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FACILITATING AGING IN PLACE AND COMMUNITY BY EMPOWERING PARTICIPATION IN SOCIETY: A MIXED METHODS STUDY ON THE CO-DEVELOPMENT OF A THEORY OF CHANGE WITH SUBURBAN-DWELLING OLDER ADULTS

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---

by

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Dedication

To my mother.

She who inspires me in life and in death. I am forever grateful for your deep love, your passion for helping others, your dedication to your family, patients, and profession, your style and grace, and your advocacy for people whose voices could not be heard. I hear your wisdom in my heart and soul and channel it through my actions; *everything I do is stitched with your color*.

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Abstract

Background: Baby boomers are steadily aging in America and represent an increased population in nearly every sector. In suburban communities today, older adults make up 51% of the population. Ninety-five percent of all older adults live in community settings and have expressed a desire to avoid costly institutionalization and to remain in their homes and communities, also called *aging in place*. Older adults in moderate income suburban communities are increasingly at a higher risk for institutionalization should their health or finances decline as the access to their wealth is within the home in which they dwell. This process forces many suburban-dwelling older adults to liquidate their assets in order to access funding. This demeaning process negates the vision of aging in place. Aging in place services are not only preferred by older adults, but they also are shown to be a more cost-effective solution to institutionalization. Older adult participation in community life is shown to enhance aging in place and enrich communities. Communities have recognized the need for action planning to support the needs of older adults to age in place; however, plans often lack empirical evidence, they leave out older adults, particularly those with disabilities, and the planning process takes a top-down approach often from the perspective of planners and policy makers.

Objective: The purpose of this study was three pronged at a micro, meso, and macro level. At the micro level the goal was to assess the relationship of participation in society (satisfaction) with a) individual characteristics of community-dwelling older adults and b) environmental characteristics in select suburban South Jersey communities. At the meso level the goal was to a) garner a deep understanding of participant perceived barriers and facilitators and b) elicit suggestions for addressing them in order to c) inform a focused situation analysis and theory of change. Lastly, at the macro level, the goal was to understand fidelitous empowerment

procedures of older adult participation in society through person-centered community action planning. In order to develop community action plans that shape policy and facilitate meaningful participation, local communities must first begin to develop an evidence-based understanding of strategies for engaging older adults in the plan development processes. Through the development of a theory of change for community action plans in select suburban Southern NJ communities, older adults of varied ability levels are able to meaningfully participate in society and effectuate further participation.

Methods: This study utilizes the Consolidated Framework for Implementation Research to map aging in place literature and uncover opportunities to propel aging research through engagement of older adults in the theory of change process. Drawing from multiple theories, this explanatory sequential mixed methods study telephonically surveyed (n=64) and interviewed (n=14) older adults from three suburban communities in southern NJ. In the first, quantitative phase of the study, cross-sectional telephone survey data using interactive voice response (IVR) and Qualtrics survey software was collected from a purposeful sample to examine how satisfaction with participation in society (dependent variable) was related to community features and individual characteristics (e.g. functional ability level). Data was analyzed using IBM SPSS. The second, qualitative phase was conducted as a follow-up to the quantitative results. Maximum variation sampling of survey participants who agreed to follow up resulted in the selection of 14 telephone interviews. Participants explained barriers and facilitators to participation in society and suggested objectives to overcome barriers and leverage facilitators to participation in society. NVivo software was utilized for analysis using templated and axial coding. Appreciative Inquiry Theory was utilized to inform the qualitative process and development of a theory of change.

Results: A multiple linear regression analysis was conducted to determine how much of a variation in the dependent variable, satisfaction with participation (USER-P), can be explained by the independent variables measuring individual characteristics and community characteristics. Three variables, functional mobility (WHODAS score; B= -0.266), availability of healthcare services (B= 8.20), and availability of information to events, services, and programs (B= 8.905) added statistically significantly to the prediction ($p < .05$) of the dependent variable. The multiple regression model statistically significantly predicted USER-P satisfaction, (adj. $R^2 = .456$, $p < .001$). A secondary analysis using binomial logistic regression models was performed for the variables that are considered specific to community participation. WHODAS score statistically significantly predicted satisfaction in outdoor mobility (OR=.952, 95% CI [.908, .997]), exercise (OR .948, 95% CI [.902, .997]), and daytrips (OR= .961, 95% CI [.924, .999]). The findings from the quantitative analysis, guided by Appreciative Inquiry, were used to inform the qualitative strand of the study. Three overarching domains emerged from the qualitative findings: Basic, Social, and Growth. These findings as well as the co-developed outcomes chain were used to create the theory of change. The theory of change articulates a set of needs that are desired and suggested objectives to address these needs. The theory of change coupled with the translational stakeholder meeting bridges further engagement with older adults in planning. Stakeholders identified four fidelitous empowerment procedures required to induce person-centered community action planning: leveled engagement, communication, enfranchisement and champions, and social/cultural capital.

Conclusion: Within the context of the Consolidated Framework for Implementation Research (CFIR), basic, social, and growth domains must first be understood as needs, suggested objectives to meet needs, and desired outcomes within the *individuals involved*, the *inner setting*,

and the *outer setting* so that *interventions* (theory of action) can be designed with the explicit theory of change *process*. The theory of change developed in this study explains that older adults are empowered to participate in one's community when there is support for basic and home living needs (basic), when options for participation match one's level of ability, interest, and values (social), and when one is invited and knows where to find information about programs, services, or events (growth). The theory of change is a demonstration of a process that utilizes person centered planning toward consumer leadership in system development and recognizes that aging in place is impacted by health factors as well as social determinants of health. Planning teams now have the translational tools to create customizable, theory-driven, and evidence-based approaches for strategies to engage older adults with varied ability levels to feel empowered to participate not only socially in community activities, but also civically in the development of community action plans.

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CHAPTER 1

INTRODUCTION

1A: Overview and Background

Suburban communities are the fastest growing counties for older adults who represent 51% of the suburban population (Parker et al., 2018; Andrew E. Scharlach, 2016). By 2035, older adults are projected to outnumber children for the first time in United States history (United States Census Bureau, 2019a). The changing dynamics of baby boomers including higher divorce rates, less or no children, higher rates of co-morbidities and disability; and younger generations sandwiched between aging parents and personal commitments limit traditional caregiving roles by family (Blanchard, 2013; Cannuscio, Block, & Kawachi, 2003; Gitlin, Szanton, & Hodgson, 2013; Lehning, 2012). Older adults with co-morbidities are more at risk for institutionalization (Sabia, 2008). This shift in dynamics has created a costly long-term care (LTC) model that will not support the rapid growth of an aging population living longer with chronic disease and disability (National Quality Forum, 2016; Seeman, Merkin, Crimmins, & Karlamangla, 2010). Correspondingly, older adults in moderate income suburban communities are increasingly at a higher risk for institutionalization should their health or finances decline as the access to their wealth is within the home in which they dwell (Golant, 2014; 2015).

Older adults, and baby boomers in particular, desire to live out their lives independently in their homes and communities contributing to society without the threat of institutionalization (Binette & Vasold, 2018; Jansson, 2015). This concept is called aging in place. More formally, aging in place is defined as “the ability to live in one’s own home and community safely, independently, and comfortably, regardless of age, income, or ability level" (Binette & Vasold, 2018; Centers for Disease Control, 2015; McWhinney-Morse, 2009; Morley, 2012; Sabia, 2008).

Aging in place is a complex societal issue that has a multitude of constructs investigated by disciplines spanning from medicine and geriatrics, psychology, environmental gerontology, urban planning and transportation, nursing, social work, occupational therapy, public health, and health policy (Annear et al., 2014; Li, 2020; Szanton et al., 2011). Increasingly, aging in place is being addressed in interdisciplinary teams and communities especially since 2007 when the World Health Organization published their landmark seminal work *Global Age Friendly Cities: A Guide* (AFC); now referred to as Age-friendly Cities and Communities (World Health Organization, 2007a; 2018). The literature is vast and well-studied, going back as far as the 1950's when the Older American's Act (OAA) began to be crafted. The concept of aging in place has developed over time from its early definitions of a person in their home to the inclusion of their community (Blanchard, 2013). Capabilities of the person, including intrinsic ability, were added to the aging in place concept by the WHO in 2015 (World Health Organization, 2015). More recent definitions now expand the complex and ever-changing dynamic process of contexts of not only the home and community, but also the social and political, and furthermore, the social participation and inclusion in these varied contexts (Garoon, Engelman, Gitlin, & Szanton, 2016; Jansson, 2015; Moulaert & Garon, 2016; World Health Organization, 2018). The constructs of a) functional ability, b) age-friendly cities and communities (AFC), namely the built environment and community supports and services, and c) participation in society, are closely examined.

It is critical to demonstrate the importance of including older adult perspectives in shaping aging in place policies and services as they continue to be excluded (Corrado, Benjamin-Thomas, Mcgrath, Hand, & Laliberte Rudman, 2019; Remley et al., 2018) and particularly because administratively reported data has been found to differ from accounts of local older adult

perceptions in empirical data (World Health Organization, 2015). Moreover, it is important to encourage neighborhoods to take a community collaboration approach that includes older adults of all ability levels, including those with chronic conditions and disability, to co-produce strategies, plans, and policies that improve the participation of older adults of varied ability levels in society (World Health Organization, 2015; World Health Organization, 2018). By engaging older adults with varied abilities to participate in collaborative research, stakeholders may begin to understand and illuminate the processes for person-centered planning by promoting older adult representation within their communities. This *consumer leadership in system development* (National Quality Forum, 2016) is a first step toward flexible and sustainable age-friendly communities that enable older adults with changing functional ability levels to remain engaged, participating in society while aging in place (World Health Organization, 2015; World Health Organization, 2018).

1B: Statement of the Problem

Current long-term care (LTC) and long term supports and services (LTSS) are unsustainable (Blanchard, 2013; Congress of the United States, 2017; Knapp, Bauer, Perkins, & Snell, 2013; Menec, Means, Keating, Parkhurst, & Eales, 2011; Seeman et al., 2010) and do not reflect the desires of American older adults who wish to avoid institutionalized care (Parker et al., 2018). The COVID-19 Pandemic has exacerbated problems in nursing homes including stronger resistance to move to a nursing home and looming closures that further threaten the long term care of older adults (Grabowski & Mor, 2020; Wilde Mathews & McGinty, 2021). The unsustainability is rooted in the rapid growth of the aging population (United States Census Bureau, 2019a) and the changing dynamics of older adults such as higher divorce rates, less family support, and low social capital (Blanchard, 2013; Cannuscio et al., 2003; R. Putnam in

Congress of the United States, 2017; Gitlin et al., 2013; Lehning, 2012). In America, 95% of older adults live in the community (Kathy Black, Dobbs, & Young, 2015; Jansson, 2019) with the fastest growing counties for older adults in suburban communities (Parker et al., 2018); yet three quarters of LTSS is spent in nursing homes and not in community prevention services (Administration for Community Living, 2018; Applebaum & Kunkel, 2018; National Quality Forum, 2016). Moreover, LTSS are primarily funded by Medicaid (Applebaum & Kunkel, 2018; National Quality Forum, 2016), yet 90% of older adults in the community are not eligible for Medicaid (K. S. Thomas & Applebaum, 2015). This leaves community-dwelling older adults who need support to utilize a system that requires them to deplete their assets, which in the suburbs often translates to estate liquidation, in order to tap into the overly relied upon funding streams from Medicaid (Applebaum & Kunkel, 2018; Golant, 2014; 2015). This degrading process negates the very nature of aging in place and reinforces ageism (Jansson, 2019).

Aging in Place programs and policies, such as home and community based services (HCBS), hold promise (Marek, Stetzer, Adams, Popejoy, & Rantz, 2012; Xu & Intrator, 2020), but are underfunded, decentralized, and difficult to measure (Davitt, Madigan, Rantz, & Skemp, 2016; National Quality Forum, 2016). The lack of funding and centralized measurement processes in HCBS contributes to the knowledge gap of effective interventions that can promote aging in place which propagates fragmented services and inhibits evidence-based policy development. Furthermore, the disproportionate allocation of funding to institutions reinforces an ageist system that averts innovative services from developing in the community where they are clearly needed and desired while systematically dismantling the aging in place process.

With limited funding allocated, communities must take innovative steps to make progress toward securing the needs for older adults to age in place (Kathy Black et al., 2015). To facilitate

aging in place policies and services, community collaboration that includes older adults on a spectrum of ability levels has the potential to improve the participation of older adults in society (Gustafsson, Falk, Tillman, Holtz, & Lindahl, 2018). Older adult participation generally is related to passive participation (i.e. obtaining information from them) in surveys in quantitative research (Annear et al., 2014; Yang & Sanford, 2012) and while the inclusion of older adult perspectives in participatory action research (i.e. co-designing with the target group of older adults) is improving over the last decade, those with chronic conditions and disability continue to be excluded (Corrado et al., 2019; Remley et al., 2018). This exclusion minimizes opportunities for evidence-based plan and policy development and scale-up processes that supports community participation and aging in place.

The American Association of Retired Persons' (AARP) *Livable Communities* has developed a *Network of Age-Friendly States and Communities* (2019) which provides guidance for development of Community Action Plans. Centralizing these plans within the Global Network of Age-friendly Cities and Communities (World Health Organization, 2018) is recommended by AARP, however both require separate steps for membership. Additionally, planning guides are largely bottom-up approaches that lack evidence-based outcomes and an understanding of evidence-based processes related to the engagement, development, implementation, and sustainment of Community Action Plans. While the *Global Age Friendly Cities: A Guide* (World Health Organization, 2007a) was developed using a bottom-up approach, the planning process and implementation takes a top-down approach which undermines civic participation of older-adults (Plouffe, Kalache, & Voelcker, 2016). There is a need to merge top-down and bottom-up approaches to rid structurally embedded ageist inequalities and move

toward collaborative and inclusive approaches (Moulaert, Boudiny, & Paris, 2016) that support participation.

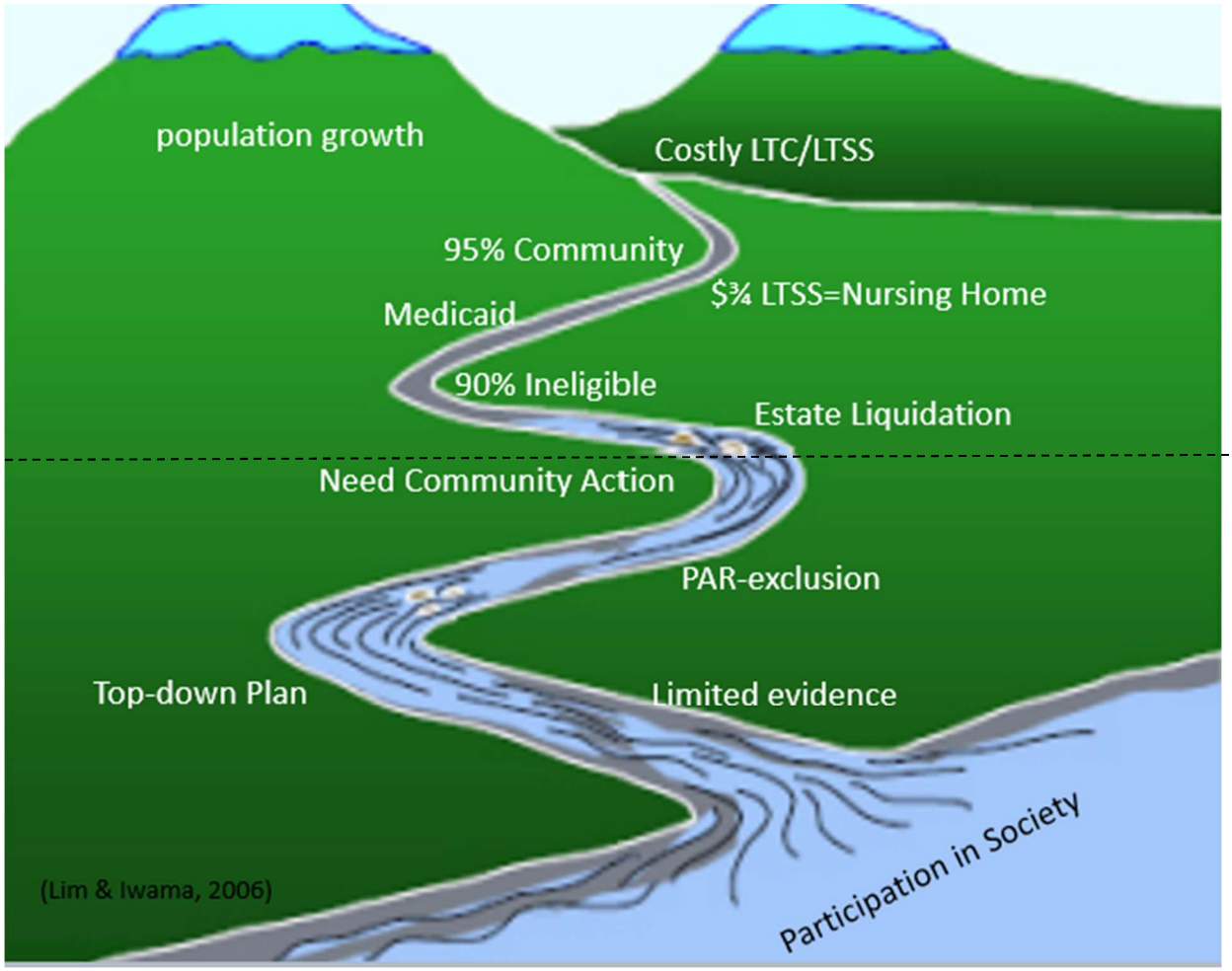
The development of Community Action Plans is in its infancy and are rarely grounded in a theory of change (Andrew E. Scharlach, 2016). A theory of change is the "underlying belief and assumptions" (National Association for State Community Services Programs (NASCSP), 2017) or "central mechanism" (Funnell & Rogers, 2011, p. 31) that "guide[s]…change and improvement" (National Association for State Community Services Programs (NASCSP), 2017). It is unknown if specific communities include older adults with chronic conditions and disability in planning and what impact this has on community action plans as the descriptive statistics and outcomes of AARP's Network of Age-Friendly States and Communities have yet to be fully analyzed or reported (Bill Armbruster, AARP, personal communication, May 6, 2020). Moreover, communities who develop community action plans and report so on their websites fail to make explicit if they are utilizing guidance from AARP, the WHO, or if they have theoretical underpinnings or program theory. Correspondingly, community action plan processes with and by older adults have limited empirical testing and most reports include urban, not suburban communities (Andrew E. Scharlach, 2016). Furthermore, moderate income suburban communities are increasingly at a higher risk for institutionalization should their health or finances decline as the access to their wealth is within the home in which they dwell (Golant, 2014; 2015).

Southern New Jersey has several counties that are considered both suburban and moderate income or "middle class" (Matthau, 2018). New Jersey's median household income is $79, 363 (United States Census Bureau, 2019b). Household incomes between $55,000 and $162,000 are considered to be middle class in Southern NJ (Matthau, 2018). According to

AARP's membership map, no Southern NJ communities are participating in their Network of Age-Friendly States and Communities community action plan development. Given the above findings, older adults with disability in South Jersey are particularly at risk for institutionalization and would benefit from the opportunity to participate in the development of community action plans to test if outcomes improve the ability to participate in society and age in place.

Figure 1 displays the problem statement within the Kawa model (Iwama, 2006) in order to visualize how the complex interplay of "logjams" stem from a multitude of barriers. While the outcomes of the study intend to influence and address the problems beginning at the dashed

Figure 1.
Problem Statement within Kawa River Model (adapted from Iwama, 2006)



line and moving downward toward the bottom of the model, it is critical to understand higher level barriers that are out of the scope of the study.

1C: Purpose of Study & Research Question

1C.1 Purpose

The goal of this mixed methods study was to understand fidelitous empowerment procedures of older adult participation in society through development of a theory of change that induces person-centered community action planning. In order to meaningfully participate, it is imperative that communities develop action plans that capture the voice of older adults in their community which may be accomplished by creating a theory of change from the community-dwelling older adult perspective. Through the development of a theory of change for community action plans in select suburban Southern NJ communities, older adults of varied ability levels are able to meaningfully participate in society and effectuate further participation. The purpose of this study was three pronged at a micro, meso, and macro level. At the micro level the goal was to assess the relationship of participation in society with a) individual characteristics of community-dwelling older adults and b) environmental characteristics in select suburban South Jersey communities. At the meso level the goal was to a) garner a deep understanding of participant perceived barriers and facilitators and b) elicit suggestions for addressing them in order to c) inform a focused situation analysis and theory of change. Lastly, at the macro level, the goal was to understand fidelitous empowerment procedures of older adult participation in society through person-centered community action planning. In order to develop community action plans that shape policy and facilitate meaningful participation, local communities must first begin to develop an evidence-based understanding of strategies for engaging older adults in the plan development processes.

A mixed methods approach assisted in reaching the study goals, as it is inherently intuitive and pragmatic (J. Creswell & Plano Clark, 2018). An explanatory sequential mixed methods design was used that involved collecting quantitative survey data first and then explaining the results with in-depth qualitative data. In the first, quantitative phase of the study, survey data was collected from 64 older adults aged 65 and over in three Southern NJ suburban communities to assess the relationship of satisfaction with participation in society (dependent variable) with individual characteristics (e.g. functional ability level) and community characteristics (e.g. built and service environments) (independent variables). The second, qualitative phase was conducted as a follow-up to the quantitative results to help a) explain the barriers and facilitators to engagement in meaningful societal participation and b) elicit suggestions for engagement and participation in society from selected community participants in order to c) inform a theory of change that empowers engagement in community action plans.

1C.2 Research Questions and Specific Aims

This study answered the overarching mixed methods research question (RQ): In what ways do the themes derived from older adult participants provide insight to a theory of change process for engaging older adults in community action plan development in middle income, suburban Southern New Jersey communities? The following aims and research questions for the quantitative (QUAN) and qualitative (QUAL) strands were the building blocks to the overarching mixed methods question:

Aim 1.

Estimate which individual and community variables identified by suburban-dwelling older adults are associated with participation in society (satisfaction).

RQ 1: (QUAN). How is satisfaction with participation in society associated with a) individual characteristics of community-dwelling older adults in Southern NJ and b) suburban community characteristics of Southern NJ?

Aim 2.

Describe associated interactions of individual and community barriers and facilitators to participation in society

RQ 2: (QUAL). How do participants in Southern New Jersey suburban communities describe the barriers and facilitators to participation in society that stem from a) individual characteristics and b) community characteristics?

Aim 3.

Develop a theory of change by eliciting suggestions about objectives to overcome barriers and leverage facilitators in order to engage in community action plan development.

Sub-question RQ 3: (QUAL). What are participant suggested objectives for addressing barriers and facilitators to participation in participant communities?

1D.1: Statement of Potential Impact

By engaging older adults with varied ability levels to participate in collaborative, person-centered research and planning, stakeholders may begin to understand and illuminate strategies for embedment of a theory of change within community action plans. A theory of change can be utilized to empower older adults to work with community organizations to execute their theory of action, thus further participating in society through community action plan development. This process can promote underrepresented older adult participation within their communities to improve conditions that promote participation for all people.

Unpacking the relationships of antecedents (community and individual characteristics) with the outcome of satisfaction with participation in society in this study has resulted in customizable, theory-driven, and evidence-based approaches for strategies to engage older adults with varied ability levels to feel empowered to participate in the development of community action plans. Specifically, this study generated a theory of change for older adult participation in three suburban South Jersey communities to utilize in community action planning. Participation in the form of *consumer leadership in system development* (National Quality Forum, 2016) can facilitate a continuous feedback loop between the outcome of satisfaction with participation with the antecedents. This continuous process will allow for flexible and sustainable age-friendly communities via active tailoring of support services and physical and social environments that enable older adults to age in place with their dynamic and changing functional ability levels (WHO, 2015; World Health Organization, 2018) in an ever-evolving, age-friendly community.

1D.2: Translational Nature of the Study

Researchers, community members and organizations, policy makers, clinicians, and community-dwelling older adults can benefit from the results of this study. In translational health science, it is important to discover where a "log jam" exists (see Figure 1). Many fields design programming without first uncovering the barriers and facilitators (Grol, Wensing, Eccles, & Davis, 2013) from the perspective of the 'patient,' and the aging in place literature and community planning is no different. This study embodies the critical feature of "patient" involvement with older adults with varied ability levels as the central force driving this knowledge. Furthermore, this study's importance in the field of translational health science is appraised by its ability to build upon and inform along the translational science spectrum (National Center for Advancing Translational Science (NCATS), 2020). In order to better

understand and illuminate the processes for person-centered planning promoting older adult representation within their communities, it is imperative to first understand, from the perspective of participants, the barriers and facilitators to participation in society. Efforts to increase person-centered planning processes to produce and provide generalizable knowledge of effective strategies can be better designed now that a) participation barriers and facilitators are understood and b) suggestions to overcome barriers and leverage facilitators have been elicited. This study's results can inform and empower older adults and younger community members, community organizations, policy makers, and researchers on the ways in which they may design Community Action Plans that allow for flexible and sustainable aging-friendly communities (WHO, 2015; World Health Organization, 2018) effectuating continued participation.

1E: Conceptual Framework

There is a need to give a voice to community-dwelling older adults, including those with chronic conditions and disability, to advocate for change (J. Creswell & Plano Clark, 2018) away from the ageist and reductionistic medical model and towards a holistic, community approach (Davitt et al., 2016). This study utilized a transformative, dialectically pluralistic ontology with a collaborative, participatory-social justice epistemology. Dialectics allow for multiple paradigms and mental models as well as multiple methods under the same inquiry. Dialectical pluralism offers the ability to view multiple perspectives, including divergent ones, to respectfully engage diverse groups toward understanding and acceptance. Because the voices and perspectives of older adults are heterogenous within and across heterogenous contexts, dialectical pluralism offers the ability to understand these wide and varied experiences and approaches (Greene & Hall, 2010). This study can be ethically justified using Rights Theory which aims to protect this

population from oppression and unequal treatment and ensures research upholds the rights of participants (Beauchamp & Childress, 2001).

The conceptual framework draws upon Ecological Systems Theory (Bronfenbrenner, 1986) (Figure 2), Environmental Press Theory (Lawton & Nahemow, 1973) (Figure 3) and maps the literature that contains them (as well as other theories) to the five domains of the Consolidated Framework for Implementation Research (CFIR). CFIR is a translational framework that organizes implementation theories under standardized, common language terminology expressed in five domains: *Individual*, *Inner Setting*, *Outer Setting*, *Intervention Characteristics*, and *Process*. (Damschroder et al., 2009) (Figure 4). Ecological Systems Theory centralizes the *individual* and their associated factors and abilities within a) the *microsystem* of their direct contacts such as family and church, b) the *mesosystem* of these relationships, c) the *exosystem* linking to contexts such as neighbors and politics, and d) the *macrosystem* which considers the larger culture and attitudes. Environmental Press Theory expresses that individual function and environmental characteristics require a good *fit* in order to have maximum comfort and performance. For example, if an individual variable includes poor functional mobility and the environment includes a high challenge, such as stairs, there will be high press or poor fit.

