and through outreach.

Health events. Health fairs and events were sources to gain information but also valued opportunities to interact with others. For example, Lucy described the need for a diabetes event, “a lot of people could really benefit from it. Besides just this friendship and support.” Participants enjoyed learning and the meals offered at senior center events, which were deemed an effective way to attract attendees to educational programs:

They get a lot of people here that will listen to their speakers. Okay, for free lunch. Yeah, it's a good way to get people to commit by giving them lunch.

Health events and luncheons were evaluated favorably, and the health information was useful. For example, Virginia described why, “Health fairs are great.” She resolved an

ongoing health issue through attending a health fair. She received a diagnosis on site and then followed up with her doctor to resolve the matter:

The H. pylori is from you can get it from unclean. It's mostly [from] unclean lettuce. Even if you clean your lettuce, you could pick it up from lettuce or vegetables that weren't properly clean, from the dirt. And these things if you get, one time I had H. pylori and I must have coughed and choked and spit up foam for five months before I had this test at a health fair, and I looked at that sign at the health fair down here at the college, they had a health fair, and it said H. pylori, and I thought, 'What is that?' Well it is an infection in your intestines, and I'm gonna have that test because I've been coughing and choking and it could have something to do with it. It did!

Virginia, Lucy, and Mabel spoke about events where they learned about health matters at senior centers. Lucy explained, "Yeah, once a month. We have what they call the Health Odyssey that's sponsored by the hospital and they bring in some very interesting speakers on a variety of subjects." In addition to learning, the events were opportunities to experience, "friendship and support:"

They had a program before and there wasn't enough interest, but I think they need to start it up again, for diabetics. I'm surprised how many people here there's so many, different forms, now with diabetes. And there are a lot of people could really benefit from it. Besides just this friendship and support.

Outreach. Clarence advocated that service agencies deploy, "More people out in the field to talk to, let them know what's available!" Henry agreed with getting more people to disseminate information in person. He said, "Word of mouth, because that's the only way you're really getting to em." Clarence was particularly concerned about women who he felt were in the most vulnerable circumstances and advocated for targeted efforts to be able to reach them:

Well, if I can be blunt, they need to get out in the field where the people have health problems and find out firsthand how to help people and people who with limited incomes and don't have the wherewithal to go to the best hospice in town.

They can barely manage getting a home health aide once in a while, you know. Because the husband died too early, left 'em practically nothing.

Clarence was concerned for those who lived in rural areas of the county who he felt could only be reached through personal contact:

Get it out to the boondocks people, people in the remote areas, by hands on once in a while. Bite the bullet and go out there and make a personal call. If you find out that somebody really is cash strapped and has real health problems, bite the bullet and get the hell out there and find out personally one on one! Don't just send them form and say return this if you would, please. We're conducting this statewide survey yada yada yada. Because half of 'em are either stroke patients or there got Parkinson's or something, and they can't fill it out anyway.

Agnes felt it was important that the person deployed be someone from within the county, who met with seniors in places and settings where they would already be gathered. She explained:

“Maybe going to McDonald’s. One time we had an intern working for COA [Commission on Aging]. So I know at one time she went and talked to the people having coffee. She was a person that was from Monroe County. And, you know, she bought a coffee or whatever, and got in to 'em that way to talk to 'em to gain their trust. Because so many seniors have been taken so many times. That's why if you can get them at their place, and if they'll let you come in there. Or if you can, seniors will go for food. So you want to get 'em somewhere where you have food.

Agnes recommended targeting sites with the highest density of seniors, such as senior high-rise resident buildings. She highlighted the importance of familiarity and trust, and that having seniors talk to seniors would be most effective. Agnes believed she could be successful in this capacity, as she explained:

But we gotta find a way, I don't know if we go, we got a couple of senior high rises. But to get meetings there and see if we, even if we went door to door to see if they would let you in, just see what they do have and what they will need . . . [It would have to be] somebody that lives in that unit that they trust. Like I probably could get in to most of the places. But it's got to be somebody they trust. This is the biggie because there's so many scams and so many rips offs.

Lucy concurred with the need to increase outreach. She felt that each senior housing site should have an individual person as a referral resource to assist residents. She also thought health presentations would draw large crowds, so that information could get to many people through one event:

Every [senior complex] should be aware of someone [to refer seniors to]. Now through the hospital. They bring medical programs. And it's been a couple years ago when there was a program for Vets, to try and let them know what was available, and how they could get help if they needed. It's probably something, a more general information thing, to get people started. And I don't know exactly how you're going to do that. Unless you set up a committee. We have to have a committee, you know, it's not official without committee. And, you know, if you could just have someone available to answer questions. We have people here, that survived the depression. And they are very proud people. They don't like to ask for help. They are very independent. But if it was just a general, kind of just to inform the public.

Like the people that come from the hospital to talk about diabetes, maybe someone can come and talk about things that are available for seniors just as a general information talk. So they'll know what's out there.

Intra-Organizational Practices and Policies

This section will describe intra-organizational practices and policies that constrained and enabled service utilization.

Initial Moments of Contact. Participants described impediments to utilizing community-based services that they experienced from the moment they attempted to make contact with organizations. Lucy articulated how interacting with organizations felt, “So impersonal. I mean we won't even know when they switch over to robots.” Ella agreed that the automated system was an issue and that having a real person to speak to when you're old, is “very critical.” She narrated her experience using the automated system:

Please listen to our menu. Yeah, push [this button] through this [referring to a recording asking you to push buttons]. And yeah, and if you don't know, if they give you seven choices, and you don't know which question you have, what choice, I just pushed one of them anyway and say, Okay, get me to the one I need. Yeah, more real. A real person to talk to is pretty, that's very critical.

Many felt frustrated by having to navigate an automated menu of options that were not always compatible with their needs, and eventually having to call back several times:

First of all, if it's an emergency, that is so stupid. I mean, what do they think we are, really? And then if this is a medical question, push one. If you don't want to change your appointment, push two, if it's something else, push three. And they are not always accurate. Sometimes you push every button. Two or three calls to get what you want.

Margaret cautioned that the automated systems directly deterred older users from engaging with the organization. She believed that it only took a single poor experience for someone to give up trying to get their needs met:

Older people hate the fact that they can't talk to a person . . . And particularly for older people, because I have friends that just say I'm not doin' it. If I can't talk to a person. Well, you're kind of cutting off your nose to spite your face. If that's the way it is, you got to do it.

Screening for Eligibility. When participants were able to reach a live person within an organization, they were frustrated by the interaction sequence. Instead of greeting the caller or saying hello, they asked income questions to screen for eligibility.

Participants described this as an important common misstep, Dorothy explained:

You really have to be careful what you say. There are people who resent, 'What do you make?' and with almost ninety percent of these services, that's the question they ask. And it's one of the first ones they ask.

Likewise, Henry suggested altering the sequence of the interaction by posting an impersonal question or two, and then, "you know, third or fourth question maybe income.

Not the first one!" Lucy echoed this sentiment, "You call up and their first thing is, you

know, what's your income? You know, just show *some* interest in the person and their problem, and then pop the question.”

Interactions with service organizations were deemed dissatisfactory for many participants. Clarence cautioned that, “People get discouraged very easily.” He warned that poor interactions and experiences could deter utilization:

Well, if [seniors] call you about some problems, and they put you on hold. They may never call back. So, when they call, consider every call VERY important. People get discouraged very easily. They say, ‘Why bother?’

Initial Relationship Building. Lucy felt that the first point of contact was very important. She explained, as did others, that organizations lacked signals of care or concern:

Your first phone call, it can make a *world of difference*. And you can't, you know, push this or this or this or this? Or if a person answers, she'll say, “Well, we'll call you back later.” There's nothing warm, or welcoming, or the “May I help you?” kind of thing. Sometimes you just feel like, well, they just don't want to be bothered with me.

Interactions with community-based organizations were depicted as cold and impersonal as Lucy explained, “Yeah, that's my current thing. They have to do something about these phones. We have no longer become customers.” Her experience was that organizations were less concerned for people, as she explained, “It's usually just, yeah, just get this done as efficiently as possible.” Participants felt that minute signals would help to mitigate this, so that users might form a positive impression and not be discouraged from interfacing with organizations. Henry pulled from his experience working on the railroad to provide recommendations for how organizations might improve interactions. He

recommended that phone calls begin with simple greetings to make the interaction more personable and to build rapport:

Your first thing you should say is 'Hello.' Like working for the railroad, that's the first thing you had to do is say, 'Hello. This is like, or like, 'Hello, this is Henry you're speaking with.' So you're, you're putting yourself out there for the people. And then they come back at you. And then you're, you know, like you say, these people are showing interest in that person and then you'll win them over.

If you feel like you're being brushed off or whatever, instead of when you make it a little more personal...and it isn't that hard. That's the other problem, it's not that hard to *be* personable.

And then you're you know, like you say these people are showing interest in that person and then you'll win them over.

Participants favorably evaluated their interactions with community-based service providers when they were accompanied with expressions of care and concern. Margaret provided an example of a positive interaction, which included expressions of care and being personable. She also appreciated the collaborative approach the provider used during the decision-making process:

It's like is this your job or your passion or is it just a paycheck? Anyone I've been in contact with [community-based aging agency] has given me the feeling that they actually care what they're doing.

People at [community-based aging agency] that I have interacted with have been very personable okay, and caring. And they try to help you make decisions without telling you what to do which is important . . . and recommending things that you try without really, they don't want to boss you around, and they've been getting to these services like that housekeeping. You do have to admit what your income is and stuff. I'm fine with that for services.

Inadequate Investment in Human Resources. Participants did not hold providers solely responsible for poor interactions; they blamed poor organizational policies and practices. In addition to poor practices at points of entry, participants felt that

organizations did not adequately invest in providers. Lucy explained that budget cuts resulted in staff reductions and providers who were inaccessible: “They're too busy. They are so overloaded.” She explained that constrained budgets resulted in less than satisfactory outcomes:

You got you know, budget cuts. They cut the people. Two people do the work of three, and then they're doing the work of four. And the clients just muddle along.

Likewise, Ella expressed concern for the lack of investment in service providers, “If you're paying the minimum wage and you have a minimum requirement, they're going to have minimum talent.” Inadequate investments in staff resulted in a talent pool with poor skills and little education. Margaret was empathetic to the fact that the organization had not adequately prepared her home chore service provider:

There should be more training. You know I don't know, that ah, they're trying to do a good job, but it's not the well-educated people, that's the problem those are the ones that need the help.

Others described providers who sought insight about how to perform their duties when they arrived:

Probably more training, more training there. I don't know how they hire but I think it's the ladies, I don't have a man, but people that need . . . have no job, need money. They're told what to do. And I think the people, she kept asking, what do you want me to do? What you want me to do? And how do you want me to do it? So there wasn't a lot of training.

Leonard felt that providers were inadequately prepared and, in general, demonstrated a lack of experience interacting with seniors. Before his wife was moved to an assisted living facility, he utilized a community-based organization for assistance. Leonard explained:

There was a couple of the ladies that came in that take care of my wife, was that way, that just didn't have the experience in it. It didn't work out. But you can't step out of high school and come in to take care of people if you've never been around [seniors].

I asked Leonard how he thought that experience might have been improved, to which he replied, "It's just lack of experience and not paying enough attention to what's going on and like that." Dorothy echoed Leonard's sentiment that younger cohorts were inexperienced and thus ill equipped to interact with seniors:

And it was so some young kid, didn't know how to answer me. No, the young people, maybe they should have some classes in school, go into the nursing homes. Something. Because, they ah, they have no idea.

Experiences of older adults with community-based service organizations can influence the behavior of many, particularly when negative impressions are formed. Lucy noted that poor interactions stimulated conversations with others that may have dissuaded them from using a service:

What usually gets 'round is word of mouth. One senior tells another senior and if that seniors not happy, with what, you know, the way he was treated it's gonna start going down. But you get one that thinks he was treated fairly, and you're on the right angle . . . And it's still in the town. In a small-town word travels rapidly.

Likewise, Opal spoke to the importance of having the first point of contact be someone who could make a positive impression:

It's kind of like in a, in a business or a company, the first person that is an ambassador for your company is the receptionist. And sits in front, and you can either leave with a good feeling or 'Boy, was she snippy.' You know kind of thing. It is important.

As Opal and others indicated first impressions are important, though evaluations are formed before, during, and after the service utilization experience.

Community Dynamics

This section will describe how the communication environment and spatial dynamics influenced community-based service utilization.

Inter-Organizational Disconnects. Participants were frustrated by interactions with members of community-based organizations who they felt were siloed from each other with respect to information exchange. Interactions with healthcare professionals in particular, who were viewed as trusted communication resources, were missed opportunities for learning about community-based services. Participants speculated that they were either not privy to community resources beyond their location, or that they did not have the opportunity to extract the information due to time constraints. Albert felt that the medical community needed to be more informed about resources so that, specifically, his doctor could, “Get off his lazy ass and tell his patients what they need to do to get better or delay, at least advise them about what the hell is available out there.” He described a process of learning about services that were beneficial for his wife after many years of being uninformed, which he faulted his doctor for:

He was a neurologist and . . . he says, ‘You've got Parkinson's. There's no cure for see it, ya in a year.’ And yeah, that was it. You know, and I'm going ‘What? What, wait a minute.’

Agnes echoed this sentiment though felt that information needed to flow more readily between community-based service organizations and hospitals. She was specifically concerned about hospital discharging as a missed opportunity for seniors to get information about services:

I'll tell you of a local problem right now that we're working on. The hospital . . . say you're in the hospital, the hospital dischargers, they don't provide the people with information.

Agnes also felt that hospital staff left seniors, "sitting there and they don't know what to do." Lucy described how the hospital discharge process negatively impacted seniors:

And I saw this happened recently. If you don't, they got discharged from the emergency room, say three or four o'clock in the morning. They don't have anyone to come pick them up. They sit in the lobby and wait until the hospital can get a taxi or put them on a bus. I saw it for myself recently. This woman was brought here extremely deaf. From the emergency room. I don't know who brought her it was some guy, sat her down in a chair and the lobby and then left. A couple of people here. Who knew her helped her get up to her apartment.

To address this information deficit, Agnes suggested having copies of the Monroe County Senior Source and Family Guide² (MCG) disseminated to hospitals, churches, and also among community-based service organizations as well. From her view, healthcare professionals were uninformed, and aging service providers were siloed from each other. Agnes said she had worked with an older gentleman who had visited the Veteran's Administration (VA) who left without being informed about resources that he could have benefitted from. She explained,

Well, what got me was the gal at the veteran's bureau who signed him up, never told them how to get these services or anything else . . . 'Oh, you're on your own.' Yeah, and doesn't tell them anything. We have the [MCG] brochure that lists all the agencies and everything they do.

² The Monroe County Senior Source and Family Guide, a publication of the Monroe Newspaper, is a 56-page booklet that lists all of the services and programs including a toll-free phone directory. The MCG has a notecard stapled to the front that features a central call in phone number for senior specific questions. Two inserts are also included, the first describes and provides contact information regarding elder abuse. The second insert describes the Commission on Aging, the Monroe County senior millage, and how funds from the millage are allocated by service.

The inter-organizational disconnect extended beyond community-based services. Participants described a feeling that interactions in community-based organizations posed hinderances. For example, Virginia described an experience with a doctor who did not have enough time to answer pertinent questions, which clearly indicated he would not be a conduit to any other information such as community-based services. She described the interaction with her doctor who rushed her through a conversation about a pending procedure without the opportunity to address any unresolved questions:

I had macular degeneration in one eye and my doctor sent me to a specialist...and I knew there was a new shot now you can get right in the eye, and [daughter] was with me. So this cocky doctor was standing there . . . and of course being a teacher, what do you do? You ask questions. ‘Okay, what is it?’ He looked at us and he says, ‘You are taking *entirely too much* of my time.’ We got up [and left]. Someone’s gonna put a shot in your eye and you’re not gonna ask!?! I mean I wanted to know what was going on before I got the shot in the eye.

Healthcare experiences often left seniors feeling rushed, brushed off, and with unanswered questions as Virginia illustrated. As Lucy stated, “We are statistics and numbers, they answer as rapidly as possible because they mustn't waste time!” Participants felt that these interactions were missed opportunities for learning about beneficial resources such as community-based services. Margaret said that asking questions or asking for help could be difficult, which was intensified by individuals who didn’t have time to answer questions. She explained, “You don't want to feel like you're already beating yourself up because you need help and you don't know where to turn. The last thing you need is for somebody to make you, to dehumanize you.”

Built Environment. Participants described elements of their residential environments that influenced the utilization of community-based services. An

environment that is conducive of communication allows knowledge to flow to those who need it. In Monroe County, some contexts fostered connections and dialogue and others areas were less conducive. As the reviewed literature highlighted, interpersonal discussions influence awareness and enable utilization behavior. Furthermore, the physical environment can constrain or enable information sharing. For example, the U.S. Census Bureau (2014) defines Monroe County as 38% rural, the rest of the county is not considered rural because of proximity to major metropolitan areas. In many of these areas, despite how they are categorized, the environment is not conducive to interactions. For instance, homes that are situated miles apart do not have shared driveways or fences, nor do they have amenities such as city lights and sidewalks that foster interactions with neighbors. Gardner (2011) described *thresholds*, or hybrid places outside the home but within the neighborhood such as porches, driveways, and yards as places that provide opportunities for interacting and exchanging information.

Geographic differences were observed throughout the county, which impacted participants access to information about community-based services. For example, those who resided in the south and east near the Toledo border, often went outside of Monroe County for resources, information, and some relied on the Toledo Blade newspaper as a communication resource. Margaret lived near Toledo where the Toledo Blade newspaper had high readership, “that's the main newspaper out here. We don't even get a Monroe News, I don't think out here. You can get it but it's too expensive.” Relying on a newspaper outside the County reduced knowledge about community-based services and resources where they could connect to services such as local health events. Likewise,

people who lived in northern and western parts of the county and who resided near Ann Arbor were unconnected to information about Monroe County community-based services.

Participants living in more densely populated areas had more direct access to senior centers, and were able to benefit from events and activities where they were exposed to information about community-based services. Likewise, they frequently shared newsletters that they received from being a member that included information about community-based services.

Transportation was indicated as a barrier to using services by participants by severing direct connections with services and reducing access to places where they could learn from others. When I asked Henry about obstacles to accessing services, his kneejerk response was, “Lack of transportation.” The oldest participant who was ninety-six, was a caregiver for her son (in his seventies) who had suffered from a stroke. Dorothy gave up driving which meant she couldn’t get to the senior center:

I used to go but, ya know, I don't drive anymore. I gave up driving a year ago. So I don't go down there . . . I used to go down there and eat, played cards.

Socializing was infrequent and occurred, “Only if someone comes to visit. Take us someplace, we’re uh, pretty isolated.” She felt “stuck” at home and relied on others to get her to places, she disclosed, “it gets pretty lonesome sometimes.” Transportation limitations impeded access and also hindered meeting with others, in Dorothy’s case at the local VFW hall, where she could access information about services through others. When I asked if she had talked to other people about community-based services she replied, “When you get this age and you're in the house, you don't get out, no you don't

you don't have that opportunity.” More direct to the point, Dorothy noted transit barriers for getting to services, “We don't really have, what we really need is a bus service.”

She explained how a more densely populated neighboring city offered transportation services and how macrosystem forces played a role in service provision:

Bedford has a bus service . . . I've heard them talking about it. But they do have a bus service. There really should be something like that from the county. Not, not the township. But I guess the way the laws are set up, the townships have to do it and pay for it themselves. And we would have to vote that through.

The politicians have to get on the ball just like Temperance, they voted for that bus service, but it's a bigger township. Erie is so much smaller, that's why it should be county wide. Yeah, see but we only have thirty-five hundred people here. Can they really support something like that in a small township? Things like that should be county wide, not individual.

Millie lived in Bedford and continued to vote in favor of funding transportation, though she did not anticipate using it:

I mean, I don't think I'll ever need it because my kids are so close to help. But I still vote every time for it. Because I know there's a lot of people that [need it].

For those not citing immediate transportation issues, they described planning for a time when they wouldn't be able to drive. Opal was on a waiting list for subsidized housing in Ann Arbor that she estimated would take several years to get into, “I think I'm 102 on the list. So that isn't coming up very quick.” She explained, “And the reason I thought of is because, Ann Arbor has, ah, you know, a cab ride is one dollar. You can take the buses, you don't have to drive if you get to the point you can't drive.” Stanley agreed that hanging up the keys meant that people would reevaluate environmental fitness, “But then now where you live becomes an issue. [When] you can't drive.” Participants described how their travel patterns had changed with age. Millie provided an

example: “I don't like to drive to Toledo anymore, it's too congested and just, you know. I have to, if I don't feel safe, I don't drive.” Likewise, Opal said, “When I was younger, I used to go to Toledo quite a bit, shopping and things. But I don't so much anymore, yeah it's about 40 miles I think.”

Finally, seniors described different ways in which they mitigated transit obstacles. Sharing rides to senior centers, church, VFW halls, and other sites were frequently noted solutions. Earl explained why he drove his neighbor, “He wrecked his car and he had no way to get church and I kept picking em up and take em to church on Sundays. It was no big deal, it's along the way.” Lee provided rides to a woman he knew, “Once a month I would take, pick her up and take her up north to a doctor's and by the time I leave here and come all [the] way around, it's 80 miles. I did a lot of driving for her.” Although the built environment is a barrier for some, older adults who shared rides are afforded the opportunity to chat about their community and exchange information about services.

Settings as Conduits for Information about Services. Recreation and senior centers, grocery stores, VFW halls, and community rooms were sites that participants noted being introduced to information about community-based services. Millie described her experience at the YMCA, “You're, you're learning from other people . . . Yeah, if you just keep your mouth shut, their eyes open. Yeah, you can learn.” She learned about a service from someone at the recreation center, “And I felt like, I'll just see if my insurance will pay for part of it. That's how I decided to do it.” Participants connected to community-based services through fliers they discovered at the local grocer and by sharing problems with others who they chatted with at the local VFW.

Two participants who lived in a senior housing building described frequent gatherings in a community room at the center of their adjoining units. The participant who was newest to the housing site said she benefitted from the informal group meetings, “Until I moved here, I did not know anything about any of the services.” She and others were recipients of in-home chore services which they learned about through each other and a newsletter disseminated within the housing site. Potluck dinners, morning “snack and yack” coffee gatherings, and small group projects such as reupholstering a chair were occasions to talk about their community and available resources. Ernie described his transition to senior housing that began with walking into a senior center for information that he read about in a flyer. Ultimately, this experience influenced his decision to move to the senior center:

I decided I had to move. Yeah, go to senior housing. I knew about [place]. So, and I couldn't get in over there. I didn't know how to get in here. So I went over the [senior] center. And they were so nice to me. And they told me how to get in. And she gave me a book on the different senior places in town. And I was very happy with that.

He moved into the housing site and also became a volunteer at the attached senior center, “and that was the best thing I ever did.” He explained why:

You know, my wife died 20 years ago. And I didn't know you know, you don't know you're lonely. I thought I was happy. But I wasn't.

I wish I would have known this ten years earlier, because it just changed my life. 100% in volunteering. I never volunteered before in my life. Well, I did. But you know, not like I'm doing now.

I mean, I'm happier now. I'll put it that way. Yeah, I mean, I, I kept busy all the time. Yeah, but you don't realize how you miss people. Then. All sudden, one day I saw what I miss most about retirement. I mean, when I worked with the customers, I would come in and I could go talk to customers. They would ask for

me and that. That's what I decided. I miss that. I want to start going to what I can, just meet people.

The communication environment afforded an opportunity to forge connections and rebuild a diminished microsystem that was impacted by the death of his spouse. His experience motivated him to spread information about community-based services. He viewed himself as an information ambassador who espoused information about services to anyone he met:

So when I talk to people, you know, I tell them, you know, well, you know, you can get these different services. And I tell them how to get in contact with them. I keep a card like yours with both RSVP, the center and the food pantry you know, and I tell, I'll give them their phone numbers.

These examples highlight the importance of dedicated spaces where older adults could access mediated and interpersonal communication resources to learn about community-based services. Moreover, the settings allowed them to forge interpersonal connections in order to augment their diminishing pool of communication resources that they could draw from. Individuals benefit from the resources of other microsystem members and may be influenced to utilize community-based services through them.

Community Norms. Community activity and involvement can influence the senior's ability to connect with community-based services. As described previously, people who were civically engaged also were critical for connecting older adults to services. This included people who were advocates for seniors in general, or others who were volunteers, retirees, or held civic roles. They disseminated information, provided advice, and tangibly connected them with services by providing transportation and by

registering participants for services and helping to get their names put on waiting lists when needed.

Conversely, some participants were concerned about diminishing patterns of participation which could lead to fewer social interactions and less opportunities for sharing knowledge about community-based services. Shared church affiliation was a way to connect to information, however, attendance rates were declining. Virginia explained:

Well, those [older people] are the only people that go to church these days are, [church name] is just going to close I'm sure. We're down to about 12 people on Sunday morning now, but the young kids don't go to church anymore.

Despite the activities that were occurring near to her home, Opal wasn't participating in events because she stayed home more frequently:

I don't put down any organization. The fact that I don't partake in a lot has nothing to do with whether it's good or not. It's just that I just putzy around here.

Likewise, Eddie reported declining numbers at both the church and local senior center where he socialized:

We used to have on a Friday night at the senior center. We have maybe thirty or thirty-five, I don't think we ever hit forty, but we had that many people come down every Friday night at the senior club and everything. Well, everything's going downhill. Now we have maybe fifteen people something like that. Last week we only had eight.

I asked Will what he meant when he said that everything is going downhill. He replied, "Participation. You know, I don't know. They just don't get out like they used to." He was concerned about the diminishing social resources as people got out less and less.

Participants contrasted stories about the past, of living in a tightly knit, safe community, with current realities that centered on the erosion of trust. Eleanor provided an example:

Because, I found now I used to, I'd go anywhere in East End and then if I had a flat tire, I just walk up to the house, that kind of thing. But now a lot of the drug dealers have permeated the community, which is sad . . . Yeah, Monroe has changed quite a bit.

Millie recounted how things had changed since raising her children who described growing up “during the best of times when it was still, everything was still, you didn't lock your door and you could trust people.” She reminisced:

It used to be I feel so bad because you can't trust anything or anybody anymore. Even kids outside playing they say well can stay and you know on our electronic things, but you still you have to be careful having them outside. My kids used to walk to the corner here that used to be the school at the corner does a senior center now is like a half a mile. And when they, until they were in the sixth grade it was down here then they love, they walked to school on time. There's no problem. Now you just don't want kids out on the road like that. My kids say they lived during the best of times when it was still, everything was still, you didn't lock your door and you could trust people.

Opal shared her coping strategies which made her feel less vulnerable when she was out:

When I shop anymore, I have . . . I keep everything in my pocket. I don't carry a purse. Yeah. And that's very much a good thing to do for older people. For sure. They can't grab your purse and run or whatever.

The lack of trust can directly impact utilization. Clarence lamented about not being able to utilize services while caring for his mother who was worried about letting strangers in her home. As a result, he and his mother went without the help they needed:

The problem was she didn't want anybody in her house that she didn't know about and couldn't trust. And so, we would have to cancel that, or not take advantage over [the service] in the first place. So, I wound up as they say out of left field with no help.

The notion of trust also influenced how participants planned to communicate to seniors about community-based services. Agnes noted that outreach needed to be delivered from

the inside of a person's microsystem. For example, she advised that a resident from within senior high-rise buildings should go door to door to attempt to speak to residents:

Somebody that lives in that unit that they trust. Like I probably could get in to most of the places. But it's got to be somebody they trust. This is the biggie because there's so many scams and so many rips offs,

Ella relocated to a senior housing community where she gained a great deal of knowledge about community services. Though when she first arrived, she indicated that trust and vulnerability influenced how she interacted with others: "Yeah, when you first, it gets scary when you first move in, even in a place as welcoming as this is just a little scary. You don't know who to trust, who to, you know, to be vulnerable with."

Trust and skepticism also influenced behavior when interacting with others through mediated sources of communication including telephones. As Millie described: "the calls are just getting more ridiculous, but that's why the phones are maybe becoming an outdated source for communication." Albert avoided answering when phone numbers were unfamiliar, "If I don't recognize the number, I don't answer it." Agnes said that she only answered calls from individuals who sent a priming text before the phone rang as a way to legitimize the caller. Likewise, Ted reported that he wouldn't answer the phone unless the area code was the same as his, and at least three participants described fraudulent activities that occurred over the telephone. Albert sarcastically explained, "Because there's people like the prince from Zimbabwe or something is just one of eighty-seven billion dollars and he wants to share it with you! You know, come on here, there's enough of that junk out there."

Macrosystem

The fourth research question focused on the macrosystem, specifically understanding how individual behavior shaped by broad structural forces act to segregate older adults from younger cohorts. Old age privileges wisdom and a breadth of experiences that were shaped by macro-level phenomenon. This section will summarize matters related to the broader contextual realities that influenced community-based service utilization.

Age Segregation

Participants often reminisced about their pasts when family members lived more proximate to one another, and often live all together. They explained how those arrangements afforded opportunities for younger and older people to interact, understand one another, and to communicate effectively. Participants felt that there were relational consequences for the scattering of families for jobs and modern family structures that required both parents to work. Participants' depictions of the macrosocial phenomenon and implications for community-based service utilization are described in detail below.

Participants shared narratives about their past experiences living in close proximity to family members or in homes that were multigenerational. Lucy described growing up in a multi-generational home, "Years ago, like we said, there was two, three generations or more in the house. Now, these people grow up never knowing their grandparents." She explained how shared living spaces afforded opportunities for exposure to old age circumstances and greater understanding. She indicated that current

norms of infrequent visiting “once every ten years” were insufficient to establish meaningful connections:

And if they live together, and they see the changes, they would know. And they know what has to be done, that they need more help they need more physically, because they're not physically able to do the same things . . . And to see how people gradually change. If you've got relatives you see once every 10 years, it's not the same as watching them regularly.

Dorothy had similar recollections of families being close and older adults remaining in the same house with their children and grandchildren until they died: “Years and years ago when I was growing up that's the way it was . . . You stayed home, you usually took care of your grandchildren and then you stayed home until you died.” From her perspective, people lacked the experience necessary to cope with old family members, Agnes explained:

Now with some of these services, they send ‘em to the nursing home. So nobody has any experience. People want to be home as long as they can . . . And it doesn't matter what economic bracket you're in, nobody wants to be in a nursing home.

Eleanor indicated that age and illness were both important experiences for being sensitized to aging matters. She spoke about a relative who was deployed in the military when his parents both died, leaving him without the skills to relate to old age matters:

He's had no experience with anybody sick . . . And never saw them sick, he's never. Seen. Anybody. Sick. And he doesn't understand sometimes.

Participants viewed current trends as cause for concern for future cohorts, who they anticipated would inevitably lack the communicative competence to interact with seniors including service providers. Dorothy described an interaction with her priest who she felt was inept; a consequence of not being exposed through family interactions. She explained:

If you ah, have no idea, they will never know. The only way that they would know is if they came from a large family themselves. Just like we had [name of] church, he just left. The priest just left, he was an only child. He could, he couldn't communicate with the old people. Ah...he didn't know how to talk to old people.

Dorothy was the first of many participants to suggest that schools would have to compensate for the mounting communication gap:

He just couldn't seem to communicate with people and especially the old people. And you would think that as a priest they would have had that training, but evidently not. All the training he had growing up, took over. Because he had no, no social graces with the old people at all. I don't know how you'd even correct that. Possibly if at the schools they'd have a class that would that they would take, and maybe go into a nursing home for half a day and work, and they will find out how things are done and what it's like [to be old].

Agnes agreed that people were increasingly ill-equipped to relate to, or interact with, old people. She noted a course that a catholic school offered on end of life issues, "Years ago, at the [catholic school name] the girls school and the boys school were together and they had a class of death and dying, because they don't know what to do." Mabel agreed that education and exposure to older adults was needed, "No, the young people, maybe they should have some classes in school, go into the nursing homes. Something. Because, they ah, they have no idea." Eleanor posited that schools must play a growing role in helping educate people about aging. She described being exposed to information about aging and services while attending school in Flint, Michigan:

You're gonna have to start with the school, the kids in school. You have to have a program that they know what services are available for their grandparents. Then as they grow up, what services there are for veterans, what services there are for every society in life, almost. You know, because it's a *whole* different thing.

I come from Flint, okay services in Flint were taught to us in school...Like the Lions, the Masons, what they do and what they stand for, what they collect and yeah, stuff like that. So we, known that there were services before I left high

school that's for sure way before that, before we even got in high school, there was services.

Dorothy recalled a class at the high school that offered sensitivity training that was focused on high school seniors who interacted with children in kindergarten:

We do have a class over here, which I think helps a little bit. The kids, they have to be a senior and they have one class go over into the elementary school for kindergarten. And they help for kindergarten class, so they can understand little, little ones. Now I don't know, but I don't think all schools have that.

Dorothy expressed concern about the long-term economic impact of not educating people sooner about how to interact with older adults:

So maybe you'd better start in school. Start now, get these people, these kids to know. I don't know how you can do it. They'd say, 'No money. And we can't do that. Because we don't have any money.' But we don't educate the kids right, it's gonna cost us more money.

While schools did not play a role in how seniors interacted with agencies or their staff members per se, participants felt that the growing separation of families would result in individuals who would not be sensitized aging matters. Leonard verified this deficit; from his perspective it was a lack of experience interacting with seniors. Before his wife was moved to an assisted living facility, he utilized a community-based organization for assistance. Leonard said:

There was a couple of the ladies that came in that take care of my wife, was that way, that just didn't have the experience in it. It didn't work out. But you can't step out of high school and come in to take care of people if you've never been around [seniors].

Participants felt that the lack of intergenerational communication and growing trend of families being separated from elders meant that schools would need to increase aging education in the future. Eleanor described the cultural tendency to avoid discussing old

age matters and that it was omitted from education because, “it’s a hush, hush thing.” Participants suggested that as generational separations increased with time, so too would the communication gap between the old and young.

Self-Sufficiency and Historical Narratives as Rationale

As described at the individual level, older adults were often reluctant to disclose information related to sensory function (e.g., hearing loss, vision impairments) and to admit to the need for assistance. Dorothy stated that people feel embarrassed when they have to call and ask for help:

Well, people, they feel embarrassed to have to call. I hate calling all the time to try and get a ride. And most people I call, they don't mind. But, they just, the people are embarrassed to keep making phone calls.

Henry also pointed to gender differences playing a role in use such as attending the senior center, because individuals, “don’t want to park their ego at the door:”

Well it's all about their egos. They don't want to park your ego at the door. Hhhh Well, it is, you know, we all think we're invincible... hhhh. I think that's a male deal. I really do. Like my dad, he thought he wasn't old. But he was. Oh I'm not gonna go to that [senior center].

Henry noted the importance of users maintaining a sense of dignity; a priority of food pantry that he tried to persuade a neighbor to use. He described his neighbor as too proud to take advantage of these services:

He wouldn't go. Never went. And he coulda used that help. You know, get food. Oh, yeah. Look at different people. I mean, I talk long and hard. I’m usually pretty convincing, he wouldn't budge. He would not budge. And it's, the pantry (.) if you go there (.) it’s a very (.) good situation for the people. You know they go around, it’s just like a supermarket and there’s no judgmental deal with people. And we try to make people feel very comfortable there. It’s very good. It was a good idea when they did that.

One of the senior people that play in our pool league, I suggested he goes to MCOP, the food pantry to get food, because he was living on just his social security and it's barely covered his deal, and he still was so proud he would not go there. I talked to him, and I says, that's what it's there for. It's there for you. To give you help. So then you have extra money, some extra money, than some of the other thing you may want. Versus living month to month. That's the thing, pride.

Ernie indicated that individuals would have to “admit it to themselves,” that they needed help, an obstacle that was not limited to disclosure with others:

Some people are ashamed to ask for help. I know, some people around here don't want to ask for help. They are embarrassed, and I don't think they want to admit it to themselves that they need help.

I've even offered to help them go to MCOP, drive and stuff like that. ‘No, I don't want to go.’ They just keep putting it off. And, you know, they don't want to, I don't know if they're ashamed to admit it. Or they don't, you know, just don't want to admit that they can't do it on their own.

Opal echoed this sentiment as she shared her thoughts about the challenges of maintaining her home before she moved into a senior housing complex. She explained, “I think, probably, I wasn't maybe receptive at that point.” When I asked her to explain what she meant by not being receptive, she replied, “I would have at first maybe thought, well, I'm not gonna admit that I don't have any money.” Stanley illustrated how resisting help for menial issues resulted in major changes:

I'll use my mother as an example. When she finally decided she had to move out, she had a condo, she went from a farmhouse to a condo to assisted living. Yeah, each transition was different. But she was ready for each one. But the one that got to her was in the winter when she had to take her garbage, at the condo. She had to get her garbage from the house out to the road.

And she was a little frail, and she was so afraid of falling. And when the weather was snowy, or icy. And I said, ‘Mom, we can hire somebody to come and put your garbage out to the road.’

Stanley's offer was declined, as he recollected her response, "I don't want to ask anybody to put my garbage out and to get my mail. That seems stupid!" He explained that her resistance meant that she had to relocate to a less challenging environment:

So that became a reason to go to assisted living. Because all that's all taken care of it. I don't have to worry about shoveling snow off my walk. And so I think the elderly are pretty smart about what they *have* to do. I think cost becomes a big issue whether they can do it or not. So those are little issues that probably have other solutions. But yet people resist having somebody come and do something they consider so menial. That I have to ask you to take my garbage out.

Notably, as participants revealed personal information, some asked me to pause the recording device so they could speak "off the record." Clarence, in particular, felt he was expressing very personal information that for him, and that was atypical. At one point during our interview he paused to say, "Um, I don't normally share this. You should feel privileged." Clarence was not the only participant who disclosed personal information. Lee disclosed that he couldn't jot down notes as things slipped his mind, he explained, "I don't know how to read." Opal talked frankly about her memory loss, surgeries, and also that she didn't think she was receptive to services when she lived independently because she would have had to admit to herself that she didn't have enough money. Seniors used their pasts to illustrate how their value systems were shaped. Their narratives shaped who they were and impacted how they were in the world, including utilization of community-based services.

Participants frequently used historical experiences to warrant their present-day decisions and behavior. Lucy, who was eighty-nine, explained:

We have people here that survived the depression. And they are very proud people. They don't like to ask for help. They are very independent.

Older adults shared stories about their pasts more to demonstrate current understandings about community-based services. The participants, who on average had more than eight decades to accumulate knowledge, provided narratives about their experiences as children at the beginning of the last century. Participants explained, “You didn’t have the welfare benefits” or the “facilities and places that you can go for help” available in the present day. The concept of getting help outside their microsystems from government or community-based organizations seemed to be a novel concept. As Stanley described, “it’s something that I think a generation ago they, just didn’t have to do. Yeah, just wasn’t necessary with children taken care of parents.” He explained that families were the “core institution” and that people relied on each other:

Well, my grandmother she rotated between my mom's and her other siblings houses and she didn't have a house of her own, just took care of her that way. And sometimes when we were fast faced with an issue . . .well, how did they handle it a generation ago? Well, families were the core institution, you know, and they took care of business of the health care or whatever, but it's a different era.

Lucy agreed that the concept was novel and that people worked until they died, and died before they would have even qualified for help based on today’s standards. She explained:

You know, when they talked about Social Security, 65 was picked. Very few people actually lived to 65. That was like, I mean, the idea now that is being drawn on by people. They thought people would draw on it for a few years, now it goes on and on.

Stanley agreed, he explained that people worked until they died in past generations. As he recollected, there wasn’t time in life to actually require support or services, pointing to community-based services or support from outside sources as a novel concept:

People worked. They didn't have senior centers and things like that. Because people worked, you just kept working until you died. You know, that was the way life was.

He explained the notion of retirement as being socially unacceptable, a thought that seemed to persist as he grappled with drawing from Social Security though he felt he was still able to be productive:

I don't think it was very socially acceptable in some respects to retire. 'Well, wait, why are you retired you as long as you can be productive?' And I honestly, sometimes I feel that way, I can be productive. Why am I relying on Social Security to help take care of me? And I think that those questions are always going to be asked, because how long, 'cause they're raising the age at which you can retire and draw your social. So that's one way the community responds to it. But it's a real problem. Yeah, how long can we support these old people?

I think that the older people before they're in any programs because people just died and . . . why plan for something that isn't going to happen, you know, now all of a sudden, we're living longer. So now, what are we going to do with life? We haven't really, we haven't talked to the kids about it, because it's sort of a, yeah, sort of a new phenomenon. We gotta worry about that, we didn't worry about it. Well, I lost my one grandfather when he was in his 50s and the other grandfather in early 60s. You know, and so I think the fact that I'm 75 or almost 75 is, it's probably unusual compared to a generation ago. . . They died before anybody thought about creating a program for [them].

Mabel also spoke about community-based services and support as a new concept, particularly to older generations. She said, "We didn't have all these facilities and places that you can go for help. Oh, I didn't even have it with [deceased husband], as much as what they have today." She went on to explain that help wasn't even available for deadly medical issues for her father who was a coal miner, and that "welfare benefits" were non-existence as well:

He had gone over to service he had come back he had developed pneumonia he went back into the mines in Kentucky-Tennessee area too soon. There was no penicillin at that time it had not been invented yet. And actually passed away and died of the pneumonia going back, but I found out that a lot of the people that the

flu, and it was the flu that started it in America with and had come over from Europe, the boys coming back after world war one and bringing the flu and that's your flu epidemic. Also, at that time, their oldest daughter by mother's sister...died of sugar, because they did not know just to give her a cube a sugar or some honey or something sweet... She was like maybe 19, 20, 21 years old. Hmm. And way back then you didn't have penicillin available. I don't know if it was available in like New York or Chicago. But it wasn't available in the coal mining area. I don't know when that came in. You had voice coming back from World War One that was wounded having, the flu coming back, going back to work too soon, because they had a family to support, you did not have the welfare benefits.

Antiquated notions of “welfare” seemed to persist in relation to seeking or accepting assistance. The word *welfare* had negative connotations and utilization was stigmatized in the past. There are exceptions, however, as with Social Security that individuals view as reciprocal. Because they have contributed to Social Security, they are comfortable drawing from it. However, their tax dollars have also contributed to the community-based services that are available to them, which may help inform how providers frame messages to promote use.