While Environmental Press and Ecological Systems theory are important and foundational, they are unable to explicate the processes that have been suggested to translate knowledge into practice and policy. Mapping the literature using CFIR constructs demonstrates that the *individuals involved*, the *inner*, and *outer settings* are heavily researched in a reductionistic isolated fashion. While some authors describe combinations of one to two factors of individual characteristics (e.g. functional limitations), environmental characteristics, and community participation (Vaughan et al., 2016; Yang & Sanford, 2012); rarely does the literature

capture the symbiotic interplay and holistic complexities of these three factors together (Weil, 2019). Additionally, adapted interventions are not explicated and processes are not empirically researched. Anecdotal accounts primarily include community efforts which lack clarity about the participatory planning process of older adults. This finding is corroborated by Scharlach as he states, "Age-friendly community initiatives seldom are based on an explicit theory of change, nor linked to the rich body of conceptual and empirical scholarship regarding change processes..." (Andrew E. Scharlach, 2016, p. 317).

Appreciative Inquiry (AI) (Cooperrider, 1986) (Figure 5) is an empowerment process theory that utilizes the *5D cycle*: 1) *Definition* which clarifies the focus or topic, 2) *Discovery* is a dialogue of what has been successful, 3) *Dream* is considering new possibilities for the future, 4) *Design* describes what can ideally be created, and 5) *Destiny* is the delivery or embedded nature of the design. AI has been applied in a community participatory action research study (Black et al., 2015). Some bottom-up planning in communities loosely use constructs associated with AI (e.g. Community Heart and Soul Model which is utilized in Transforming South Jersey). AI was utilized to scientifically guide the theory of change process to underlie community action plans in this study.

Figure 2.
Bronfebrenner's (1986) *Model of Ecological Systems*

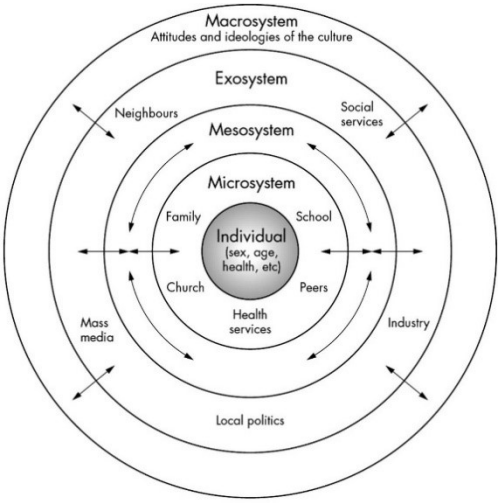


Figure 3.
Environmental Press Model (Nahemow & Lawton, 1973)

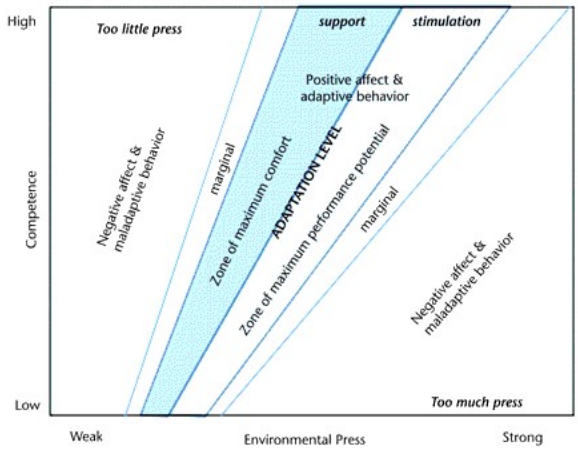


Figure 4.
Consolidated Framework for Implementation Research (Damschroder et al., 2009)

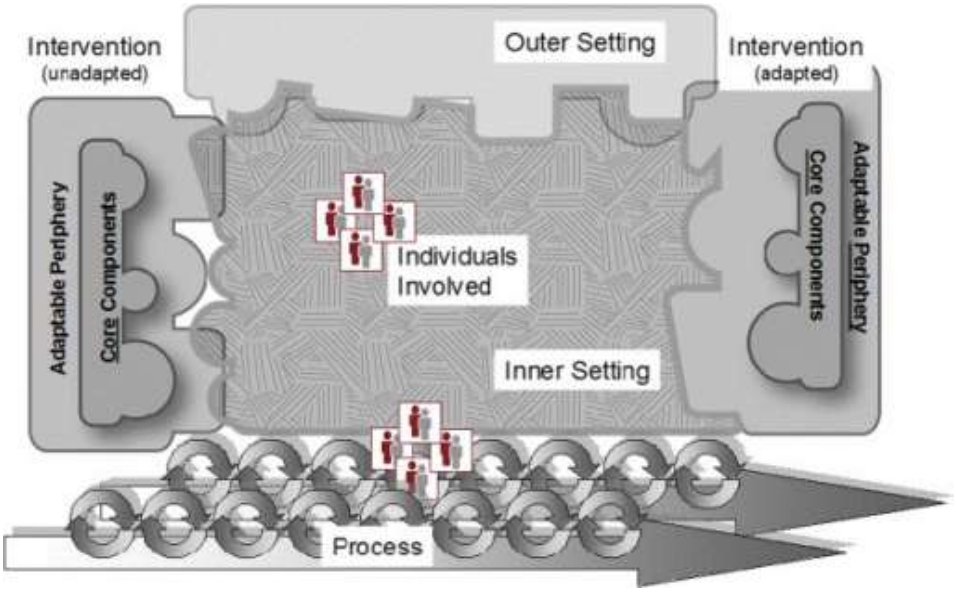
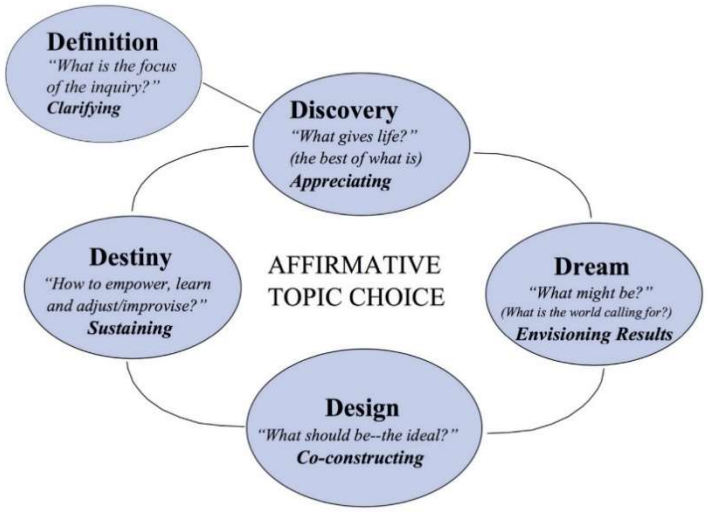


Figure 5.
Appreciative Inquiry (adapted, Cooperrider & Whitney, 2005).



Note. "The original Appreciative Inquiry framework consisted of four steps—called the *4D Cycle*— but some practitioners later recognized a fifth step, leading to the creation of the *5D Cycle*. The 5D Cycle references the 'five Ds,' or the five terms beginning with the letter D, that

describe each step in the Appreciative Inquiry process. Somewhat confusingly, due to different interpretations and presentations, there are actually six 'Ds' associated with the model. Source: This image is a modified version of the 4D Cycle presented in 'A Positive Revolution in Change: Appreciative Inquiry' (2005) by David Cooperrider and Diana Whitney" (Organizing Engagement, 2020).

The interplay of multiple theoretical perspectives nested within CFIR is a logical next step given the complexity of the aging in place process. Grounding community action plans within a theory of change (*process*) can enhance understanding of barriers and facilitators in communities, provide systematic theory for eliciting suggestions for community improvement, and empower development of a theory of action. When older adults are supported in *consumer leadership in system development* (National Quality Forum, 2016) constructing well-designed, robust community action plans, communities can facilitate implementation and maintenance of generated innovations that improve participation and aging in place.

This conceptual framework allows the researcher to 1) view the older adult from the micro level through the macro level (Bronfenbrenner, 1986), 2) consider the interactions of the older adult functional ability within the characteristics of their community's built and service environments 3) study how these interactions, understood via barriers and facilitators in specific contexts, effect participation, or *fit* (Nahemow & Lawton, 1973), and 4) utilize processes to elicit innovations (Cooperrider, 1986) for a theory of change from the older adult perspective to 5) understand fidelitous empowerment procedures of older adult participation in society through development of a theory of change that induces person-centered community action planning that 6) can later be implemented into plans, programs, and policies (theory of action) that effectuate further participation. By focusing on the older adult perspective in a precursory theory of

change, their engagement and local knowledge can go on to inspire community action plans to implement, develop, and test innovations within their communities.

1F: Summary of Methodology

The goal of this mixed methods study was to understand fidelitous empowerment procedures of older adult participation in society through development of a theory of change that induces person-centered community action planning. Through the development of a theory of change for community action plans in select suburban Southern NJ communities, older adults of varied ability levels can meaningfully participate in society and effectuate further participation. The purpose of this study was three pronged at a micro, meso, and macro level.

This study was approved by the George Washington University Institutional Review Board (IRB) and meets the CFR criteria for minimal risk (Protection of Human Subjects, 2018). Participant informed consents were presented in multiple formats including telephonically, written on the back of the invitational flyer, and online using a website with approval of a waiver from the GWU IRB. All analyses and results were anonymized and stored in a password protected file accessible to only the research team.

This study utilized an explanatory sequential mixed methods design that involved a quantitative cross-sectional survey followed by an in-depth qualitative interview of select participants. The quantitative and qualitative phases are situated within a theory of change.

In the first, quantitative phase of the study, cross-sectional telephone survey data using interactive voice response (IVR) and Qualtrics survey software was collected from 64 community-dwelling older adults aged 65 and over in three Southern NJ suburban communities to estimate how satisfaction with participation in society (dependent variable) is associated with a) individual functional abilities of older adults and b) community characteristics (independent

variables). It was hypothesized that among suburban community-dwelling older adults, the presence of supportive community features congruent with functional ability level (i.e. *fit*) will result in a greater odds of satisfaction with participation in the community (dependent variable). Convenience and snowball sampling were utilized to recruit participants from three middle income, suburban NJ communities. Multiple logistic regression and logistic regression results of the survey data were used to assess the relationship of participation in society with a) individual characteristics of community-dwelling older adults and b) environmental characteristics in select suburban South Jersey communities. Survey results were analyzed using IBM SPSS software. Significant, non-significant, surprising, and contradictory results were interpreted and utilized to develop an interview protocol that connected the quantitative results with the qualitative follow-up (J. Creswell & Plano Clark, 2018).

The second, qualitative phase was conducted as a follow-up to the quantitative results to help explain barriers and facilitators to participation in society and elicit suggested objectives to overcome barriers and leverage facilitators to participation in society using community based participatory research principles. Community based participatory research (CBPR) is often used to amplify the voices of those in the community affected by the issue being studied in order to create actionable change (Brownson, Colditz, & Proctor, 2012a). Appreciative Inquiry Theory was utilized to inform the qualitative process. Maximum variation sampling of survey participants who agreed to follow up were selected for telephone interviews. A priori sample size is not given with this sampling method, but rather ad hoc upon saturation. Saturation was anticipated to be approximately 12-15 interviews (J. Creswell & Plano Clark, 2018). Fourteen interviews were recorded telephonically in Google Voice and transcribed using Rev.com. NVivo 12 software was utilized for memoing, coding and codebook development, and ultimately for

thematic analysis. Findings were supported with quoted textual evidence and interpreted to answer the research questions. Lincoln and Guba's (1985) evaluative criteria was utilized to ensure trustworthiness. A discussion of the member-checked results were presented with older adult participants and Transform South Jersey (a community grantor and supporter in this research) during a stakeholder meeting.

The aims and research questions at the micro and meso level integrated the results and specific aims to answer the overarching, macro level, mixed methods question. Transparency and detailing in methods as well as limitations of the study are reported in detail in Chapters 3 and 5. Results are presented in Chapter 4 as well as in an executive summary tailored for target audiences (e.g. community members, organizations, policy makers) (Appendix H). Results are intended to be published in relevant journals and discussed at scientific conferences.

1G: Limitations and Delimitations

A variety of nonprobablistic sampling techniques were utilized for this mixed methods study. The quantitative strand utilized convenience and snowball sampling and the qualitative utilized maximum variation sampling. While nonprobabilistic sampling has a number of benefits, such as capturing heterogeneity (Maxwell, 2013), this sampling approach also comes with limitations, namely generalizability and bias (Terrell, 2016). Generalizability to other populations must be considered with caution (Portney & Watkins, 2015) particularly because in non-probability/purposive sampling, inferences to different communities is not the main goal, but rather purposive sampling is used to understand specific community characteristics that can answer the research question (Lund Research Ltd, 2012). Study limitations under this design are prone to researcher bias due to the nature of case selection. In non-probability/purposive sampling, participants choose to participate and therefore self-selection bias is introduced. This is

mitigated through theoretical guidance, explicit and clear methods, and transparency in reporting. Additional limitations include the unavailability of a validated tool for measuring age-friendly communities. Face and content validity for the AFC tool is used in addition to two known valid and reliable survey tools, WHODAS 2.0 and USER-P, which enhance the rigor of the quantitative design. Results may only be applied to the populations defined in this study (internal validity) provided the socio-demographics of the study population are comparable to the target population (the town); however, findings point to a need for further research in similar communities with larger sample sizes where randomization is possible (Banerjee & Chaudhury, 2010).

This research had the full support of Transforming South Jersey (TSJ), a group of six philanthropic organizations, including Community Foundation of South Jersey and the Orton Foundation/ These organizations have teamed as TSJ to build social capital in South Jersey communities (Community Foundation of South Jersey, 2020). At the core of the TSJ partnership is the Orton Family Foundation's Heart and Soul model (2020). The Orton Family Foundation's (2020) Heart and Soul model states a goal of engaging residents who are typically underrepresented in community decisions. Transform South Jersey agreed to bridge the candidate to community liaisons by providing these community liaisons with the candidate's invitation to participate in the study. TSJ recognizes the importance of including older adult perspectives of all ability levels participating in society and shaping the plans developed by the selected communities.

Delimitations include the use of specific communities associated with Transform South Jersey. Transform South Jersey has served as a gatekeeper to community liaisons and supports the desire to have underrepresented voices in communities amplified through approaches that

align with the candidate's personal values, occupational philosophies, and scholastic endeavor. In particular, the candidate has a strong history in social justice advocacy. She is a military veteran and continues in a "service after service" capacity in the community, particularly in efforts that uphold and defend the values enshrined in the Constitution. Working with community organizations to develop evidence-based approaches to aging in place requires thoughtful, selective, and purposeful strategies and delimiting.

1H: Definitions of Key Terms

Ageism: "include[s] direct discrimination…" (e.g. older workers excluded from job market, elder abuse), "but also encompasses less direct, more insidious, stereotyping" (e.g. conceptualizing older adults as a burden) and results in stigmatizing older adults as well as procrastination of preparedness for aging by younger adults for themselves and for policy development (Walker, 2016, pp. 57-58).

Age-friendly city: "an inclusive and accessible community environment that optimizes opportunities for health, participation and security for all people, in order that quality of life and dignity are ensured as people age" (World Health Organization, 2015, p. 3). Also referred to by the candidate as *aging-friendly community* to demonstrate the active and dynamic process of growing older in an ever-evolving community context.

Aging in Place: "the ability to live in one's own home and community safely, independently, and comfortably, regardless of age, income, or ability level" (Binette & Vasold, 2018; Centers for Disease Control, 2015; McWhinney-Morse, 2009; Morley, 2012; Sabia, 2008); "remaining in one's familiar home or community until the end of life" (Rosenwohl-Mack et al., 2020, p. 2)

Chronic disease/Chronic illness: "conditions that last 1 year or more and require ongoing medical attention or limit activities of daily living or both" (Centers for Disease Control, 2019).

Chronic diseases include conditions such as cancer, substance use, head injury, mobility impairment, visual impairment, diabetes, heart disease, and arthritis (Corrado et al., 2019).

Community: "groups of people who share common interests, concerns or identities in settings that are defined by geography, culture, administrative boundaries or geopolitical region or that are identified with joint activities, such as work or recreation" (Marston et al., 2016)p 376.

Community Action Plans: "a road map for creating community change by specifying what will be done, who will do it and how it will be done. In other words, the plan describes what your group wants to accomplish, what activities are needed during a specified timeline, what resources (money, people and materials) are needed to be successful" (Mizoguchi, Luluquisen, Witt, & Maker, 2004)

Consumer Leadership in System Development: "the level to which individuals who use HCBS are well supported to actively participate in the design, implementation, and evaluation of the system at all levels" (National Quality Forum, 2016, p. 36). Formerly referred to as "Consumer Voice."

Disability: Serious difficulty with the following areas of functioning: hearing, vision, cognition, and ambulation which impact ADL, and IADL (United States Census Bureau, 2018) and more specifically as "an umbrella term for impairments, activity limitations or participation restrictions" (Organisation mondiale de la santé, World Health Organization, & World Health Organization Staff, 2001, p. 3) that impact the areas of understanding and communicating, getting around, self-care, getting along with people, life activities (i.e., household, work, and/or school activities), and participation in society (Üstün, Kostanjsek, Chatterji, & Rehm, 2010).

Empowerment: "a process of strengthening in the course of which individuals, organizations and communities get a grip on their own situation and their environment and this by obtaining

control, fostering a critical mind and stimulating participation" (Van Regenmortel in Moulaert et al., 2016, p. 293) {translation by Moulaert et al, 2016} and furthermore enhances a 'personal and collective responsibility' between the individual and the community (Moulaert et al., 2016, p. 293).

Function: The International classification of functioning, disability and health (ICF) defines *functioning* as "an umbrella term encompassing all body functions, activities and participation" (Organisation mondiale de la santé et al., 2001, p. 3)

Functional ability is defined in this study by the combined definitions of functioning, disability, and independence; and can be thought of as an individual's level of participation characterized by observable performance skills (American Occupational Therapy Association, 2020b). In 2015, the WHO adopted the term and defines it as "the health-related attributes that enable people to be and to do what they have reason to value. It is made up of the intrinsic capacity of the individual, relevant environmental characteristics and the interactions between the individual and these characteristics" (World Health Organization, 2015, p. 28).

Home and Community-Based Services (HCBS): "refers to an array of services and supports delivered in the home or other integrated community setting that promote the independence, health and well-being, self-determination, and community inclusion of a person of any age who has significant, long-term physical, cognitive, sensory, and/or behavioral health needs" (NQF, 2016, p. 9).

Independence in this study is defined as "Self-directed state of being characterized by an individual's ability to participate in necessary and preferred occupations [activities] in a satisfying manner irrespective of the amount or kind of external assistance desired or required" (American Occupational Therapy Association, 2002, p. 660). "In contrast with definitions of

independence that imply a level of physical interaction with the environment or objects within the environment, occupational therapy practitioners consider clients to be independent whether they perform the component activities by themselves, perform the occupation in an adapted or modified environment, use various devices or alternative strategies, or oversee activity completion by others" (AOTA, 2002).

Older adult: In this study, older adult typically refers to any person over the age of 55 as all baby boomers have reached this age as of December 2019. However, the study design will draw from older adults 65 and over due to the need to compare results with census data which can only be observed in 65+ categories. Other studies specifically define older adulthood by other ages such as over the age of 55, 60, 62 ½, and 65.

Participation in society: focuses on the constructs of sense of belonging, the act of meaningfully doing and influencing, and ultimately the inclusion in available opportunities and is impacted by both internal (e.g. demographics, values, ability level) and external factors (e.g. availability and accessibility of the physical environment, social environment, service environment) (Cogan & Carlson, 2018; Dehi Aroogh & Mohammadi Shahboulaghi, 2020; Sverker et al., 2020; Üstün et al., 2010; World Health Organization, 2007a).

Participatory Action Research, Community-based Participatory Action Research: " a collaborative approach to research that equitably involves all partners in the research process and recognizes the unique strengths that each brings. CBPR begins with a research topic of importance to the community with the aim of combining knowledge and action for social change to improve community health and eliminate health disparities" (Kellogg Community Health Scholars Program, 2001)

Person-centered planning: "The level to which the planning process is directed by the person, with support as needed, and results in an executable plan for achieving goals and meeting needs that the person deems important. The plan includes the role of the paid and unpaid services or supports needed to reach those goals" (NQF, 2016, p. 48)

Person-Centered Planning and Coordination: "An approach to assessment, planning, and coordination of services and supports that is focused on the individual's goals, needs, preferences, and values. The person directs the development of the plan, which describes the life they want to live in the community. Services and supports are coordinated across providers and systems to carry out the plan and ensure fidelity with the person's expressed goals, needs, preferences, and values" (NQF, 2016, p. 48).

Program Theory: "an explicit theory or model of how an intervention contributes to a set of specific outcomes through a series of intermediate results" (Funnell & Rogers, 2011, p. 31). Comprised of a theory of change and a theory of action.

Theory of Action: Explains how the theory of change is activated including success criteria for final results (Funnell & Rogers, 2011)

Theory of Change: The "underlying belief and assumptions" (National Association for State Community Services Programs (NASCSP), 2017) or "central mechanism" (Funnell & Rogers, 2011, p. 31) that "guide[s]…change and improvement" (National Association for State Community Services Programs (NASCSP), 2017).

CHAPTER 2

LITERATURE REVIEW

2A.1: Topic & Purpose

The purpose of this literature review is to explore the existing literature on factors that influence aging in place, to identify gaps in existing knowledge, and for potential future research avenues. This first section (2A) provides an overview of the sections in chapter two and the methods of the literature review. The second section (2B) of the literature review will provide the reader with the background information required to understand the exponentially large and evolving topic of aging in place, setting the stage for the overarching topic of this dissertation. Next, the review of the literature will walk the reader through the description and critique of major constructs of aging in place by mapping them to the Consolidated Framework for Implementation Research (CFIR) (Laura J. Damschroder et al., 2009). CFIR is utilized to highlight gaps in knowledge. CFIR is comprised of five domains: *Individuals Involved*, *Inner Setting*, *Outer Setting*, *Intervention Characteristics*, and *Process*. The use of CFIR to guide the literature review will organize the major identified constructs of aging in place: a) *Individual*s *Involved & Inner Setting*: literature on the older adult's individual characteristics and functional ability, b) *Outer Setting*: literature on characteristics in the community, and c) *Intervention Characteristics* & *Process*: literature on participation in society and participation in community action plan processes. In the third section (2C), the review of the literature will provide inferences for the forthcoming study by identifying how gaps in research support the need for this dissertation. In the final section (2D), major theories that underpin what it means to age in place and common and emerging methodologies used in research to enhance understanding of

aging in place will be described and critiqued, ultimately detailing the conceptual framework of the candidate as informed by the literature.

2A.2: Methods of the Literature Review

Published qualitative, quantitative, and mixed methods literature was reviewed through databases available at Himmelfarb and Gellman Libraries at The George Washington University as well as unpublished Grey literature (e.g. websites and white papers). Preliminary searches and assistance from librarians helped to identify appropriate search terms and available MeSH terms using PubMed. The following databases were utilized in several iterations from September 2019 through July 2021: PubMed, Scopus, CINAHL, ProQuest, GEOBASE, Social Services, OAIster, Science.gov, EconLit, Google Scholar, and Dissertations & Theses. Boolean operators connecting keywords, such as "aging in place" or alternate spellings of "ageing" and various MeSH terms including "independent living," "community participation," "community health services," "activities of daily living," "social participation," "social capital," and "community action plans" were utilized to conduct searches in databases. Correspondence with content experts directed the candidate to specific journals such as *The Journal of Human Sciences and Extension* and *Aging Innovation*. Bibliographic hand searches also yielded relevant journals and articles for review. Exploration of websites including the World Health Organization, American Association of Retired Persons (AARP), Governmental agencies (e.g. Department of Health and Human Services), and several American local community webpages showcasing Community Action Plans were also explored for content.

Inclusion and exclusion criteria were developed throughout the search process. While studies are largely US-based due to the unique nature and culture of America, the healthcare system and associated policies (Applebaum & Kunkel, 2018); the inclusion of studies abroad

provide useful insights for successful aging in place strategies. Excluded were those studies conducted in developing countries due to differences in healthcare structures and community design. Also excluded were articles discussing aging in place in institutions and those focusing on technology and artificial intelligence. Inclusion criteria required studies to utilize community dwelling aging in place concepts. Abstracts related to the identified constructs and subconstructs were reviewed and those articles that were related to aging in place and community were reviewed in full. Early exploration limited searches to the last 10 years, however earlier seminal works were included when discovered in hand searches of bibliographies. This dissertation will focus primarily on literature that has been shaping since 2007, when the seminal *Global Age Friendly Cities: A Guide* was published by the World Health Organization (World Health Organization, 2007a). This landmark publication is perhaps the most influential work related to aging in place. After a thorough understanding of the historical review of aging in place, searches focused on the last five years, including recent systematic and scoping reviews, in order to situate the candidate within the latest scholarly conversations.

2B: Description and Critique of Scholarly Literature

2B.1: Aging in Place

By 2035, older adults are projected to outnumber children for the first time in United States history (United States Census Bureau, 2019a). The changing dynamics of baby boomers including higher divorce rates, less or no children, higher rates of co-morbidities and disability; and younger generations sandwiched between aging parents and personal commitments limit traditional caregiving roles by family (Blanchard, 2013; Cannuscio et al., 2003; Gitlin et al., 2013; Lehning, 2012).

America's current long-term care model will not support the rapid growth in a population aging with chronic disease and disability (Seeman et al., 2010) with more than 12 million older Americans needing long-term care services and supports/long-term care (LTSS/LTC) with a projection to 27 million by 2050 (National Quality Forum, 2016). Older adults will be required to tap into funding from a system that is fragmented and siloed (Blanchard, 2013; Congress of the United States, 2017; Knapp et al., 2013; Menec et al., 2011). Because of this, there has been a shift from healthcare providers to community based resources (Braun et al., 2014), yet our current healthcare system utilizes a long-term care model where less than a quarter of funding is utilized for Home and Community Based Services (HCBS) (Applebaum & Kunkel, 2018; Bookman, 2008; National Quality Forum, 2016; W. H. Thomas & Blanchard, 2009).

Older adults, and baby boomers in particular, have a desire to live in their homes and communities "…safely, independently, and comfortably, regardless of age, income, or ability level" or to age in place (Binette & Vasold, 2018; Centers for Disease Control, 2015; McWhinney-Morse, 2009; Morley, 2012; Sabia, 2008). Participation is associated with quality of life, active aging, and is a cornerstone in aging in place (Carver, Beamish, Phillips, & Villeneuve, 2018; Moulaert et al., 2016). In order to age in place, studies show a community approach that empowers the older adults' active role can aid in hospital and institutional prevention and improve wellness, yet implementation and uptake of these programs is lagging (Clark, Park, & Burke, 2013; Coleman, Parry, Chalmers, & Min, 2006; Jackson, Carlson, Mandel, Zemke, & Clark, 1998; Liverman, Schultz, Terry, & Leshner, 2013). Programs targeting caregivers indicate that multifaceted interventions that include the care recipients and families in the collaboration process were valued (Juckett & Robinson, 2018). In some instances, the importance of aging in place emphasizes the avoidance of institutionalized care more so than

the home of current residence (Hillcoat-Nalletamby & Ogg, 2014; Wiles, Leibing, Guberman, Reeve, & Allen, 2012) stressing the importance of a connected, supportive community.

The concept of aging in place has developed over time from its early definitions of a person in their home to the inclusion of their community (Blanchard, 2013). The capabilities of the person were added to the aging in place concept by the WHO in 2015 with the addition of intrinsic ability (WHO, 2015). More recent definitions now expand the complex and ever-changing dynamic process of contexts of not only the home and community, but also the social and political, and furthermore, the social participation and inclusion in these varied contexts (Garoon et al., 2016; Jansson, 2015; Moulaert & Garon, 2016; World Health Organization, 2018). What is known about the constructs of a) individual characteristics, such as functional ability, b) age friendly communities, namely the built environment and community supports and services, and c) participation in society will be reviewed.

2B.2: The Consolidated Framework for Implementation Research (CFIR)

The Consolidated Framework for Implementation Research (CFIR) contains five domains: *Individual*, *Inner Setting*, *Outer Setting*, *Intervention Characteristics*, and *Process.* The mapping of these major constructs to CFIR demonstrates that the *individuals* involved (e.g. reductionistic medical model of developmental process), the *inner settings* (e.g. home environment; family dynamics), and *outer settings* (e.g. built, social environment) are heavily researched in isolation. While some authors describe combinations of one to two factors of individual characteristics (e.g. functional limitations), environmental characteristics, and community participation (Vaughan, LaValley, AlHeresh, & Keysor, 2016; Yang & Sanford, 2012); rarely does the literature capture the symbiotic interplay and holistic complexities of these three factors together (Weil, 2019). Moreover, CFIR highlights that the *adapted interventions*

and *processes*, particularly community planning and intervention implementation processes, are less researched and documented (Juckett & Robinson, 2018; Andrew E. Scharlach, 2016).

2B.3: Individuals Involved & Inner Setting

Individuals involved and Inner Setting are two separate constructs within CFIR. In this study they are combined to include the individual personal attributes and their knowledge, skills, abilities, and attitudes within their own home and personal context (Laura J. Damschroder et al., 2009). The following sections of 2B.3 will describe individual characteristics, functional ability, and the inner setting of the home.

2B.3.1 Individual Characteristics

It is helpful to envision the constructs discussed under this heading as the *Individual* and *Inner Setting* within the CFIR. Individual characteristics are those that are inherent to the older adult person. CFIR refers to these characteristics as *other personal attributes*. They include demographics of age, gender, race/ethnicity, socioeconomic and educational status (also called *personal factors*, (American Occupational Therapy Association, 2020b), as well as domains of functional ability. The Occupational Therapy Practice Framework (American Occupational Therapy Association, 2020b) provides an in depth look at the characteristics of an individual (e.g. *performance patterns* of habits, roles, and routines) and categorize these under the overarching term, *occupations*. Occupations can be further broken down into categories of a) Activities of Daily Living (ADL) which include activities of caring for oneself, b) Instrumental Activities of Daily Living (IADL) which includes those activities that involve support of one's home and community environment, c) Health Management, d) Rest and Sleep, e) Education, f) Work, g) Play, h) Leisure, and i) Social Participation which are centralized around engagement with the community, family, and/or peers. The comprehensive categories of Performance Skills

such as *motor*, *process*, and *social interaction skills* underlie Client Factors; which include values, beliefs, spirituality, body function, and body structure and include such areas of *mental function* and *movement*, amongst several others. Client Factors influence a person's ability to engage in occupations.

When a person experiences a disruption in any one of these domains, they may experience a decline in health, well-being, and participation. Occupational therapists design interventions to address or prevent these disruptions and enhance a person's ability to engage in meaningful occupation (American Occupational Therapy Association, 2020b). In some ways this is done by facilitating maintenance of *roles* or enhancing an individual's *knowledge* and *self-efficacy* (Laura J. Damschroder et al., 2009) through, for example, *self-advocacy* and *occupational justice*, amongst others (American Occupational Therapy Association, 2020b).

2B.3.2 Depression, Loneliness, and Isolation

Older adults who live alone report a greater reliance and rate of importance on community supports, outdoor spaces, assistance, and health services (Flores, Caballer, & Alarcón, 2019; Li, 2020), but because they have a decreased opportunity to discuss and share resources available in the community, and potentially to access the community, they are at risk for isolation, depression, and early mortality (Beard, Hon Prof John R & Bloom, 2015; Miyashita, Tadaka, & Arimoto, 2021; Yi et al., 2021). While it is known that individuals who have depression are more likely to score life satisfaction as low (Daig, Herschbach, Lehmann, Knoll, & Decker, 2009), In Mehrabi and Beland's (2020) recent scoping review, they found little evidence exploring the relationship between social isolation and loneliness on health outcomes. It is important to recognize that while these variables have associations with one another, they are not all necessarily predictive of poor health. Individuals who are living alone and potentially

isolated may be suited for social considerations for interventions such as special services focusing on support for outings, meals, and housework (Yi et al., 2021) particularly because of the emphasized importance older adults place on community supports (Flores et al., 2019). Facilitating and maintaining older adult roles, including community based roles, has been shown to enhance life satisfaction despite increasing age and the amount of time related to the role does not necessarily indicate its value to the older adult (McKenna, Broome, & Liddle, 2007).

2B.3.3 Functional Ability

Disability is defined in this study as serious difficulty with the following areas of functioning: hearing, vision, cognition, and ambulation which impact ADL, and IADL (United States Census Bureau, 2018) and more specifically the areas of understanding and communicating, getting around, self-care, getting along with people, life activities (i.e., household, work, and/or school activities), and participation in society (Üstün et al., 2010). The presence of a disability, such as a hearing or vision impairment, where there is an accommodation in place, (e.g. hearing aid or glasses) may mask functional impairment despite the presence of a disability. Federal grants provided under the Older Americans Act (OAA) are granted based on the number of older adults who have a disability and not whether the disability poses a threat to functional ability (United States Census Bureau, 2018). According to the WHO, disability, measured through six domains (cognition, mobility, self-care, getting along, life activities, and participation) predicts a number of factors including service needs, level of care, outcome of the condition, length of hospitalization, receipt of disability benefits, work performance, and social integration (Üstün et al., 2010). Additionally, knowledge of disability can improve public health and policy decisions beyond knowledge of a diagnosis because needs may be better identified, treatment and intervention may be better matched, outcomes and

effectiveness can be measured, and priorities and resources can be better allocated (Üstün et al., 2010). Provision of grants would likely provide better matched interventions and allocation of services assistance if functional ability were also considered. Therefore, understanding presence or absence of functional limitation is an important consideration.

The development of a standardized assessment, the Disability Assessment Schedule (WHODAS 2.0) (Üstün et al., 2010) may be a useful tool for researchers, healthcare providers, policy makers and older adults themselves because, as noted in the Occupational Therapy Practice Framework, building knowledge, self-awareness, self-efficacy, and self-advocacy can promote meaningful participation in society (American Occupational Therapy Association, 2020b).

While the WHO (2015) has only recently acknowledged the importance of functional ability on healthy and active aging, occupational therapists have highlighted the importance of functional ability, termed *independence*, for 100 years (Hattjar, 2019). When a person experiences a disruption in any one of these domains, they may experience a decline in health, well-being, and participation (American Occupational Therapy Association, 2020b). Occupational therapists design interventions to address or prevent these disruptions and enhance a person's ability to engage in meaningful occupation (American Occupational Therapy Association, 2020b), hence the use of the term *functional ability* is preferred over *disability*.

In 2015, the WHO adopted the term *functional ability* and defines it as "the health-related attributes that enable people to be and to do what they have reason to value. It is made up of the intrinsic capacity of the individual, relevant environmental characteristics and the interactions between the individual and these characteristics" (World Health Organization, 2015, p. 28).

The definition of functional ability in this study was developed by the combined definitions of the International Classification of Functioning, Disability, and Health's (ICF) *functioning* and *disability*; and AOTA's *independence*; and can be thought of as an individual's level of functioning in a given activity and measured by observable and self-reported performance skills (American Occupational Therapy Association, 2020b).

Knowledge of ability levels and changes over time help to understand the dynamic needs of an *aging* friendly community as opposed to an *age*-friendly community; the latter placing the assumption that once a plan is in motion, no further changes or adaptation is required (Moulaert et al., 2016). Functional ability can be based on a multitude of factors and have been measured in different ways across the literature. For example, chronic disease does not equate to disability, but it may manifest in disability and functional impairment later in life, which can help communities to think about future aging needs (Cwirlej-Sozanska, Wilmowska-Pietruszynska, Sozanski, & Wisniowska-Szurlej, 2018). Chronic diseases are "conditions that last 1 year or more and require ongoing medical attention or limit activities of daily living or both" (Centers for Disease Control, 2019). Chronic diseases include conditions such as cancer, substance use, head injury, mobility impairment, visual impairment, diabetes, heart disease, and arthritis (Corrado et al., 2019).

According to Gitlin, Szanton and Hodgson (2013), who examine older minority adults living with chronic conditions and disability using an Ecological Systems theory in conjunction with The Health Environmental Integration model, Life Span Theory of Control, and Adaptive approaches; older minority adults with disability and chronic conditions are at higher risk for isolation and depression, have less ability to perform ADL's, leisure and work, are more likely to be frail, have falls, be hospitalized, and have a higher mortality rate. These poor outcomes are

exacerbated by unsupportive home and community environments (Gitlin et al., 2013). Findings from a hazard analysis on determinants of aging in place behaviors show that individuals with a functional impairment are at greater risk for institutionalization (Sabia, 2008).

Qualitative studies and mixed methods designs employed over the last decade have demonstrated the adaptive strategies of older adults when they are faced with challenges. In a systematic review of meta-ethnography and qualitative studies, Rosenwohl-Mack and colleagues (2020) describe that older adults assert agency through focusing on the strengths that do exist while also adapting their current routines. The authors define agency as "the capacity of older adults to make choices about their lives" (p. 12), to respond to threats, and maintain important life skills and features. Agency also includes a choice in whether to age in place in their current place or to move elsewhere, such as an institution. This method is consistent with an occupational therapy intervention approach (American Occupational Therapy Association, 2020b). HCBS that include occupational therapists are demonstrating effective outcomes in individuals' ability to enact this agency, though more research is needed. Rosenwohl-Mack and colleagues' findings suggest future research that examines services that can help older adults to age in place using a person-centered approach. Thus, the inclusion of the occupational therapy perspective may be seen as a facilitator to implementation of aging in place initiatives.

2B.3.4 Inner Setting: The Home

One's home and personal context including dynamics of family or living alone are important considerations for aging in place. Because of the changing structures of families, older adults are more likely to live alone and have limited traditional caregiving support from family (Blanchard, 2013; Cannuscio et al., 2003; Gitlin et al., 2013; Lehning, 2012; Yi et al., 2021). Thus, an emphasis on support services that include assistance for basic Activities of Daily Living

(ADL) as well as Instrumental Activities of Daily Living (IADL) has been identified as a care need for older adults living alone, but also for all community-dwelling older adults. In a new scoping review of quantitative studies over the past decade, authors Mah and colleagues (2021) found several personal and community/social factors that contribute to the utilization of homecare services to support aging in place. These factors include: 1) personal: age, ethnicity/race, self-assessed health, insurance, housing ownership, housing problems, marital status, household income, children, informal caregiving, social networks and urban/rural area; and 2) social: age, personal finances, housing ownership and living arrangements. The study concludes that older adults who utilize homecare have reduced mortality, hospitalization, institutionalization and improved quality of life all at a reduced cost to the healthcare system and the findings indicate that it is social factors/social determinants of health that ultimately can make the difference between an older adult being home with assistance versus institutionalized. Furthermore, Green and colleagues (2020) emphasize the importance of social determinants related to housing, specifically the need for and access to home safety renovations, as a cost-effective strategy for aging in place that would cost less than two percent of the CMS budget. The authors argue that in part the issue lies in policy development where policy makers rarely fund non-medical programs and miss the opportunity to relate these services as a benefit to health.

The Community Aging in Place, Advancing Better Living for Elders (CAPABLE) (Szanton et al., 2011) study, which utilizes Environmental Press theory and a randomized control pilot design, demonstrated improved functional performance in older adult participants with the use of an occupational therapist, registered nurse, and handyworker team. At a mere $1,300 average per household budget in a home-based intervention, 94% of the intervention group

reported an improvement in their lives by participating in the study as compared to only 54% in the control group (Szanton et al., 2011). This study is not only a demonstration of how occupational therapists are well suited to address the needs of older adults in their homes, but also a demonstration of how interdisciplinary collaboration of stakeholders can address barriers to aging in place. This study also demonstrates not only a person-centered approach with the older adult, but a patient-directed approach (Szanton et al., 2011). Patient-directed approaches are well suited for behavior change because they address the needs of the client, as defined by the client, and are motivating (Michie, van Stralen, & West, 2011). These self-motivating behaviors can lead to self-efficacy via achievement of increased knowledge and understanding and adopting behaviors associated with habit formation (American Occupational Therapy Association, 2020b; Michie et al., 2011). Self-efficacy is defined as how confidently a person is able to take a course of action in response to a situation (Bandura, 1977). Older Korean American adults who were able to obtain community support as opposed to relying on children when living in a new affordable housing setting were found to have high self-efficacy (Shin, 2014). Collective efficacy, as described in the psychological literature by Shin (2014), is a cohesive approach to intervening on the behalf of another for the common good, which is described as an element of social capital.

2B.4: Outer Setting

The outer setting considers the external policies, pressures, networks, physical structures, resources and information (Laura J. Damschroder et al., 2009). In the following 2B.4 section, suburban community characteristics and the World Health Organization's (2007a) Age-Friendly City environments will be described.

2B.4.1 Suburban Community Characteristics

According to Pew Research Center (Parker et al., 2018), suburban communities are the fastest growing counties and demonstrate the sharpest increase in older adults, whereby suburbs comprise 51% of the older adult population (Andrew E. Scharlach, 2016). Infrastructures of suburban communities vary in built and social environments and are sharply contrasted with urban and rural communities. Often the assets of suburban older adults that could be used for additional support services are within the home itself (Golant, 2014; 2015) and to access this wealth older adults would have to liquidate this asset by selling their home (Beverly Lunsford, personal communication, November 22, 2019). Aging in place initiatives have not focused solely on individuals with modest or moderate income or suburban communities (Golant, 2014; Andrew E. Scharlach, 2016). Wealthy older adults can purchase needed resources while the poorest older adults may have access to social programming (Golant, 2014) demonstrating a unique need that warrants investigation within middle-income, suburban older adult populations. A National Association of Area Agencies on Aging survey indicates that communities are underprepared to address aging in place at a community level (Kathy Black et al., 2015). Under-preparedness has immense social and economic consequences (Au et al., 2020), yet over reliance on communities could relieve government officials from provision of programming and policy that would support aging in place (Menec et al., 2011).

2B.4.2 World Health Organization's Global Age Friendly Cities Guide

The World Health Organization (2007a) developed the Global Age Friendly Cities Guide and Checklist for communities to adopt in order to support aging in place. The checklist can serve as a self-assessment to begin to understand where improvements can be made. Derived from the guide, the checklist provides eight domains where age-friendliness can be evaluated:

Outdoor spaces and buildings, Transportation, Housing, Social participation, Respect and social inclusion, Civic participation and employment, Communication and information, and Community support and health services (World Health Organization, 2007a). The eight domains can be categorized into three constructs: The built environment, the social environment, and the service environment (D. John & Gunter, 2016). This section of the literature review will address the built environment and services environment. Participation in society, discussed later, will capture the essence of the social environment.

2B.4.2.1 WHO Built Environment

The built environment is comprised of housing, outdoor spaces and buildings, and transportation. Housing for the purposes of this review of the literature and study is placed within the inner setting. Specific housing issues related to aging in place were discussed in this literature review in the Inner Setting section (see, for example, CAPABLE study) and the Outer Setting (Suburban Community). Thus, the following paragraphs emphasize outdoor spaces and buildings and transportation.

Outdoor Spaces and Buildings. This sub-domain is largely associated with the physical structure and layout of community environments. According to the WHO (2007a), outdoor spaces and buildings have an impact on aging in place. The WHO (2007a) describes the recurring themes of this construct as that of access, safety, and quality of life. Poor maintenance of pavements (e.g. cracked, narrow, high curbs) and lack of universal design in outdoor spaces and buildings (e.g. lacking ramps, poor signage, no handicapped toilets), absence of green space, and limitations in resting areas (e.g. well placed benches) limit the ability of older adults to actively age and engage in their communities (World Health Organization, 2007a). Much of the scholarly discussion within this construct is centralized on walkability, or how easily a town can

be navigated by walking. Well lit, smoothly paved sidewalks that connect to accessible stores, restaurants, etc. are important for active aging, maintaining independence, and socializing (Kathy Black et al., 2015; A. Scharlach, Lehning, Warburton, Ng, & Shardlow, 2013; World Health Organization, 2007a; Wu & Tseng, 2018). Gentrification (Cho & Kim, 2016; Versey, 2018) and other environmental changes, particularly when greater distance is involved, can threaten the independence of older adults, especially those with chronic conditions and disabilities, and their ability to age in place as it reduces their access to the goods and services they need (Rosenwohl-Mack et al., 2020; Wu & Tseng, 2018).

When communities are walkable and of mixed-use, the result is an opportunity for social interaction (A. Scharlach et al., 2013) and accessibility (Wu & Tseng, 2018). In a mixed methods sequential design of city planners, the participants reported that they utilize information from advocacy groups when designing walkable spaces (Lehning, 2012). A Diffusion framework guides this study to demonstrate a need for advocacy involving older adults to local government (Lehning, 2012) as their input and advocacy may help develop policies for improved design of outdoor spaces and buildings.

Transportation. The ability to move about one's community impacts the opportunity to access services and participate socially and civically (World Health Organization, 2007a). Accessibility and proximity to resources were found to be the dominant factors for social participation across all communities (rural, urban, and metropolitan) and access to transportation whether by driving, public transit, or via family is the mediating source for gaining this access (Levasseur et al., 2015). Affordable, reliable, accessible, and convenient transportation, both in location and in locomote, are identified as barriers to many older adults (Kathy Black et al., 2015; World Health Organization, 2007a). Due to the barriers of public transit and the reluctance

in asking others (Kathy Black et al., 2015), many older adults in the suburbs rely on retaining independence in driving and they require modifications for signage and lighting (Lehning, 2012) as the natural life course diminishes the senses. Village models and community members supporting one another by provision of volunteer transportation has been shown to be beneficial to isolated older adults (Kathy Black et al., 2015; Graham, Scharlach, & Stark, 2017; Greenfield, 2016; Wu & Tseng, 2018). Modifications of signage for older drivers is also suggested to improve ability to access communities for meaningful interactions (Chippendale & Bear-Lehman, 2010; CRAMM, VAN DIJK, & NIEBOER, 2018; Graham et al., 2017; Greenfield, 2016; Lehning, 2012; Menec et al., 2011; World Health Organization, 2007a).

2B.4.2.2 WHO Service Environment

The WHO describes aspects of the service environment as *communication and information* and *community support and health services.* The new addition of the Occupational Therapy Practice Framework (American Occupational Therapy Association, 2020b) places an emphasis on group and population level interventions and processes. Therefore, the healthcare services of the profession are becoming more explicit for group and population level interventions such as those within the community.

Communication and information. Practical, community based information and the means in which that information is communicated, such as media sources, is important for older adults to stay connected with their community and be aware of available services (World Health Organization, 2007a). While developing countries report limits in media style, developed nations, such as the US often report a, sometimes overwhelming, abundance of complex information often riddled with fraudulent scams (Kathy Black et al., 2015; World Health Organization, 2007a). Additionally, older adults report being unaware of services that are

available which limits their ability to maintain independence (Kathy Black et al., 2015). Cultural and language barriers have also been identified as barriers to communication and information (Rosenwohl-Mack et al., 2020) as well as feeling left behind in the rapid technological advances (Kathy Black et al., 2015). It is important to consider the individual preferences, however, as some older adults perceive technology as a threat to connectedness in terms of unwanted communication or the use of technology over real human interaction (Rosenwohl-Mack et al., 2020).

Health literacy is becoming an important "vital sign" to assess in older adults and has been deemed as a determinant of health by the WHO (World Health Organization, 2013). The self-management of chronic conditions, such as diabetes, requires ability to digest and understand health information that can affect health outcomes (Yamashita & Kart, 2011). A recent systematic review of community-based initiatives to improve health literacy showed that with collaborative learning and social support, older adults may improve judgement and application of appropriate health information (De Wit et al., 2018). Correspondingly, health literacy may be associated with access to resources, interaction with neighbors, and participation in social activities according to a recent Japanese study on life-space[1] (Miyashita et al., 2021).

Community Supports and Services. The WHO (2007a) remarks that health services are vital to maintain health and independence. Services available within the community are important resources for aging in place (Rosenwohl-Mack et al., 2020). The Older Americans Act (OAA) created the infrastructure for HCBS as we know it today (Applebaum & Kunkel, 2018). In 2012, the Department of Health and Human Services (DHHS) created the Administration for

[1] Life space is defined as the spaces people travel and includes both mobility, frequency, and participation in social activities (Miyashita et al., 2021; Yang & Sandford, 2012)

Community Living (ACL), who's designation is to focus on promotion of aging in place (Administration for Community Living, 2018; Kathy Black et al., 2015). Understanding effectiveness of current HCBS is difficult because the systems for measurement are decentralized and are state and population specific (National Quality Forum, 2016); however, states that have higher HCBS have less nursing home admissions in childless older adults (Administration for Community Living, 2018). Program development and measurement at the levels of the person, service, and system are needed to examine domains (National Quality Forum, 2016) such as those put forth by the WHO (2007a) for measurement of predictors of participation in the community. The National Quality Forum reports that the need for these services will continue to grow. The decentralization of these services limits the data that can be collected and understood (National Quality Forum, 2016).

The WHO (2007a) states that common issues related to accessible care are about not only the physical location of services, but also the knowledge of the existence of these services. There has been a consumer-driven shift to HCBS (Braun et al., 2014), a system that is severely underfunded (Davitt et al., 2016). Available services focus on home care and long term care when participants report needs for day centers, mental health, training, rehab and palliative care as well as access to medical equipment, and preventative services related to screening, physical activity, and injury prevention (World Health Organization, 2007a). Reconceptualization of senior centers into community wellness centers has been suggested by older adults (World Health Organization, 2007a) potentially as a centralized location for services. The Department of Health and Human Services Administration for Community Living states that investing in HCBS and research and innovation in HCBS is "…significantly less expensive than the cost of institutional care" (2018, p. i).

Older adults with limitations in functional mobility and Activities of Daily Living (ADL) are the largest subgroup requiring health services (Figueiredo, Rosenzveig, Morais, & Mayo, 2017). For all older adults, especially those who live alone, community support and health services decrease the risk of nursing home admission and improve life satisfaction (Administration for Community Living, 2018; Flores et al., 2019). Home and Community Based Services (HCBS) focus on changing the routines and behaviors of older adults with and without chronic disease and disability as well as provisions for home modifications (Lien, Steggell, & Iwarsson, 2015). The ACL focuses HCBS primarily on transportation, personal care, adult day care, and case management services (Administration for Community Living, 2018) demonstrating they are observant of many of the needs expressed by older adults, yet not all desired and required areas are included.

Resources external to the home, those that are within the community, may also play a key role in aging in place (Rosenwohl-Mack et al., 2020). For example, Age-Friendly Sarasota suggests the establishment of a neighborhood visitation program for errand running as well as ride sharing as a service or means to arrive at a service and has developed action plans in order to develop them (K. Black, 2017). National Quality Forum (2016) calls for HCBS to be "delivered in a manner that...[e]ngages individuals who use HCBS in the design, implementation, and evaluation of the system and its performance." The perspective and inclusion of the older adult will be critical in shaping the future of HCBS and thus, aging in place (Corrado et al., 2019).

2B.5: Intervention Characteristics & Process

Intervention characteristics describe the general design, quality, cost, and complexity of interventions and the processes are the degrees to which the interventions are planned, executed, evaluated and by whom they are championed by (engagement) (Laura J. Damschroder et al.,

2009). This section will describe and define the main outcome variable and phenomenon of interest*: participation in society*. The ways in which participation is measured and considered is both an intervention and a process. CFIR describes elements within the process as a means of connecting the intervention and the setting, thus making this domain difficult to disentangle from all other areas of CFIR. The processes, especially the limitations in empirical evidence of processes, are described in the subsection: *participation in process: community action plans*.

2B.5.1 Participation in Society: Intervention

Participation is a cornerstone in aging in place (Carver et al., 2018) and is defined as "involvement in a life situation" (WHO, 2001, p. 10 in American Occupational Therapy Association, 2020b, p. 89). Yet, participation alone is not enough to contribute to aging in place. According to a study on participation from the perspective of individuals with disability, there is no set frequency that accounts for full participation, but rather a set of constructs highly influenced by a person and their values and their physical and social environment (Hammel et al., 2008). The International Classification of Function, Disability and Health (ICF) includes participation as a component of function and organizes it by domain; however, distinguishing participation from activities and means for operationalizing is not part of the ICF (Heinemann et al., 2013; Organisation mondiale de la santé et al., 2001). The WHO defines participation broadly as "involvement in a life situation" and *social participation* as "the engagement of older people in recreation, socialization, and cultural, educational and spiritual activities" (Organisation mondiale de la santé et al., 2001, p. 14; World Health Organization, 2007a, p. 9). Similarly, the Occupational Therapy Practice Framework: Domain and Process defines social participation as a domain, or an area of occupation, that "interweave[s]…occupations" to support meaningful and desired interaction and involvement with activities, people and social situations

in a variety of contexts (American Occupational Therapy Association, 2020b, p. 92). The seminal Well Elderly Study on Lifestyle Redesign was a demonstration of the effectiveness of occupational therapy interventions in community-based prevention with older adults. This work highlighted the difference between activity participation and meaningful occupational participation in community by comparing interventions where older adults were engaged with social activities in non professional activity groups and occupational interventions led by occupational therapists. The occupational therapy study participants demonstrated improvement in four health related outcomes: 1) enhanced physical health, 2) improved mental health, 3) superior occupational functioning, and 4) increased life satisfaction (Jackson et al., 1998).