Mesosystem

The final research question was concerned with understanding the connections among the multiple levels described previously. To address the communication disjuncture between community-based service providers and older adults, this section will describe the bridging elements between individuals and their microsystem to community-based service organizations and explore how features of the communication environment impeded or facilitated connections. The interdependent communication resources fostered connections through direct and indirect paths.

Health Centered Activities

As described in the microsystem section, older adult's communication resources diminished as old age progressed; thus, interactions become increasingly important resources to obtain information. Younger cohorts typically have more connections and activities organized in a rich communication ecology of educational, occupational, recreational, and social resources. Participants' activities and narratives were often centered on health matters that included therapy and doctor's appointments, surgeries, and hospital visits.

Participants shared details about health issues and how it limited or impacted their activities. Opal explained, "I've had my knee replaced also during March. I had my knee replaced along with everything else that went wrong." Opal talked about returning to her volunteer position and getting out once she healed. Irene described how several operations derailed her from her routine of attending the YMCA:

Then I had the operation in two knee replacements and two shoulder replacements, and three of the most in 10 months. But then, so I didn't go back. I didn't go back to the Y for quite a while. And after that. I just got kind of out of the habit.

Many others spoke about doctor's appointments, visiting the eye doctor, stays in hospitals and other activities related to their health. Because late life is centered on health activities, those who provided health care and who they interacted with in health settings were potential sources of information. Participants hoped that healthcare professionals would provide more information about health matters, as well as share information about community resources, such as services and programs related to their particular health circumstances. Agnes and Lucy advocated for better informed hospital dischargers who

were unaware about community-based services. One participant described a senior who was discharged with no way to get home:

They got discharged from the emergency room, say three or four o'clock in the morning. They don't have anyone to come pick them up. They sit in the lobby and wait until the hospital can get a taxi or put them on a bus.

Agnes thought it might be useful to disseminate the MCG community-based resource booklet to healthcare sites and to hospital dischargers. Health care activities did not connect seniors to community-based services, however these activity patterns present an opportunity for service agencies to consider how they can make this meso-level linkage to Monroe County's eldest residents.

Health related programs and events were valued resources for participants. These health-related outreach programs and events were described as part of exosystem outreach. Health events such as lunch and learns, health fairs, and health presentations were key communication resources for older adults. These events provided opportunities for elders to learn about health matters as well as interact with others who may provide guidance to access resources. Lucy noted the exo-micro bridging benefit of attending a health program focused on diabetes that would help attendees, but that also offered an opportunity for experiencing "friendship and support." The events were opportunities to learn about and be exposed to information about community-based services through interpersonal discussions with other seniors and through organizational members who may speak about them or disseminate printed materials. Participants gained knowledge about the health activities when information was disseminated through meso-friendly channels such as the local newspaper or senior center newsletters. Virginia, Lucy, and

Mabel spoke about a monthly health event where they learned about health matters at a senior center. Though participants sometimes described a health care system that was disconnected from local organizations and community-based services, the regional hospital provided speakers and sponsored the event. This demonstrates a potential disconnect between perceived and actual connections between health and community-based services. Lucy explained, “Yeah, once a month. We have what they call the Health Odyssey that’s sponsored by the hospital and they bring in some very interesting speakers on a variety of subjects.”

Civically Engaged Seniors

Seniors who were civically engaged were meso-level actors that bridged microsystems and community-based services in the exosystem. These actors were service agency retirees and volunteers or served on community boards or in civic roles such as the Commission on Aging. They acted as advocates for connecting seniors to community-based services. These individuals were viewed as trusted experts with insight on navigating the service system and represented competent resources for problem solving and advice about community-based services. Agnes was one of these meso-agents who requested our interview take place where she was volunteering during the Monroe County Fair. She had the MCG and other print materials in her basket attached to her motorized scooter. She held several civic roles and worked to bridge microsystems of seniors to exosystem resources:

There's so much that needs to be done and to help people and yes, I'm interested in helping the people get what they need people don't know how to go after these services. This is the biggie. You know, my phone will ring all the day long, this happened, that happened, now what I do?

Ella described how a community-based service retiree (micro: local companion) functioned as a meso-level resource who helped add her name to a waiting list for low-income senior housing (exo). Ella moved into the housing unit where she was able to forge new microsystem connections (micro) and learned more about services (exo). Ella was reluctant to sign up for low-income housing as she did not perceive the need, and reflected on how the retiree negotiated signing her up:

She said, this house is going to get to be too much for you. And I said, No, I'm staying here forever! She says 'Well, I'll tell you what, I will help you get as much help as you need. But I insist on one thing, that you sign up at [name of place] housing.' I said, 'What is that?' She said, 'It's a HUD housing and goes on your income.' And I said, 'Well, that's the deal.' So I had to sign up for it.

Ella frequently socialized with residents in the adjoining community room. She explained, "Until I moved here, I did not know anything about any of the services." It was clear that the retiree had connected her to resources and directly influenced utilization. In addition, as a peripheral outcome, the physical features of the housing unit fostered microsystem connections with others and increased interaction with a housing specific newsletter that included information about services.

Volunteers were also meso-level actors who shared information about community-based services. They reported that volunteering meant they were more connected and informed, and often explained how they spent time sharing information about services. Volunteering allowed seniors opportunities to forge connections and strengthen their microsystem. For example, Ernie explained how volunteering helped him

You know, my wife died 20 years ago. And I didn't know you know, you don't know you're lonely. I thought I was happy. But I wasn't.

Not only did the experience strengthen and increase his own communication resources, it had a positive impact on his health and motivated him to assist others by sharing information about community-based services. He viewed himself as an information ambassador who trumpeted information about services and shared print materials during those conversations:

So when I talk to people, you know, I tell them, you know, well, you know, you can get these different services. And I tell them how to get in contact with them. I keep a card like yours with both RSVP, the center and the food pantry you know, and I tell, I'll give them their phone numbers.

This provides a key example of how an intermediary role (volunteering) facilitated connections between services (exosystem) and individuals and highlight how their microsystem peripherally benefit from their role.

Volunteers often spoke about the support they provided to others outside their formal exosystem roles, to informal network (micro) to facilitate connections with services. For example, Henry talked about the fact that his neighbor had wrecked his car, so he provided rides so that he could get out of the house and attend church and the senior center:

So you know, they needed help and so I went over and helped just like any other of my friends. Um, he wrecked his car and he had no way to get church and I kept picking em up and take em to church on Sundays. It was no big deal, it's along the way. And then I used to take him to the Frenchtown Senior [Center] because they like to play Pinnacle with a group and took me about three months to talk him into it, because all he's doin' is sitting in his house, and something he liked to do. And we, uh, we talked him into it. And he went over you know, enjoyed himself, and the people.

Beyond being exposed to more information in those roles, the volunteer's experiences afforded their microsystem members to benefit from their knowledge and increased connections between community-based service providers and seniors.

Local Print Media

In addition to interfacing, mediated resources particularly in print form, were key meso-level instruments. Newsletters included information about community-based services, such as social and educational events, where individuals could be exposed to connecting resources.

One participant explained that a local service agency would visit the senior center and publish a newsletter as part of a multi-method approach to increase their reach, "They [agency name] come here once a month and . . . they're always in the newsletter. If you read the newsletter, you would know [about] it." Albert said the senior center newsletter, "really enlightened us and turned us on to everything that's going on."

Local newspapers were also important resources for connecting elders to activities. Participants often referred to the newsletter and local newspaper calendars that provided dates and times for events, as well as health and leisure resources. These outreach approaches addressed several individual level barriers, including offering services at a variety of times of day, and frequently before the evening. The newsletters and newspapers were received via snail mail; particularly important for home bound seniors. To illustrate, Opal had recently undergone a major surgery, so she was unable to participate in her volunteer role and was temporarily home bound. She shared the senior center newsletter that was mailed to her home as key communication resource and she

had also learned about my study because the local senior center sent her my flier via snail mail.

Community Settings

Connecting to community-based services may not be a direct path from an agent or instrument. Larry described getting connected with community-based services by way of a flier that he saw at a local grocer. He was frustrated by his healthcare network that left him feeling underinformed about resources. The flier connected him to health program where he was able to access information and print materials. Larry talked about the importance of learning from others, through word of mouth, as he explained was the “greatest information source that I’ve come across quite frankly.” He described how the flier was the initial bridging element that expanded his communication resources:

And through that connection, we heard about other doctors and programs other than the delay the disease thing, was scattered around several programs. So she started going to the delay the disease program, which was an exercise program designed specifically for Parkinson's patients. And then you talk to the other people, and it was mostly older women because their husbands had it. So, you know, I was the only guy I didn't get involved in their chit chat thing.

Larry had learned about community-based services by way of connecting with people that were originally informed through a flier. This illustrates how getting to exosystem sites, such as grocers, and the exercise program increases exposure to information and microsystem connections that influenced utilization. Larry and his wife talked about taking what they had learned to bridge other people to resources, thus bolstering others’ health communication resources and connections. His wife described going to church where she was a meso-agent for connecting:

I had saw somebody in church and I was watching for a while, and I had knew him for many years, and I kept watching his physical movements and all that. I thought, I bet he has Parkinson's, and he says, 'You know what? I do. I just got diagnosed.' 'Well I have some information.' I gave him a whole bunch. I said you can either pitch it or hang on to it and give it to someone else.

His wife felt her health condition could provide purpose by bridging others to communication resources:

You can stay here and cry your eyes out the rest of my life. Or get out there, if you can be a help to somebody.

Getting connected to community-based services is not always a linear process. Larry and his wife were meso-agents who by sharing the materials at church connected the recipient with exosystem resources that were Parkinson's disease specific. This in turn, as it happened for Larry and his wife, was an opportunity for fostering microsystem connections with similar others who may bridge them to community-based services. This example highlights the importance of a setting as a conduit for multi-level connections.

Seniors as Advisors

During our discussions, some participants did some problem-solving of their own and offered strategies on how to bridge seniors to community-based services. Opal imagined how service providers could access community-level data to inform targeted snail mail to the oldest residents. She suggested using community-level data such as voter registration files to obtain addresses for seniors so that information could be targeted via snail mail as a means of increasing awareness about community-based services:

I think maybe even flyers or mailings going out where you would get it. It would cost a little to do it. But you can do a bulk rate and telling about the good things because I don't think people really know. I mean, well, from 55 to 65, I didn't really know much about it, or even think about it. It wasn't till I quit work that it even occurred to me that that would be something to do. . . And I don't know if

how you get a hold of a list of names. I don't know if you can get them from voting, things. I don't know if they give them out . . . and if somebody could go through and check ages, and just send the seniors [information].

Agnes reflected on a strategy that was effective at engaging seniors to inform them about community-based services. The scenario depicted the effectiveness of embedding an organizational level member, who shared geographic commonalities, at a time and place where they would be socializing with others. Agnes' description below includes how the approach crosses levels and identifies elements described in earlier sections within:

We just gotta find out, you know, maybe going to McDonald's (*organizational*). One time we had an intern working for COA [Commission on Aging]. So I know at one time she went and talked to the people having coffee (*individual, interpersonal*). She was a person that was from Monroe County (*interpersonal: similar others*). And, you know, she bought a coffee or whatever (*individual: expression of caring*), and got in to em that way to talk (*interpersonal: face to face preference*) to em to gain their trust. Because so many seniors have been taken so many times. That's why if you can get them at their place (*organizational*), and if they'll let you come in there. Or if you can, seniors will go for food. So you want to get him somewhere where you have food. And if they're able to get there during the day. We do have the bus service with LET [Lake Erie Transportation] (*community enabling: mobility sensitized*) now we're trying to get a lot of health care agencies to sponsor like a lunch or that at senior centers and that to bring the people in, that they can be talked to (*organizational and community levels*).

This example illustrates how meso-level forces intersect for connecting older adults to community-based services.

A lack of communication between organizations resulted in siloed information with little insight available from organizational members about services or programs outside of their own. Participants offered solutions to address this issue such as disseminating the MCG community resource booklet that included information about all

services to several sites including health facilities (as mentioned earlier in this section) and churches. Many felt that churches needed to be made more aware of services and programs that were available. By doing so, they would be able to inform their eldest about resources available to them, including community-based services. Agnes suggested getting information out to faith-based organizations through multiple channels:

Through the paper. I think if we get more information to the churches. I get the church bulletin every week, but you never see anything about the what's going on in the county. The churches should be more involved . . . But the average church doesn't. But they could get a flyer, send them something once a month, about what's going on. Or just like that book [MCG], you just send them some of those books in the person that's getting, to the person that's heading [the church].

It was clear that community-based services information needed to increase and be disseminated through multiple paths, as Opal described below. She noted that while technological modes were increasing, it was not a viable communication resource:

Communication. there's got to be communication through the paper, actually through the churches, even through the schools a lot of the schools send all your monthly or bimonthly publication out. I know a lot of them do, there's gotta be communication, and I don't know the answer. Actually, the technology is taking over, and technology does not give communication.

Collectively, the examples described above highlight how participatory approaches that include seniors may help community-based service providers to know how best to reach seniors.

Technology as a Mesosystem Impediment

The lack of experience with technology among older adults is an impediment to connecting them with services. Technological modes of communication inhibited services utilization as depicted in the microsystem and exosystem. It hindered seniors from connecting with microsystem members who might share information and advice

about services. It also impeded connecting with services and information hosted via computer mediated sources when disseminated through email or other computer sources. Technology also directly inhibited utilization when seniors had to navigate convoluted menus when they reached out to service agencies. Albert corroborated these challenges when suggesting how technological systems play a role in how seniors maintain key resources for connecting to services such as their driver's license. Albert described his wife's frustration in trying to renew her driver's license, thus illustrated how technology may obstruct service utilization by forgoing the option to drive:

You know, if you want this press one, if you want that press two. You know it's a recorded thing. I went through it with my drug company the other day, and I was trying to get through to them, you know, what I needed. And it seemed like the recorded thing wouldn't, did not give me an option to talk to a real person. And when I finally did get ahold of somebody, because the information I needed wasn't following the scripted thing that they had, I finally did get somebody. And, but I think there's a lot of people my age and older that just give up, they'd say, 'Well, you know, what the heck. I can't get ahold of anybody to talk to.' I get so angry that the menus are convoluted.

I will stay on the line until I can talk to somebody and complain about it. But I know some others. My wife is one she just she gets mad. She had to renew her license online. And the technology for renewing her license actually made her quit. She said it was so frustrating for her too, she was doing all the things you supposed to do. What do you call it? When you update your information? Anyway, she would follow the procedure for taking more information classes or whatever, required to renew your license.

And the technology for making it happen was *so frustrating* for her. She said, 'I'm just not renewing my license anymore.' And I think well, maybe there's a lot of other people like my wife, you know.

These automated systems, built for efficiency, may have peripheral impacts in old age. When older adults decide to opt out of accomplishing a goal like renewing a driver's license, it can have broader, disconnecting impacts. Likewise, Opal stated how

“technology is taking over, and technology does not give communication”; a view shared by many participants. Participants expressed concern that the rise of technology threatened their communication resources. To illustrate, Stanley warned that newspapers would eventually be on-line:

I think that maybe it's going to replace newspapers ultimately. But for the older folks that like to have a paper in their hand and read what's going on. I think it'd be a loss if they do.

Agnes, on the other hand, felt like community-based services needed to modernize their communication tactics to be able to reach younger generations:

[Young] people don't take the newspaper any more. You have all social media, and this is the bad part. That's why we gotta have something attractive enough to the younger generation to want to come to, to find out what's available so they can take care of their parents or whomever they would be taking care of.

Understanding communication in late life and how interactions shaped and influenced beliefs, experiences, and decisions may help to strengthen bridging elements and inform adaptations to address obstructions so that elders can connect to community-based services.

Summary

Below the main findings are listed by each of the five social ecological levels (Table 4). The results are also depicted using a social ecological model to visually illustrate the internal and external forces of influence that constrained and enabled older adult's utilization of community-based services (Figure 2).

Table 4

Results per Social Ecological Level

Individual

Lack of awareness
 Perceptions of “Fit” with Preferences and Interests
 Attitudes Toward Technology
 Physiological Changes with Advancing Age
 Response time
 Hearing loss
 Vision decline

Microsystem

Diminishing Informal Network
 Friends are few in number
 Family is too busy and geographically dispersed
 Neighbors and neighboring
 Computer Mediated Communication
 Keeping in touch
 Surveillance
 Local Companions
 Community rooms
 Volunteers
 Being informed
 Time to talk and listen
 Interaction Content
 Message: Type
 Information about services
 Advice on navigating services
 Appraisal of need
 Message: Delivery
 Signaling care and concern
 Having the time to talk
 Story sharing
 Message: Source characteristics
 Competency and experience
 Geographic proximity
 Homogeneity

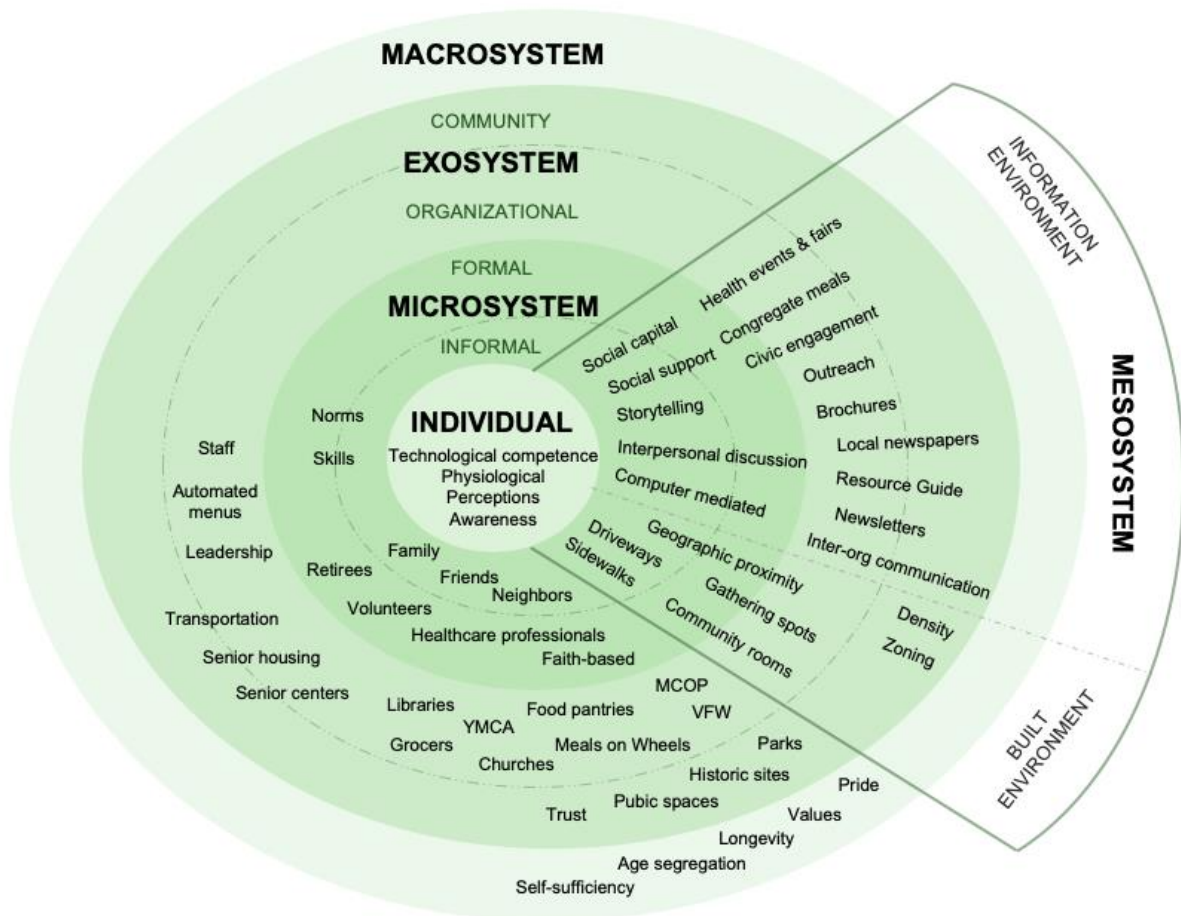
Exosystem

Channels for Disseminating Information
 Mediated communication
 Print media
 Face-to-face outreach
 Health events
 Outreach
 Intra-Organizational Practices and Policies
 Initial moments of contact
 Screening for eligibility
 Initial relationship building
 Inadequate investment in human resources
 Community Dynamics
 Inter-organizational disconnects
 Built environment

Settings as conduits for information about services Community norms	Macrosystem
Age Segregation Self-Sufficiency and Historical Narratives as Rationale	
Health Centered Activities Civically Engaged Seniors Local Print Media Community Settings Seniors as Advisors Technology as a Mesosystem Impediment	Mesosystem

Figure 2

Social Ecological Depiction of Results



Participants reported low levels of awareness of community-based services. Perceptions of how utilizing community-based services would negatively impact others or that they were mismatched to their interests or preferences impeded use. Male participants described how self-perception deterred service use; they did not view themselves as a target user either by age or role of being a caregiver. Consequently, some participants did not use services. Participants' attitudes toward, and lack of experience with, technology limited connections with community-based services and others who may inform them about services. Participants' physiological changes impacted interactions and impeded access to community-based services. This included vision decline compromising their ability to drive and thus, gain access to services.