Participation in society, which, as previously defined, for this study focuses on the constructs of sense of belonging, the act of meaningfully doing and influencing, and ultimately the inclusion in available opportunities and is impacted by both internal (e.g. demographics, values, ability level) and external factors (e.g. availability and accessibility of the physical environment, social environment, service environment) (Cogan & Carlson, 2018; Dehi Aroogh & Mohammadi Shahboulaghi, 2020; Sverker et al., 2020; Üstün et al., 2010; World Health Organization, 2007a). Measuring participation has been a challenge through the literature, in part due to the complex constructs and variable definitions described above. According to Heinemann and colleagues (2013), participation can be measured through frequency or engagement, satisfaction, and through ascription of meaning. Active ageing is a term used by the WHO that is defined by maintenance of participation in vast ranges of activity domains in older adulthood and influence health and wellbeing (WHO, 2002). Participation, namely participation in society, can therefore be elicited via facilitation of meaningful activity engagement (mechanism in the process). Meaningful engagement is a major construct of the occupational therapy and

occupational science literature and is a means to participation, health and well-being (American Occupational Therapy Association, 2020b). While engagement in occupations can be either active or passive, exploration of active empowerment and advocacy strategies of older adult participants is critical (beyond 'what works' and toward knowledge-building of *why* implementations succeed/fail (LJ Damschroder et al., 2009). Through meaningful activities, participation in the community can ultimately shape policies that will facilitate aging in place (American Occupational Therapy Association, 2020b; Annear et al., 2014; Kathy Black et al., 2015; Dhillon, Philip, & World Health Organization, 1994). According to Morrow-Howell and colleagues (2017), there are limited policies that support engagement of older adults, often a result of ageism.

Seminal works articulate that older adults have much to offer to society and are well placed to do so (World Health Organization, 2017), yet empirical measurement is largely unexplored especially regarding the older adult perspective (Annear et al., 2014). Often the discussion around older adult participation is related to physical activity participation and less often on civic and social participation surrounding rights and advocacy (Annear et al., 2014). Lengthening employment is often sought after by policy makers (Walker, 2016), but for older adults civic participation is more than employment. Some authors have advocated for the WHO domain to reduce *social participation* and *civic participation and employment* into one domain of participation to be more inclusive of the varied types of participation (Plouffe et al., 2016). Literature highlights the desire and need for opportunities for structured volunteerism and ways to "give back" (Kathy Black et al., 2015; Corrado et al., 2019; Flores et al., 2019). In a recent mixed methods study in Spain, older adults identify that the opportunities for civic participation are low and that communication about all participatory opportunities are low (Flores et al.,

2019). An important aspect about participation in society is identification and investigation of new and innovative ways one may participate in communities (e.g. effective interventions and processes to facilitate neighborliness as a community support and health service opportunity) (Dhillon et al., 1994; World Health Organization, 2018).

Advocacy, according to the Occupational Therapy Practice Framework, is defined as the efforts of the practitioner to promote occupational justice and empowerment for participation in occupations (American Occupational Therapy Association, 2020b). An example of advocacy is a World Café qualitative design where participants came up with the idea of the creation of a senior ombudsman to play a role in advocacy for the older adult population within the community (Emlet & Moceri, 2012). Yet advocacy is distinguished from self-advocacy, which are those efforts of justice and empowerment undertaken by the older adult and promoted and supported by the clinician (American Occupational Therapy Association, 2020b). Black and colleagues (2015) advocate for a paradigm shift within their conceptual framework which utilizes participatory action approaches to complement ecological systems theory as they study through appreciative inquiry how older adults can spur societal changes in perspective within communities. The perspective of empowerment as self-advocacy is corroborated by Moulaert and colleagues (2016) who suggest the concept can avoid "paternalistic meddling by professionals" (p. 294) by allowing the older adult to have agency through choosing, deciding, and acting on innovations in a multileveled fashion.

2B.5.2 Participation in Process: Community Action Plans

Community Action Plans are defined as "a road map for creating community change by specifying what will be done, who will do it and how it will be done. In other words, the plan describes what your group wants to accomplish, what activities are needed during a specified

timeline, what resources (money, people and materials) are needed to be successful" (Mizoguchi et al., 2004). They can be thought of as a theory of action which is a component of program theory. Program theory is defined as a theory of how a program contributes to intermediate results and ultimate outcomes of a program, project, policy, and so on (Funnell & Rogers, 2011). WHO (2018) recommends addressing gaps by co-producing evidence with older adults and communities using a bottom-up approach. Community action planning is a recognized "bottom up" approach complimentary to the WHO Global Age Friendly Communities (AFC) (2007) model used to develop aging friendly communities. In the US, action plans are promoted by AARP, who bases the plan guides on the WHO (2007) eight domains (Plouffe et al., 2016). Several communities have adopted the action plan approach and guidance from the WHO (2007a; 2017) and AARP has suggested tools for development. While the WHO (2007) AFC Guide was developed using a bottom up approach, the planning process and implementation has been criticized for taking a top-down approach which undermines civic participation of older-adults (Plouffe et al., 2016). And while AARP's Livable Communities has developed a Network of Age-Friendly States and Communities (2019) that provides guidance for development of Community Action Plans, the impacts of these plans have not yet been reported due to an inadequate amount of communities completing the program in full (Bill Armbruster, personal communication, May 6, 2020).

According to Scharlach (2016), there is ambiguity related to the process of making communities more age friendly and whether or not these principles are similar to community change processes (Weil and Gamble, 1995 in Scharlach, 2016) as the former has not been studied empirically in academic scholarship. Partly the rationale for this lack of empirical study is that Age Friendly Cities seems "intuitively obvious" (p. 313), but Scharlach cautions that

without the critical study and examination through research there is a risk of tangential and unintended outcomes. In order to merge top-down and bottom-up processes (Moulaert et al., 2016; Plouffe et al., 2016; Andrew E. Scharlach, 2016), it may be useful to consider developing community action plans using program theory principles through a collaborative effort by combining stakeholder mental models, inductive development and deductive development (Funnel & Rogers, 2011).

In order to inform processes used to develop community action plan's, the stakeholder mental models of older adults of varied ability levels is warranted (Funnel & Rogers, 2011). Eliciting perspectives on how they envision a community action plans to capture their voices and address their needs is critical to developing community action plans. Deductive reasoning can be utilized to ground community action plans in theory which allows for a systematic understanding of the processes for community action plan development and future evaluation. Following a systematic process can improve the ability to make community action plans measurable and contribute to the scholarly conversation with empirical outcomes. Theory can also provide shortcuts in the process and help to extract poorly articulated theory within community action plans that has not been made explicit (Funnel & Rogers, 2011). As with program theory, community action plans are an iterative development process that can be used to test theory empirically (Funnel & Rogers, 2011).

Understanding the "bottom-up" approach of citizen engagement in the development of age-friendly cities and communities (AFC) through the development of Community Action Plans is warranted if America is to design fluid neighborhoods that can sustain aging friendly features; doing so must be accomplished *with* and *by* older adults rather than *for* them (Buffel, Phillipson, & Scharf, 2012). A model of engagement and empowerment that "reflects the needs, capacities,

and aspirations of older people and the changing contexts in which they function" could provide insight to larger public health programs and policies (Beard, Hon Prof John R & Bloom, 2015, p. 1). Yet, implementation of community action plans are primarily top-down methods as local community leaders are presently the authoritative source to create policy and are doing so by "pulling" or eliciting perspectives of, for example, planners and policy makers, based on pre-existing WHO Age Friendly Cities models of services and physical structures within the town (Andrew E. Scharlach, 2016) rather than a "push" perspective whereby older adults are empowered as community researchers/advocates that systematically create and implement innovations (Brownson, Colditz, & Proctor, 2012b, p. 4; Andrew E. Scharlach, 2016). Suggestions by leading age-friendly international authors are to merge the top-down and bottom-up methods using a collaborative approach (Moulaert et al., 2016; Plouffe et al., 2016; Andrew E. Scharlach, 2016).

In a recent integrated review of the literature, the authors found that occupation may be the missing link when designing community spaces. Occupation is often overlooked and rather the built spaces and persons with disabilities are examined without attention to the intersecting relationships of meaningfully doing or participating. Furthermore, the authors indicate that a provision of access is not enough, but rather it is imperative to consider how individuals participate in meaningful occupations within accessible contexts. Involving users of such spaces and the ways in which they utilize universal design to engage is a critical inclusion point (Watchorn et al., 2021). Participation in the form of *consumer leadership in system development* (National Quality Forum, 2016) can facilitate a continuous feedback loop between the outcome of participation with the internal and external antecedents of the person and environment. This continuous process will allow for flexible and sustainable age-friendly communities via active

tailoring of support services and environments that enable older adults to age in place with their changing functional ability levels (WHO, 2015; World Health Organization, 2018).

2C: Inferences for Forthcoming Study

Previous literature shows that dysfunction related to the individual's functional ability increases the risk for institutionalization despite a desire to age in place (Gitlin et al, 2013; Sabia, 2008). Home and community based services (HCBS) can mitigate many of the functional impairments that individuals face both within their individual function, within the home (e.g. safety, home modifications), and through access to the community, reducing the risk of nursing home admission (Administration for Community Living, 2018). External factors related to the built and social environment show that when communities address and eliminate physical and social barriers and utilize evidence-based policies to support them, older adults at any ability level are able to participate and feel included in community life (WHO, 2018). Yet older adults are often left out of the process where they have local knowledge and experiences that could better shape these environments and services and their collaborative inclusion is recommended (Annear et al., 2014; Garon, Veil, Paris, & Rémillard-Boilard, 2016). Older adults have identified that they desire to have a choice and a voice in their communities that is respected, valued, and sought after (Kathy Black et al., 2015; Rosenwohl-Mack et al., 2020).

Aging in place literature has a plethora of information in which the same theories, models, and frameworks are continuously applied, yet the findings seemingly fall short of reaching the most important decision makers: policy makers at all levels, communities, and older adults themselves. The use of the Consolidated Framework for Implementation Research (CFIR) to guide the literature review demonstrates that the *individuals involved*, the *inner*, *and outer settings* are heavily researched in a reductionistic, isolated fashion. While some studies detail

combined approaches of one to two factors of individual characteristics (e.g. functional limitations), environmental characteristics, and community participation (Vaughan et al., 2016; Yang & Sanford, 2012); there is a need to develop community profiles that explore these multiple factors together (Weil, 2019). Correspondingly, the *adapted interventions* (including the process of elicitation and tailored community action plans) and *processes* (theories/program theories embedded or grounding community action plans) are not empirically researched and anecdotal accounts primarily include community efforts which lack clarity about the participatory planning process of older adults. Additionally, knowledge translation activity between the adapted intervention and process constructs is not addressed empirically, nor does it include qualitative data to explicate findings, resulting in partial implementation and/or misinterpreted, incomplete, or distorted outcome measurements (Funnell & Rogers, 2011; Levasseur et al., 2015; Moulaert et al., 2016; Sabia, 2008; Andrew E. Scharlach, 2016; Yang & Sanford, 2012). While there are some US-based mixed-methods studies on aging in place, the studies that do use mixed-methods tend to focus on technological factors (exclusion criteria in this study) and walking (e.g. use of geospatial wearable devices).

A translational approach is needed to bridge the chasms between what is known (e.g. home modifications improve function in the home), what is effective (e.g. tailoring age-friendly communities in a similar way that is done with home modifications), and how uncovering barriers and facilitators can spur discovery, innovation, and implementation processes. The WHO (2015) describes implications of preventative health services, the built environment, and inclusivity as influencers on participation in society and that examining them is imperative in responding appropriately to older adult needs. Recommendations for examining the complexity of internal and external factors related to social participation using population characteristics, the

built environment, and supports and services is recommended (Annear et al., 2014; World Health Organization, 2015). Studies identify the need to include older adults in participatory approaches, yet the strategies for participation and collaboration in local communities is not identified or evaluated in scholarly literature (Gustafsson et al., 2018). Some model cities, such as Age-Friendly Sarasota County (K. Black, 2017) and PHC Heart & Soul (Myrick & Mosher-Williams, 2020), have developed Action Plans that show promise for adapting interventions and laying out the implementation process; however, the research has yet to be completed or outcomes go unreported/unpublished. There are a number of strategies identified by organizations such as AARP (national) and local communities (e.g. Community Foundation of South Jersey's use of the Heart and Soul model) that warrant a practice-based evidence approach. Practice-based approaches are bottom-up, inductive approaches whereby research is generated from stakeholders in the community (Austin, 2018; Drolet & Lorenzi, 2011).

Processes to translate strategies into policy are needed (Beard, Hon Prof John R & Bloom, 2015). In the few studies that do include the older adult perspective (Doran & Buffel, 2018), there was no systematic implementation strategy in place as suggested by Juckett and Robinson (2018), nor a strategy to include the older adult perspective within implementation into policy or practice. By engaging older adults with varied ability levels to participate in collaborative research, stakeholders may begin to understand and illuminate the processes for person-centered planning promoting older adult representation within their communities. Appreciative Inquiry as an empowerment process theory can aid in the understanding of older adult perspectives and mobilize and empower them to participate (Kathy Black et al., 2015). This makes way for a new shift away from the concepts of healthy aging, active aging, and successful aging to a holistic new term which this author will call *empowered aging*. Empowerment

concepts should be considered a shared process between the older adult and various systems (Moulaert et al., 2016).

Empirically assessing the complexities of these interdependent factors has been called a "significant challenge" (Cagney, Browning, Jackson, & Soller, 2013, p. 163; Weil, 2019). Decisions regarding which indicator sets should be driven by the local community based on meaningfulness and relevancy, yet are often driven by practicality and convenience (Cagney et al., 2013; WHO, 2015). In doing so, however, interdependencies of domains are diminished (Plouffe et al., 2016); however, the WHO argues that this "snapshot" can still provide a "strategic direction"(WHO, 2015, p. 15). Several authors suggest the need for approaches that cover the breadth of the WHO Age friendly cities domains by using mixed methods and often with an emphasis on qualitative strands (Annear et al., 2014; Corrado et al., 2019; Lien et al., 2015; Plouffe et al., 2016).

Facilitating older adults with a spectrum of ability levels to engage in *empowered aging* by participating in collaborative societal research may have reciprocal benefits between the older adult as well as their community and policy makers. They themselves may be the best suited to enact civic participation (World Health Organization, 2007a) as knowledge brokers and positive deviants. Knowledge brokering is a technique in which prior knowledge is reimagined and applied to new contexts to facilitate innovation and to deliver the right information to the right people at the right time (Hargadon, 2002). Similarly, positive deviance is a process that is rooted in the community culture whereby change occurs due to listening, understanding, and respecting different (deviant) individuals within the community as experts with innovative ideas (Sturmberg & Martin, 2013). Knowledge brokering can be operationalized between constructs of micro-meso-macro levels, persons and their environments, and inner and outer settings, by bridging and

moving knowledge (Hargadon, 2002). Utilization of positive deviance and knowledge brokering for *adapted interventions* and *processes* elicited by Appreciative Inquiry may enhance the scholarly literature on aging in place.

There is a need to support individuals of all ability levels in their communities through a collaborative approach (World Health Organization, 2007a; World Health Organization, 2018) between researchers, public health officials, policy makers, older adults, and community members in order to design, implement, evaluate, and fund evidence-based programming that strengthens communities and prevents costly and unwanted institutionalization. The first step in creating effective plans and policies to promote aging in place is developing an understanding of precursory processes for person-centered planning by promoting older adult representation within communities.

2D: Theories and Conceptual Framework for Forthcoming Study

The issue of aging in place is one in which requires a dialectically pluralistic approach. It is well suited for Transformative Design using a collaborative, participatory-social justice epistemology as there is a need to give a voice to the older adults to advocate for change (J. Creswell & Plano Clark, 2018) away from the ageist and reductionistic medical model and towards a holistic, community approach (Davitt et al., 2016). Dialectics allow for multiple paradigms and mental models as well as multiple methods under the same inquiry. Dialectical pluralism offers the ability to view multiple perspectives, including divergent ones, to respectfully engage diverse groups toward understanding and acceptance. Because the voices and perspectives of older adults are heterogenous within and across heterogenous contexts, dialectical pluralism offers the ability to understand these wide and varied experiences and approaches (Greene & Hall, 2010).

2D.1 The Consolidated Framework for Implementation Research (CFIR)

The Consolidated Framework for Implementation Research (CFIR) considers five domains: *Individual*, *Inner Setting*, *Outer Setting*, *Intervention Characteristics*, and *Process* (Laura J. Damschroder et al., 2009). While implementation research has recently been examined in aging research in America (Albert, 2020; Juckett & Robinson, 2018), CFIR has not been utilized in the aging in place literature. Literature was mapped using CFIR constructs leading to an innovative discovery process to begin to build a base for knowledge translation and implementation science within the aging literature. The use of CFIR as a literature mapping system has not been done before and future research to build upon this process may begin to focus new research efforts on centralizing information, merging empirical and anecdotal evidence, and focusing on processes for implementation of known efficacious interventions or analogous interventions that could be applied innovatively in aging in place.

2D.2 Program Theory

Program theory is "an explicit theory or model of how an intervention contributes to a set of specific outcomes through a series of intermediate results" (Funnell & Rogers, 2011, p. 31) and is comprised of a theory of change and a theory of action. A theory of change is the "underlying belief and assumptions" (National Association for State Community Services Programs (NASCSP), 2017) or "central mechanism" (Funnell & Rogers, 2011, p. 31) that "guide[s]…change and improvement" (National Association for State Community Services Programs (NASCSP), 2017). A theory of change is comprised of a situation analysis, focused outcomes situated within the larger context, and an outcomes chain to address a situation (participation in society) (Funnell & Rogers, 2011). According to Dr. Scharlach, an American and Internationally known aging-friendly scholar, "Age-friendly community initiatives seldom

are based on an explicit theory of change, nor linked to the rich body of conceptual and empirical scholarship regarding change processes...” (Andrew E. Scharlach, 2016, p. 317). Literature on aging and program theory is not explicitly reported in the breadth of literature reviewed by the candidate. One article, written by a Health and Aging Policy Fellow, describes her use of program theory in improving policy related to the physical environment and mobility for older adults in suburban and metropolitan communities (Yen & Anderson, 2012). In the article, Yen and Anderson describe their method of utilizing a realist synthesis to develop a body of evidence that describes effective strategies policy makers can use to support environmental changes in their districts. Program theory was developed through the realist synthesis with a focus on safety. The authors report that the use of program theory is relatively unknown by policy makers and health researchers in America and in their scoping review they describe the lack of implementation strategies for policy development in the reviewed studies (Yen, Fandel Flood, Thompson, Anderson, & Wong, 2014). A SCOPUS review of ‘cited by’ articles does not show governmental organizations utilizing the scoping review. It is unknown if this program theory has assisted policy makers in developing or implementing known effective strategies.

The use of program theory to merge empirical evidence and anecdotal experiences and reports of community action plans is relatively unknown for policy development in aging in place. According to Funnel and Rogers, program theory can be used in a variety of ways to influence, shape, and develop policy (Funnell & Rogers, 2011) warranting exploration in participation and aging in place.

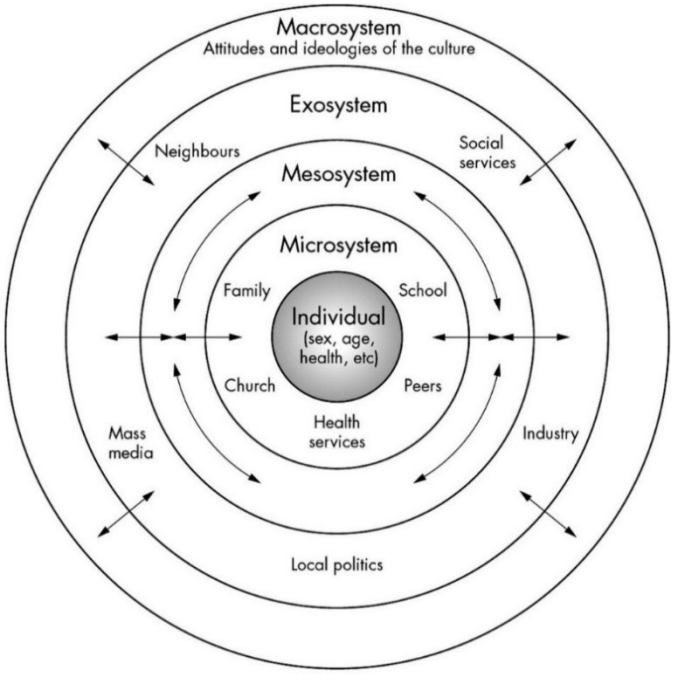
2D.3 Ecological Systems Theory & Environmental Press Theory

Predominant theoretical frameworks utilized when examining literature at both the Inner Setting and the Outer Setting (Damschroder et al., 2009) are the, often combined, use of

Bronfenbrenner's (1986) Ecological Systems Theory and Nahemow and Lawton's Environmental Press Theory (1973).

Bronfenbrenner's (1986) Ecological Systems Theory (Figure 6) considers a) the *individual* and associated factors and abilities, b) the *microsystem* of direct contacts such as family and church, c) the *mesosystem* of these relationships, d) the *exosystem* linking to contexts such as neighbors and politics, and e) the *macrosystem* which considers the larger culture and attitudes.

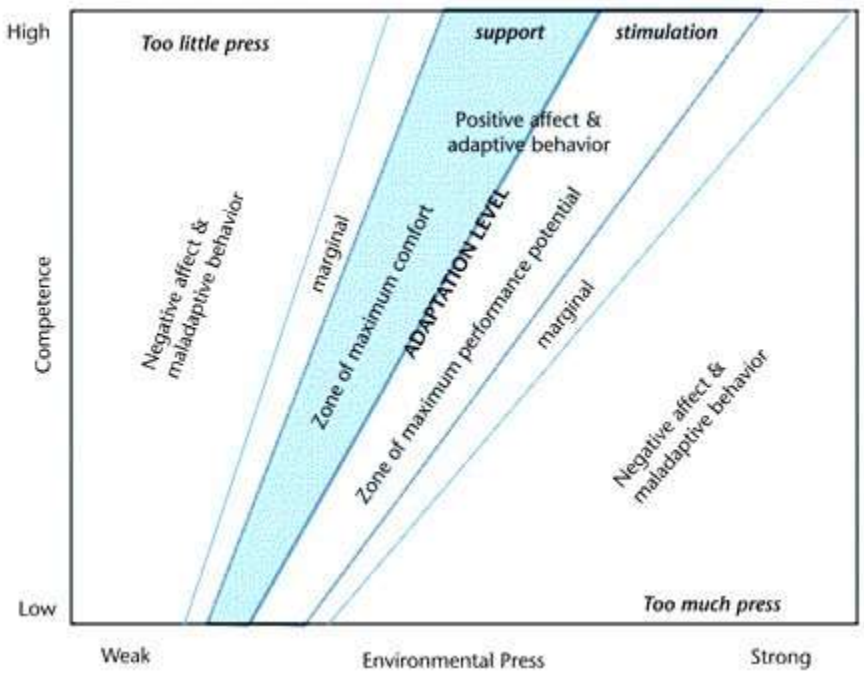
Figure 6.
Bronfenbrenner's Ecological System Model (1986)



The environmental-press theory (Nahemow & Lawton, 1973) (Figure 7) guides the perspective of the individual characteristics of the older adult as well as the community characteristics in which one resides. The disciplinary background of occupational therapy, this candidate's profession, has strong roots in this theory and continuously considers the impacts of these characteristics on meaningful participation. This theory shows that individual function and

environmental characteristics require alignment; if, for example, an individual characteristic includes low functional mobility and the environment includes a high challenge, such as stairs, there will be high press or poor alignment. The opposite is also true and would result in boredom (high individual skill, low environmental challenge). The goal is to match the ability at the person level with an appropriate *just right challenge* (Rebeiro & Polgar, 1999) at the environmental level. *Fit* of meaningful participation is often thought of on an individual level in the field of occupational therapy, however the recent edition of the Occupational Therapy Practice Framework (2020) extends this concept more explicitly to groups and populations. Participation is associated with quality of life, successful aging and a cornerstone in aging in place (Carver et al., 2018). Principles from Universal Design, a concept that ensures products and environments are usable by all people without needing adaptation (Story, Mueller, & Mace, 1998), are also considered because those features that are convenient to older adults, may also benefit others in the community and enhance community participation. In order to use environmental-press theory more globally, it is imperative to consider the collective, yet pluralistic, experiences and perspectives of the older adults themselves within specific community attributes (e.g. accessible transportation, walkable communities) and how these influence participation in society (Üstün et al., 2010; World Health Organization, 2007a).

Figure 7.
Environmental Press Model (Nahemow & Lawton, 1973)



It is useful to examine these theories together as the environmental press theory gives explanatory power to ecological systems by demonstrating how an individual interacts at and between multiple contextual levels. Often times the additional theories, such as those discussed below, are used to give further explanatory power in either the *individual, inner,* or *outer setting* (Damschroder et al., 2009). These theories cut across a vast array of disciplines including gerontology, psychology, environmental gerontology, health policy, public health, social work, occupational therapy, and nursing; and lay the foundation for aging in place research (Annear et al., 2014; Li, 2020; Szanton et al., 2011).

2D.4 Emerging Theory Application in Aging in Place

While there is a dominance in foundational theories for aging in place research, there does also exist other theories, often paired with other dominant theories, in the vast

interdisciplinary aging in place literature. This section (2D.4) will describe some of the emerging theories organized under CFIR constructs.

2D.4.1 Inner Setting

Additional theories and conceptual frameworks discovered in the literature include those that are predominantly exploring the inner setting and individuals involved. These are often paired with one or two of the predominant theories to help further operationalize the older adult within a home or community context and include: Selection, Optimization, and Compensation (SOC) Model (Baltes & Baltes, 1990) utilized as a way to understand functional loss (Lien et al., 2015) and Appreciative Inquiry (Cooperrider, 1986) utilized to understand older adult perception of independence and dignity (Kathy Black et al., 2015).

2D.4.2 Outer Setting

Theories that add to the outer setting and provide more comprehensiveness to the predominant theories include: Village/Community Models (Greenfield, Scharlach, Lehning, Davitt, & Graham, 2013; Greenfield, 2014; Guengerich, 2009) and Social Capital (Putnam, 2000).

2D.4.3 Intervention Characteristics and Process

Roger's Diffusion of Innovation (Rogers, 1957) is a cross-cutting theory, much like CFIR, whereby early phases begin with the individuals and inner setting and ultimately reach the outer setting. Additionally, the process of diffusion is of primary consideration in this theory, however in the study that utilized it (Lehning, 2012), the focus appeared to be more so on internal determinants rather than specific processes which limits implementation strategy. While advocacy is named as a facilitator, Lehning points to a need for collaboration amongst older

adults and policy makers. Roger's Diffusion of Innovation (1957) is a model that is embedded within CFIR (Damschroder et al., 2009).