Participants' informal networks contracted with age, particularly in reference to relationships with friends that were lost because of death. Contemporary careers meant that family members were too busy to interact and often living far away; both of these factors lead to the degeneration of familial norms of care. Participants contrasted their pasts with diminished customs of having company, visiting, and neighboring. Connecting with others in the informal network required the use of complex devices and adaptation to technological connections and computer mediated sources. Inexperience with technological devices was repeatedly listed as a barrier to connecting with family.

The diminishing pool of immediate social resources, such as friends and family, was buffered by connecting with similar others who were resources for information about services and insight on how to use or access them. Participants received information or advice about community-based services based on others appraising their needs and

assisted through personal interactions. Participants preferred information to be delivered by a person who signaled concern and care and were allotted time to fully express themselves and share their perspectives in narrative forms. The source who provided information or advice was deemed more trustworthy and reliable when they were an expert or experienced user, or when they shared similarities such as geographic proximity, shared residence, or religious affiliation.

Seniors relied on print media to learn about organizational activities and events including local newspapers, newsletters, and brochures. Participants kept printed materials, such as fliers and the Monroe County Senior Source Guide, on hand to share with other seniors who might benefit from the resources. Participants advocated for more outreach by service providers particularly in more sparsely populated areas and provided recommendations for how to best to engage elders through trusted community insiders. Health fairs and events were referred to as conduits to information about community-based services, health information, and to others who they could learn from.

Participants described intra-organizational practices and policies that constrained and enabled service utilization. They reminisced about how institutional members were very accessible in the past, but currently modes of contact via telephone require navigating convoluted menus via automated system to make contact. Though participants said that speaking with a live person was “critical,” when they did make contact, they were frustrated by questions about income being asked before being greeted. Participants who were reluctant to disclose personal information were even less likely to do so when they felt that the person was not concerned about their circumstance, further reducing

motivation to remain engaged with the organization. Income questions often ended the interaction and dissuaded seniors from further engaging the organization. Participants positively evaluated interactions that included expressions of concern or care to signal that they prioritized relatability over eligibility. They suggested using quick greetings such as “Hello,” stating one’s name, and expressions like, “How may I help you?” Participants viewed the service system as overburdening staff that was already inadequately trained them to interact with older adults.

Participants described how the communication and spatial dynamics influenced community-based service utilization. They advocated for increased collaboration among organizations so that information between them was more accessible during contact. Lack of communication between organizations resulted in siloed information and an uninformed formal network of resource to draw information from. Participants expressed a strong desire to have interactions with healthcare professionals, hospital dischargers, and doctors, which would result in more access to services and resources.

Elements of the built environment where individuals and services were important determinants of service utilization. Transportation was consistently described as a barrier to utilizing services by participants. Grocery stores, libraries, recreation and senior centers, VFW halls, community rooms, government meetings, and beauty shops were key sites for learning about services through fliers or by communicating with others. Millie described her experience at the YMCA, “You're, you're learning from other people,” which also occurred in community rooms in senior housing sites. Volunteers and retirees disseminated information to others who were viewed as trusted resources and also

provided transportation so they could get to services or locations where they could be exposed to information by interacting with others.

In addition to spatial features, community activity and involvement facilitated or obstructed senior's ability to connect with community-based services. Diminishing patterns of participation such as attending church or visiting the local senior center resulted in fewer opportunities to learn about services through others. Participants commented on how public places were active and a rich communication resource in the past, yet these same places are now facing declining participation rates. Participants also contrasted stories about the past, of living in a tightly knit, safe community, with present-day interpretations that centered on the erosion of trust. Erosion of trust impacted how participants interacted with currently available services. Trust and skepticism also influenced behavior when interacting with others through mediated sources of communication including telephones. Telephones were used with caution and sometimes accompanied narratives about fears of fraudulent activities.

Utilization behavior was shaped by broad structural forces that ultimately change with age and a breadth of experiences of individuals. Participants articulated desires for educational institutions to compensate for changing family and societal dynamics that resulted in young and old people being separated. This divide was viewed as growing because of the rise of technology. These dynamics were perceived to leave many without sensitivities to aging matters and impacted interactions. Participants prized self-reliance and were reluctant to disclose personal information and seek assistance. They viewed community-based services through a historical lens that shaped their present-day attitudes

and beliefs; for some participants this involved nearly a century. Their lengthy pasts resulted in depictions of services as part of a “welfare” system that conflicted with their valued self-sufficiency. For others, their historical view meant that the concept of community providing support was novel and unfamiliar.

It was challenging to separate the communication activities of participants by level as they often span multiple boundaries. In doing so, key communication bridges among levels were noted and then described in the mesosystem section. Healthcare interactions were missed opportunities for connecting with information, whereas interactions among seniors in formal settings such as health fairs or events at senior centers were key resources for connecting to community-based services. Those who held civic engagement roles on community boards, or who were service agency retirees and volunteers were determined to be communication resources and advocates for seniors. These community members were considered to be trusted experts with insight on navigating the service system, and thus were viewed as competent resources for problem solving and advice about community-based services. In addition, they served to connect individuals and their microsystems to community-based services. The most frequently cited conduits were micro-media resources in print form, which were the most effective when hand delivered to senior's homes through newspaper delivery or snail mail. Older adults described how places they visited provided opportunities for being exposed to information about services and also connected them with other people with whom they may learn. Participants provided strategies for bridging service organizations and seniors based on historical success, as well as suggesting more novel approaches, which collectively point to the value of participatory approaches to services provision. Finally, technology was revisited as a multi-level impediment to community-based services utilization in old age.

CHAPTER 5: DISCUSSION

This chapter discusses the results, interpretations, and implications for the study. To reiterate, this research investigated the internal and external dynamics that influenced older adults' community-based services utilization using qualitative methodology. The overarching question addressed with this dissertation was two-fold. First, how does communication influence service utilization and; secondly, how does the communicative environment, where those interactions occur, play a role? The research was guided by five questions to understand influencing factors at each level of the ecological health communication framework (Moran et al., 2016).

This chapter answers each of the five research questions posed in Chapter Two, demonstrates how the results support the answers and discuss how the findings fit with current scholarship. Lastly, this chapter discusses the implications for community-based service organizations in Monroe County, the limitations of this study, and how the study can inform future research.

Individual Level

The first research question focused on the individual-level context and accounted for knowledge, perceptions, attitudes, and physiological responses that influenced behavior. Current literature has established that a lack of awareness impedes service utilization (Black et al., 2012; Denton et al., 2010; Gallagher & Truglio-Londrigan, 2004; Tindale et al., 2011). The interviews and analysis revealed nuanced insights regarding services knowledge including concern for others and compatibility as primary deterrents.

Participants' attitudes toward and lack of experience with technology limited their connections with community-based services and others who may inform them about services. "The internet has become one of the most influential sources in people's media repertoire," (Walther, 2010, p. 518), except for older adults who lack the skills and resources to access the internet. In the present age, technology (computers, tablets, smartphones) is a fundamental communication tool, and generation plays a significant role in competency (Harwood, 2007). In 1996 as the World Wide Web acceptance accelerated, the youngest participants in this study would have been in three age ranges 52 to 57 years old (75-80 years old now), 58 and 62 years old (80-85 years old now), and those older than 62 years old (85 years and older now) and were nearing or already retired. Many of the participants lacked exposure to technology, during its early years of development, because they stayed home to raise children, held blue-collar jobs that did not require technology, or were retired. The youngest (75 years old) and most educated (Master's degree) study participant, who is a retired educator, best stated the sentiment that most people his age preferred to avoid computers. Moreover, those who may have developed some competency with changing technology may begin to lose competency as physiological changes occur with age.

Despite optimistic reports that technology usage and adoption rates are increasing for older adults (Pew Research Center, 2017), participants' reports refute these notions and shed new light on how the technology disconnect creates communication disparities and impacts behavior. Harwood (2007) cautions that being unplugged, "makes disadvantaged people in our society even more disadvantaged" (p. 245). The digital

divide is projected to narrow as more technologically experienced users age; presently, many are unable to access and utilize technological tools that benefit the rest of society. Walther (2010) explains the profuse, and perhaps taken for granted by those of us who spend little time contemplating ordinary, everyday experiences, functions of technologies as:

The possible transformations of traditional communication processes they may prompt, from friendship and relationship formation, familial maintenance, identity play and sexual exploration, personal identity deception and deception of attributes or instrumental claims; information sharing and group decision making (within local or globally distributed groups and teams), community maintenance including social support, political activation and influence, and the enhancement of local social capital; distributed education, health information, and health behavioral modification, as well as other forms of persuasion and social influence from survey response facilitation to charitable donation to product and vendor reviews; and organizational communication from internal coordination and organizational structure to virtual teams and remote leadership (p. 490).

Though the emergence of the technology theme is surprising to some, based on Walther's insight, it is understandable that technology emerged at each level of the ecological model. The focus here sets the stage for a continued discussion of how age, skills, and lack of experience with technology operate as antecedents of micro-, exo-, macro-, and mesosystem dynamics, which will shed light on community-based services utilization behavior.

Attitudes about the services and providers influences utilization behaviors, which are shaped through communication both in forms mediated by technology and face-to-face conversations (the preferred method for elderly individuals). Advanced age results in physiological declines, such as hearing and vision, and impacts information processing and interactions. As such this warrants consideration when discussing communication;

particularly in this study where the mean age of participants was 83 years old because community-based services contacts and providers are unlikely to be of the same age. Gero-communicologists (Harwood, 2007; Nussbaum, 2014) advocate that communication is a critical research area that will inform and enhance community-based service delivery and provision to older adults.

Participants frequently expressed frustration in rushed encounters and meetings with set time limits. They indicated their need for more time to accurately express themselves and “gather their thoughts together.” Sparks and Nussbaum (2008) discussed the importance of allowing ample time for older adults to process information and retrieve information from memory, which takes longer than for their younger cohorts. Though their study was in the context of healthcare, the current study indicates the need for lengthier interactions with community-based service providers. Sensory changes influence the way older adults experience and navigate their communicative environment. The reports of strained interactions are consistent with established wisdom (Harwood, 2007; Nussbaum, 2014; Pichora-Fuller & Carson, 2001), that sensory changes constrain social activities and patterns.

In summary, lack of awareness and perceptions of services available to user’s impeded utilization. Intrapersonal forces obstructed utilization such as differences in technology use and sensory function, hindering interactions with service agencies and others who could facilitate knowledge and combat misinterpretations. The findings add to the evidence that improved communication with older adults, to minimize issues and

maximize cognitive, social, emotional, and physical wellness is warranted (Harwood, 2007; Nussbaum, 2014; Pichora-Fuller & Carson, 2001).

Microsystem

The second question guiding this research examined how the microsystem influenced community-based services utilization. Participants microsystem are comprised of an informal network, including family, friends, and neighbors, and a “more formal helping” network of local companions. Heaney and Israel (2008) characterize a relationship as “more formal” when it is “embedded in a formal organization or institutional structure” (p. 190). A network of local companions includes health and community-based service retirees and providers, volunteers, and others who interact with participants in an organizational setting. This included sites such as VFW halls, churches, community rooms, and senior centers.

Participants compared current trends of informal network dynamics and diminished customs of company visiting and neighborhood friendships while reminiscing about close-knit multigenerational families who provided care for their elders. Moody and Sasser (2015) noted the positive impacts that reminiscing can have on improving older adult’s self-image, though cautioned that such “sentimental images of the multigenerational family in the ‘good old days’ is mistaken” (p. 205). For example, participants born close to 1935 and have reached the age of 65 are estimated to live until about 85 years old. Their parents or grandparents would have been born around 1900 and had an average life expectancy of 47 years. Thus, they may have not experienced kin who survived to very old age and lack a mental model for prolonged support or assistance,

particularly from community-based sources. Moody and Sasser (2015) suggest that reminiscence can be a useful relational tool, which other scholars agree that storytelling abilities (Harwood, 2007) and narrative competence (Nussbaum, 2014) improve with age. These preferences should inform how professionals, such as service providers, relate to and interact with older adults.

Despite Moody and Sasser's claim that older adults idealize the past, the evidence reflects that the process of diminishing social networks, which is not an old age phenomenon, began decades prior. As early as age thirty, social networks are tapered by design. Carstensen's socioemotional selectivity theory explains the shifting emphasis on investing energy into a person's preferred relationships to optimize gains and to minimize social and emotional risks (Carstensen, 1992). Throughout a lifetime these decisions are intentional, and networks remain stable, whereas they shrink "in late old age (*e.g.*, among people who are 80+)" due to death and relocation (Harwood, 2007, p. 93); reflective of participants experiences who the majority were over the age of 80 (mean age = 83).

Diminishing microsystems mean that communication disparities increase with age. Gallagher & Truglio-Londrigan (2004) suggested that as available informal resources decrease, the need to draw from community-based resources increases. This was evident for participants who benefitted from interactions in community-based settings. For those able to access community-based senior housing, churches, volunteer sites, and senior centers benefitted from feeling heard and cared about, felt less lonely, and had companions to share and solve problems, which increased awareness and utilization of community-based services. These communication resources are particularly

important in late old age because “it is difficult to add new members to the network if one is no longer engaged in work or wider community life” (Moody & Sasser, 2015, p. 23). Places *and* affiliation with those settings such as being a volunteer, or a civic role resulted in increased awareness and more positive impressions about community-based services. The affiliations increased senior’s knowledge who became information ambassadors who cross-promoted services to organizations and their neighborhoods, which aggregated microsystem knowledge.

Local companions with shared similarities, such as access to settings where seniors congregated, compensated for informal network information deficiencies. House (1981) asserted that these companions were crucial resources for informational support by providing advice and information used by seniors to address issues and connect to services. The skilled companions evaluated seniors’ circumstances and matched them with instrumental support, or as House (1981) contends tangible aid, by assisting with low-income housing enrollment or providing rides to the local senior center. The function of local companions demonstrates Goldsmith and Albrecht’s (2011) assertion that “social networks extend an individual’s own resources” (p. 339), which is needed in late old age as microsystems contract.

As Thoits (1995) suggested, local companions with shared social and demographic characteristics (*e.g.*, age and residence), increased the relatability, empathetic understanding, and supportive interactions of the individual. Nussbaum suggests that intragenerational connections among those who share historical knowledge and worldviews foster disclosure (Nussbaum, 1983), but so too do the circumstances

affiliated with their age such as having the time to talk, sensitivities to hearing and vision impediments of the other, and being able to visit without rushing. As researchers have found in health care encounters participants embedded concerns in larger narratives when given the time to speak (Nussbaum, 2014). Time constraints were frequently reported as the cause of communication impediment with informal network members and healthcare professionals; because health professionals are viewed as trustworthy and credible and the centrality of healthcare in late old age, they are the desired communication resource. Late-life activity patterns revolve around healthcare with individuals 75 years of age and older averaging eight outpatient medical site visits per year (Harwood, 2007). Hurried visits and time constraints resulted in missed opportunities and inhibited senior's ability to draw information, which could connect seniors with community-based resources and services. Timelines do not constrain intragenerational interactions with local companions; they afford opportunities to exchange stories and more importantly disclose concerns and capitalize on well-matched insight from each other.

In summary, as informal communication resources diminish, information disparities are remedied when older adults can access congregation sites with similar people to themselves. Local companions provided key communication resources for credible and trusted information, advice, and appraisals about community-based services. The interactions were effective, and disclosure was more likely when participants felt cared about, had the time to talk and express themselves in storied formats with well informed and socially similar individuals. Because these sites and local companions are

not accessible to all, healthcare professionals are a key underutilized communication resource in late old age.

Exosystem

The third research question focused on exosystem influences on community-based service utilization. Utilization was influenced through communication with community-based organizations and spatial features of the physical environment where those exchanges occurred. Participants desired for information about community-based services to be more readily accessed through their informal network and healthcare professionals. However, theorists suggest that media will continue to take “on an increasingly important role as industrialization and urbanization have decreased the influence of interpersonal social networks” (Miller, 2005, p. 262). While increasing media reliance is not an old age phenomenon, younger cohorts have more social and technological means to access information and connect with providers. Also, media use serves different purposes across different age groups. Younger cohorts select media such as television and news programming for entertainment purposes, whereas older adults’ media use is largely for information gratification (Harwood, 2007).

Information disparities in late old age result from deficient interpersonal and technological connections. These issues help explain why participants were dependent on two types of communication resources, print media and health events. Print media, either hand delivered (*e.g.*, newspapers, flyers, brochures) or through the postal service (*e.g.*, newsletters), helped inform homebound (permanently or temporarily) participants. Health events were crucial for accessing information about health matters but also important

opportunities for experiencing companionship and connecting with others, which facilitates community-based services information exposure. Understanding older adults' motivations and behaviors could facilitate organizations ability to reach seniors and justify costs affiliated with mailing print media, as Wilkin (2013) asserts "communication strategies could be enhanced by better identifying the resources utilized by the segments of the population suffering from health disparities" (p. 193). For seniors unable to attend health events and appointments, newspapers may be the only connection they have to their communities. Participants expressed concern that technology threatened newspapers and feared its extinction due to declining readership and enacting cost-saving measures prioritizing computer-based distribution over print.

Mediated communication resources such as health fairs and print media facilitated utilization by providing information about community-based services; though it was a hindrance when seniors attempted to contact organizations and were faced with inadequate automated phone directories. The organizations were criticized for inadequate practices that deterred utilization, such as using automated menus. In healthcare research conducted by Greene, Adelman, Friedman, & Charon, 1994), expressing interest in the older adult was important during initial interactions, supporting seniors desire to omit technology at the intital point of contact. Older adults are reluctant to disclose personal information in general (Harwood, 2007), particularly when conversations commence by policies that require asking about their income. Signals of care reduced their hesitancy including simple greetings, sharing their name, or offering a few minutes to talk.

Participants faulted community-based service organizations for inadequate policies and staff training; though speculated macro-level forces might contribute to the issues due to shrinking funding and budget cuts. This is an issue for the direct-care workforce (*e.g.*, home health aides, CNAs), who have a critical role in supporting community living for both seniors and the disabled (NASEM, 2016). Direct-care workers “are treated as an expense item rather than an investment, and a turnover of 40 to 60 percent is considered the cost of doing business” (NASEM, 2016, p. 41).

In addition to intra-organizational dynamics, the external communication environment influenced utilization. As described in the reviewed literature, elements of the built environment impeded community-based services utilization. Monroe County is 38% rural and a greater percentage of the county that is not considered rural by government definitions lacks “discursive spaces” (Wilkin, et al., 2011, p. 212) such as driveways, backyards, and sidewalks where residents gather and exchange information. Getting to enabling sites such as grocery stores, libraries, VFW halls, beauty shops, recreation and senior centers fostered utilization by being exposed to information. As the literature demonstrated, use and access to key sites was inhibited by not driving (Lewinson, Maley, & Esnard, 2019) and a lack of transportation (Hallgreen et al., 2015; Lau et al., 2012) services available to those living in the sparsely populated areas of the County.

Along with spatial features, community activity and involvement influenced community-based service utilization. Diminishing patterns of participation, such as attending church or visiting the local senior center, reduced the number of opportunities

to learn about available services. Participants contrasted stories about the past, of living in a tightly knit, safe community, with current interpretations that centered on eroded trust, which impacted their interactions. Trust and skepticism also influenced behavior when interacting through mediated sources of communication including telephones, which participants described using with caution, and shared narratives about fraudulent activities that occurred with use.

In summary, health and community-based service organizations and local media producers should evaluate their communication practices and policies. As Wilkin and colleagues (2011) suggested, “examining the built environment and identifying the discursive spaces and taking advantage of the neighborhood storytelling network can improve outreach abilities and enhance the ability to reach ‘hard to reach’ populations” (p. 212). Increasing reach could be achieved by offering transportation services to health events, minimizing technology impediments, and consulting with end-users who can provide feedback - improving experiences, enhancing communication, and fostering utilization. A networked approach helps close the gap between providers and the old, who would benefit from services from her community.

Macrosystem

The fourth research question focused on the macrosystem, which turned toward understanding how individual behavior was shaped by broader societal norms, values, ideologies or mass media. Changing social dynamics where families are separated from the oldest members resulted in young and old people being segregated, which Hagestad and Uhlenberg (2005) warn fosters ageism. Generational disconnections left younger

cohorts insensitive to aging matters and with deficient communication skills. Participants projected the need for educational institutions to compensate for disconnected and displaced families from their eldest members. As in the present study, Ajrouch, Fuller, Akiyama, and Antonucci (2018) found that among four countries, the United States was unique in that older age predicted a smaller network size and a lower proportion of those who lived nearby. Ajrouch et al. (2018) cautioned: “the rapid rate of aging in the United States should inform policy formation addressing long-term care needs, particularly given that network size and geographic proximity seem to diminish with age in the United States. Not recognizing and planning for these changes risk creating a vulnerable class of elders” (p. 438). Vulnerabilities are exacerbated by a senior’s technology limitations and their need to maintain contact to ensure well-being (Ajrouch et al., 2018). Trends of diminishing contact impede connecting with services, particularly for those who are geographically removed and unaware of local circumstances. For example, one participant said she used a service that she learned about from her daughter who worked in the same building as the service.