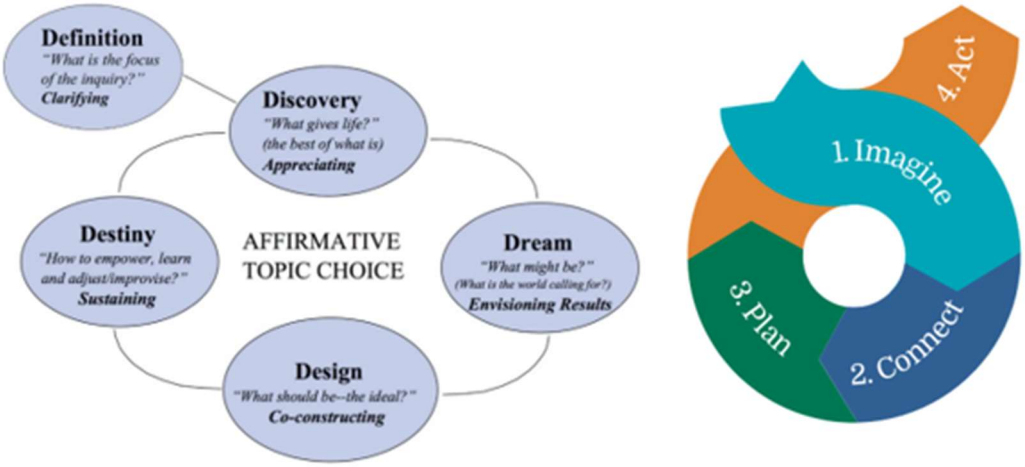
Participatory Action Research is being continuously applied and while not a theory per se, but rather a collaborative method and translational process to actuate engagement, the method attempts to converge theory with participation and action (Chevalier & Buckles, 2013; Corrado et al., 2019).

2D.5 Appreciative Inquiry

Appreciative Inquiry (AI) (Cooperrider, 1986) stems from social constructivism and utilizes positive thoughts and experiences to envision what could be. Story telling has been described as a way to demonstrate the effectiveness of AI (Kathy Black et al., 2015; Bushe, 2001). Empirically, one article describes the use of AI whereby older adults are viewed as a core resource in communities (Kathy Black et al., 2015). In combination with Participatory Action Research (PAR), Black and colleagues' study utilized qualitative designs to elicit the "insider perspective" to engagement based on older adult perceptions of how the community can support independence and dignity of older adults. Themes that emerged were similar to the domains of the WHO (2007a) Age friendly cities with nuances in two themes. *Meaningful Involvement* highlights the importance of active, meaningful community involvement and *Aging in Place* highlights how communities can support aging in place. An emphasis on prevention and inclusion was discussed particularly through utilization of older adults as volunteers. No other studies in the aging literature were found to utilize this approach. Anecdotally, the theory has been loosely utilized by the Orton Foundation for community planning in their Heart and Soul model (Orton Family Foundation, 2020). Orton reports successful use of this model across the US in strengthening the collective action of community members. The model has recently been

adopted by Transform South Jersey. Figure 8 provides a side-by-side comparison of the Appreciative Inquiry model and the Orton Foundation's Heart and Soul model.

Figure 8.
Side by Side Comparison of (left) Appreciative Inquiry (adapted, Cooperrider & Whitney, 2005) *and (right) Heart and Soul (Orton Family Foundation, 2020)*

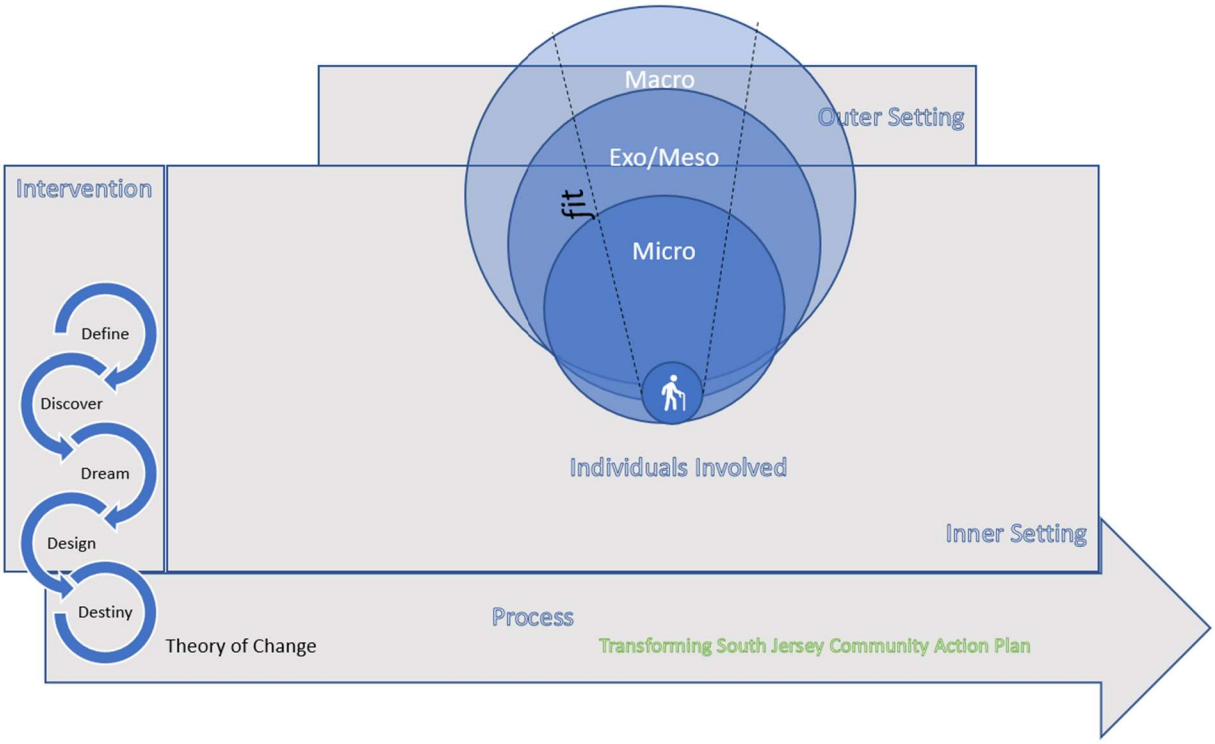


2D.6 Integrated Conceptual Framework for Dissertation

While Environmental Press and Ecological Systems theory are important and foundational, they are unable to explicate the processes that have been suggested to translate knowledge into practice and policy. This interplay of multiple theoretical perspectives nested within CFIR and operationalized through AI's empowerment process to develop a theory of change is a logical next step given the complexity of the aging in place process. A theory of change grounds local evidence with empirical scholarship (Funnell & Rogers, 2011; Andrew E. Scharlach, 2016). The study's conceptual framework uses theoretically guided techniques to

elicit engagement and participation in the community action plan development process. Figure 9 models the described theories into this study's conceptual framework.

Figure 9.
Conceptual Framework (adapted from Bronfenbrenner, 1986; Cooperrider, 1986; Laura J. Damschroder et al., 2009; Nahemow & Lawton, 1973)



Understanding which processes are effective can facilitate implementation and knowledge translation of generated innovations utilizing perspectives of older adults with varied ability levels. These philosophies shape this researcher's proposed direction to involve the older adults themselves within a collaborative, person-centered planning approach to community action planning drawing from the perspectives of those in the community whilst considering the environmental considerations and functional abilities. A community approach through the older adult perspective allowed for a rich understanding of how participation in society (social

environment) is affected by the complex interplay between the micro person-level and meso/macro-environmental press within the community through individual characteristics, physical, and service environments and how these varied needs of older adults desiring to age in place can inform processes for developing community action plans, programs, intervention services, and policies.

By soliciting older adults in the research process, potential impacts include higher rates of future participation in society leading to improved community connectedness, thus improving successful aging in place in selected suburban communities. Because those who are greatly impacted have had a participatory voice in the recommendations for change, examining these processes may be the translational ingredient needed to develop, implement, and sustain age-friendly policies.

CHAPTER 3

METHODS

3A: Overview of Methodology

Due to the transformative, dialectically pluralistic ontology and collaborative, participatory-social justice epistemology; the nature of the study calls for contextualized methodological approaches. While there is a variety of methods utilized in the review of the literature, recent studies point to the need to conduct mixed-methods designs due to the inability of surveys to fully capture the older adult perspective (Flores et al., 2019; Plouffe et al., 2016). A mixed-methods approach can assist in reaching the proposal goal and purpose by answering the research questions, as it is inherently intuitive and pragmatic (J. Creswell & Plano Clark, 2018).

This study utilized an explanatory sequential mixed methods design that involved a quantitative cross-sectional survey followed by an in-depth qualitative interview. The quantitative and qualitative phases are situated within a theory of change (Table 1) and conducted with constructs of participatory action research (PAR). A theory of change is comprised of a situation analysis, focused outcomes situated within the larger context, and an outcomes chain to address a situation (participation in society) (Funnell & Rogers, 2011). This study's two-phase process uses a combined inductive and stakeholder mental model approach that is linked to a strengths-based, deductive approach of evidence-based practice and theory (Funnel & Rogers, 2011). Figure 10 demonstrates this study design and Figure 11 demonstrates how it is operationalized.

The goal of this mixed methods study is to understand fidelitous empowerment procedures of older adult participation in society through development of a theory of change that induces person-centered community action planning. In order to meaningfully participate, it is

imperative that communities develop action plans that capture the voice of older adults in their community which may be accomplished by creating a theory of change from the community-dwelling older adult perspective in a participatory action approach. Through the development of a theory of change for community action plans in select suburban Southern NJ communities, older adults of varied ability levels are able to meaningfully participate in society and effectuate further participation. The purpose of this study was three pronged at a micro, meso, and macro level.

At the micro level, the purpose was to assess the relationship of participation in society with a) individual characteristics of community-dwelling older adults and b) environmental characteristics in select suburban South Jersey communities. Aim 1 proposes to estimate which individual and community variables (independent variables) identified by suburban-dwelling older adults are associated with satisfaction in participation in society (dependent variable). In order to address this goal, the research question: *How is satisfaction with participation in society associated with a) individual characteristics of community-dwelling older adults in Southern NJ and b) suburban community characteristics of Southern NJ*? is posed. The research question was answered with the findings from the associated aim. This was completed with the use of multiple linear regression (primary analysis) and logistic regression (secondary analysis) from the survey data. Significant, non-significant, surprising, and contradictory results were interpreted and utilized to develop an interview protocol that connects the quantitative results with the qualitative follow-up (J. Creswell & Plano Clark, 2018). The quantitative methods are further described in section 3B.

At the meso level, the purpose is to a) garner a deep understanding of participant perceived barriers and facilitators and b) elicit suggestions for addressing them in order to c)

inform a focused situation analysis and theory of change. Aim 2 proposes to describe associated interactions of individual and community barriers and facilitators to participation in society. The meso level research question is: *How do participants in Southern New Jersey suburban communities describe the barriers and facilitators to participation in society that stem from a) individual characteristics and b) community characteristics*? A semi-structured interview protocol was developed based on the results of the survey data. The interview questions address participant perceived barriers and facilitators and assess the participant's level of importance, choice, and satisfaction with participation. Aim 3 is to develop a theory of change by eliciting suggestions about objectives to overcome barriers and leverage facilitators in order to engage in community action plan development. As such, a sub question: *What are participant suggested objectives for addressing barriers and facilitators to participation in participant communities*? was developed. The aim of this sub-question gives rise to the macro level goal and overarching mixed methods question, linking the meso and macro level.

Lastly, at the macro level, the purpose, again, is to understand fidelitous empowerment procedures of older adult participation in society through person-centered community action planning. In accordance with explanatory sequential designs, the qualitative results of the research systematically and sequentially explain the quantitative results, thus addressing the overarching mixed methods question: *In what ways do the themes derived from older adult participants provide insight to a theory of change process for engaging older adults in community action plan development in middle income, suburban South Jersey communities*? The above aims and research questions at the micro and meso level integrate the results and specific aims exosystemically to answer this overarching, macro level, mixed methods question. This was accomplished through thematic analysis, integration of the theory of change process derived

from the two sets of connected results (quantitative and qualitative), member checking, and networking with community stakeholders (J. Creswell & Plano Clark, 2018). The specific study results are reported in Chapter 4.

In order to develop community action plans that shape policy and facilitate meaningful participation, local communities must first begin to develop an evidence-based understanding of strategies for engaging older adults in the plan development processes. A multisectoral community response that involves government, community organizations, community members, specifically older adults with varied ability levels, are needed to address aging in place in communities (WHO, 2015). Decision-making should refrain from a top-down approach and utilize a shared approach to policy development (Moulaert et al., 2016; Andrew E. Scharlach, 2016, p. 317). This study provided older adult participants with a product to empower their participation through the next phase of community action plan development. Dissemination strategies allowed select participants to discuss the results of the theory of change to community stakeholders in an interactive virtual discussion of the results. This fruitful meeting served as a translational bridge to the theory of action.

3A.1 Research Questions

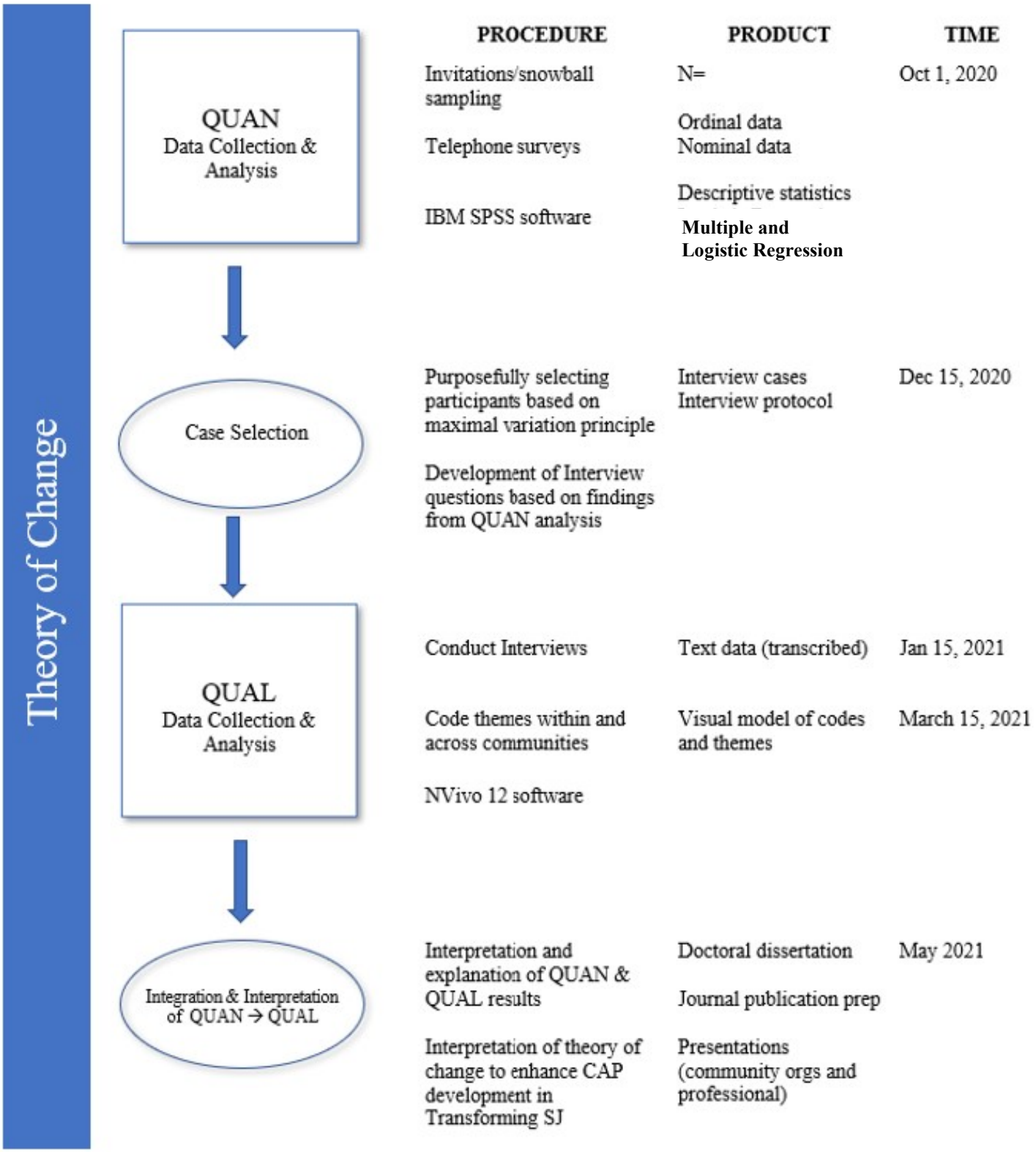
For clarity and quick reference, the research questions are listed below. This study answered the overarching mixed methods (MM) research question (RQ): In what ways do the themes derived from older adult participants provide insight to a theory of change process for engaging older adults in community action plan development in middle income, suburban South Jersey communities? The research questions for the quantitative (QUAN) and qualitative (QUAL) strands were answered first and informed the MM results:

RQ 1: (QUAN): How is satisfaction with participation in society associated with a) individual characteristics of community-dwelling older adults in Southern NJ and b) suburban community characteristics of Southern NJ?

RQ 2: (QUAL): How do participants in Southern New Jersey suburban communities describe the barriers and facilitators to participation in society that stem from a) individual characteristics and b) community characteristics?

Sub-question RQ 3: (QUAL): What are participant suggested objectives for addressing barriers and facilitators to participation in participant communities?

Figure 10.
Study Design (adapted from J. Creswell & Plano Clark, 2018)



3A.2 Operationalization of Theoretical Constructs

Theory of change is comprised of three parts, the situation analysis, the focus and scope of the community action plan, and the outcomes chain (Funnell & Rogers, 2011). Table 1 demonstrates how each part of a theory of change connects to the phases of the study. The situation analysis was developed from the literature review as well as both quantitative and qualitative phases and the scope and outcomes chain were derived from the qualitative interviews. Theory of change goals were met for each part and include: Part 1) the situation analysis: a) understand potential associations between community characteristics and individual functional abilities of older adults of varied ability levels and to what extent this relationship contributes to the satisfaction of community participation through b) understanding participant perceived barriers and facilitators of age friendly characteristics including agency and enfranchisement within their community; Part 2) focusing and scoping: c) objectives for addressing barriers and facilitators, and Part 3) development of an outcomes chain where participants contributed to an if-then causal chain.

Table 1.
Theory of Change Process

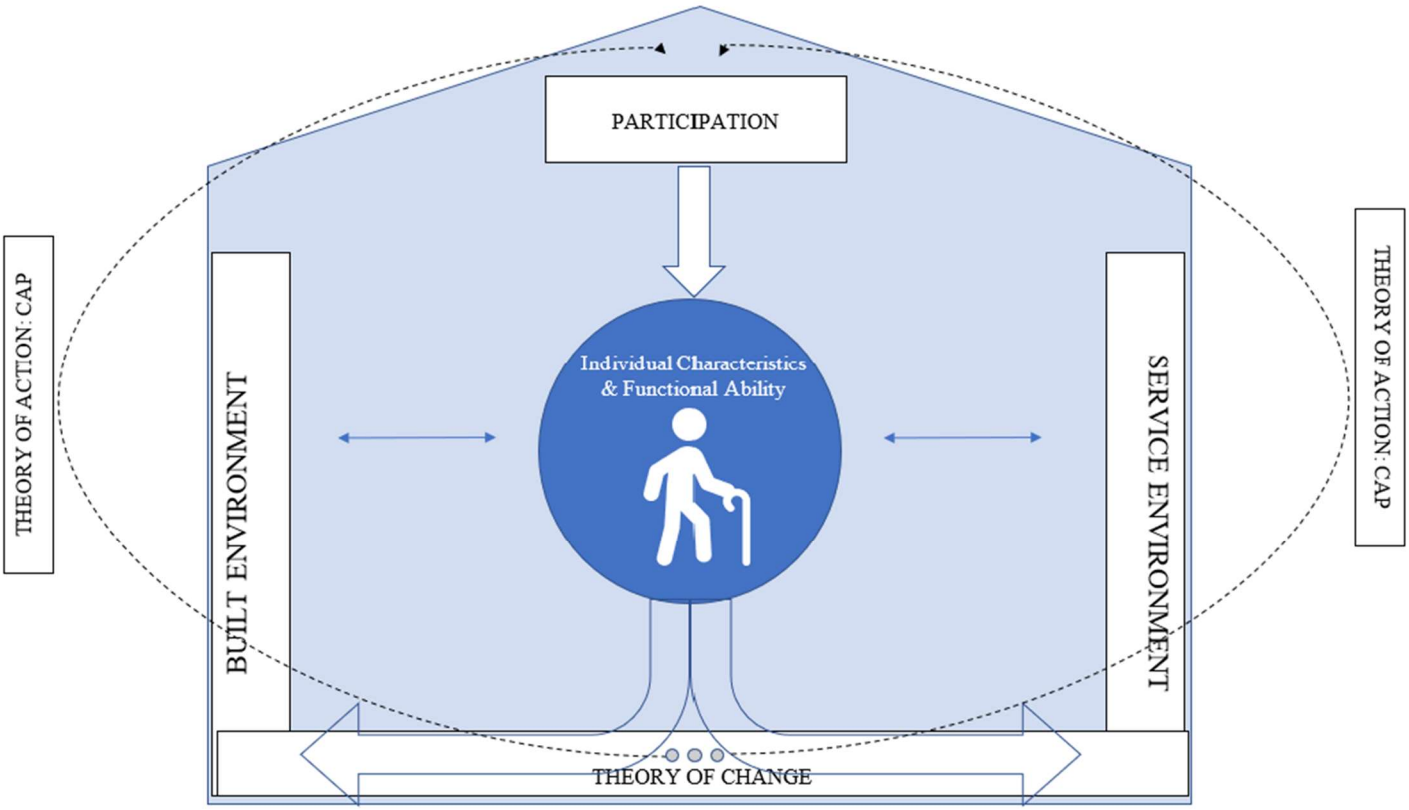
	Theory of Change		
	1. Situation Analysis	**2. Focus & Scope**	**3. Outcomes Chain**
Source	Literature Review Survey Interviews	Interviews Stakeholder meeting	Interviews

Goals	• Via survey, estimated how participation in society is associated with a) individual functional abilities of older adults and b) community characteristics • Participant's level of importance, choice, and satisfaction with participation in their communities • Participant perceived barriers and facilitators of age friendly characteristics within their community via storytelling interviews	• Elicited suggestions for addressing barriers and facilitators (objectives)	• Participants created an if-then causal chain • Discussed the inputs, resources, activities needed to bring change; named outputs expected

This mixed methods process created a theory of change which is critical for the development of robust community action plans. A theory of change grounds local evidence with empirical scholarship (Funnell & Rogers, 2011; Andrew E. Scharlach, 2016). This study's conceptual framework used theoretically guided techniques to elicit engagement and participation in the community action plan development process by grounding it first in a theory of change (see Chapter 2, Figure 9). Figure 11 demonstrates how results from the study prepared participants for action in their community as well as a model for developing a theory of change to scale up and test across suburban communities. This was accomplished by eliciting the engagement of older adults in this study (at the center of the figure). Through their participation, a better understanding of internal/inner setting (center of the figure) and external/outer setting (pillars of built and service environment on the side of the figure) barriers and facilitators were gained through the survey and interviews. Illumination of internal (e.g. functional ability) and external barriers (e.g. lack of needed/desired services) and facilitators from the perspective of the individual have become part of the theory of change (the base or foundation located at the bottom of the image). A combined perspective within the theory of change, more specifically the outcomes chain (represented as three circles on the theory of change at the base of the image),

provides participants and communities with specific objectives to overcome barriers and leverage facilitators in order to achieve desired outcomes.

Figure 11.
Conceptual Framework in Action: Engagement in Research



While ideas were generated during the outcomes chain process, the activities to accomplish goals are best suited as part of the theory of action and the action planning process (represented outside of the blue house on the model as out of scope of this study, but an important aspect to clarify what this study addresses and how it connects with the supporting program, Transforming South Jersey). An outcome of this study (further described in Chapter 4 Results) is that a majority of the older adult participants have indicated that they feel empowered

to participate in society. In order to further facilitate this, there is an emphasis on continued participation at the completion of this study which has been facilitated through the co-dissemination to communities and Transform South Jersey. Participants and communities have been encouraged through dissemination efforts to move forward with the development of action plans utilizing the theory of change developed in this study that specifically addresses the older adult needs of their community. While outside of the scope of this study, the intention is that the development of action plans will capture the voices of older adult participants from the theory of change which will form the feedback loop (the curved, dashed arrow on Figure 11) and funnel directly into the participation of the older adults in the community allowing for continuous improvements and an aging friendly community.

3A.3 Study Population and Setting

3A.3.1 Inclusion Criteria

The study population for this research study were community-dwelling older adults aged 65 and older of varied ability levels living in middle income suburban Southern New Jersey communities. Household incomes between $55,000 and $162,000 are considered to be middle class in Southern NJ (Matthau, 2018). Census data provides the median income per community. For a participant to be eligible their median community income was required to be between $55,000 and $162,000. As such, the participants lived within one of the selected suburban, middle income, Southern New Jersey communities that are recipients of the Transform South Jersey community grant. The grant has been provided to six communities, three of which meet the median income criteria. These communities are: 1) Atlantic County: Hammonton, 2) Burlington County: Willingboro, and 3) Camden County: Winslow Township. These primary inclusion conditions were selected as they met the requisite base criteria for the phenomenon of

interest (middle income communities, older adult participation in society) (John W. Creswell & Poth, 2017).

Participants did not need to be enrolled or involved in the Transform South Jersey Heart and Soul program; however, participation in the program has been encouraged and there were no restrictions to participate in this study if they also were participating in the Heart & Soul project. While results from this study are intended to inform action planning conducted in programs like the Heart and Soul project, this study and the program are separate, but complimentary. All participants in the study lived in the selected community and consider it a primary residence. Older adults who have additional residencies that they consider primary (e.g. "snowbirds" who spend part of the year in one of the selected communities and part of the year in other communities, often out of state or through mobile homes) were eligible to participate. There were no set parameters for the amount of time spent in the community throughout the year nor the amount of time living in the community as these are not the only indicators for aging in place (e.g. aging in place is considered by some to mean the avoidance of institutions (Hillcoat-Nalletamby & Ogg, 2014; Wiles et al., 2012).

Participants were permitted to utilize a proxy to assist with the survey. For example, for clients with hearing impairment or coordination deficits, a telephonic survey may be difficult to complete independently and would warrant someone to assist with completion of the survey. At midpoint quantitative data collection in an effort to increase participation of individuals who may have difficulty with telephonic surveys, an internet-based survey was provided in a written form using Qualtrics. It is unknown the amount of participants who utilized a proxy, however the research was informed by a community stakeholder that she did indeed provide proxy support to some individuals in her community.