Macro-level impediments were not only external; older adults’ desire for self-reliance influenced utilization. Several participants spoke about not wanting to ask for help (*e.g.*, asking for a ride), and pride being a barrier to access the service. Self-sufficiency is prized among older adults (Cordingley & Webb, 1997; Kohon & Carder, 2014; Thomas & Blanchard, 2009) and personal independence is a core societal value (Bell & Menec, 2015). These perceptions were often wrapped in historical narratives of growing up in homes with outhouses, references to how the economic depression or

living through the holocaust warranted independence. As Sparks and Nussbaum suggested, these stories were vehicles for embedding issues into narrative forms as a strategy to deal with values for privacy and not wanting to portray vulnerability (Sparks & Nussbaum, 2008). Service providers who have time to spend with seniors may be able to uncover concerns, though they may not be able to allocate enough time to fully reveal those issues.

In summary, communication disconnects among families and generations added to older adults' community-based services information deficits. Ideas about using services persisted from childhood interpretations and experiences before governmental sources of support or services existed. The Older Americans Act (OAA) was signed into law in 1965 and community-based services formalized in 1972. With a mean age of eighty-three, participants would have been born on average in 1934 so services would not have been available for nearly 40 years later thus they would not have witnessed use or delivery by their parents or grandparents who were likely deceased. The notion of community support was novel for participants who witnessed their grandparents and parents who worked until they died and died before they would have qualified for services by today's standards. Beyond misunderstandings and novelty expressed through history sharing, seniors expressed reluctance to use services, which would require disclosing information that conflicted with strong values of self-reliance and independence.

Mesosystem

The first four questions that guided this study focused on influence within each of the social ecological levels. The fifth and final research question, however, was concerned with understanding how connections among the levels played a role in community-based services utilization. Fittingly, this discussion will draw on a mesosystem theory to respond the final question. Communication infrastructure theory (CIT) offers a frame for unveiling how participants' diminishing social network interrelated with the communication environment to impede connections to community-based service organizations. After discussing those trans-level utilization impediments, this section will turn to the enabling elements of the communication infrastructure and discuss how those resources can be leveraged to foster connections between older adults and community-based service organizations. The discussion begins by revisiting CIT.

As described in the reviewed literature, a community's communication infrastructure is comprised of a storytelling network (STN) which is impacted by the communication action context (CAC) where the storytellers are embedded. (Kim & Ball-Rokeach, 2006). According to Kim and Ball-Rokeach (2006), a strong STN is signified by cohesive communicative activities among three sources local organizations, local media and residents. When local organizations (e.g. faith based, recreation, neighborhood, political) and local media (e.g. newspapers, newsletters) communicate about pressing concerns that residents conversate about, relevant and useful information flows which begets storytelling, increases awareness of local issues, and stimulates action for community betterment (Broad, Ball-Rokeach, Ognyanova, Stokes, Picasso, &

Villanueva, 2013; Kim & Ball-Rokeach, 2006). Figure 5 depicts the CIT put forth by Kim and Ball-Rokeach (2006) who articulated the ecological processes related to civic engagement. The residential elements in the CAC highlight the rich array of resources for promoting a triangulated storytelling network. Communication infrastructure elements are resources when stories told are topically cohesive and the communication environment promotes interactions.

Figure 3

Communication Infrastructure for Civic Engagement



Ecological examinations afford the opportunity to understand communication structures and processes and to make adjustments to identified weaknesses thus strengthening the resource facilitating elements (Kim & Ball-Rokeach, 2006). To foster a facilitating web of communication resources for Monroe County elders, the interrelated obstructions in the STN and the CAC will be discussed first.

Communication Infrastructure Impediments

The dynamics of living into old age resulted in a diminishing pool of interpersonal resources which limited who participants communicated with but also meant they lost the resources that individuals benefit from peripherally. Even more, participants had few opportunities to supplement interpersonal losses with new connections. The CAC did not foster STN integration, particularly in less densely populated areas that lacked places to gather and congregate such as in driveways or backyards. STN integration was also obstructed because those areas did not offer transportation services, which meant seniors could not get to community-based organizations where they could connect with multi-level storytellers. Connections in late life were further impeded from resources in the communication environment such as those derived from having children in schools or from resources gained via employment organizations and co-workers. These examples demonstrate the relationship between the CAC and STN that impede senior's ability to be integrated with a storytelling network.

Wilkin (2013) suggested that the storytelling network was inadequate for depicting the wide range of communication resources available in the broader *communication ecology* such as social media and health professionals. This was certainly true for older participants who frequently referred to health professionals as a deficient communication source. The myriad of obstructions and the fragmented communication resources indicate that Monroe County's oldest residents are hard to reach, which happens because the hard to reach, "typically rely solely upon isolated storytellers" (Wilkin et al., 2011). For those who are hard-to-reach, Wilkin and colleagues (2011) put

forth a community-based outreach strategy using a CIT approach. An expanded view of the *communication ecology* that older adults construct in their everyday lives can help, “determine which resources or combination of resources will lead to the most efficient health communication outreach at the community level” (Wilkin, 2013, p. 189).

Thus, the remainder of this mesosystem discussion will focus on the enabling communication resources that can be leveraged to facilitate connections between Monroe County’s eldest residents and community-based service organizations through a theoretically grounded approach to outreach.

Outreach Through the Communication Ecology

A CIT approach to community-based outreach requires “diagnosing” (Wilkin et al., 2011, p. 203) Monroe County’s communication infrastructure by identifying their enabling resources. Thus, the elements that facilitated connections will be discussed so that community-based service providers can more readily connect with elders through a theoretically grounded strategy. First, the communicative activities of community-based organizations will be discussed including health events, HUD housing, and volunteerism which provided opportunities for micro- and meso-storyteller connections. This section will also consider how a key infrastructure deficit may adapt their communicative actions so that health organizations are integrated into the community STN. Local media activities and features of the communication environment that promote connections will be discussed so that these resources can be deployed to connect with elders.

Community-Based Organizations

This part of the discussion turns to the communication facilitating activities of community-based organizations, health events and deployment of local companions. These provided opportunities for both micro- and meso-storyteller connections.

Health events such as lunch and learns, health fairs, and health presentations were key communication resources for older adults. Participants reported learning about community-based organizations including aging services through attending these events from speakers and printed materials they received. In addition, health events provided opportunities to socialize and experience friendship and support and to exchange information and advice with micro-storytellers. These events were unique opportunities for seniors to be integrated with the STN and addressed social and information deficits in addition to facilitating connections to community-based services.

Local companions were connected with at a variety of settings in the community including churches, senior centers, or community rooms within senior housing buildings, all places where seniors had time to talk. The companions were mesosystem affiliates through community organizations but also fostered micro-level storytelling connections. The local companions were resources who had the time to spend with seniors who often shared resources orally or via print such as the MCG. Local companions not only shared information about community-based services with seniors they met at local sites, but also with others in their microsystem, and also connected seniors to services by providing transportation.

The health events and local companions were storytelling actors that provided important opportunities for older adults to experience companionship. This aligns with Gardner's (2011) research that highlighted the everyday interactions that seniors had with less familiar *others*, as overlooked and underappreciated resources in the communication environment. The less familiar companions, "do not replace or negate the importance of informal systems of family and friends, or formal support systems provided by public and private agencies and services. They complement them" (Gardner, 2011, p. 269). In addition, the health events and local companions afforded intragenerational interactions prized by those who had the time to spare to talk, listen, and who shared geography, histories, and worldviews that made connecting comfortable as Harwood (2007) would suggest, but also supported by microsystem findings.

Local companions and health events facilitated connections with seniors who shared information and advice about community-based services, but even more, they were resources for supplementing their diminishing microsystem. This was particularly significant as opportunities for social interaction and bolstering the microsystem became scarcer as age progressed. Heaney and Israel (2008) posit that social networks are resources for accessing new contacts and information that can help with solving problems. As social networks diminish so do the peripheral benefits - making opportunities to connect a significant resource for Monroe County's eldest.

Local Print Media

The information rich environment that most people are embedded in makes it challenging to conceive how a person who was born in 1935 (as the twenty participants

were on average) experiences media. A historical lens reveals media in print form (books and newspapers), as key media resources available to families around their time of birth, followed by innovations such as telegrams. Magazines, movies, FM radio, and the invent of TV resources unfolded during their youth in the 1940s. Around the age of twenty-five, in the 1960s, videotapes emerged, and the following decades brought cable television and CDs. Finally, the internet became widely accessible in the 1990s when participants would have been around fifty-five years old. Participants were most reliant on print media for information about community-based services and about their community in general. As technologically inclined cohorts age, current trends that show that print newspaper readership increases across the lifespan (Harwood, 2007) may diminish.

Monroe County elders valued print information delivered to their homes, which is particularly important when adults are homebound (health or loss of driver's license). Print materials, such as the MCG, which contains contact information and a summary of all community-based services in Monroe County, would ideally be hand delivered by a community-insider who is trusted or shares similarities with the recipient. Participants valued local companions who shared similarities such as age and residence and other source characteristics that scholars (Nussbaum, Pecchioni, Robinson, Thompson, 2000; Thoits, 1995) would agree are elements that facilitate connecting and communicating. Older adults prefer to share information and concerns with people (Nussbaum, Pecchioni, Robinson, Thompson, 2000) who they can easily relate, which results in information and emotionally supportive actions that are aligned with their needs (Thoits, 1995).

One possible MCG delivery option includes Meals on Wheels (MOW) volunteers who are in a position to reach the most vulnerable and isolated older adults as a trusted contact. MOW and other volunteers should be briefed about the MCG so that they are informed about the content and can provide examples on how to use the guide. When print resources are shared by a trusted contact, such as a senior volunteer, in a face-to-face discussion the “interactive effect” of intervening at more than one level “is greater than the mere additive effect of the two levels” (Moran et al., 2016, p. 136). This allows the trusted contact to address questions and refer residents to a central call-in number that is printed on the front of the MCG, which is answered by a Monroe County resident. Disseminating the MCG during health presentations, events, and at communication hot spots (see CAC section below) should also be a priority. In cases when the guide cannot be hand delivered, funds might be allocated from the senior millage to mail resources (e.g., MCG) to the oldest residents. Finally, because older adults rely on newspapers as key information resources, the senior page of the local newspaper might be pursued as a way to market the MCG.

Micro-media connected seniors with local companions who they learned about when featured in senior center newsletters for winning card games, recent birthdays, or volunteer awards. Participants used newsletters as tools for knowing the names of people who attended the senior center and for keeping up on social activities; bridging interpersonal discussion and connection among seniors while appealing to their information needs about health matters and community-based organizations and services. Retirees, volunteers, and individuals who had experience with services were information

ambassadors who trumpeted insight about those organizations, as were those who served in civic roles. By sharing the information in person, they addressed the psychological barriers through discussion and combatted service misinterpretations and misinformation, and other perceived barriers in regard to access.

The Communication Action Context

While some areas have active senior centers, areas that are more sparsely populated (CAC) in the county do not benefit from these resources. Those in rural areas lack access to communication resources originating from senior centers such as newsletters that connect older adults to services and information facilitating events. A county-wide newsletter that summarizes information from other newsletters is a useful resource for the elderly to learn about places where they can connect with others and about community-based services. A county-wide newsletter could be disseminated at no charge to adults aged 80 years old and older, and a nominal fee for younger cohorts. The newsletter should contain information about county health fairs, the MCG, and health information relevant to their circumstances.

Community rooms were sites for congregating and connecting though were contingent upon the communication environment. For example, senior housing buildings with community rooms accessible from connected hallways inside facilitated interactions. Senior residents of a HUD housing site gathered in community rooms to collectively work on projects such as reupholstering a chair or gathering for coffee in the morning when they would “snack and yack” together. One participant described her experience in that housing unit as a place she could connect with others, which afforded her knowledge

about community-based services. Senior housing sites also had micro-ecology materials flowing through them that were created specifically for residents. The residents wrote content with administrators who printed and disseminated newsletters that included information about community-based services and information that bridged residents with each other. While four interviewees that lived in and described these interactive settings, another interviewee's senior housing community was less interactive. However, the site was comprised of independent condominiums which required leaving the physical home to socialize. Though there was a gathering room on-site the interviewee did not refer to activities there with any depth, suggesting it was not a key resource for connecting.

Ball-Rokeach, Moran and Frank (as cited in Wilkin et al., 2011) suggested that two additional features of the CAC, communication hot spots and comfort zones, are key sites that should be identified for outreach purposes. The organizations or businesses that participants reported feeling connected to were documented as comfort zones. Settings, where seniors gathered in conversations with others and opportunities to socialize, were documented as communication hot spots.

Table 5

CAC Outreach Sites

Communication hot spots	Comfort zones
<ul style="list-style-type: none"> • Health events/fairs • Congregate meals • Senior/activity centers • Senior/HUD housing rooms • Faith-based • VFW/veteran sites 	<ul style="list-style-type: none"> • MCOP • Senior centers • Faith-based • Kroger, grocers • Meals on Wheels

The communication infrastructure depicts how Monroe County's oldest adults' communication resources impact service utilization and the integrated relation of those resources based on features of the CAC. Likewise, the communication infrastructure documents avenues for reaching seniors in hot spots and comfort zones where they congregate so that community-based service organizations can more readily connect with seniors. The discussion now turns to a key communication disconnect so that adaptations can be made to improve the role of health organizations and professionals so that they can better serve their eldest patients and contribute to minimizing their information disparities.

Health Connections

Late old age resulted in contracting networks and communication disparities for participants. The goal was to document participants' communication infrastructure, ensuring that strategies to connect community-based services and seniors were grounded in ecological processes that influence utilization. However, this structure is inadequate for especially old participants, because it excludes a crucial communication connection that occurs outside of the storytelling network, with healthcare professionals. For those who may not be integrated into STNs, as study findings have revealed, Wilkin (2013) suggests building on the communication infrastructure to "consider ways to better reach those who are not connecting" (p. 188). This broadens potential opportunities for connections beyond the current network of communication resources toward contemplating how a more enabling system of communication sources might look (Wilkin, 2013). This is particularly relevant to participants who as they age become less

integrated with STN, which also is increasingly constrained by the CAC (Wilkin et al., 2011) by outliving others or ceasing driving. “The growing evidence suggesting that people who suffer the most from health disparities may not have integrated connections to the STN has led researchers to suggest that we shift our focus to *communication ecologies* for improving health outreach” (Wilkin, 2013, p. 189). Thus, an expanded depiction of the system is warranted.

Healthcare is central in later life. People aged 75 years and older average eight outpatient medical visits per year, whereas those aged 18 to 44 years old average two to three (Harwood, 2007, p. 224). As discussed, participants desired expertise from trusted experts, which is how they view health professionals (Harwood, 2007). As discussed earlier, CIT is an extension of media systems dependency (MSD) theory, which regards individuals, their interpersonal connections, social environment, and media in an interdependent relationship (Miller, 2005). As media dependency increases during times of conflict or stress (Miller, 2005) so too might the need for information to manage health issues. This may also help explain why participants were most frequently focused on healthcare professionals as desired information resources. Those who survive into late old age suffer the greatest burden of chronic health issues but may have access to the fewest information resources.

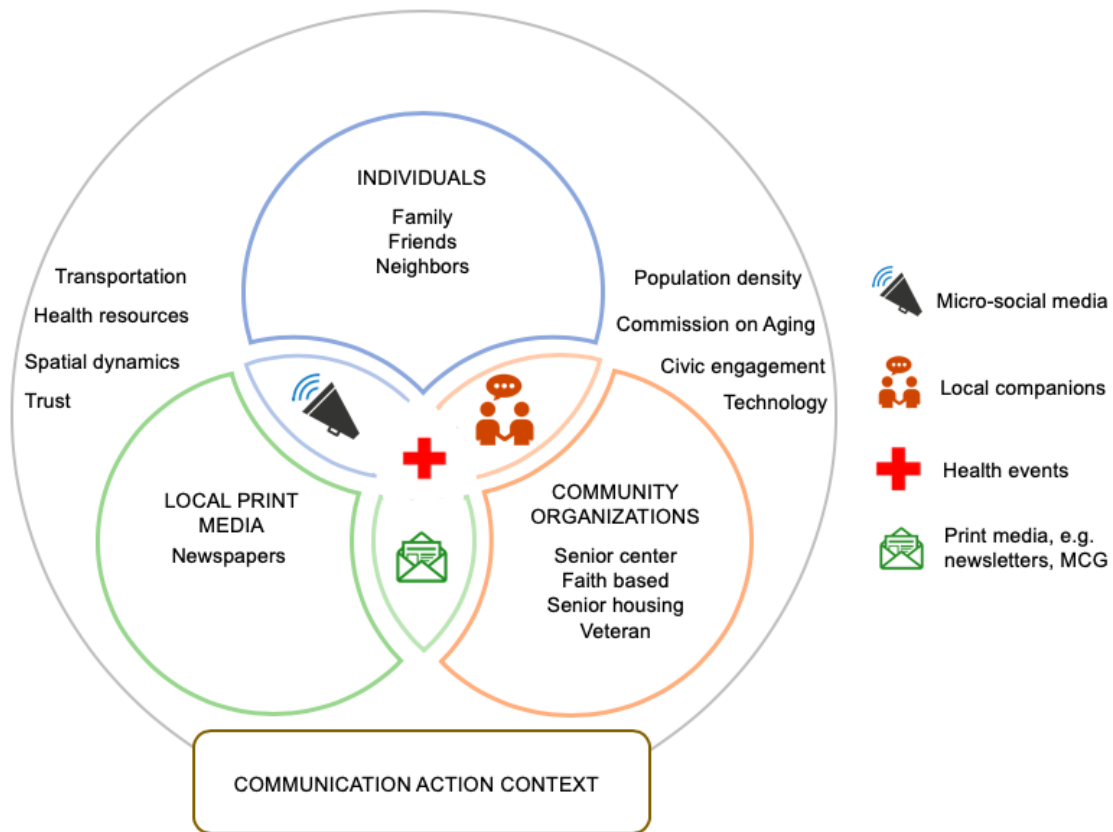
The healthcare network was referred to as a disconnected and untapped resource for connecting seniors to essential information. As seniors advocated, print materials such as the MCG should be disseminated in healthcare sites and to hospital dischargers. Interventions aimed at connecting healthcare and aging services networks is needed.

Healthcare organizations may consider how the communication infrastructure can be leveraged for connecting senior volunteers with local companions. Especially, in settings where seniors congregate and collaborate with community-based organizations; enhancing the number of communication resources that seniors can draw from, particularly the oldest community members. Understanding how older adults experience and navigate their communication ecologies sheds light on the adaptations required to ensure seniors can connect as their communication resources diminish.

As Wilkin (2013) contended, ecological communication studies enable service providers to more readily connect with seniors by increasing information provided through their communication ecologies. The goal was to inform to bridge the senior-provider divide by illustrating how interpersonal, mediated, and community-based organizations, and healthcare interactions can be improved or leveraged as communication resources in Monroe County to improve connections with seniors. Figure 4 offers a summary depiction of the facilitating communication resources that can be used to know how to connect with seniors.

Figure 4

Monroe County Oldest Adults Communication Ecology for Reach



This section explained why Monroe County's eldest are a hard to reach population and how a theoretically grounded outreach strategy can address the issue based on the distinct circumstances of their communication ecology.

Summary

It is clear that shifting norms and disconnected and displaced network members diminished communication environments - impeding access to community-based services. As people age, it is clear that each interaction becomes increasingly important in terms of information exchange. Perhaps older adults were overly critical or reliant on healthcare professionals as channels for information about community-based services, despite healthcare interactions being central during aging. The disjuncture between older adults

and community-based service organizations originated from long-held beliefs about services, some which conflicted with their value-systems and historical experiences. Diminishing information conduits, as well as unskilled, underinformed, and insensitive interpersonal interactions, impeded use.

Volunteerism combats community-based services information deficits for individuals and their microsystem. Older adults and particularly those who volunteer are assets for other seniors. More than sixty-percent (62%, n= 595) of seniors in Monroe County said they would volunteer to aid other older adults (Jankowski & Leach, 2015). Organizations should leverage those resources to increase reach and to facilitate contact by deploying them as information ambassadors and front-line liaisons. Connections between seniors and community-based services could be enhanced by leveraging key communication resources in the STN in ways that are attuned to the CAC. Likewise, participants shared advice for optimizing interactions including who should be deployed, their source characteristics, and the format for delivering messages to develop a robust outreach strategy.

Likewise, those who retire from aging services organizations are experts who may wish to contribute in reduced or consultative roles to aid organizations in contacting seniors. Seniors should not be viewed solely as targeted users of services, rather Canham et al. (2019) argued that “seniors should be acknowledged as active participants in creating and acquiring activities, services, and support” (p. 146), making seniors’ conduits for others and the community.

As generations become more removed from each other participants predict poor interactions will escalate. Workforce inadequacies for working with older adults persist with fewer than 1% of nurses, pharmacists, and physician's assistants specializing in geriatrics, and fewer than 4% of social workers (Institute of Medicine [IOM], 2008). Because financial resources may be unavailable to train or sensitize staff members to aging matters, a participatory role for retirees can help inform processes and practices. Social information processing theory suggests that organizational members integrate information from peers into their work tasks (Seibold, Meyers, & Shoham, 2010); hiring experienced caregivers or connecting few staff members with continuing education opportunities may infuse social environments with gerontology-based information. Information sharing must increase among aging network organizations, and training resources may be collaboratively procured.