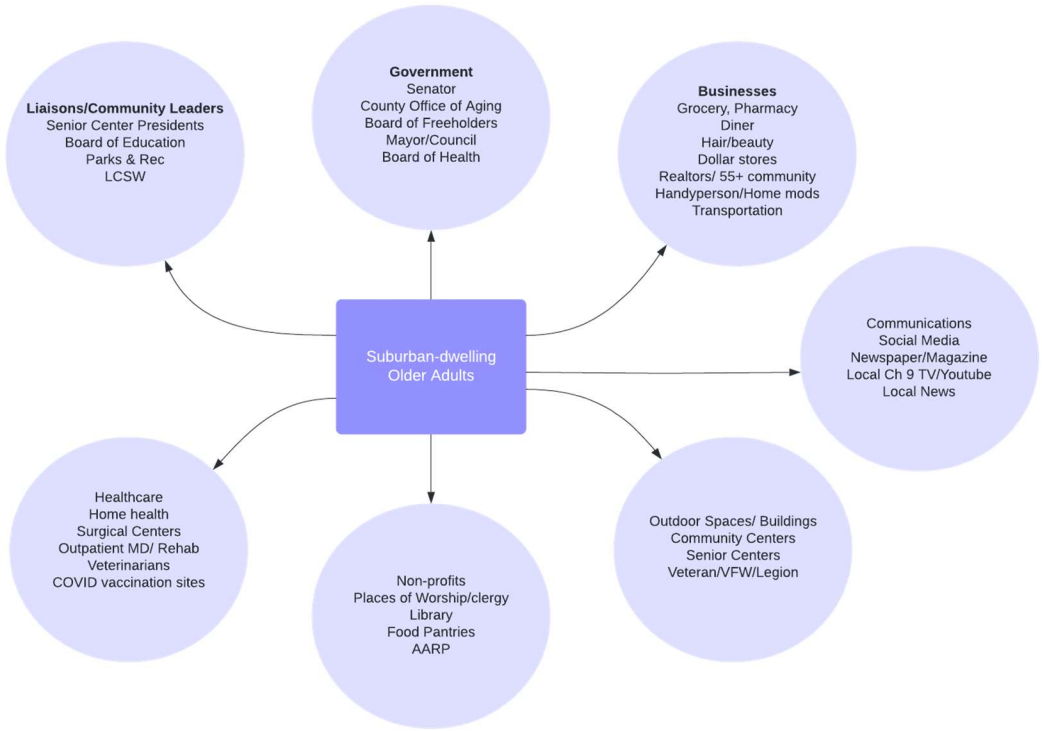
3A.3.2 Exclusion Criteria

Persons under the age of 65 at the time of survey, persons living outside of the selected communities, and persons who reside in long-term care or assisted living facilities were not eligible to participate as these are considered institutions. Older adult communities, provided they are independent living communities, and older adults who attend day-time programming were eligible to participate as they are considered community-dwelling and the latter is a service, not an institution for living.

Community Liaison. Because the study took place within a community, a liaison or "gatekeeper" was utilized for credibility and access to the target population (J. Creswell & Plano Clark, 2018). The Community Foundation of South Jersey (2020) awarded grants to work with six South Jersey communities to develop community action plan's that aim to enact the Community Heart and Soul model (Imagine, Connect, Plan, Act; see figure 8, right) (Orton Family Foundation, 2020). Six philanthropic organizations, including Community Foundation of South Jersey and the Orton Foundation, have come together to create Transform South Jersey. Transform South Jersey agreed to bridge the candidate to community liaisons by providing these community liaisons with the candidate's invitation to participate in the study. Each community liaison, herein gatekeeper, was provided with University-approved invitations to participate in the study. Collaborative conversations about the means with which the invitational flyers could be distributed to older adults within the community were discussed. Additionally, upon introduction to the gatekeeper, the candidate requested to be connected with town officials and other community leaders to provide a brief presentation to each community's monthly town hall meeting where information about the study was shared in an effort to gather participants. The candidate also conducted extensive networking throughout southern New Jersey in an effort to

garner further participation due to the impacts of the global pandemic on the safe reach to older adults in the community. Stakeholder mapping helps to identify individuals and organizations who value, influence, or directly serve the issue being studied. Figure 12 shows a stakeholder networking map that was developed from the relationships built through connections from gatekeepers and community members.

Figure 12
Stakeholder map



3B: Quantitative Inquiry

In the first, quantitative phase of the study, cross-sectional survey data was collected from 64 older adults 65 and over in three Southern NJ suburban communities to estimate how participation in society (dependent variable) is associated with a) individual functional abilities

of older adults and b) community characteristics (independent variables). Results of the survey estimate which individual and community variables identified by suburban-dwelling older adults are associated with participation in society. In this quantitative strand of the research design, the following aim and research question were addressed and answered:

Aim 1.

Estimate which individual and community variables identified by suburban-dwelling older adults are associated with participation in society (satisfaction).

RQ 1: (QUAN). How is satisfaction with participation in society associated with a) individual characteristics of community-dwelling older adults in Southern NJ and b) suburban community characteristics of Southern NJ?

3B.1 Hypothesis

It is hypothesized that among suburban community-dwelling older adults, the presence of supportive community features congruent with functional ability level (i.e. *fit*) will result in a higher odds of satisfaction with participation in the community (dependent variable).

3B.2: Quantitative Research Procedures

3B.2.1 Sampling

The population sought was described above in detail in inclusion and exclusion criteria and targeted older adults aged 65 and over from three moderate income Southern NJ suburban communities. Census data from each town provided descriptive data to define the population. Each town has a community profile that includes the census data and a description of their town based on each community's town website to give readers an understanding of the communities being sampled (see Qualitative Inquiry for details; see also Appendix B). The study population was drawn from the target population of each town. The criteria for the accessible population are

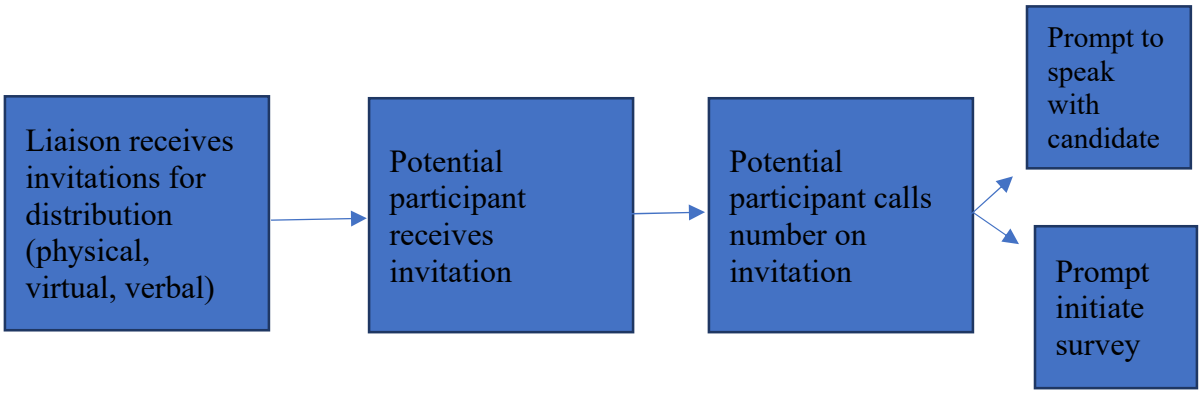
derived from the scholarly literature about the range of individual factors (e.g. disability) within the community-dwelling, older adult population and based on a broad set of specific criteria (described above in inclusion/exclusion) that can be practically and conveniently drawn from (Dehi Aroogh & Mohammadi Shahboulaghi, 2020).

Sampling. Non-probability/non-random sampling was utilized for this study. Non-probability/non-random sampling is a feasible, intentional approach that sampled older adults within the selected suburban communities using convenience and snowball sampling (Terrell, 2016). There are limitations to using this sampling method, some of which are briefly discussed here, and further detailed in the validity section. Furthermore, limitations are discussed in Chapter 5. In field research non-probability/non-random sampling is common due to time and resource restrictions (Banerjee & Chaudhury, 2010). Because the research was conducted using non-probability samples, the error, or the difference between the target and sampled population, cannot be established (Portney & Watkins, 2015).

Invitations to participate in the study (Appendix D) were provided to community gatekeepers. Gatekeepers were encouraged to reach out directly to eligible participants and provide them with the invitation. Frequent communication occurred between the researcher and gatekeepers through telephone, text message, mail and email. Additional strategies were used and are described below in snowball sampling. The invitation included a brief statement of the purpose of the survey and the informed consent was printed on the back of the survey. The invitation provided a telephone number for an interactive voice response (IVR) survey where the participant could choose a prompt to proceed with completing the survey through the automated system. A QR code was also provided on the invitation to a website that allowed participants to view the invitation, enlarge the informed consent, and (later) access the survey online. Callers

could also call the candidate directly or choose a prompt within the IVR system that forwarded the caller to the candidate to ask questions or to set up an appointment to participate in a live survey with the candidate. Choosing the prompt to begin the survey began with a verbal recording of the informed consent where participants were asked to acknowledge and agree before proceeding with eligibility and interview questions. At the end of the survey, prompts allowed the participant to choose answers about follow up (Figure 12). No names of participants were collected during the survey. Initial data collection was stored by phone number and recoded with a unique identifier (described in section 3D). After several months of data collection, an online survey (of the same questions and sequence) was developed to increase the participant pool. An IRB modification was obtained with this addition.

Figure 13.
Sampling Strategy



Snowball sampling procedures through the liaison were utilized to engage more participants meeting inclusion criteria and the socio-demographic characteristics of any missing or under-represented characteristics when possible; this is a common procedure in later stages of snowball sampling and is called selective sampling (Biernacki & Waldorf, 1981).

Snowball Sampling. Snowball sampling approaches, a type of purposive sampling, were utilized to increase the sample size for participants who were not reached through convenience

sampling (Terrell, 2016). In other words, older adults who are given the invitation by liaisons were provided with additional invitations to pass along to older adults within their community network until an adequate sample based on the power analysis was obtained (Portney & Watkins, 2015). Invitations were shared physically through active (e.g. handing an invitation to a friend) and passive (e.g. a copy of the invitation in a church bulletin or hanging at a store) approaches, virtually through active (e.g. directly emailed or forwarded to a friend) and passive approaches (e.g. placement of the invitation on a town social media site or town webpage), and verbally/word-of-mouth (e.g. telling a friend about the study and sharing the phone number). The researcher frequented each community to pass out invitations and meet with stakeholders. The invitation included contact information where potential participants could either 1) begin the survey or 2) speak with the candidate to ask questions. Older adults who contacted the candidate with interest in participating were screened for eligibility; meeting the age requirement of 65 and living within the selected community for at least part of the year (e.g. "snowbirds" who travel between homes are eligible to participate) are required. All questions were answered regardless of eligibility as callers could chain refer potential participants. Callers who met eligibility criteria were encouraged to take the survey where demographic and variable information was collected through the survey. To facilitate further chain referrals, each person who contacted the candidate was asked to pass along the invitation to those in their network using any of the modes described above (physical, virtual, verbal). Some individuals provided contact information to potentially eligible persons and this information was secured as per the IRB protocol.

Sample size. There are varied positions regarding calculation of sample size when using logistic regression (Babyak, 2004; Howell, 1997). Because this study is observational, surveying older adults within select communities without trying to affect them, and not an experimental

trial testing effectiveness (Dawson, Dawson-Saunders, & Trapp, 2004); it is reasonable to use the "rule of thumb" often provided by statisticians of 10-15 participants per independent variable set a priori (Babyak, 2004). Correspondingly, Babyak (2004) urges the researcher to be descriptive about the data and explicit about its limitations (see Chapter 5). With these considerations, a target sample size of 135 participants was sought with equal distribution by community. The global pandemic created significant restrictions for safely contacting potential participants (further described in Chapter 5) and as such the survey was closed upon achieving 64 participants as this was determined to be an adequate sample size given the mixed methods design (i.e. robustness sought in qualitative interviews).

3B.2.2 Data Collection

Dependent variables, Sociodemographic data, and independent variables were collected via survey and census data and include: dependent variable a) satisfaction with participation; independent variables a) individual characteristics: gender, age, race/ethnicity, depression, and functional ability level and b) community characteristics: town, outdoor spaces and buildings (walkable, building accessibility, road signage), transportation (public transit, special needs transit, driver network), communication and information, and community support and health services. Table 2 below lists the variables, their definitions, the type of data (e.g. nominal, ordinal), the International Classification of Function, Disability and Health (ICF) construct, and the method for soliciting the information (e.g. census, previously developed tools) and Appendix A provides the detailed survey questions. Additionally, Table 2 is color coded by yellow for the dependent variables, blue for individual characteristics, and green for community characteristics. This color coding also corresponds with the survey tool developed for the study with the addition of the color pink for inclusion and follow up procedures (Appendix A).

Because research shows that individuals who have depression are more likely to score life satisfaction as low (Daig et al., 2009), the collection of a confounding variable for depression was included in the survey.

3B.2.2a Dependent Variables: Frequency and satisfaction of participation in society. Participation in society has been defined in this study as a focus on the constructs of sense of belonging, the act of meaningfully doing and influencing, and ultimately the inclusion in available opportunities and is impacted by both internal and external factors (Cogan & Carlson, 2018; Sverken et al., 2018; Üstün et al., 2010; WHO, 2007). Participation in society includes a variety of types of participation including social and civic and activities such as person-centered planning. According to Heinemann and colleagues (2013), participation can be measured through frequency (also referred to as engagement), satisfaction, and through ascription of meaning. This study will not measure frequency, but will measure satisfaction of participation quantitatively through the satisfaction scale in the Utrecht Scale for Evaluation of Rehabilitation-Participation (USER-P) (van der Zee, C. H., 2013) (described in detail in data collection tools) and the ascription of meaning will be examined qualitatively. While the USER-P does measure frequency scores for observation of patterns, it was determined that frequency would not provide meaningful information about participation as this is variable. Rather the satisfaction scale places value on the patterns (van der Zee, C. H., 2013), highlighting the personalized experience of participation and capturing the pluralism of heterogenous groups.

3B.2.2c Independent Variables: Individual characteristics. Social stratifiers are recommended to disaggregate data by gender identity, age, income, and neighborhood (WHO, 2015). Additionally, measuring functional ability is recommended so that communities may

consider future aging needs (Cwirlej-Sozanska et al., 2018). The rationale for the inclusion of the independent variables for individual characteristics is briefly described in the sections below.

Gender Identity. Gender identity is important particularly in the 'old old' as they tend to be mostly women (Walker, 2016). Due to the gender inequalities associated with women who work lower paying jobs and are less likely to have pensions; therefore having less cumulative wealth to support them in retirement years (Jansson, 2015), examining older adults' experience with community participation by gender may provide insight when developing a theory of change. Participants were asked to identify their gender identity in the survey.

Age. A variety of ages for older adults is utilized in the literature and WHO (2015) suggests that this be determined based on the demographic profile. The age of 55 was determined to be an optimal selection as the youngest baby boomers, born in 1964, reached age 55 by the end of 2019 (O'Rourke, 2014); however census data only aggregates data by either age 60 or 65 and over. Therefore, the age of 65 was selected so that results could more accurately be compared with census data by town. Exact age was asked in the survey.

Race and Ethnicity. Due to known inequalities amongst race and ethnicity, accounting for this demographic in later life is critical for identifying inequalities and developing plans to address them (Walker, 2016). Participants were given census driven selections for their race and ethnicity in the survey and this is presented in Chapter 4 results.

Functional Ability. Functional ability level is a critical consideration due to the varied levels within and across age groups of aging adults. To measure functional ability, the survey asked participants to consider their health conditions (chronic disease or disability), if any, and what level of difficulty these conditions present according to WHODAS 2.0 (Üstün et al., 2010)

constructs. This is not only critical for statistical analysis, but also for convenience and snowball sampling that includes older adults of varied ability levels for the qualitative strand of the study.

3B.2.2d Independent Variables: Community Characteristics. The selection of communities across different counties in Southern NJ suburbs provided an opportunity for heterogeneous groups of people and communities which can make for a better understanding of the need for flexible designs centralizing around fidelitous constructs to consider in the process of developing a theory of change. Accounting for multiple factors was critical in understanding heterogeneity amongst and across groups in order to develop plans that are tailored by community need (Flores et al., 2019). The collection of these features as independent variables aligns with the ontology of dialectical pluralism as it considers the individuality of persons and communities. The rationale for the selection of community independent variables that was collected in the survey is briefly described below.

Neighborhood Income. Neighborhood income was used to protect the invasive questioning of personal income based on the Vancouver Protocol, the method used by the WHO in developing the Global AFC Guide (World Health Organization, 2007b).

Outdoor Spaces and Buildings. Community characteristics of outdoor spaces and buildings and roads, were shown to be, in part, predictors to civic and social participation of older adult participants in Castelló, Spain; and older adults who live alone have a greater reliance on community support and health services (Flores et al., 2019).

Transportation. The ability to move about one's community impacts the opportunity to access services and participate socially and civically (World Health Organization, 2007a). Therefore, it is a critical variable to measure in terms of access and participation.

Communication and Information. Meaningful engagement and participation in society often first comes from knowledge of the availability of an activity. The choice of and access to opportunity, referred to as enfranchisement by Hammel and colleagues(2008), demonstrates that participation in society is a complexity that in part deals with knowledge of the opportunity and the power of choice. Without the proper information, older adults cannot enact choice in meaningful activity selection. Often older adults are unaware of community information that would provide enjoyment or assistance (Kathy Black et al., 2015; World Health Organization, 2007a).

Community Support and Health Services. National Quality Forum (2016) recommends prioritizing community supports and health services, specifically home and community based services (HCBS), with a goal of improving outcomes for consumers as well as promoting community living. Additionally, they recommend person-centeredness in the development of these services. When home and community-based supportive services (HCBSS) are designed with communities in mind and tailored to meet the specific needs of individuals, they can provide the opportunity for aging in place (Administration for Community Living, 2018), yet the specific services must be based on community and individual needs, thus variables associated with the availability of services is critical baseline data. Knowledge of how these variables as potential determinants of participation in selected communities assisted in the development of the theory of change and may also be used for determining how to design services through community action plan's that can support these potential needs.

3B2.2e Confounding Variable. The Patient Health Questionnaire-2 (PHQ-2) was utilized to ascertain depressed mood and is utilized as a first step approach for diagnosing depression. For the purpose of this study, it will be utilized to determine if depression could be a

confounder in satisfaction results and is not intended to diagnose respondents. The Likert values range from not at all (0), several days (1), more than half the days (2), to nearly every day (3). The questionnaire is scored on a four-point scale with values ranging from zero to three with six being the highest score. Persons who score a three or higher are likely to have major depressive disorder. The assessment has high construct and criterion validity (Kroenke, Spitzer, & Williams, 2003).

3B2.2f Missing Data & Response Rates. Missing data was coded with a unique number to ensure that answered responses or responses intended to have missing values (e.g. "don't know" and "prefer not to answer" response) can inform the analysis (Portney & Watkins, 2015). Response rates in telephone surveys are often underreported or lack detail (Gripp, Luloff, & Yonkers, 1994). Dillman and colleagues (2009) discuss the use of IVR in response rates as an area that has not been studied. The study describes previous literature using IVR which typically refers to its use in outbound calling. Response rates vary ranging from approximately 50-80% depending on the method of mixed use. Therefore, response rates for IVR, including mixed-use surveying, is relatively unknown for inbound calls. Five hundred printed invitations were provided to gatekeepers and communities in order to reach as many participants as possible. Because this study utilizes snowball sampling, traditional methods of disposition tables cannot be utilized because these tables report the number of outbound telephone calls. This study utilized snowball chain referrals for producing inbound calls, and therefore response rates cannot be calculated (Gripp et al., 1994). All participants except one (who indicated they were not 65 or over) who called the survey line completed the survey in full and all participants who utilized the online version completed the survey in full. Data collection proceeded until 64 participants completed the survey. To be considered complete, a score on the WHODAS 2.0 is required as

well as the completion of the selected areas of the USER-P. Some areas may be skipped and still considered to be a full survey in accordance with scoring guidance.

3B.2.3 Data Collection Tools

The development of a survey that includes questions from several tools to collect the dependent and independent variables was created for the study (Appendix A). The tools utilized in the survey are described below. Rather than providing each tool in its entirety, "reasonable pragmatism" is enacted utilizing the necessary constructs determined for this study to capture the intended variables, limit unnecessary data points, and to be considerate of the participants time and risk for survey burn-out (Snyder et al., 2007, p. S77). The developed survey was piloted on five older adult participants to test the accuracy of the IVR system including the ability to hear and understand questions, the approximate length of time, and to identify any problems with data collection in the system. Pilot participants were over the age of 65 and suburban-dwelling, but did not live in the selected NJ communities in the study. Feedback from the pilot participants was utilized to mitigate two main issues ahead of the study: clarity of directions and the use of the number "2" for no as opposed to the use of the number "0". The .csv file derived from the pilot data was utilized to generate a template for data collection of participants wishing to participate in a live survey. No participants chose to participate in a live survey with the researcher.

3B.2.3a USER-P. The Utrecht Scale for Evaluation of Rehabilitation-Participation (USER-P) (van der Zee, C. H., 2013) is a 31-item scale that measures the frequency, restriction, and satisfaction of participation under the ICF domains of body function, activity, and participation. It has been validated for use with spinal cord injury populations, stroke, and general/non-specific rehabilitation populations that range from musculoskeletal, neurological,

cardiac, and pain populations. Cronbach's α is used to determine internal consistency of a construct; the higher the coefficient is to1.0 the more reliable. Cronbach's α is 0.70-0.91 indicating a satisfactory internal consistency (Post et al., 2012). The USER-P has been found to be a valid measurement tool for people with varied disabilities (Shirley Ryan Ability Lab, 2020). This study utilized the satisfaction section of the USER-P. The satisfaction domain is measured on a scale of 0 (very dissatisfied) to 4 (very satisfied) and is comprised of ten items for a total possible score of 40. Each scale is converted to a 0-100 scale, but there is no total score for the USER-P's three scales together as each scale measures a different construct of participation, thus utilizing the satisfaction with participation scale independently is acceptable for a total score in this study (Mader et al., 2016). While higher scores are said to indicate greater satisfaction (Lee, Park, Kim, & Lee, 2016), caution is advised as one may not compare a score across individuals or across scales; a score of 50% does not mean an individual is participating at 50% as the measurement levels are ordinal and suggest that separate items could be more relevant than total score (van der Zee, C. H., 2013). Satisfaction scores place value on participation (van der Zee, C. H., 2013), highlighting the personalized experience of participation and capturing the pluralism of heterogenous groups. Use of the USER-P as an outcome measure is recommended in varied settings (Mader et al., 2016). Thus, this study measures the total score using linear and logistic regression to examine overall satisfaction.

3B.2.3b WHODAS 2.0. The WHODAS 2.0 is a valid and reliable tool developed by the WHO to measure disability (herein functional ability) level in six domains: cognition, mobility, self-care, getting along, life activities, and participation. Domains can be used to predict a number of factors including service needs, level of care, outcome of the condition, length of hospitalization, receipt of disability benefits, work performance, and social integration.

Additionally, knowledge of functional ability can improve public health and policy decisions beyond knowledge of a diagnosis because needs may be better identified, treatment and intervention may be better matched, outcomes and effectiveness can be measured, and priorities and resources can be better allocated (Üstün et al., 2010). The scoring process for an average general disability score may be used to make this determination. The 36-item questionnaire has sound psychometrics, however due to the length of the questionnaire, a 12-item tool was also developed by the WHO. Reliability of the WHODAS 2.0 shows a Cronbach's α ranging from 0.7 to .98 for all versions (Garin et al., 2010). Thus, WHODAS 2.0 is a highly reliable tool. The 12-item version explains 81% of the variance of the 36-item tool (Üstün et al., 2010). According to a recent systematic review on the 12-item self-administered tool, the authors concluded that it is internally consistent and reliable with correlation to other disability measures. In this same study, the authors recommend that the tool is more reliable when a functional profile is developed versus the use of a total sum (Saltychev, Katajapuu, BÃ¤rlund, & Laimi, 2019). This is an important finding for this study in that this study is an explanatory design that intends to utilize the score as one variable of function along with multiple other factors which one may consider the development of a profile. Correspondence with the author (M. Saltychev, personal communication, July 20, 2020) indicates that development of a profile in ICF terms looks holistically at individual types of impairment (e.g. body functions, body structures) coupled with participation and environmental factors (Organisation mondiale de la santé et al., 2001).

While there is no agreed upon cut-point for disability levels, an Australian study in collaboration with US authors and the World Health Organization indicate that scores on the WHODAS 2.0 12-item ranging from 10 to 48 are likely to have a clinically significant disability. Correspondingly, participants who score 0 have no activity limitations and there is no consensus,

it is suggested for discussion whether individuals scoring 1-4 should be considered mild and those scoring 5-9, moderate. The authors suggest developing norms by country (Andrews, Kemp, Sunderland, Von Korff, & Ustun, 2009). Scores are converted to a 100 point scales (/48*100) and therefore those presenting with a score of 20.8 or higher represent the significant functional limitation category and zero retains it's none/ no functional limitation categorization.

3B.2.3c Census Data. Demographic data collection derives from census questions for age, gender identity, and race and ethnicity. Census data also offers population level data for the towns being studied and include statistics related to the demographic constructs of interest described in the independent variables (United States Census Bureau, 2019b). Information from the webpage allows for comparative descriptive statistics from the study population with the town's target population (Appendix B).

3B.2.3d engAGE Survey. Developed by Cooperative Extension researchers, the engAGE survey comprises many of the constructs from the WHO AFC that this study aims to inquire about (D. H. John & Gunter, 2016). While not explicitly stated as a derivative of the AARP Livable Communities survey by the authors who partnered with AARP during their research in Oregon, the questions are similar to AARP's questionnaire, but organized in a different format (e.g. presence of a community characteristic and consecutive importance in AARP vs. presence and importance concurrently in engAGE). The authors report that the tool was developed using the WHO AFC domains as well as from the Federal/Provincial/Territorial Ministers Responsible for Seniors (2007). Psychometrics are not available for the engAGE survey nor the AARP survey; however, because results from this study aim to inform services within the selected communities rather than to generalize to all suburban populations, this survey tool meets the needs of the study (S. Figueiredo, personal communication, July 15, 2020).

Table 2.
Variable Descriptors

Variable	Definition	Characteristic	ICF construct	Measurement Tool
Participation (Dependent Variables)				
Participation in Society (satisfaction)	Focuses on the constructs of sense of belonging, the act of meaningfully doing and influencing, and ultimately the inclusion in available opportunities and is impacted by both internal and external factors (Cogan & Carlson, 2018; Sverken et al., 2018; Üstün et al., 2010; WHO, 2007). Includes a variety of types of participation including social and civic and activities such as Person-centered planning.	Dependent Variable Ordinal (converted to Continuous variable using total score and dichotomized to not/satisfied Nominal variable)	(Activities and Participation: Community, social and civic life, ICF)	Utrecht Scale for Evaluation of Rehabilitation-Participation (USER-P) (e.g. Satisfaction: How satisfied are you with your day trips and other outdoor activities such as: shopping, attending events, going to the beach, church or mosque?)
Individual Characteristics (Independent Variables)				
Gender identity	Male Female Other	Individual Characteristic Nominal	Personal Factors, ICF	Survey
Age range	65-74 75-84 85-94 95+	Individual Characteristic Continuous	Personal Factors, ICF	Survey
Race/Ethnicity	White Black or African American American Indian or Alaska Native Asian American/Pacific Islander Hispanic/Latino/Spanish origin	Individual Characteristic Nominal	Personal Factors, ICF	Derived from 2020 Census Question
Functional Ability	"the health-related attributes that enable people to be and to do what they have reason to value" (WHO, 2015, p. 28); An individual's level of performance based on observable performance skills (AOTA, 2014); derived from WHODAS 2.0 constructs: 1. Understanding and communicating 2. Getting around 3. Self-care 4. Getting along 5. Life activities—School/work, Household 6. Participation in society (ability)	Individual Characteristic Continuous	Activities and Participation: General tasks and demands, Mobility, Self-care, Domestic life, Interpersonal interactions and relationships	WHODAS 2.0 12-item version, interviewer-administered
Depression	Frequency of depressed mood and anhedonia (inability to feel pleasure) over the past two weeks (Kroenke et al., 2003)	Confounding variable Ordinal	Personal Factors, ICF	Patient Health Questionnaire-2 (PHQ-2) (Kroenke et al., 2003)

Community Characteristics (Independent Variables)				
Town	Name of moderate income South Jersey suburban community	Community Characteristic Nominal	Environmental Factors	Census Data
Outdoor spaces and buildings: 1. Walkable 2. Building accessibility 3. Road signage	Physical structure and layout of community environments especially walking surfaces and building features related to access and safety (WHO, 2007)	Community Characteristic Ordinal	Environmental; Activities and Participation: Mobility- *Walking and moving*, ICF)	engAGE survey (D. H. John & Gunter, 2016)
Transportation 1. Public transit 2. Special needs transit 3. Driver network	The ways in which one moves about the community/method of locomote and access to transit including driving (self or others) and public transit (typically does not include walking) (WHO, 2007)	Community Characteristic Ordinal	Activities and Participation, Moving around using transportation, ICF	engAGE
Community Supports and health services/HCBS	"refers to an array of services and supports delivered in the home or other integrated community setting that promote the independence, health and well-being, self-determination, and community inclusion of a person of any age who has significant, long-term physical, cognitive, sensory, and/or behavioral health needs" (NQF, 2016, p. 9); often relates to transportation, personal care, case management, adult day care (DHHS, 2018)	Community Characteristic Ordinal	Environmental Factors: Services, systems and policies; ICF	engAGE
Communication and information	Practical, community based information and the means in which that information is communicated (WHO, 2007)	Community Characteristic Ordinal	Activities and Participation: Communication-Communicating-receiving	engAGE

3B.2.4 Data Analysis

Anonymized, password protected survey data was analyzed using IBM SPSS statistical software version 26. Descriptive statistics provide population descriptions for empirical observations of the participants and communities (Portney & Watkins, 2015). Nominal data including frequency counts for demographic variables (gender identity, race/ethnicity) and continuous data for the remaining individual characteristics (age, functional ability score) is presented as the sample size (n) in Chapter 4. Initially ordinal regression was selected due to the

ordinal nature of the dependent variable. It was later determined that the research question would be answered utilizing multiple regression and logistic regression and as such these are described below.

Multiple regression was used to estimate the association of the independent variables on the dependent variable total score of satisfaction with participation. There are eight assumptions to consider when running a multiple regression. The first two assumptions are determined before running the analysis whilst the latter six are determined while running the analysis: 1) the dependent variable must be a continuous variable, 2) independent variables are measured at continuous or nominal levels and ordinal variables must be converted as such, 3) independence of errors, 4) linear relationships between independent and dependent variables, 5) homoscedasticity, 6) no multicollinearity, 7) no significant outliers, and 8) there should be normal distribution of errors/residuals. The results of the assumptions are presented in Chapter 4.

Logistic regression was utilized to test specific items on the satisfaction scale, namely those questions that ask specifically about community. Logistic regression requires seven basic assumptions: 1) the dependent variable is dichotomous, 2) independent variables must be continuous or nominal, thus ordinal independent variables were converted to meet this criterion, 3) all variables must have independent observation (i.e. they fit into one category or the other, not both), 4) the sample size should have an adequate number of cases per independent variable (e.g. 10-15 per IV). Assumptions 5, 6, and 7 are determined upon running the statistical testing and include: 5) a linear relationship between continuous independent variables and the logit transformation of the dependent variable, 6) no multicollinearity, and 7) no significant outliers. The results of the assumption tests are presented in Chapter 4. Regression results identified the

strongest contributors to participation in society (satisfaction with participation) and are also reported in Chapter 4.

3B.2.5 Validity

Generalizability to other populations must be considered with caution (Portney & Watkins, 2015). Descriptive statistics are presented in Chapter 4 and the census data and community profile is reported in Appendix B by town to help readers make determinations about the application of findings (Portney & Watkins, 2015). Inferences do not describe the relationships, but rather describe the population. Results may only be applied to the populations defined in this study (internal validity) but because socio-demographics of the study population are small findings point to a need for further research in similar communities with larger sample sizes where randomization is possible (Banerjee & Chaudhury, 2010).

3B.2.5a Internal. To the best of the candidate's knowledge, there is no criterion-related validated tool (Portney & Watkins, 2015) that measures Age Friendliness of communities. Reports of study limitations such as the unavailability of validated measurement for measuring age-friendly communities acknowledge threats to validity. Therefore, a survey questionnaire using face and content validity (Portney & Watkins, 2015) informed by WHO and AARP was utilized. The use of two known valid and reliable survey tools, WHODAS 2.0 and USER-P, enhance the rigor of the quantitative design. An additional threat to validity is self-selection bias.

3B.2.5b External validity. In random sampling, the sample size is determined based on error and confidence. Sampling error is the difference between the population averages and the sample averages. Because the study is observational and uses non-random, purposeful and snowball sampling, the results of the study will be limited to suburban communities of similar size and structure. The results should be weighted with caution due to sampling bias from non-

probability techniques (Portney & Watkins, 2015). Purposive snowball sampling and convenience sampling have a risk of a biased sample related to procedures for data collection as snowball sampling relies on connections through a social network (Biernacki & Waldorf, 1981) and convenience sampling relies on being in a particular place at the 'right' time (Terrell, 2016). According to the American Association of Public Opinion Research, transparency in reporting methods is critical to validity (Baker et al., 2013) and specific procedures and transparency have been reported for this study (See also Chapter 5, limitations).

The study goals are tailored to specific communities making changes and improvements under a social justice lens within their own neighborhoods. Generalizability in this study focuses on the *process* of developing the theory of change. Because this study is a mixed methods design, the quantitative focus for generalizability differs from the use of quantitative results alone for generalizability. Thus, the focus here is for generalizing results in their entirety rather than an emphasis on only typical experimental design threats related to, for example, sampling and prediction (J. Creswell & Plano Clark, 2018; Portney & Watkins, 2015; Terrell, 2016).

Knowledge of which specific community features are 1) present and critical to support meaningful participation or 2) absent and both needed and desired to support participation, forms the basis of a needs assessment or situation analysis which is foundational for a theory of change and requires the use of mixed methods to develop. Because features will vary by community, the process of eliciting perspectives about 1) community characteristics: facilitators and barriers related to presence or absence of a community feature and 2) individual characteristics: personal experiences in the community related to functional ability level and demographics are imperative in the later, qualitative phase of the study. Correspondingly, concluding the study so that participants feel empowered to continue to develop action plans to actuate their change theory

can spur future studies that examine relationships about how creating an aging friendly community further enhances older adult community participation and aging in place. Future studies can look to understand and measure action planning processes, overall program theory outcomes and sustainability, and the relationships of community action planning with aging in place. While out of scope and futuristic, it is important to understand how this research study intends to connect past and current endeavors with a more global view of program theory.

3C: Qualitative Inquiry

The second, qualitative phase was conducted as a follow-up to the quantitative results to help explain barriers and facilitators to participation in society and elicit suggestions to overcome barriers and leverage facilitators to participation in society. Appreciative Inquiry Theory was utilized to inform the qualitative process. In this qualitative strand of the research design, the following aims and research questions were addressed and answered:

Aim 2.

Describe associated interactions of individual and community barriers and facilitators to participation in society

RQ 2: (QUAL). How do participants in Southern New Jersey suburban communities describe the barriers and facilitators to participation in society that stem from a) individual characteristics and b) community characteristics?

Aim 3.

Develop a theory of change by eliciting suggestions about objectives to overcome barriers and leverage facilitators in order to engage in community action plan development.

Sub-question RQ 3: (QUAL). What are participant suggested objectives for addressing barriers and facilitators to participation in participant communities?

3C.1: Qualitative Research Procedures

Due to the global pandemic and threats of COVID-19 at highest risk in this population (M. A. Cohen & Tavares, 2020), focus groups were determined to be an unsafe option and physical gathering is restricted by The George Washington University's IRB. While focus groups would provide the richest of data to answer the research questions, it was determined that the research questions could be adequately answered through the use of telephone interviews. In fact, the use of interviews potentially enhanced the variability of participants who may otherwise have been unable to be physically present. An IRB modification was granted after three months of data collection over the IVR system to include the option to take the survey online. The goal was to expand the reach of the survey to allow, for example, those who are hearing impaired or whom would prefer to read along to take the survey.

3C.1.1 Recruitment and Sampling

Community based participatory research (CBPR) is often used to amplify the voices of those in the community affected by the issue being studied in order to create actionable change (Brownson et al., 2012a). Older adults in community settings can be difficult to target as collaborators in a non-COVID era (Israel, 2013), and the pandemic has made accessing this population in a safe way increasingly difficult. CBPR tenants include collaboration, community resources, and co-learning with community members. Traditional marketing concepts, such as the *4 P's*: product, price, place, and promotion, were first explored to understand initial strategies for collaborating with older adults. But traditional marketing concepts lack the value based care (Jacobs & McCormack, 2019) that social marketing principles such as exchange theory,

relationship marketing, and critical marketing (Hastings & Saren, 2003) can bring. Thus, utilization of the *7 P's* (price, place, promotion, people, process, physical evidence, product) (Jacobs & McCormack, 2019) along with social marketing theories were applied to develop a strategy to target older adults in the community while adhering to NJ's COVID-19 restrictions. In order to capture the components, the author utilized a template of the *7P's* to answer questions with a primary focus on recruitment and dissemination.

This qualitative strand of the study utilized purposeful sampling of the older adult participants from the moderate income Southern NJ suburban communities who indicated on the survey that they would be willing to participate in follow up interviews. Purposive sampling of participants for the qualitative phase are participants who agreed to follow up interviews after the quantitative survey. The selection of willing participants was based on maximum variation sampling (Guba & Lincoln, 1989). In maximum variation sampling, a range of participants are selected to represent the range of participants (Guba & Lincoln, 1989). In particular, the candidate focused on a selection of a range of ability levels to ensure participants with disability were represented in the interviews, as they are often left out. Whenever possible, the researcher sought to select individuals in the extreme and middle ranges of the WHODAS 2.0 scores (i.e. those who scored extreme or no disability as well as middle ranges); however, this was limited to those participants who were willing to follow up and those whom actually did. Upon reaching saturation the quantitative survey collected data from two additional participants, one of whom agreed to follow up in an interview. This strategy also allowed for a range of ability levels to be represented. An a priori sample size was not given, but rather was reported ad hoc once saturation was achieved (J. Creswell & Plano Clark, 2018). Saturation occurred upon the 14th interview for this study, and analysis at this stage showed saturation and full development (J.

Creswell & Plano Clark, 2018). The candidate selected individuals with a wide range of ability when feasible.

3C.1.2 Interview Protocol Preparation

3C.1.2a Interview Protocol. Each community had a representation in interviews. A semi-structured open-ended interview protocol (Appendix E) including probes was designed based on the outcomes of the survey data and guided by Appreciative Inquiry (AI) theory as well as principles of enfranchisement (e.g. power and choice) which are difficult to capture in quantitative surveys. Additionally, the interviews aimed to include those with limitations in functional ability as indicated on the survey response.

3C.1.2b Location. Due to the global pandemic, interviews were conducted via telephone. Times and dates of interviews were discussed with participants to determine what was most convenient. Arrangements were made to accommodate participants.

3C.1.2c Community Profile. Each community has a profile that is descriptive in nature regarding important features and town characteristics. These features include census data for the total population size, proportion of the population that is older adults over 65, and average/median income of the community. This descriptive information was developed from the review of town websites verified with stakeholders (see Appendix B).

3C.1.3 Data Collection

Participants provided verbal consent upon listening to the script of informed consent via telephone. Any questions or clarifications were addressed at that time and upon beginning the session to determine willingness to participate. The interview began with establishing rapport using general conversation techniques. Telephone interviews were audio recorded using Google Voice with a back-up recording using Otter.ai and upon completion of the interviews mp3

recordings were sent to Rev.com for transcription. Transcriptions were stored on Box using password protected software systems accessible only to the research team. Handwritten notes taken during the interview were stored in a locked file in the candidate's home office. A stakeholder meeting was conducted to discuss the results of the study. The stakeholder meeting was conducted on a virtual platform and was not recorded, however hand written notes were taken by the student researcher and dissertation chair. These notes were used to provide a summary and analysis of the discussion to stakeholder participants and is included in the results.

3C.1.4 Data Analysis

Transcriptions were uploaded into NVivo 12 software for coding, clustering, and thematic analysis within and across interviews by community. Diccico-Bloom and Crabtree's (2006) template approach was utilized for analysis. The authors describe this approach as one that uses common codes which are grouped and later distilled into categories. The coding process is an iterative " 'sense-making' endeavor" that involved a complex process of organic coding using the template approach in NVivo 12 (DeCuir-Gunby, Marshall, & McCulloch, 2011, p. 137). Thematic analysis of transcriptions were coded first in NVivo 12 without the use of any prescribed code language, but using initial codes that were derived from the literature, theories in the study (axial coding) (John W. Creswell & Poth, 2017) and inductively after thoroughly reading all transcriptions. Next, the initial 84 codes or "nodes" developed in NVivo were organized in an excel document for early theme development through axial coding. The axial coding was guided by overarching theories and models, namely the Consolidated Framework for Implementation Research (CFIR) (Laura J. Damschroder et al., 2009) and the WHO Age-friendly cities and communities. Appreciative Inquiry drove the interview guide, however, as can be seen in the conceptual framework, it is organized as a process model to drive knowledge and

understanding of processes for designing interventions (i.e. community modifications, programs, policies generated by a theory of action) thus underpinning action plans that support community participation. Organic coding (nodes) was first utilized when reviewing transcriptions and later organized under CFIR constructs. The WHO AFCC was also utilized, however it was primarily situated under the *outer setting* of CFIR. CFIR was utilized to enhance the translational impact of the findings by providing processes for the development of the theory of change. The committee met to review the initial coding process and discussions were centralized on the research questions. It was determined to review each code to determine descriptive phrasing for emerging themes and definitions of nodes under the umbrella of barriers and facilitators to community participation. A codebook was developed for organization and consensus during analysis. The codebook contains themes, codes that define those themes, thorough definitions of each code, and examples of textual evidence from interview quotations (J. Creswell & Plano Clark, 2018; DeCuir-Gunby et al., 2011, p. 137). Codebook organization was reviewed with an independent intercoder to validate the organizational method followed by discussion and validation with the research team.

Memos assisted in the development of rich, thick descriptions of coded quotes and later were chunked into developing themes. Inter-coder agreement amongst the research team was conducted throughout this phase using an iterative process until saturation was achieved (J. Creswell & Plano Clark, 2018). The findings from the interviews were integrated for the final results in order to answer both the qualitative and overarching mixed methods research questions (J. Creswell & Plano Clark, 2018).

A research team meeting identified the need to utilize CFIR to enhance translational processes. It was determined that a stakeholder group meeting would serve as a translational

bridge to community action plan development. This meeting was conducted virtually and the results from the meeting were thematically organized and distilled into categories that provide fidelitous empowerment procedures for engaging older adults in community participation through action planning.

3C.1.5 Trustworthiness

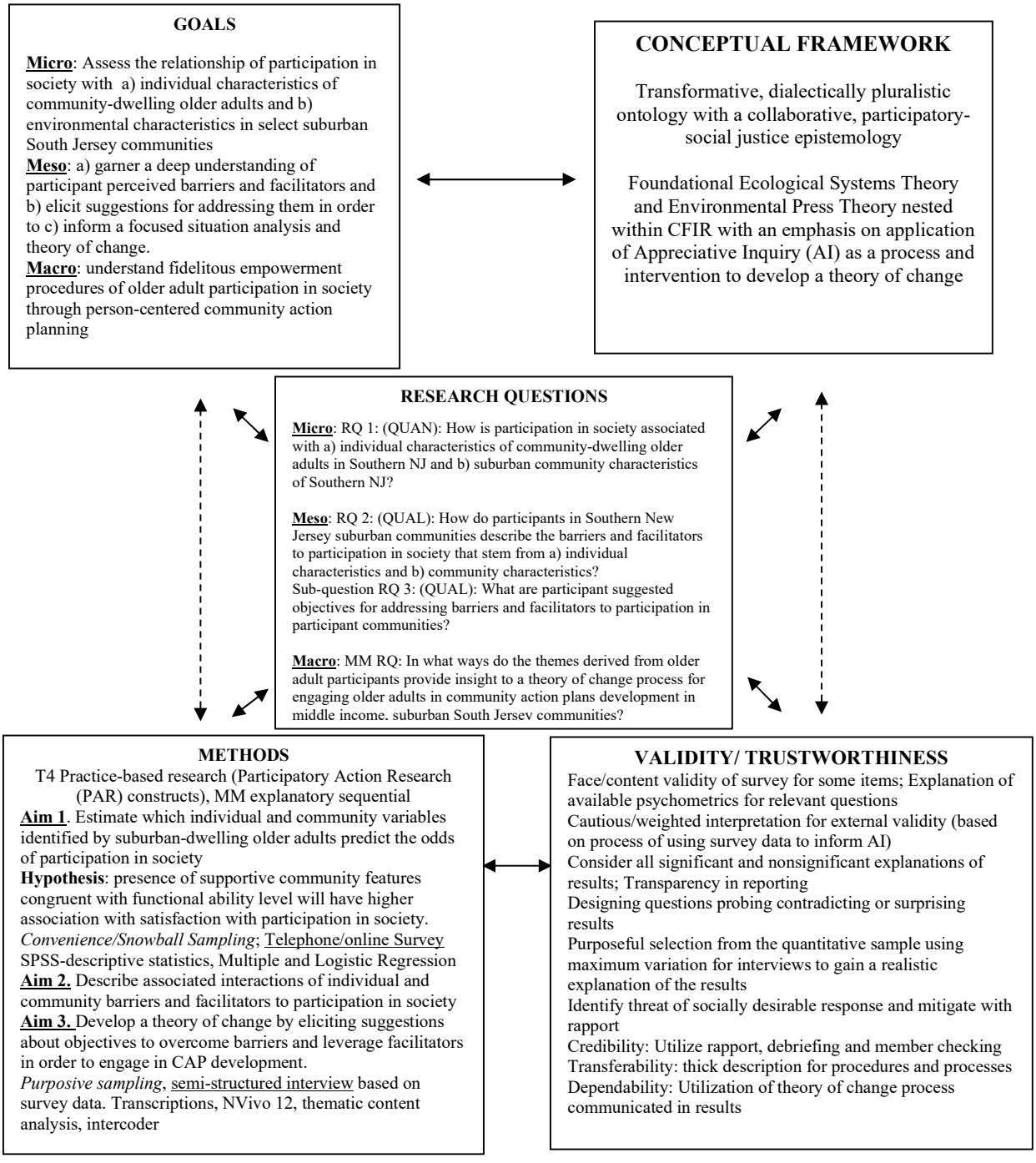
Assuring validity and trustworthiness is critical for increasing the credibility, transferability, dependability, and confirmability of this study (Lincoln & Guba, 1985). Trustworthiness principles were conducted with both the participants as well as the Transforming South Jersey conglomerate of philanthropic organizations. The candidate remained aware of threats by participant, such as socially desirable responses and mitigated with rapport and an understanding of candor. Credibility was established through engagement in rapport building, debriefing, and member checking before and during interviews. Transferability was established using thick description of procedures and processes of developing a theory of change. Establishment of dependability was determined through the use of the theory of change process across the selected communities and is communicated in the results. Member checking was again utilized upon the completion of the analysis confirming developed themes and with (n=7) participants who were willing to be contacted and able to be reached after the interviews (Lincoln & Guba, 1985).

Collaborating with Transforming South Jersey throughout the study has been a critical element in this study's trustworthiness. According to Lincoln and Guba (1985), the establishment of credibility, transferability, dependability and confirmability are the components that must be established. By connecting this study with the community foundations, credibility is established through maintaining engagement with regular updates on progress, it may also be thought of as

an extension of member checking; while the organizational leads are not members of the group, they are a liaison and may have influence in towns regarding the construction of policy. Through this relationship the merging of top down and bottom up approaches may begin to bridge. Connecting this study to the Heart and Soul model may enhance future projects and allow for transferability of a program theory through thick description. Heart and Soul is a nation-wide model applied by the Orton Foundation. The Orton Foundation may be able to utilize these research findings to effect change processes in other communities.

Thorough notes related to communications with Transforming South Jersey assisted in developing an audit trail furthering confirmability of the study. Triangulating correspondences, particularly through dissemination conversations, with findings from this study provided a richer description of perceptions of participant accounts from non-participants in terms of any application of the findings. The candidate's perspective aligns with the foundation's Heart and Soul model and this has been made explicit in order to avoid bias (Malterud, 2001).

Figure14.
Alignment: Interactive Model of Research Design (adapted from Maxwell, 2013, p. 9)



3D: Human Participants and Ethics Precautions

This study meets the criteria for research defined as, "systematic investigation, including research development, testing and evaluation, designed to develop or contribute to generalizable

knowledge (Protection of Human Subjects, 2018). Human subject research does not require direct contact with a subject but may include the systematic collection of private individually identifiable information about individuals" (Protection of Human Subjects, 2018). Only through implementation science, specifically the implementation of evidence-based processes, can "our nation's investment in research in the life sciences yield the pay-off that patients and the public deserve" (Solomon in Dubois & Prusaczk, 2017, p. 4). This translational study aims to ensure this pay-off occurs through dissemination of study results to and with communities and via pre-determined journals and presentations at national conferences in an effort to produce and provide *generalizable knowledge* (research) of effective processes that will *improve the health of individuals and the public* (translational component) who are at risk of institutionalization.

3D.1 Ethics in Reporting Findings

"The combination of community engagement and relevant scientific research further can pack substantial political punch, helping to effect policy and systems-level changes conducive to more health-promoting environments" (Brownson et al., 2012a, p. 197). This quote embodies the critical need for dissemination through community, scientific, and political channels all of which were provided either in written, presentation, orally or combined approaches. Dissemination plans were shared with participants in the informed consent. The findings from the study were reported with and to the community and are planned for dissemination through peer reviewed journals and conferences. All steps to ensure anonymity, including use of pseudonyms and numeric identifiers known only to the candidate, have been conducted except for those participants who are willing to share their identity within their communities by being physically or virtually present and/or taking part in the presentation of findings, recommendations, and lessons learned. Anonymity is critical to avoid further stigma or isolation in an already

vulnerable population. Variations in reporting style have been utilized to meet audience needs. An executive summary of findings, lessons learned, and recommendations have been shared with participants through informal follow-up procedures with participants willing to be contacted after the qualitative phase of the study. After final approval and input, the executive summary was shared with Transform South Jersey who may wish to utilize the findings in the development or refinement of community action plans. While the candidate will not provide direct reports to policy makers, it was recommended that the results be shared with policy makers and planners through the development of the community action plans. This report was also shared on the study website and emailed to networking groups who contributed to the project. Because of the current global pandemic, formal community presentations were not conducted in person, but rather virtually with older adult participants to Transforming South Jersey.

3D.2 IRB Review and Monitoring

The George Washington University Institutional Review Board (IRB) received and approved the application for human subjects research with an exempt review as this study meets the CFR criteria for minimal risk (Protection of Human Subjects, 2018). No serious, unanticipated risks to participants or others, noncompliance, or adverse events occurred during the study and thus no reports to OHRP were warranted (Protection of Human Subjects, 2018). A modification was approved to include the IVR survey in an online format.

3D.3 Informed Consent

Informed consent was provided to participants prior to participating in the study and survey administration via the survey flyer. Informed consents were also available telephonically and through the study website. Verbal consent was deemed appropriate by the IRB through the approved waiver for collecting a signature in minimal risk studies. Participants were informed

that they may withdraw from the study at any point without repercussion. To facilitate sustained involvement, a tiered consent process (Hudson, 2011) allowed participants to indicate if they were willing to be contacted for 1) questions from the survey, 2) a follow up interview(s) and/or 3) future research related to aging. The telephone consent was read directly from the informed consent which included that the survey is research, explanation of the purpose, anticipated duration, description of procedures, risks, benefits, confidentiality statement, voluntary nature of participation including withdrawal without penalty, and compensation. This same procedure was utilized for the phase two qualitative interviews, albeit slightly different language in the informed consent for interview protocols. The informed consents for the study can be found in Appendix C.

3D.3.1 Risks. While the study meets CFR for minimal risk (Protection of Human Subjects, 2018), some participants may experience psychological discomfort related to disability, race, gender, or exclusion. Debriefing strategies and rapport building was prepared to be utilized to address these feelings should they arise during the interview process and participants were made aware that they may skip any questions. Additional risks that participants were informed of included loss of confidentiality. Telephone numbers for adults aged 89 and over are considered to be Protected Health Information (PHI) and were treated as such in survey data security. Collected information was de-identified after initial collection of survey data and interviews.

Survey Data Security. The use of IVR software through a cloud base program provided additional protections for safeguarding data through industry standard encryption through Secure Sockets Layer (SSL). IVR systems are automated technology programs that collect data and generate a report of that collected data. IVR companies are not involved in accessing or viewing data and reports. Data is only viewable to the company through permission of the account holder

for diagnostic problems with the system itself. This was not necessary during the study and at no time did the company access the data. Additionally, the IVR program does not utilize or sell participant collected data (e.g. phone numbers of callers) to third parties, nor do they contact callers who utilize their system. The online survey was designed and delivered through GWU's Qualtrics system.

Interview Data Security. Interview data was collected using Google Voice recordings and uploaded to Rev.com transcription services. All recordings from Google Voice are retained in their system temporarily and anonymized in their system. All voice recordings were de-identified before uploading to the transcription database.

For both survey and interviews, participants' personal information, primarily telephone numbers, were given a unique identifier to de-identify them from their personal information. The personal identifiers were stored in a separate password protected file viewable only to the candidate in a VPN, password protected system in GWU. As previously described, other contact information using names, email addresses, or phone numbers of community members or organizations were stored in a password protected file. De-identified files are stored in a VPN protected and password protected Box system through GWU account holders and accessible only to the research team.