A myriad of forces shaped Monroe County seniors' utilization behavior; they were influenced by the social and physical milieu that accumulated over decades, and by current happenings. Mostly the seniors desired more information, from and among community-based organizations through print and in-person. While Lee and colleagues (2019) found that with age comes less comfort and efficacy using computers, they postulate that as time passes and more technologically savvy cohorts age, the problem should dissolve. In the meantime, human contact in agencies is critical for fostering utilization. Communication and services that are ecologically sensitized are optimized when organizations appreciate the norms, values, and contexts that influence older adults' engagement and utilization. This study's findings can be used to inform adaptations to

service provision and information diffusion to foster utilization by the oldest and the most vulnerable residents of the county.

CBPR Process and Outcomes

This ecological communication study used a CBPR guiding framework to seek Monroe County's eldest residents' perspectives with the goal of co-learning *with* senior community members and experts (Israel et al., 2013; Katz, 2004). The seeds of this study were planted several years before this research during a county-wide needs assessment that commenced in 2014. That experience, however, included a significant budget, whereas this study did not. I was interested to learn whether or not the relationships would be sustainable throughout another multi-year project when the partners were not obligated as stewards of county funds. It became evident that, unlike traditional research where the researcher defines the problem, the questions that motivated the study and the desire to address those concerns that emerged from within the community were also what sustained the collaboration.

CBPR principles articulated by Israel and colleagues (2013) were applied throughout the project, though to varying degrees. Israel et al. (2013) suggested drawing on the principles as goals to strive for and advocate, as part of a partnership building process, for evaluating to what extent those principles were drawn. To that end, a discussion of how the principles informed the research will be presented with insights from the CAG *in vivo* from our last meeting when we discussed how the principles were resources for our work.

The CAG strengthened this study in many ways. Not only were they seniors themselves but each had insight about community-based services as current and former providers. Open, frequent, and transparent communication was prioritized throughout the study, and as I progressed through this process, each draft of my dissertation was sent to the CAG and my academic advisors. This transparent approach was to empower each person to participate in decision-making, drawing on CBPR principles of that advocate for equitable contribution and power-sharing processes (Israel et al., 2013). Most of our meetings were in-person, and notes and drafts of documents for each meeting were emailed in advance for review. The in-person meetings were at least two hours in duration and up to three hours in some cases, each of the four of us was present throughout each meeting. Other means of communication involved individual phone calls for consultations, and email was relied on only for coordinating meeting times and sharing materials that we would review during those meetings.

During our initial meetings, we discussed study details and how the small pool of funds should be allocated for the study. This was particularly helpful for setting study boundaries, because they requested that I present the findings to the Commission on Aging and that funds be allocated for printing study findings to share. By co-defining these research deliverables, extra efforts were made to get to each of the nine Commission on Aging (COA) districts, adhering to CBPR principles that “acknowledges the community as a unit of identity” (Israel et al., 2013, p. 8) so that the results were relevant community concerns and needs. While I was interested in rural aging, the CAG was more concerned with service disconnections to seniors in all areas of the county,

which was more relevant to COA priorities as well. Lastly, the CAG was most concerned with older adults aged 75 years and older as those who would be in the most need for community-based services and support. We were able to define the community of interest based on how it would best serve and be returned to decision makers for impact.

Drawing on the CBPR principles, I offered myself as a research instrument to my advisors while building on the strengths and resources of their networks to ensure the research was locally relevant and sensitized to participants (Hacker, 2013). Sensitizing information was drawn from the community advisors who provided insight about communication deterrents such as using a cell phone to keep time, language used in the informed consent and discussion guide, and how to ensure that each participant completed the questionnaire, which inquired about income level. They recommended I explain why I would be collecting that information, how it would be used, and restating that it was confidential. All study participants completed the questionnaire in its entirety.

CBPR principles suggest engaging in an iterative process informed by competencies from each partner, which guided my interview approach (Israel et al., 2013). During interviews I conducted alongside one of the CAG members in Monroe County in a former project several years before, I learned about the importance of visiting, friendliness, and allotting time for older adults to fully express themselves. The local insight, supported by gero-communicologist Nussbaum (2014), highlighted the importance of patience and storytelling preferences when disclosing information, informing my research methods. As a result, I allocated two hours for each interview for story sharing and listening, which the CAG appreciated: “How much can you really

understand in 20 minutes? You understand a whole lot more in two hours.” Older adults in general pride themselves on self-sufficiency, self-reliance, and independence (Bell & Menec, 2015; Cordingley & Webb, 1997), which can be a barrier to learning about their circumstances especially when asking questions that conflict with maintaining those positions. The approach proved effective based on participants who said they were reluctant to disclose private information, particularly with people who they do not perceive to care about them or their circumstances, who were forthcoming and open. One gentleman commented that I should feel “honored” because he rarely shared such information. On more than one occasion, participants asked me to turn the recorder off so that they could share their personal thoughts, “off the record.”

Guided by CBPR principles that build on strengths within the community (Israel et al., 2013) and having made contact with community organizations in former projects, I was able to reach out to contacts who I had met in the past. One organization used their funds to mail my study flyer to individuals (without my asking or knowing that it was sent), which I learned they had mailed during an interview when the participant shared it with me. These organizations were key resources in locating individuals across the County who resided in various COA districts. Likewise, the first ten of twelve participants were females. Knowing that males participate in health activities and research at lower rates, the organizations were instrumental in connecting me with them. Another organization suggested I come to her location so that people would be more likely to answer the phone. I was calling during a primary election cycle and was having trouble getting through to people on the telephone. The participants she connected me

with answered the phone and I was able to interview them in their homes within days. These findings illustrate CBPR strengths since I was able to easily connect to seniors through sensitized communication and insider resources and learn from and with them. The participatory approach allowed me to build on the strengths and resources within the community to produce a locally informed, culturally appropriate research project, which increases the likelihood that it may result in improvements (Hacker, 2013).

During the final meeting with the CAG, we discussed elements that they felt were important for sustaining the partnership; trust and familiarity were emphasized. Having had experience working with them for several years earlier during the needs assessment proved critical, and “because of the trust that was built up in that process” as one CAG member stated. The CAG also highlighted the importance of relational characteristics. They stressed that showing up in a suit and, “talking about higher level data and all this kind of bullshit,” would deter collaboration, whereas being “easy to talk to” enabled collaboration. They noted the importance of communication skills and positively evaluated the “model” I used during interviews with seniors and when meeting with them which they said, “really is an inclusion kind of communication.”

CBPR principles advocate for achieving a “balance between knowledge generation and intervention for the mutual benefit of all partners” (Israel et al., 2013, p. 10). I asked the CAG whether they felt the amount of contribution was in fact balanced, it was noted that it was “just the right amount,” of effort required from them. They were particularly motivated by participating in the process because it could strengthen their ability to compel funders to support their work:

I think the process is going great. Okay, you do the heavy lifting. Okay. In my experiences, I would say just right. I would say just right. You know, this is a process that I'm interested in. Yeah, because I was interested in the initial study Okay, in the end I probably stuck my nose in the document probably more than the ordinary person and then use that, I used your information a lot with the organizations that give me funding to reflect back to them the validity of what we're doing so it's like a validity trail.

So, I feel like I've got some skin in the game even though you know, we haven't had any money that has exchanged hands. But if this process and your product helps me have more data so that I have a better chance writing grants, you know, that's the motivation. And you know now, that you're a nice person to have on a team . . . but you know it's for the professional reasons . . . I want to run a program that I can be proud of and that I can defend, so I see you as an asset to help me do that.

Through the co-learning process I was able to develop my own research skills, which the CAG evaluated favorably particularly my use of qualitative methods that worked for their benefit. They noted the importance of having residents' voices incorporated into the study results and they felt the study findings were validated by those depictions. One advisor explained, "There is a charm to actually hearing the voices of your constituents. I think that's a powerful communication model." They felt the results would be less compelling with data that represented an idea without their voices, and appreciated claims that were justified through seniors:

When you're convincing somebody to do a study or being engaged, it's not just data, but we're gonna expand this and get the richness of why people just said this. It's not just a scale of one to five. But why did you arrive at that five? Which you can only get through a one on one discussion.

A CBPR dissertation is a challenging and rare occurrence, particularly as people are deterred by the amount of time it requires - in addition to a traditional research dissertation. The additional hours were spent coordinating and preparing notes and documents for our meetings and prepping and presenting overviews of each step. This

was particularly labor-intensive during data analysis, which took time to articulate the process to others. I underestimated how receptive the advisors would be to the quantity and depth of information I presented. I grappled with sharing information that met their needs but wanted them to be able to capitalize on the dissertation as a whole. As such, I erred on the side of presenting everything, instead of too little. Thus, they received updated drafts of my dissertation as did my academic advisor. It was important for me to share information in a way that was accessible without having it bogged down by academic jargon. Aligned with CBPR principles that advocate for research attuned to public health in context (Israel et al., 2013), the CAG embraced the social ecological model as a way to organize the study and examine the results as well:

The ecological approach, where you're overlaying these contexts that are important to, you know, try not to let any anything that's that has a lot of impact slip away, try to take into consideration all the dynamics that are going on that you possibly can. Yeah, you can't overload yourself with too many. So you chose the dynamics you thought were the most important that stuck with you using the ecological model. And if you just simply a numbers person, you wouldn't even be involved in an ecological [approach].

It seems like if you're going to do this kind of study, those are the kinds of the things you're attending to, those are the things that seem logical that you need to attend to.

Our collaborative endeavor situated in seniors' social ecologies yielded rich, nuanced, and layered accounts of experiences. Scholars and my community advisors confirmed that ecological approaches yield a “more comprehensive understanding” (Moran et al., 2016, p. 137) of community circumstances. The CBPR approach allowed me to authentically represent the seniors I was studying, learn from and with them, and build my research skills (goals of CBPR; Hacker, 2013).

The remaining and perhaps most important CBPR principles prompt researchers to return the research back to the community in a way that is distilled, understandable, and usable (Israel et al., 2013). In response, dissemination strategies will be discussed in a section devoted to addressing the applied nature of this dissertation, by providing recommendations and projected activities that will occur in the immediate, short-term, and long-term future. The final CBPR principle advocates for a “long-term process and commitment to sustainability” (Israel et al., 2013, p. 11) which has been achieved as early as 2014 and projected to continue through 2020 as discussed below.

Immediate. This information will be translated and presented to the Monroe County Commission on Aging in a way that is accessible and understandable as well as actionable. This will be done with the CAG; presentations are currently being scheduled at various senior centers so that they may be publicized in newsletters months in advance. This is an opportunity to report the results back to the participants as well as organizations that contributed, so that they may benefit from the research.

Short-term. Work will continue on creating a summary document with the CAG that will distill the research findings down to a usable list of recommendations that will be presented to the Monroe County Commission on Aging and disseminated more broadly through the County. Likewise, my contact information will be shared so that I may be a resource for visiting community-based organizations who wish to learn more about connecting with seniors through their communication ecology.

Long-term. In the more distal future, I intend to co-publish and disseminate the research findings in academic venues as well as conferences that practitioners rely on for

delivering services including the American Society on Aging conference. Ideally, in the long-term, the CAG members or myself could collaborate with community-based services who should consider formulating plans for working more closely with healthcare organizations in Monroe County to improve inter-organizational communication.

Finally, table 6 below was provided to the Community Advisory Group as a guide for future directions. Our initial post-dissertation, face-to-face meeting is scheduled for July, 2019 when we will review and make edits as well as to prioritize these activities based on the CAGs desire.

Table 6

Future Monroe County Activities and Outcomes

Level	Action	Outcome
Individual	<ul style="list-style-type: none"> • Report back to participants; invite to community presentations • Resource Research: Provide additional materials for improving communication, re hearing, vision, and other handouts at each speaking event • Inform seniors re positive impact of sharing information, socializing, and volunteering • Disseminate and educate about MCG; overview of communication resources that exist within MC • Communication tactics included in presentations 	<ul style="list-style-type: none"> • Change in perceptions/ attitudes about utilization • Skills enhancement, i.e. communication with others • Behavioral intentions impacted; increased intent to socialize • Reduced apprehension to attend senior center; understand it as a resource for health bolstering information • Increase awareness of services and resources • Increase awareness of communicative changes that impact interactions
Inter-personal	<ul style="list-style-type: none"> • Disseminate results in various locations and settings • Communication skills included in presentations 	<ul style="list-style-type: none"> • Skills enhancement, i.e. communication with seniors • Sensitized communication strategies when interacting with older adults

Institutional	<ul style="list-style-type: none"> • Presentation announcements and summary included in local newsletters, present at senior centers including Monroe Center and Milan • Develop recommendations for modifications w CAG • Develop ecologically sound outreach strategy for engaging seniors w CAG • Presentations to aging organizations; modifications to policies and services • Communication skills included in presentations • Inform orgs about social learning theory - train small # of staff to infuse orgs with gero-communication tactics • Advocate for aging advisors and participatory service provision practices 	<ul style="list-style-type: none"> • Increased awareness about aging services study and outcomes • Modifications to institutional policies • Reduction in technology reliance • Enhanced outreach tactics • Sensitized staff to aging dynamics • Skills enhancement, i.e. communication with older users • Improved user experiences • Increased senior consultants to evaluate practices and policies
Community & Policy	<ul style="list-style-type: none"> • Presentations to policy makers including Monroe County Commission on Aging; present to MC COA Communication & Outreach working group • Quantitative data analysis: operationalize findings for analyzing community-level needs assessment data • Grant-seeking and writing 	<ul style="list-style-type: none"> • Change in perceptions/attitudes about service utilization • Enhanced community understanding - how to reach hard to reach • Justification for resources including mailing print info, transportation in late old age

Limitations

This dissertation research had several limitations. First, ecological models have been criticized for producing research that errs on the side of breadth and lacks building a deeper understanding of a phenomenon. Individual-level studies specify mechanisms to influence behavior, whereas ecological models place a “greater burden on health promotion professionals” to figure out how to use the information in application (Sallis, Owen, & Fisher, 2008, p. 480). Using an ecological model as a framework was challenging when trying to categorize concepts that often overlapped at more than one level. This was particularly challenging with regard to communication between service providers and older adults. For example, it was difficult to discern whether providers’

rushed communication practices were due to inadequate interpersonal skills or organizational policies/structures and socialization that limited the time they were able to spend chatting. Although I attempted to consistently categorize interactions within levels, some “inconsistencies” do appear. Rather than be problematic, it is meant to highlight, once again, how drawing distinct boundaries in a model has some heuristic oversimplification. Pursuing a community-based participatory research dissertation comes with limitations and challenges. The nature of working with institutions, communities, practitioners, and community members means that academic interests and goals may not coincide. For example, early on in the project, we met to discuss our goals, and though I was particularly interested in rural aging, the community advisory group, which serves seniors in all residential areas did not agree that the focus was necessary. Inclusive approaches risk losing control of a project, not just in scope but also logistically as others compete to set the agenda. The nature of who I partnered with on this project also meant that the voices of those who they are affiliated with are included. Two of the members were directors; thus, the interviewees who they referred me to were plugged into the aging network. One of my CAG members directed the senior center, which is located at the base of a senior housing unit. Thus, many of those referred were volunteers at the center or resided in the housing site and likely have more resources than others residing independently in homes separated for others, as the majority of Monroe County residents live.

Likewise, the Director of the RSVP program referred me to individuals actively engaged as volunteers who may have stronger networks and support. Another issue that

surfaced while working with the group was my inability to adequately obscure data when we gathered for discussions of study results. Themes and commonalities were presented to the group by using *in vivo* accounts so that responses are given in the words of the older adults themselves. As I highlighted some key comments for discussion, it was clear that the advisors knew who the person was that made the statement and then discussed their interpretations of those data. It was difficult to discern how to then use that insight as it conflicted with participants perspectives. Additional pseudonyms were used for single participants, and referents needed to be omitted when writing the results. For example, there were cases when I referred to the oldest participant but then realized it would be obvious who was being referred to so that information was omitted.

Investigations of non-medical, health-supporting resources such as community-based services have been neglected as an area of study. It was challenging to locate studies with very old cohorts of adults. When discussing the findings at each level of the ecological model, insight about very old adults was increasingly desired to substantiate or understand how existing knowledge might conflict with claims. Harwood (2007) suggested that research is scant on the old-old (ages 70 to 80) and even more so, the oldest-old people (over the age of 80) which he describes as a “very new scientific enterprise” (p. 27). This poses challenges when conducting research, though also supports the need for undertaking such endeavors since the demographic trends of the oldest cohorts will continue to grow.

As is the case with qualitative research, while the results of this study will not be generalizable, they can contribute a deeper understanding into communication and

service utilization in later life. This study is limited to services interpreted within Monroe County, though the impetus of this research has been identified as a pressing issue in other communities and at the state level who may benefit from the insight.

Future Directions

The study results were foundational for understanding seniors' experiences, whose well-being is the crux of this dissertation. However, research conducted solely with the individual minimizes the dynamic nature of various contexts and interactions. As Moran and colleagues (2016) suggest, conducting ecological communication research is most effective when multiple contexts are examined crosscut with a participatory approach (Lounsbury & Mitchell, 2009). Therefore, future research with a focus on provider perspectives would be advantageous. The inclusion of perspectives from providers may illuminate communicative hindrances from within organizations. By collecting insight from service providers, it may empower them to, "become change agents by telling their stories, articulating their perspectives on the issues affecting them, and recommending strategies for addressing these issues that are grounded in the realities of their environment and experience" (Kieffer et al., 2013, p. 252). Research that deploys recommendations from this study could test the efficacy of implementing the results toward efforts informing older adults about available resources.

Conclusions

To increase the effectiveness of interactions between older adults and service providers, understanding how seniors experience those interactions both critically and favorably can inform adaptations. Their experiences influence their decisions to utilize

services, but they reverberate more broadly through legacy story sharing about the experience, especially when it is a poor one - impacting others decision to use available services. Special groups of older adults are understudied, particularly in terms of their communicative needs in securing assistance in later life. Interventions to facilitate service utilization would benefit from considering the communicative challenges that accumulate with age, declining social resources, and the everyday experiences of older adults who are further disintegrated with their ecologies by technological limitations.

Conceptually incorporating social ecological models into communication strategies for service provision can inform interactions adapted to older adults sensory and skill levels in a way that is responsive to their needs. Informing seniors, care providers, health professionals, and familiar others, volunteers, retirees, and family members about communication changes that happen with age can help to increase the likelihood of positive communicative instances. As micro-social opportunities contract, seniors' interactions become increasingly important as they have fewer resources for companionship and information. Service providers should strongly consider the limitations of the contracting social environments, technological proficiency, and historical experiences of their most senior users and how their interactions play a role, before, during, and after the service event.

Applied and health communication studies alike tend to focus on the needs of the provider rather than the user. This study provided a more comprehensive depiction of the communication resources embedded in Monroe County available to older adults. It also highlighted how programs and practices can be adapted to old users. Findings from this

study suggest a new outreach approach for connecting to older adults through communication ecology, which also reaches the particularly very old age seniors.

Finally, services and programs should be shaped with input from users to optimize “fit” to older adults’ communication and information needs. Providers and the organizations where they are embedded should consider the important role they play in influencing utilization behavior. Community-based services should be delivered by someone who cares about seniors historical and physiologic orientations so that interactions promote positive experiences and attitudes toward aging organizations, professionals, and services. Not only for the user, but also for the local companions who will gather to chat about them.

APPENDIX A. RECRUITMENT FLIER

2018 Older Adult Community-Based Services Interview Flier



Older Adults Use of Community-Based Services Study

What is the study about?

- This research study is designed to learn about community-based service use in Monroe County, Michigan. I hope to learn about the reasons people do or don't use local services such as Meals-on-Wheels.

What will I have to do?

- Interviews should take approximately one hour. The location can vary as long as it allows for talking in a quiet place. The interview can take place in your home, at the library, or another place that you think would be a comfortable place to meet and talk. You will fill out a brief questionnaire at the end.

Why should I participate?

- To help researchers learn more about how their community supports elder residents! Your participation is completely voluntary.

When will I participate?

- Whenever you have time – weekdays or weekends! The study consists of approximately a one-hour meeting.

Please call Carrie Leach, at 313-664-2612 or email carrieleach@wayne.edu if you are interested in participating. Carrie is a research assistant and student at Wayne State University interested in community support in later life.

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APPENDIX B. PRE-SCREENING CRITERIA SCRIPT

1. What year were you born?
 - a. If born in 1943 or earlier (75 years old) , move to Q2.
 - b. If born after 1943 or later (74 years old or younger), not eligible.
2. Do you live in Monroe County?
 - a. If they reside in Monroe County move to question 3.
 - b. If they reside outside Monroe County, not eligible.
3. Do you reside in a nursing home or assisted living facility?
 - a. If no, move to Q4.
 - b. If yes, not eligible.
4. Are you able to meet in person for a one-hour interview?
 - a. If yes, move to Q5.
 - b. If no, not eligible.
5. Would you be willing to have your voice recorded?
 - a. If yes, participant is eligible for study.
 - b. If no, not eligible.

APPENDIX C. INTERVIEW GUIDE

Older Adults Use of Community-Based Services Interview Guide

Equipment:

- Audio recorder
- Batteries
- Notebook
- Ink pen
- Business cards
- Questionnaire printed
- Informed consent printed

INTRODUCTION (10 minutes)

Introduce myself.

I am conducting research for my dissertation at Wayne State University in Detroit and have spent some time here in Monroe County conducting research in the past helping the Monroe County Commission on Aging conduct a community needs assessment of older adults. The purpose of that needs assessment was to learn how to best serve the senior population. Today I am more focused on learning about your experience in your home and about community-based services and whether you have used them and reasons why you haven't.

The purpose of this research is to learn about: 1) living independently in Monroe County, 2) things that have come up that made you think about getting some help, and 3) your thoughts, feelings, and experiences about getting someone to give you a hand with things in your home.

Informed Consent

Before we begin, I need to get your consent to participate in this study. The purpose of the consent is to assure that you understand your rights as a participant in this interview.

Interview Guidelines and Expectations

1. There are no right or wrong answers. Say whatever comes to your mind. This is an informal chat about you and your opinions. I appreciate you being as honest and frank as you'd like to be.
2. I will be jotting down notes while you talk to be sure that I don't miss anything while you're talking. I may want to circle back to things you say to get more information. I will also have my phone out to watch the time and be sure that we have enough time to get to each question. The audio recorder is set to capture our chat because I can't write as fast as you talk. Your name and information will be confidential and anything you say will not be identifiable.
3. So, I have a few questions to talk about but I'm also to hearing about your story. Feel free to share anything that comes to mind. There may be periods of time when neither of us is talking and it's silent, I tend to allow that space to happen for about 15 seconds, even if it feels uncomfortable. This allows you to have ample time to think, and I hope feel comfortable responding when you're ready.

Do you have any questions?

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INTERVIEW QUESTIONS

Opening Questions. (10 minutes)

Factual questions:

- How long have you lived in Monroe County?
- Does anyone live here with you?

Experience questions:

- Do you have friends that live nearby?
- Do you have family that lives nearby?
- Do people call you for help with things? What kind of things?
- Do you have family or friends who you can call if you need a hand with anything? Who helps? What do they help you with?

Generative Questions. (20 minutes)

I want to learn about your opinion of services especially and how you learn about them, and your interactions with people that work or volunteer there.

Elicitation questions: I have a list of services and programs available for Monroe County older adults.

- Are any of these familiar to you?
- Have you used any of those services?
 - NO
 - Have you attempted to use? What went wrong?
 - Why haven't you?
 - YES
 - How did you learn about the service?
 - What made you want to reach out?
 - What is/was using [insert service] like?
 - What would you say is good about using [the service]?
 - What would you say is bad about using [the service]?
 - How are/were the interactions with staff members?
 - Are you still using?
 - NO
 - Why not? What made you stop?
- Have you attempted to use any other services available in Monroe County? What happened? Can you give me examples?

Other people's motives questions:

- Do you know other seniors that use any of those services? Have they told you about how they feel about it?
- How do you think seniors get help if they need it?
- What are some of the reasons that you think people don't get help when they need it?

Directive Questions. (20 minutes)

Data-referencing question: 6% of seniors in Michigan use community-based services. These agencies have a hard time reaching seniors, and seniors report having issues getting help.

- What things would help connect seniors and service providers?
- Can you think of things that have helped you get in touch with agencies?
- What are some reasons you think they might have a hard time reaching seniors in Monroe County specifically?
- What could be improved? Do you have tips or advice for these agencies that want to provide support?

Interview Closing. (10 minutes)

Special interest question:

- What word or few words would you use to describe yourself?

Catch-all questions:

- Are there questions I didn't ask that are important?
- Is there anything you want to add?

Demographic questions:

- One last thing before we leave, I need to ask you to complete a very brief survey. Please take a minute to fill that out. The purpose is to get a general idea about you and your circumstances.

Thank you for taking the time to meet with me and share your experiences for letting me into your home.

You have my contact information so if ideas come to you after I leave, please call or email me any time. Your input will only strengthen my research. If you'd like results from the study you can contact me and I will happily email you to let you know where the results will be shared.

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APPENDIX D: INFORMATION SHEET

Behavioral Research Informed Consent

Title of Study: *Older Adults Use of Community-Based Services*

Principal Investigator (PI): Carrie Leach, study conducted through the WSU Department of Communication, can be reached at the Institute of Gerontology at Wayne State University via phone at 313-664-2612 or email carrieleach@wayne.edu

Purpose

You are being asked to be in a research study of older adults because you live in Monroe County. In this research study, I will speak to older adults about their experiences and opinions regarding community-based services. This study is being conducted at Wayne State University and taking place in Monroe County. The estimated number of study participants to be enrolled is about 25. **Please read this form and ask any questions you may have before agreeing to be in the study.**

Study Procedures

If you agree to take part in this research study, you will be asked to discuss positive and negative experiences living independently and about your interactions with community-based service providers. You will also be asked what kind of support and services that you receive, if any. You will also be asked to fill out a questionnaire with information about yourself including your age and marital status. You can decline any question posed in the interview or on the survey. You can stop the interview at any time that you wish.

The interview should take about 60 minutes to complete and will be recorded and transcribed. We will remove your name from the transcriptions so that you cannot be identified in our conversation. The sheets that you fill out will not be stored with the conversation transcription and you will be protected completely from being able to be identified with your comments.

In order to get in touch with other older adults in Monroe County we will leave an information sheet with the details of our study so that you can share the information with other residents that you think may be interested in speaking to me.

Benefits

As a participant in this research study, there may be no direct benefit for you; however, information from this study may benefit other people now or in the future.

Risks

There are no risks affiliated with participating in this study.

Costs: There will be no costs to you for your participation in this research study.

Compensation

For taking part in this research study, you will receive a gift card to Kroger.

Confidentiality

All information collected about you during the course of this study will be kept without any identifiers.

Voluntary Participation/Withdrawal

Taking part in this study is voluntary.

Submission/Revision Date: [6/11/2018]

Page 1 of 2

Protocol Version #: [055718B3X]

Form Date: 04/2018

Monroe County Older Adult Study

Questions

If you have any questions about this study now or in the future, you may contact Carrie Leach at 313-664-2612. If you have questions or concerns about your rights as a research participant, the Chair of the Institutional Review Board can be contacted at (313) 577-1628. If you are unable to contact the research staff, or if you want to talk to someone other than the research staff, you may also call (313) 577-1628 to ask questions or voice concerns or complaints.

Participation

By completing the interview you are agreeing to participate in this study.

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Submission/Revision Date: [June 2, 2015]
Protocol Version #: [3]

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Form Date: 04/2016

APPENDIX E. QUESTIONNAIRE



Older Adults Use of Community Based Services Study Participant Questionnaire

1. What year were you born? _____

2. What is your gender? Male Female

3. Including yourself, how many people live in your household? _____

4. What is your marital status?

Single/Divorced Married/Partnered Widowed Other: _____

5. How much formal education have you completed?

Less than 9th grade High school/GED Associate's degree Graduate or professional degree
 9th – 12th grade Some college, no degree Bachelor's degree

6. What is your monthly household income?

Less than \$400 \$1,200 to less than \$1,700 \$2,500 to less than \$2,900
 \$400 to less than \$800 \$1,700 to less than \$2,100 \$2,900 to less than \$3,400
 \$800 to less than \$1,200 \$2,100 to less than \$2,500 \$3,400 or more

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APPENDIX F. DATA CODING EXAMPLE FROM ATLAS.TI

ATLAS.ti Project Edit Document Quotation Code Memo Network Analysis Tools View Window Help

Dissertation Data 2018 — Edited

Dissertation Data 2018 - Code Manager

Grouped by Nothing

Name	Count	Groups	Comm
3 Institutional level	181	INSTITUTIONAL	1
1 Individual level	116	INTRA-PERSONAL	1
2 Interpersonal level	105	INTER-PERSONAL	1
5 systems	28	SYSTEMS	1
4 community	28	COMMUNITY	1
6 Technology	20		0
MESO LEVEL INTERACTION	19		0

287 They would call 911... every time? get there or four times a week because they didn't know. And... communication, there's got to be communication through the paper, actually through the churches, even... the schools send all your monthly or bimonthly publication out. I know a lot of them do, there's gotta be communication, and I don't know the answer. Actually the technology, technology is taking over and technology does not give communication.

288 It should be going to a class or more training. I know a girl, she has someone coming in and she's practically bed ridden and she complains, the girl picks up the little rags and shakes em, and outside she shakes em in the house. Yeah, she doesn't know any different there should be more training. You know I don't know, that ah, they're trying to do a good job, but it's not the well educated people, that's the problem those are the ones that need the help. So it does happen so it does it does help them. It gives them the money to live on.

327 They (MCOCP) may will counsel us on insurance on budget. And sometimes if you can't pay a bill and you help you pay the bill and just all kinds of community service things. They mean, I had my house renovated or I wouldn't have been able to stay there. Yeah, it's a hot water tank was the original one was over 50 years old.

328 Yeah, they have a newsletter from the office every month and you for the music community and they put in there when the MCOCP people will be here so that you can come and make appointments to see them and all the services that they can provide, yeah that's where we learned, all we they also have available to us attorney, I don't know it's not called ABLE out here but they're seeing some kind of attorney services

324 I also have an in home helper too, all of us do. All of us have aids [helpers] [conversation about the help they get, some girls are better than other, where they are from, visiting angels, Monroe... area aging, area office, other resources, they can't recall exactly what the answer is, which comes through the VA, which can't recall exact... conversation about how...]

Code

3 Institutional level

Color ● Light Green

Comment

Institutions and organizations, include schools, health care administrators, businesses, faith based orgs. How organizational communication systems influence use? Intra-organizational not with older adult. Separate interactions with personnel/seniors

In Groups

INSTITUTIONAL

Linked Codes

- 2 Interpersonal level is part of
- If you feel like you're being brushed off or a instead of when you make it a little more personal? You know, just show some interest what ever you do, don't die in Ohio is a I just don't think you're training your girls in area as well as they could be is a
- But the thing I don't like, I like to get up early things and they have their senior stuff like 1 communication, there's got to be communicate the paper, actually through the churches, or My sister refuses. She gets somebody she understand. She said, I'd like to speak to an on call up and their first thing is, you know, income? is a
- frontline workers, you know, that answer the [interactions] that could make a world of difference

Coded Quotations

e. So that's the "Monroe News" is that count newest? g. Yes, if you'd like to take it to... Well, this [Monroe News] has been about some company out of the country. Oh show 1

REFERENCES

- Administration on Aging. (2012). *A Profile of Older Americans*. Department of Health and Human Services. Retrieved from http://www.aoa.acl.gov/aging_statistics/profile/index.aspx
- Ajrouch, K. J., Fuller, H. R., Akiyama, H., and Antonucci, T. C. (2018). Convoys of social relations in cross-national context. *The Gerontologist*, 8;58(3):488-499. doi: 10.1093/geront/gnw204.
- Antonucci, T. C., & Akiyama, H. (1987). Social networks in adult life and a preliminary examination of the convoy model. *Journal of Gerontology*, 42(5), 519-527. <http://dx.doi.org/10.1093/geronj/42.5.519>
- Bacsu, J., Jeffery, B., Johnson, S., Martz, D., Novik, N., & Abonyi, S. (2012). Healthy aging in place: Supporting rural seniors' health needs. *Online Journal of Rural Nursing and Health Care*, 12(2), 327-337. <http://rnojournl.binghamton.edu/index.php/RNO/article/view/52>
- Bailey, P. (2009). Community partnerships for older adults. *Generations*, 33(2), 79-81.
- Baker, E. A., Motton, F., Barnidge, E., & Rose, F. (2013). Collaborative data collection, interpretation, and action planning in a rural African American community: Men on the move. In B. A. Israel, E. Eng, A. J. Schulz, & E. A. Parker. (Eds.). *Methods for Community-Based Participatory Research for Health* (2nd ed.). San Francisco, CA: Jossey-Bass.

- Bell, S., & Menec, V. (2015). "You Don't Want to Ask for the Help" The Imperative of Independence: Is It Related to Social Exclusion? *Journal of Applied Gerontology*, 34(3), NP1-NP21. <http://dx.doi.org/10.1177/0733464812469292>
- Berger, C. R., Roloff, M. E., & Roskow-Ewoldsen, D. R. (Eds.). (2010). *The Handbook of Communication Science* (2nd ed.). Los Angeles: Sage.
- Black, K. (2008). Health and aging-in-place: Implications for community practice. *Journal of Community Practice*, 16(1), 79-95.
<http://dx.doi.org/10.1080/10705420801978013>
- Black, K., Dobbs, D., and Young, T. L. (2015). Aging in community: Mobilizing a new paradigm of older adults as a core social resource. *Journal of Applied Gerontology*, 34(2), 219-243. <http://dx.doi.org/10.1177/0733464812463984>
- Blair, T., & Minkler, M. (2009). Participatory action research with older adults: Key principles in practice. *The Gerontologist*, 49(5), 651-662.
<http://dx.doi.org/10.1093/geront/gnp049>
- Blanchard, J. (2013). Aging in community: The communitarian alternative to aging in place, alone. *Generations*, 37(4), 6-13.
- Blieszner, R., Roberto, K. A., & Singh, K. (2002). The helping networks of rural elders: Demographic and social psychological influences on service use. *Ageing International*, 27(1), 89-119.
- Bookman, A. (2008). Innovative models of aging in place: Transforming our communities for an aging population. *Community, Work & Family*, 11(4), 419-438. <http://dx.doi.org/10.1080/13668800802362334>

- Booza, J., Jankowski, T. B., & Leach, C. (2010). An Income Profile of Older Adult Householders in Southeast Michigan. *Seniors Count! Working Paper Series*, No. 1, 23 pgs.
- Broad, G., M. Ball-Rokeach, S., Ognyanova, K., Picasso, T., Stokes, B., Villanueva, G. (2013). Understanding communication ecologies to bridge communication research and community action. *Journal of Applied Communication Research*, 41(4), 325-345. doi:10.1080/00909882.2013.844848
- Bronfenbrenner, U. (1977). Toward an experimental ecology of human development. *American Psychologist*, 32, 513-531.
- Bronfenbrenner, U. (1979). *The Ecology of Human Development: Experiments by Nature and Design*. Cambridge, MA: Harvard University Press.
- Bronfenbrenner, U. (2009). *The ecology of human development: Experiments by nature and design*. Cambridge, MA: Harvard University Press.
- Burleson, B. R., Albrecht, T. L., Sarason, I. G. (1994). *Communication of Social Support: Messages, Interactions, Relationships, and Community*. Thousand Oaks, CA: Sage.
- Canham, S. L., Fang, M. L., Battersby, L., Woolrych, R., Sixsmith, J., Ren, T. H., & Sixsmith, A. (2019). Contextual factors for aging well: Creating socially engaging spaces through the use of deliberative dialogues. *The Gerontologist*, 58(1), 140-148.

- Cantor, M. J. (1979). Neighbors and friends: An overlooked resource in the informal support system. *Research on Aging, 1*(4), 434-463.
<http://dx.doi.org/10.1177/016402757914002>
- Cantor, M.J. (1980). The informal support system: Its relevance in the lives of the elderly. In Borgotta, E. & McCluskey, N. (Eds.), *Aging and society: Current research perspectives*. Beverly Hills, CA: Sage.
- Carstensen, L. L. (1992). Social and emotional patterns in adulthood: Support for socioemotional selectivity theory. *Psychology and Aging, 3*, 331-338.
- Cashman, S. B., Allen, A. J., Corburn, J., Israel, B. A., Montano, J., Rhoades, S. D., Swanson, S. F., & Eng. E. (2008). Analyzing and interpreting data with communities. In M. Minkler & N. Wallerstein (Eds). *Community-Based Participatory Research for Health: From Process to Outcomes* (pp. 285-306). San Francisco, CA: Jossey-Bass.
- Chapman, S. A., Keating, N., & Eales, J. (2003). Client-centered, community-based care for frail seniors. *Health and Social Care in the Community, 11*(3), 253-261.
- Chernesky, R. H., & Gutheil, I. A. (2008). Rethinking needs assessment in planning services for older adults. *Journal of Gerontological Social Work, 51*(1/2), 109-125. <http://dx.doi.org/10.1080/01634370801967588>
- Cordingley, L., & Webb, C. (1997). Independence and aging. *Reviews in Clinical Gerontology, 7*(2), 137-146. <http://dx.doi.org/10.1017/s0959259897000154>
- Craig, C. (1994). Community determinants of health for rural elderly. *Public Health Nursing, 11*(4); 242-246. <http://dx.doi.org/10.1111/j.1525-1446.1994.tb00418.x>

- DeJonge, K. E., Taler, G., & Boling, P. A. (2009). Independence at home: Community-based care for older adults with severe chronic illness. *Clinics in Geriatric Medicine*, 25(1), 155-169.
- Denton, M., Ploeg, J., Tindale, J., Hutchison, B., Brazil, K., Akhtar-Danesh, N., Quinlan, M., Lillie, J., Plenderleith, J. M., & Boos, L. (2008). Where would you turn for help? Older adults' awareness of community support services. *Canadian Journal on Aging*, 27(4), 359-370. <http://dx.doi.org/10.3138/cja.27.4.359>
- Denton, M., Ploeg, J., Tindale, J., Hutchison, B., Brazil, K., Akhtar-Danesh, N., Quinlan, M., Lillie, J., & Plenderleith, J. M. (2010). Would older adults turn to community support services for help to maintain their independence? *Journal of Applied Gerontology*, 29(5), 554-578.
- Federal Interagency Forum on Aging-Related Statistics. (2012). *Older Americans 2012: Key Indicators of Well-Being*. Federal Interagency Forum on Aging-Related Statistics. Washington, DC: U.S. Government Printing Office.
- Finnegan, J. R. & Viswanath, K. (2008). Communication theory and health behavior change: The media studies framework. In K. Glanz, B. K. Rimer, & K. Viswanath (Eds.). *Health Behavior and Health Education: Theory, Research, and Practice* (pp. 271-279). San Francisco, CA: Jossey-Bass.
- Friedland, L. A. (2001). Communication, community, and democracy: Toward a theory of the communicatively integrated community. *Communication Research*, 28, 358-391.

- Gallagher, L., & Truglio-Londrigan, M. (2004). Community Support: Older Adults' Perceptions. *Clinical Nursing Research, 13*(1), 3-23.
<http://dx.doi.org/10.1177/1054773803259466>
- Gardner, P. J. (2011). Natural neighborhood networks-Important social networks in the lives of older adults aging in place. *Journal of Aging Studies, 25*, 263-271.
<http://dx.doi.org/10.1016/j.jaging.2011.03.007>
- Greene, M. G., Adelman, R. D., Friedman, E., & Charon, R. (1994). Older patients satisfaction with communication during an initial encounter. *Social Science and Medicine, 38*, 1279-1288.
- Greenfield, E. A. (2012). Using ecological frameworks to advance a field of research, practice, and policy on aging-in-place initiatives. *The Gerontologist, 52*(1), 1-12.
- Hacker, K. (2013). *Community-Based Participatory Research*. Thousand Oaks, CA: Sage.
- Hagestad, G. O., & Uhlenberg, P. (2005). The social separation of old and young: A root of ageism. *Journal of Social Issues, 61*(2), 343-360.
- Hallgreen, E. A., McElfish, P. A. & Rubon-Chutaro, J. (2015). Barriers and opportunities: A CBPR study of health beliefs related to diabetes in a US Marshallese community. *The Diabetes Educator, 41*(1), 86-94.
- Harwood, J. (2007). *Understanding communication and aging*. Thousand Oaks, CA: Sage.
- Harwood, J. (2014). Lifespan communication theory. In J. F. Nussbaum (Ed.). *The handbook of lifespan communication* (Vol. 2). New York, NY: Peter Lang.

- He, W., Goodkind, D., & Kowal, P. R. (2016). *An Aging World: 2015*. US Census Bureau (United States, Census Bureau). Retrieved November 01, 2016, from <https://www.census.gov/library/publications/2016/demo/P95-16-1.html>
- Heaney, C. A. & Israel, B. A. (2008). Social networks and social support. In *Health Behavior and Health Education: Theory, Research, and Practice* (4th Ed.), K. Glantz, B. K. Rimer, & K. Viswanath (Eds.). San Francisco, CA: Jossey-Bass.
- House, J. S. (1981). *Work Stress and Social Support*. Reading, MA: Addison-Wesley.
- Institute of Medicine (IOM). (2008). *Retooling for an aging America: Building the health care workforces*. Institute of Medicine (US) Committee on the Future Health Care Workforce for Older Americans. Washington (DC): National Academies Press (US). Accessed on February 12, 2019 from <https://www.ncbi.nlm.nih.gov/books/NBK215402/>
- Israel, B. A., Eng, E., Schulz, A. J. & Parker, E. A. (Eds.). (2013). *Methods for Community-Based Participatory Research for Health* (2nd ed.). San Francisco, CA: Jossey-Bass.
- Jankowski, T., Booza, J., & Leach, C. (2011). Invisible poverty: New measure unveils financial hardship in Michigan's older adult population. *Seniors Count! Working Paper Series*, No. 3, 19 pgs.
- Jankowski, T. B., & Leach, C. (2013). *Calhoun County Older Adult Needs Assessment Findings* (pp. 1-168, Rep.). Calhoun County, MI.
<http://www.calhouncountymi.gov/DownloadTracking.aspx?DocumentId=1107>

- Jankowski, T. B., & Leach, C. (2015). *Monroe County Older Adults Needs Assessment* (pp. 1-269, Rep.). Monroe, MI.
http://www.co.monroe.mi.us/Monroe_County_Older_Adult_Needs_Assessment_2015_Final.pdf
- Jankowski, T., Leach, C., & Graham, P. (2010). *A Needs Assessment of Older Adults in the Tri-County Area* (pp. 1-91, Rep.). United Way of Southeast Michigan Senior Regional Collaborative, Wayne State University Institute of Gerontology, Detroit, MI.
http://m.ped.macombgov.org/sites/default/files/content/government/ped/pdfs/Senior_Regional_Collaborative_Needs_Assessment.pdf
- Katz, D. L. (2004). Representing your community in community-based participatory research: Differences made and measured. *Preventing Chronic Disease*. Retrieved from http://www.cdc.gov/pcd/issues/2004/jan/pdf/03_0024.pdf. Accessed February 2014.
- Khobzi, N. & Flicker, S. (2010). Lessons learned from undertaking community-based participatory research dissertations: The trials and triumphs of two junior health scholars. *Prog Community Health Partnerships*, 4(4), 347-356. doi: 10.1353/cpr.2010.0019
- Kieffer, E. C., Salabarría-Pena, Y., Odoms-Young, A. M., Willis, S. K., Palmisano, G., & Guzman, J. R. (2013). The application of focus group methodologies to CBPR. In B. A. Israel, E. Eng, A. J. Schulz, & E. A. Parker. (Eds.). *Methods for*

- Community-Based Participatory Research for Health* (2nd ed.). San Francisco, CA: Jossey-Bass.
- Kim, Y., & Ball-Rokeach, S. J. (2006). Civic engagement from a communication infrastructure perspective. *Communication Theory*, 16(2), 173–197. doi: 10.1111=j.1468-2885.2006.00267.x
- Kivett, V. R., Stevenson, M. L., & Zwane, C. H. (2000). Very-old rural adults; Functional status and social support. *The Journal of Applied Gerontology*, 19(1); 58-77. <http://dx.doi.org/10.1177/073346480001900104>
- Knickman, J. R., & Snell, E. K. (2002). The 2030 Problem: Caring for Aging Baby Boomers. *Health Services Research*, 37(4), 849–884. <http://doi.org/10.1034/j.1600-0560.2002.56.x>
- Kohon, J., & Carder, P. (2014). Exploring identity and aging: Auto-photography and narratives of low-income older adults. *Journal of Aging Studies*, 30, 47-55. <http://dx.doi.org/10.1016/j.jaging.2014.02.006>
- Lau, D. T., Machizawa, S., & Doi, M. (2012). Informal and formal support among community-dwelling Japanese American elders living alone in Chicagoland: An in-depth qualitative study. *Journal of Cross Cultural Gerontology*, 27, 149-161. doi:10.1007/s10823-012-9166-1
- Leach, C. & Jankowski, T. (2017, March). Communicating with older adults: Medium, mode, and message. Workshop presented at the annual meeting of the American Society on Aging conference, Chicago, IL.

- Lee, C. C., Czaja, S. J., Moxley, J. H., Sharit, J., Boot, W. R., Charness, N., & Rogers, W. A. (2019). Attitudes toward computers across adulthood from 1994-2013. *The Gerontologist*, 59, 22-33.
- Lerner, A. S. & Gehrke, P. J. (2018). Organic Public Engagement: How Ecological Thinking Transforms Public Engagement with Science. Cham, Switzerland: Palgrave Macmillan. doi: 10.1007/978-3-319-64397-7
- Levy-Storms, L. (2005). Strategies for diffusing public health innovations through older adults' health communication networks. *Generations*, 29(2); 70-75.
- Lewin, K. & Cartwright, D. (1951). *Field Theory in Social Science*. New York: Harper.
- Lewinson, T., Maley, O., & Esnard, A.-M. (2019). Accessing Faith-Based Organizations Using Public Transportation: A Qualitative and GIS Study. *Journal of Applied Gerontology*, 38(3), 323-343. <https://doi.org/10.1177/0733464816687220>
- Lichtenberg, P., Leach, C., Smith, B., Schroeck, N., & Blessman, J. (2017). Co-constructing environmental stewardship: A Detroit-driven participatory approach. *Public Policy & Aging Report*, 27(1), 37-39. doi:10.1093/ppar/prw026
- Lindlof, T. R., & Taylor, B. C. (2002). *Qualitative Communication Research Methods* (2nd ed.). Thousand Oaks: SAGE.
- Lounsbury, D. W. & Mitchell, S. G. (2009). Introduction to special issue on social ecological approaches to community health research and action. *American Journal of Community Psychology*, 44, 213-22. doi: 10.1007/s10464-009-9266-4
- Lysack, C., Leach, C., Russo, T., Paulson, D., & Lichtenberg, P. A. (2013). DVD training for depression identification and treatment in older adults: A two-group

- randomized wait-list control study. *American Journal of Occupational Therapy*, 67(5), 584-593. doi: 10.5014/ajot.2013.008060
- Matsaganis, M. D., Golden, A. G., & Scott, M. E. (2014). Communication infrastructure theory and reproductive health disparities: Enhancing storytelling network integration by developing interstitial actors. *International Journal of Communication*, 8, 1495-1515.
- Mayan, M. J. (2009). *Essentials of Qualitative Inquiry*. Walnut Creek, CA: Left Coast Press.
- McCulloch, B. J. & Lynch, M. S. (1993). Barriers to solutions: Service delivery and public policy in rural areas. *The Journal of Applied Gerontology*, 12(3), 388-403. <http://dx.doi.org/10.1177/073346489301200307>
- McDonald, J. T. & Conde, H. (2010). Does geography matter? The health service use and unmet health care needs of older Canadians. *Canadian Journal on Aging*, 29(1):23-37. doi: 10.1017/S0714980809990389
- McKinlay, J. B. (1972). Some approaches and problems in the study of the use of services-An overview. *Journal of Health & Social Behavior*, 13, 115-152.
- McLeroy, K. R., Bibeau, D., Steckler, A., & Glanz, K. (1988). An ecological perspective on health promotion programs. *Health Education Quarterly*, 15, 351-377.
- Menec, V. H., Means, R., Keating, N., Parkhurst, G., & Eales, J. (2011). Conceptualizing age-friendly communities. *Canadian Journal on Aging*, 30(3), 479-493. doi: 10.1017/S0714980811000237

Michael, Y. L., & Yen, I. H. (2014). Aging and place-Neighborhoods and health in world growing older. *Journal of Aging and Health*, 26(8), 1251-1260.

<http://dx.doi.org/10.1177/0898264314562148>

Michigan Department of Health and Human Services (MDHHS), Aging and Adult Services Agency (AASA). (June 2015). Michigan Aging Information System, FY (2014) NAPIS Participant and Services Report. Retrieved on January 23, 2016 from

[http://www.michigan.gov/documents/osa/FY_\(2014\)_NAPIS_Report_Final_494785_7.pdf](http://www.michigan.gov/documents/osa/FY_(2014)_NAPIS_Report_Final_494785_7.pdf)

Miller, K. (2005). *Communication Theories: Perspectives, Processes, and Contexts* (2nd ed.). Boston, MA: McGraw-Hill.

Moody, H. R. & Sasser, J. R. (2015). *Aging Concepts and Controversies*. Los Angeles: SAGE.

Moran, M. B., Frank, L. B., Zhao, N., Gonzalez, C., Thainiyom, P., Murphy, S. T., & Ball, Rockeach, S. J. (2016). An argument for ecological research and intervention in health communication. *Journal of Health Communication*, 21(2), 135-138.

National Academies of Sciences, Engineering, and Medicine (NASEM). (2016). *Policy and Research Needs to Maximize Independence and Support Community Living: Workshop Summary*. Washington, DC: The National Academies Press. doi: 10.17226/21893.

- Nolan, M., Davies, S. & Grant, G. (2001). Integrating perspectives. In M. Nolan, S. Davies, & G. Grant (Eds.), *In working with older people and their families: Key issues in policy and practice* (pp. 160-178), Buckingham, England: Open University Press.
- Nussbaum, J. F., Pecchioni, L. L., Robinson, J. D., & Thompson, T. L. (2000). (2nd ed). *Communication and Aging*. Mahwah, New Jersey: Lawrence Erlbaum Associates.
- Nussbaum, J. (Ed.). (2014). *The Handbook of Lifespan Communication*. New York, NY: Peter Lang Publishing. <http://dx.doi.org/10.3726/978-1-4539-1367-3>
- Oswald, F. & Wahl, H. W. (2005). Dimensions of the meaning of home in later life. In G. D. Rowles & H. Chaudhury (Eds.). *Home and Identity in Later Life. International Perspectives*. NY: Springer.
- Pew Research Center. (2017). Tech adoption climbs among older adults. Accessed on January 12, 2018 from <https://www.pewinternet.org/2017/05/17/tech-adoption-climbs-among-older-adults/>
- Pichora-Fuller, M. K. & Carson, A. J. (2001). Hearing health and the listening experiences of older communicators. In M. L. Hummert, & J. F. Nussbaum. (Eds.). *Aging, Communication and Health: Linking Research and Practice for Successful Aging*. New York, NY: Routledge.
- Pierce, C. (2001). The impact of culture of rural women's descriptions of health. *Journal of Multicultural Nursing & Health*, 7, 50-53. Retrieved from <http://search.proquest.com.proxy.lib.wayne.edu/docview/220300931?accountid=14925>

- Rubin, D. L., Freimuth, V. S., Johnson, S. D., Kaley, T., & Parmer, J. (2014). Training meals on wheels volunteers as health literacy coaches for older adults. *Health Promotion Practice, 15*(3), 448-454. doi:10.1177/1524839913494786
- Russo, T, Leach, C., Lysack, C., Paulson, D., & Lichtenberg, P. (2014). Efficacy of a train-the-trainer curriculum for increasing occupational therapists' mental health knowledge. *Occupational Therapy in Mental Health Journal, 30*(1), 90-106. doi: 10.1080/0164212X.2014.878515
- Ryser, L., & Halseth, G. (2011). Informal support networks of low-income senior women living alone: Evidence from Fort St. John, BC. *Journal of Aging & Women, 23*, 185-202. <http://dx.doi.org/10.1080/08952841.2011.587734>
- Sallis, J. F., Owen, N., & Fisher, E. B. (2008). Ecological models of health behavior. In K. Glanz, B. K. Rimer, & K. Viswanath (Eds.). *Health Behavior and Health Education: Theory, Research, and Practice* (pp. 465-486). San Francisco, CA: Jossey-Bass.
- Schensul, J. J., Berg, M. J., & Nair, S. (2013). Using ethnography in participatory community assessment. In B. A. Israel, E. Eng, A. J. Schulz, & E. A. Parker. (Eds.). *Methods for Community-Based Participatory Research for Health* (2nd ed.). San Francisco, CA: Jossey-Bass.
- Schoenberg, N. A. & Coward, R. T. (1998). Residential differences in attitudes about barriers to using community-based services among older adults. *Rural Health Research, 14*(4), 295-304. <http://dx.doi.org/10.1111/j.1748-0361.1998.tb00635.x>

- Schoenberg, N. A, Coward, R. T., & Albrecht, S. L. (2001). Attitudes of older adults about community-based services: Emergent themes from in-depth interviews. *Journal of Gerontological Social Work, 35*(4), 2001.
http://dx.doi.org/10.1300/j083v35n04_02
- Seibold, D. R., Meyers, R. A., & Shoham, M. D. (2010). Social influence in groups and organizations. In C. R. Berger, M. E. Roloff, & D. R Roskos-Ewoldsen (Eds.). *The Handbook of Communication Science* (2nd edition). Thousand Oaks, CA: Sage.
- SEMCOG, Southeast Michigan Council of Governments. (n.d.). Retrieved December 05, 2016, from <http://www.semcog.org/>
- Sparks, L., & Nussbaum, J. F. (2008). Health literacy and cancer communication with older adults. *Patient Education & Counseling, 71*(3), 345-350.
- Stoller, E. P. & Lee, G. R. (1994). Informal care of rural elders. In Coward, R. T., Bull, C. N., Kukulka, G., & Galliher, J. (Eds.). *Health Services for Rural Elders*. Springer: New York, NY.
- Strain, L. & Blanford, A. (2002). Community-based services for the taking but few takers: Reasons for nonuse. *Journal of Applied Gerontology 21*(2), 220-235.
<http://dx.doi.org/10.1177/07364802021002006>
- Thoits, P. A. (1995). Stress, Coping, and Social Support Processes: Where Are We? What Next? *Journal of Health and Social Behavior, 35*, 53.
<http://doi.org/10.2307/2626957>

- Thomas, W. H. & Blanchard, J. M. (2009). Moving beyond place: Aging in community. *Generations*, 33(2), 12-17.
- Thomas, K. S., Akobundu, U. & Dosa, D. (2016). More than a meal? A randomized control trial comparing the effects of home-delivered meals programs on participants' feelings of loneliness. *Journals of Gerontology: Social Sciences*, 71(6), 1049-1058. doi: 10/1093geronb/gbv111
- Thomas, K. S. & Mor, V. (2013). The relationship between older Americans Act Title III state expenditures and prevalence of low-care nursing home residents. *Health Services Research*, 48(3), 1215-1226.
- Thomas, K. S., Parikh, R. B., Zullo, A. R., & Dosa, D. (2016). Home-delivered meals and risk of self-reported falls: Results from a randomized trial. *Journal of Applied Gerontology*, 1-17. doi: 10.1177/0733464816675421
- Tindale, J., Denton, M., Ploeg, J., Lillie, J., Hutchison, B., Brazil, K., Akhtar-Danesh, N., & Plenderleith, J. (2011). Social determinants of older adults' awareness of community support services in Hamilton, Ontario. *Health and Social Care in the Community*, 19(6), 661-672. doi: 10.1111/j.1365-2524.(2011).01013.x
- Tracy, S. (2013). *Qualitative Research Methods: Collecting Evidence, Crafting Analysis, Communicating Impact*. Chichester, West Sussex, UK: Wiley-Blackwell.
- van Bilsen, P. M. A., Hamers, J. P. H., Don, A. A. M., Groot, W., & Spreeuwenberg, C. (2010). The use of social services by community-dwelling older persons who are at risk of institutionalization: A survey. *European Journal on Ageing*, 7, 101-109. <http://dx.doi.org/10.1007/s10433-010-0150-8>

- Vieder, J. N., Krafchick, M. A., Kovach, A. C., & Galluzzi, K. E. (2002). Physician-patient interaction: What do elders want? *Journal of Osteopathic Association, 102*, 73-78.
- Villaume, W. A., Darling, R., Brown, M. H., Richardson, D., & Clark-Lewis, S. (1993). The multidimensionality of presbycusis: Hearing losses on the content and relational dimensions of speech. *Journal of the International Listening Association, 7*, 111-128.
- Viswanath, K. (2008). Perspectives on models of interpersonal health behavior. In K. Glanz, B. K. Rimer, & K. Viswanath (Eds.). *Health Behavior and Health Education: Theory, Research, and Practice* (pp. 271-279). San Francisco, CA: Jossey-Bass.
- Wacker, R., & Roberto, K. (2015). *Community Resources for Older Adults: Programs and Services in an Era of Change* (4th ed.). Los Angeles: Sage Publications.
- Waites, C. (2012). Examining the perceptions, preferences, and practices that influence healthy aging for African American older adults: An ecological perspective. *Journal of Applied Gerontology, 32*(7), 855-875.
<http://dx.doi.org/10.1177/0733464812446020>
- Wallace, D. C., Fields, B. L., Witucki, J., Boland, C., & Tuck, I. (1999). Use of home and community-based services by elderly Black and White females. *Journal of Women & Aging, 11*(4), 5-20.

- Walther, J. B. (2010). Computer mediated communication. In C. R. Berger, M. E. Roloff, & D. R Roskos-Ewoldsen (Eds.). *The Handbook of Communication Science* (2nd edition). Thousand Oaks, CA: Sage.
- Wilby, F., & Chambless, C. (2012). Older adults who seek care in the home. *Quality in Ageing and Older Adults*, 13(2), 89. doi:10.1108/14717791211231175
- Wiles, J.L., Leibing, A., Guberman, N., Reeve, J., & Allen, R.E.S. (2012). The meaning of “aging in place” to older people. *The Gerontologist*, 52(3) 357-366. doi: 10.1093/geront/gnr098
- Wilkin, H. A. (2013). Exploring the potential of communication infrastructure theory for informing efforts to reduce health disparities. *Journal of Communication*, 63(1), 181–200. doi: 10.1111=jcom.12006
- Wilkin, H. A., & Ball-Rokeach, S. J. (2011). Hard-to-reach? Using health access status as a way to more effectively target segments of the Latino audience. *Health Education Research*, 26(2), 239-253.
- Wilkin, H. A., Moran, M. B., Ball-Rokeach, S. J., Gonzalez, C., & Kim, Y. C. (2010). Applications of communication infrastructure theory. *Health Communication*, 25(6), 611-612.
- Wilkin, H. A., Stringer, K. A., O’Quinn, K., Hunt, K., & Montgomery, S. (2011). Using communication infrastructure theory to formulate a strategy to locate “hard-to-reach” research participants. *Journal of Applied Communication Research*, 39(2), 201-213.

Williams, N. (1994). Health and social services, formal organizations, and the Mexican American elderly. *Clinical Sociology Review*, 12(1), 223-234.

ABSTRACT**EXAMINING COMMUNITY-BASED SERVICE DISCONNECTS IN LATE OLD AGE: PATHS FOR REACH THROUGH THE COMMUNICATION ECOLOGY**

by

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As the pool of eligible recipients continues to grow, understanding service system utilization and barriers can help ensure very old adults can access support from their communities when needed. Mounting research demonstrates that investment in community-based services to ensure seniors remain independent translates to saved government dollars. As a contributing researcher of a multi-year county-wide older adult needs assessment in Monroe County, Michigan, data collected from 1,870 people revealed a communication disjuncture between seniors and service providers. In response, officials convened a post assessment working group that focused on communication and outreach. Along with members of the Community Advisory Group (CAG), we determined that additional research could better inform how service providers engage the most senior and vulnerable members of their community. Thus, a community-based participatory research approach was used to conduct an applied, qualitative study aimed to understand how everyday interactions influenced service utilization in late old age. The research was guided by an ecological health communication research framework

to respond to academic calls for multilevel examinations of interactions among individuals and their social environment.

Interpersonal connections diminish with age; a phenomenon that is most acute in late old age as families and friends are geographically dispersed or outlived. For those in their 80s who are reluctant to connect through technological means, the network of resources to draw from becomes even more limited. Diminishing microsystems and a lack of experience and apprehensiveness to technology implied that communication disparities increased with age. As informal communication resources diminish, information disparities are remedied when older adults get to sites where they may congregate with other individuals who they can learn from. Local companions were key communication resources for credible and trusted information, advice, and appraisals about community-based services though contingent on older adults getting to sites where they could interact with other seniors.

Communication infrastructure theory offered a frame for unveiling how participants' diminishing social network interrelated with the communication environment to impede connections to community-based service organizations. In addition to the trans-level utilization impediments, enabling elements of the communication infrastructure were identified so those resources can be leveraged to foster connections between older adults and community-based service organizations. This action-oriented study sought to inform interventions to bridge the senior-provider divide by understanding how interpersonal, mediated, and organizational connections can be improved or leveraged as communication resources in Monroe County to improve

communication and connections with older adults. Findings from this study suggest a new outreach approach for connecting to older adults through their communication ecology. The findings add to the growing convergence of evidence that calls for improved communication competence with older adults to minimize poor interactions that hinder accessing resources that can benefit their social, emotional, and physical well-being.

AUTOBIOGRAPHICAL STATEMENT

Carrie Leach has conducted research at the Institute of Gerontology at Wayne State University in Detroit since 2009. During that time, she co-authored reports for community-based participatory needs assessments at the municipal, county, and regional level to help prioritize service provision for older adults in the face of shrinking budgets. Building on her community-based and engaged research experiences, in 2014 she joined the Center for Urban Responses to Environmental Stressors (CURES) at WSU as Program Manager for the Community Engagement Core. She manages the advocacy, engagement, and communication activities with the aim of fostering connections and co-learning between researchers and Detroiters impacted by environmental issues. Informed by Community-Based Participatory guiding principles, she has co-constructed communication and translation tools with a Community Advisory Group to disseminate environmental health information and science to more than 3,500 Detroit residents. She works with CURES environmental health science researchers to translate and distill scientific information so that it may more readily inform policy making and improve public health. Carrie earned her Master of Public Administration in the Department of Political Science at WSU in 2009 and PhD in the Department of Communication in 2019 with a focus on health communication and social gerontology. Her applied research focuses on older adults' social worlds and how communication in context influences decisions to engage and access health and social services.