3D.3.2 Compensation. Compensation was provided at each phase of the research study (survey and interview). In order to respect participant confidentiality, attempts to limit collection of private information of name and address is limited. Due to the restrictions surrounding telephone interviews (as opposed to a link for electronic payment systems provided through an email), getting payment to each of the survey participants would require significant resources related to additional cost and time, as well as obtaining and storing personal information not

necessary for the surveys or interviews. Rather than provide each participant with individualized payment, the pooled amount was utilized to purchase a gift card in their local community. This community business gift card is intended to support the spirit of community engagement and the business was selected with the assistance of the community liaison. Participants who completed the survey were entered into a drawing for a chance to win a gift card valued at $150 to a local business in each community (totaling $450). Winners also received a custom painted artwork by the candidate in the form of a card that captured the sentiment of community and gratitude. This amount was considered reasonable and not coercive. Interview participants were provided $20 community gift cards each to participate in order to compensate for a longer time period for in depth interviewing. Upon completion of the interview, the name and address of the participant was written directly onto the envelope containing a thank you note and gift card to the selected business in their community and mailed immediately to avoid any need for storage of the interviewee's name or address. These amounts are considered reasonable "breaking even" amounts under SCHARP that should not coerce or deter enrollment (DHHS, 2018), but shows appreciation for participants and communities.

3D.4 Ethical Principles

3D.4.1 Justice. The ethical principle of distributive justice refers to a fair and equitable distribution of burden and benefit (Vaughn, 2010). The applicability of this principle is highlighted in this study as participants represent a known underserved and vulnerable population that has been historically marginalized in society and in research. Representation of this susceptible and vulnerable group is important in research and participants must be protected from additional harm and exploitation (Levine, C., Faden, R., Grady, C., Hammerschmidt, D., Eckenwiler, L.,& Sugarman, J., 2004), continued oppression, unequal treatment, and disparity.

This study was conducted in the community, thus allowing the ethical principle of *justice* to fully come to fruition as the beneficiaries of research are those potentially at risk in the community.

3D.4.2 Autonomy. Autonomy is a person's capacity to independently make choices and decisions once fully informed (Vaughn, 2010). This study follows the Code of Federal Regulation (45 C.F.R. §46) including the Common Rule (Protection of Human Subjects, 2018) and the informed consent process transcends this ethical principle (Vaughn, 2010).

CHAPTER 4

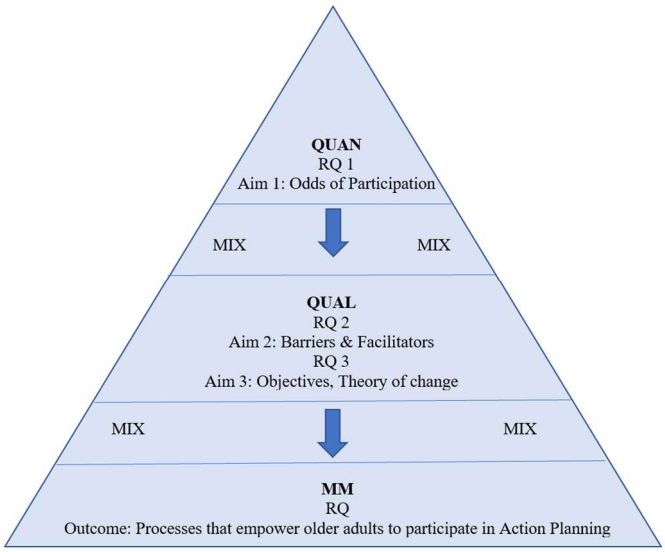
RESULTS

4A: Overview

This mixed methods explanatory sequential design study was nested within a theory of change. The purpose of this study was three pronged at a micro, meso, and macro level. At the micro level, the goal was to assess the relationship of participation in society with a) individual characteristics of community-dwelling older adults and b) environmental characteristics in select suburban South Jersey communities. At the meso level the goal was to a) garner a deep understanding of participant perceived barriers and facilitators and b) elicit suggestions for addressing them in order to c) inform a focused situation analysis and theory of change. Lastly, at the macro level, the goal was to understand fidelitous empowerment procedures of older adult participation in society through person-centered community action planning.

This study aimed to answer the overarching mixed methods research question (RQ): In what ways do the themes derived from older adult participants provide insight to a theory of change process for engaging older adults in community action plan development in middle income, suburban Southern New Jersey communities? Figure 15 displays how the data is mixed using explanatory sequential design. The paragraphs below describe the results of the quantitative (QUAN) and qualitative (QUAL) strands of the research and ultimately the overarching mixed method (MM) results.

Figure 15.
Mixed Methods Explanatory Design Mixing (adapted from Creswell & Plano Clark, 2018)



4B: Quantitative Strand

The aim of the quantitative strand was to estimate which individual and community variables identified by suburban-dwelling older adults are associated with participation in society (satisfaction). The research question was: *How is satisfaction with participation in society associated with a) individual characteristics of community-dwelling older adults in Southern NJ and b) suburban community characteristics of Southern NJ?*

4B.1 Hypothesis

It is hypothesized that among suburban community-dwelling older adults, the presence of supportive community features congruent with their functional ability level (i.e. *fit*) are associated with higher satisfaction with participation in the community (dependent variable).

4B.2 Descriptive Statistics

Sixty-four older adults aged 65 to 88 answered the quantitative survey from three Southern New Jersey communities located in three different counties. Of the 61 participants who provided gender identity, 25% (n=15) identified as male and 75% (n=46) identified as female.

No participants selected other as a category of gender identity in this study. Participants choices for race and ethnicity were guided by selections from the US Census. Participants identified as 49 (77%) white, 10 (16%) Black or African American, 0(0%) American Indian or Native Alaskan, 1 (2%) Asian American or Pacific Islander, 4 (6%) preferred not to answer. No participants (0%) identified as having Hispanic, Latin, or Spanish origin.

Functional ability of the participants was measured using the WHODAS 2.0 12-item assessment. The raw scores of up to 48 were converted to a 0-100 scale with 0 being no functional impairment and 100 severe functional impairment. As previously discussed in Chapter 3 there is no agreed upon cut-point for disability levels. Raw scores on the WHODAS 2.0 12-item ranging from 10 to 48 (converts to a standardized score of 20.8 to 100, respectively) are likely to have a clinically significant disability. Correspondingly, participants who score 0 have no activity limitations (Andrews et al., 2009). Results of participant measures of functional independence on the WHODAS 2.0 12-item assessment in this study ranged from 0 to 84.1, with 89% of participants having identified impairment with functional ability. Median scores are provided as the WHODAS 2.0 scores are not normally distributed (Mdn=13.64, IQR= 22.68). The USER-P Satisfaction with Participation subscale was utilized to measure satisfaction on a 0 to 100 to point scale (very dissatisfied to very satisfied). Participant scores were evenly distributed (M=67.90, SD= 17.44). Table 3 displays the descriptive statistics discussed.

Table 3
Descriptive Statistics

Characteristic	N(%)
Age Range in years	64 (100)
65-74	40 (63)
75-84	21 (33)
85 and up	3 (5)

Gender Identity	61(95)
Male	15 (25)
Female	46 (75)
Other[a]	0
Missing[a]	3
Race	60(94)
white	49 (77)
Black/Af. Am.	10(16)
Am. Ind/Pac.Is.	1(2)
Missing[a]	4
Ethnicity	
Hispanic[a]	0
WHODAS 2.0	64
Min.-Max	0-84.10
Median (IQR)	13.64 (22.70)
Q1	4.55
Q3	27.23
USER-P	64
Mean (95% CI)	67.90 [95% CI 83.53, 72.25]
SD	17.44

[a] No percentage given because not included in total N count.

4B.3 Univariate Main Findings & Multiple Regression Model Building

Univariate linear regression was utilized to determine which independent variables are potentially associated with the main outcome of satisfaction with participation (Total USER-P score) in order to build the final regression model. Ordinal variables were transformed into dichotomized variables whereby negative agreement is no and positive agreement is yes. Missing responses (i.e. Don't Know) were categorized as *no* presuming if participants are not aware of a community feature, then they cannot be satisfied with it. All independent variables with a p-value of <0.1 were entered into the multiple regression equation (see Table 4 below).

Table 4
Variables, descriptors, p-values for Model building

Variable	Brief Variable Description	*p* value
Age*	≥ 65	.081**
Depressed*	PHQ-2***	<.001**
Town	3 communities in study	.139
Race	Per census definition	.314

Gender	Male, Female, Other	.218
WHODASscore	Measure of functional ability	<.001**
Walkable	Maintained sidewalks/paths***	.396
Bldg	Accessible buildings***	.059**
Road	Adequately marked/signs***	.323
PublicTrans	Public transit adequate***	.814
SpecNeedsTrans	Adequate special needs/elder transit***	.298
DriverNet	In/formal driver network***	.614
Information	Events/programs/service information available***	<.001**
Healthcare	Healthcare/mental health services available***	.004**

*Controlling variable; **p<.10; ***dichotomized

The six independent variables selected from the univariate analysis were entered into the model included: Age, WHODAS Score, Depressed, and dis/agreement about the following community features: building accessibility, availability of information, and availability of healthcare services. Age and depression are controlling variables entered into the equation.

Multiple linear regression analysis was conducted to determine how much of a variation in the dependent variable, satisfaction with participation, can be explained by the independent variables measuring individual characteristics (e.g. functional ability/WHODAS) and community characteristics (e.g. accessibility of buildings, access to information). Higher percentage of explained variance (R^2) is indicative of a stronger association (Laerd Statistics, 2015). Before reporting the results of the analysis, all assumptions were tested. A detailed discussion about the assumptions is described in Appendix J.

4B.4 Multiple Regression Main Findings

Three variables, WHODAS score, Info, and Healthcare, added statistically significantly to the prediction, $p < .05$. of the dependent variable (USER-P, satisfaction with participation). A lower level of functional ability (B= -0.266) is associated with less satisfaction with participation, and being depressed (B=-10.92) (controlling variable) is also associated with lower satisfaction with participation. Availability of healthcare services (B= 8.20) and availability of

information to events, services, and programs (B= 8.905) are both associated with higher satisfaction with participation. The multiple regression model statistically significantly predicted USER-P satisfaction, (adj. $R^2 = .456$, $p < .001$) a medium size effect according to Cohen (1988). Table 6 below displays the regression coefficients and standard errors.

Table 5
Multiple regression results for USER-P Satisfaction

USER-P	*B*	95% CI		SE *B*	R^2	ΔR^2
		Lower	Upper			
Model					.51	.46**
Constant	88.90	45.63	132.18	21.61		
Age	-.355	-.937	.227	.291		
WHODAS score	-.266*	-.470	-.062	.102		
Depressed	-10.92*	-19.80	-2.05	4.43		
Building Accessibility	3.22	-6.08	12.53	4.65		
Information	8.905*	1.59	16.23	4.65		
Healthcare	8.20*	1.46	14.93	3.36		

Note. N=64. *p<.05; **p<.001

4B.5 Logistic Regression Model Building

While multiple regression is the primary analysis, a secondary analysis was performed for the variables that are considered specific to community participation. Four binomial logistic regression models were built to estimate the association of selected community and personal characteristics (independent variables) with four specific items of the USER-P considered relevant for community participation: satisfaction with outdoor mobility, exercise, outing, and

daytrip. USER-P satisfaction was dichotomized with neutral and negative (very dissatisfied, dissatisfied) feelings about satisfaction considered *no* satisfaction and positive satisfaction (satisfied, very satisfied) considered *yes*, satisfied. In order to determine the most significant factors associated with the dependent variable, 14 independent variables were run in a univariable analysis to each dependent variable with a criterion of $p<0.1$ to remain in the model (Kutner, Nachtsheim, Neter, & Li, 2005).

Table 6
Variables, descriptors, p-values by dependent variable for Logistic Regression Model building

Variable	Brief Variable Description	*p* value mobility***	*p* value exercise***	*p* value outing***	*p* value daytrip***
Age*	≥ 65	.236	.002**	.455	.062**
Depressed*	PHQ-2***	.018**	.034**	.034**	.005**
Town	3 communities in study	.024**	.523	.399	.328
Race	Per census definition	.800	.756	.867	.960
Gender	Male, Female, Other	.781	.206	.051**	.093**
WHODASscore	Measure of functional ability	<.001**	.002**	.073**	.005**
Walkable	Maintained sidewalks/paths***	.500	.326	.688	.875
Bldg	Accessible buildings***	.056**	.595	.401	.429
Road	Adequately marked/signs***	.783	.551	.668	.383
PublicTrans	Public transit adequate***	.512	.212	.777	.955
SpecNeedsTrans	Adequate special needs/elder transit***	.243	.436	.679	.777
DriverNet	In/formal driver network***	.966	.327	.545	.449
Info	Events/programs/service information available***	.003**	.006**	.035**	.221
Healthcare	Healthcare/mental health services available***	.663	.795	.545	.469

Note. *Controlling variable; **p<.10; ***dichotomized

The results are presented in the main findings and organized according to the dependent variable being assessed. All assumptions were met and a description of logistic regression assumptions can be found in Appendix K.

4B.6 Logistic Regression Main Findings

Regression results were utilized to identify the strongest contributors to participation in society. Each regression is reported independently below. Age and Depressed are included in each model as control variables regardless of p-value.

4B.6.1 Satisfaction with Outdoor Mobility

The USER-P Satisfaction questionnaire asks participants to report satisfaction with outdoor mobility such as driving a car, traveling by bus or train, cycling to work, or going shopping. Variables selected for outdoor mobility during univariable analysis for model building with a p of <.1 include: town, WHODAS score, building accessibility, and information access. Thus, a binomial logistic regression model was estimated to evaluate the association of the independent variables of town, WHODAS score, building accessibility, and information access on the dependent variable, satisfaction with outdoor mobility when controlling for age and depression.

Classification, variables in the equation, and case counts (n=64) all appear acceptable. Of the nine independent variables only one was statistically significant: WHODAS score (OR=.952, 95% CI [.908, .997]) as shown in Table 7 below. Decreasing WHODAS scores (i.e. toward functional independence) resulted in a higher likelihood of satisfaction in outdoor mobility. The model explained 48% (Nagelkerke R^2) of the variance in satisfaction with participation in outdoor mobility and correctly classified 81.3% of cases.

Table 7.

Logistic Regression Predicting Likelihood of Satisfaction with Outdoor Mobility

	B	S.E.	Wald	df	p	Odds Ratio	95% CI for Odds Ratio	
							Lower	Upper
Age	-.079	.068	1.341	1	.247	.924	.808	1.056
WHODASscore	-.050	.024	4.329	1	.037	.952	.908	.997
Town			2.389	2	.303			
Town(1)	-1.459	.998	2.135	1	.144	.233	.033	1.645
Town(2)	-1.039	1.085	.917	1	.338	.354	.042	2.967
Depressed(1)	-1.105	.885	1.559	1	.212	.331	.058	1.877
C_bldg(1)	.747	.927	.649	1	.420	2.110	.343	12.977
C_Info(1)	.483	.824	.343	1	.558	1.621	.322	8.149
Constant	7.619	5.420	1.976	1	.160	2036.552		

a. Variable(s) entered on step 1: Age, WHODASscore, Town, Depressed, C_bldg, C_Info.

4B.6.2 Satisfaction with Exercise

The USER-P Satisfaction questionnaire asks participants about sports or other physical exercise such as tennis, cycling, gym, and long walks. Because of the community participative nature of these activities, it is included as a dependent variable.

Variables selected for exercise during univariable analysis for model building with a p of <.1 include: WHODAS score and access to information. Thus, a binomial logistic regression was performed to evaluate the association of the independent variables WHODAS score and information access on the dependent variable satisfied with exercise when controlling for age and depression.

Classification, variables in the equation, and case counts (n=64) all appear acceptable for satisfaction with exercise. Of the 5 independent variables only 1 was statistically significant: WHODAS score (OR .948, 95% CI [.902, .997]) when controlling for age and depression as

shown in Table 8 below. Decreasing WHODAS scores (i.e. toward functional independence) resulted in a higher likelihood of satisfaction in exercise. The model explained 55% (Nagelkerke R^2) of the variance in satisfaction with participation in exercise and correctly classified 81.3% of cases.

Table 8
Logistic Regression Predicting Likelihood of Satisfaction with exercise

							95% CI for Odds Ratio	
	B	S.E.	Wald	df	Sig.	Odds Ratio	Lower	Upper
Age	-.244	.084	8.368	1	.004	.783	.664	.924
WHODASscore	-.053	.025	4.376	1	.036	.948	.902	.997
Depressed(1)	-1.645	1.227	1.798	1	.180	.193	.017	2.137
C_Info(1)	1.579	.830	3.616	1	.057	4.851	.953	24.702
Constant	17.215	5.973	8.308	1	.004	29949543.236		

a. Variable(s) entered on step 1: Age, WHODASscore, Depressed, C_Info.

4B.6.3 Satisfaction with Outings

The USER-P Satisfaction questionnaire asks participants to report satisfaction with going out such as eating out, visiting a café, the cinema, a concert alone or with others.

Variables selected for outings during univariable analysis for model building with a p-value of <.1 include: Gender identity, WHODAS score, and access to information. Thus, a binomial logistic regression was performed to evaluate the association of the independent variables gender identity, WHODAS score and information access on the dependent variable satisfied with outings when controlling for age and depression.

Classification, variables in the equation, and case counts (n=61) all appear acceptable for satisfaction with outings. There are three missing cases associated with gender identity. Of the 6 independent variables none were statistically significant when controlling for age and depression

as shown in Table 9 below. The model explained 25.3% (Nagelkerke R^2) of the variance in satisfaction with participation in outings and correctly classified 72.1% of cases.

Table 9
Logistic Regression Predicting Likelihood of Satisfaction with outings

	B	S.E.	Wald	df	Sig.	Odds Ratio	95% CI for Odds Ratio Lower	Upper
Age	-.009	.051	.033	1	.856	.991	.897	1.094
Female(1)	-1.443	.785	3.373	1	.066	.236	.051	1.102
WHODASscore	-.019	.019	1.052	1	.305	.981	.946	1.018
Depressed(1)	-1.016	.752	1.824	1	.177	.362	.083	1.582
C_Info(1)	.774	.611	1.604	1	.205	2.168	.655	7.181
Constant	2.261	3.858	.343	1	.558	9.592		

a. Variable(s) entered on step 1: Age, Female, WHODASscore, Depressed, C_Info.

4B.6.4 Satisfaction with Daytrips

The USER-P Satisfaction questionnaire asks participants to report satisfaction with daytrips and other outdoor activities such as shopping, attending events, going to the beach, church or mosque.

Variables selected for daytrips during univariable analysis for model building with a p-value of <.1 include: Gender identity and WHODAS score. Thus, a binomial logistic regression was performed to evaluate the association of the independent variables gender identity and WHODAS score on the dependent variable satisfied with daytrips when controlling for age and depression.

Classification, variables in the equation, and case counts (n=61) all appear acceptable for satisfaction with exercise. There are three missing cases associated with gender identity. Of the five independent variables one, the WHODAS score (OR= .961, 95% CI [.924, .999]), was

statistically significant when controlling for age and depression as shown in Table 10 below. Decreasing WHODAS scores (i.e. toward functional independence) resulted in a higher likelihood of satisfaction in daytrips. The model explained 45% (Nagelkerke R^2) of the variance in satisfaction with participation in daytrips and correctly classified 72.1% of cases

Table 10
Logistic Regression Predicting Likelihood of Satisfaction with daytrips

	B	S.E.	Wald	df	Sig.	Odds Ratio	95% CIfor Odds Ratio Lower	Upper
Age	-.076	.055	1.919	1	.166	.927	.832	1.032
Female(1)	-1.432	.849	2.847	1	.092	.239	.045	1.260
WHODAS score	-.040	.020	3.945	1	.047	.961	.924	.999
Depressed(1)	-2.622	1.126	5.421	1	.020	.073	.008	.660
Constant	8.016	4.195	3.650	1	.056	3028.095		

a. Variable(s) entered on step 1: Age, Female, WHODAS score, Depressed.

4C: Mixing of Data Part I

In keeping with explanatory sequential design, Creswell and Plano Clark (2018) describe mixing of data at two steps. First after the results of the QUAN research to inform or "connect" to the QUAL strand in order to explain the quantitative results, which will be described here, and again after the QUAL strand to inform the MM results, which will be described in Part II.

Because of the COVID-19 pandemic, reaching participants to take the survey was increasingly difficult despite networking efforts. A decision to explore preliminary quantitative results to begin qualitative interviews was made upon gathering data from 62 participants primarily to respect the timeline for participants to remember what they indicated on the survey. Ultimately the quantitative findings from the preliminary primary analysis of multiple regression pointed to a need to inquire specifically about healthcare services and information access in

relation to functional ability. While all survey areas could be discussed, it was critical to emphasize and draw explanations specifically about these results. Appreciative Inquiry, (Cooperrider, 1986) which utilizes positive thoughts and experiences to envision what could be, was employed to design an interview protocol that utilized probing questions to address factors associated with participation in society identified in the analysis of the survey data. As described in Chapter 3, maximum variation sampling (Guba & Lincoln, 1989) and a willingness to participate in the interview were utilized to select individuals who could provide explanations.

The finalized results from the survey of the strongest contributor for satisfaction with participation in society, functional ability as measured with the WHODAS score, was included into the qualitative strand (confirming the preliminary results) when asking about ability level in order to discover positive experiences of participation, understand what the participant values about their community, and probing questions for continuity in designing an aging friendly community that supports participation of varied functional ability levels and facilitates aging in place. While results of the logistic regressions identified only the WHODAS score as associated variable with community participation, the results of the multiple regression demonstrated that access to information and healthcare services also play a role in satisfaction with participation. Thus, these variables were intentionally queried in the qualitative strand and often emerged organically prior to probes or thick descriptions.

4D: Qualitative Strand

Nested within the Consolidated Framework for Implementation Research (CFIR) (Laura J. Damschroder et al., 2009) and guided by the quantitative results and Appreciative Inquiry (Cooperrider, 1986), the qualitative strand aimed to describe associated interactions of individual and community barriers and facilitators to participation in society and to develop a theory of

change by eliciting suggestions about objectives to overcome barriers and leverage facilitators in order to engage in community action plan development. The qualitative strand answered the research questions: *How do participants in Southern New Jersey suburban communities describe the barriers and facilitators to participation in society that stem from a) individual characteristics and b) community characteristics?* and *What are participant suggested objectives for addressing barriers and facilitators to participation in participant communities?*

All 14 interviewees were contacted to attempt member checking of qualitative themes. Seven interview participants agreed to provide member checking and were provided the qualitative findings below. All seven participants agreed with the thematic results. While no specific changes were recommended, one participant questioned how the results will be used. This led to a conversation about co-dissemination of results in a two-way dialogue and working session to envision the ways they can be used for action planning. Additionally, stakeholder meeting members were given the opportunity to make changes to the community profile developed from census data and town websites and no corrections to profiles were provided.

4D.1 Thematic Organization & Development

Because the dissertation focus is creation of a theory of change, themes were organized with guidance from program theory and in relation to research questions two and three. A theory of change is comprised of a situation analysis, focused outcomes situated within the larger context, and an outcomes chain to address a situation (participation in society) (Funnell & Rogers, 2011). Table 11 displays the theory of change as described by Funnel and Rogers.

Table 11.
Components of a Theory of Change (Funnell & Rogers, 2011)

Theory of Change		
1. **Situation Analysis**	2. **Focus & Scope**	3. **Outcomes Chain**
Identification of	Setting the boundaries,	The centerpiece of

problem, causes, opportunities, consequences	linking to partners	program theory, linking theory of change and theory of action

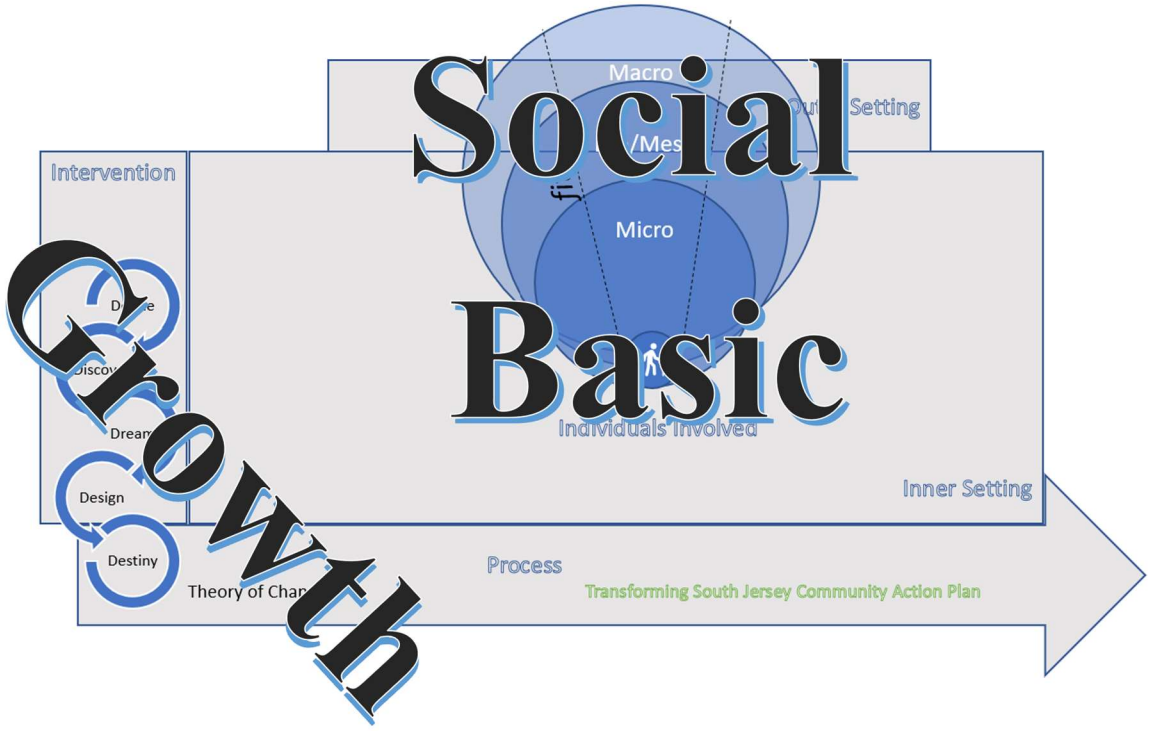
As the thematic analysis began to take shape, the researcher drew connections inductively between the findings related to a situational analysis or needs assessment that could be used to explain participant mental models. It became apparent that using Maslow's Theory of Motivation[2] and his Motivational Model (Maslow & Frager, 1987) provides explanatory power to the qualitative results. A description of Maslow's theory and model as well as the linkage to this study can be found in Appendix I.

4D.1.1 Thematic Emergence

Three overarching domains emerged from the qualitative findings: Basic, Social, and Growth. The domains are organized within the Consolidated Framework for Implementation Research (CFIR), the overarching theory driving this study depicted below in Figure 16. The Basic Domain is situated within the *inner setting* and the *individuals involved* (older adults). The Social Domain is situated within the *outer setting*. The Growth Domain is best captured as part of the *adapted intervention*. The combined domains with themes and outcomes represent the theory of change (described in a later section), which is situated within CFIR as the *process* (Laura J. Damschroder et al., 2009).

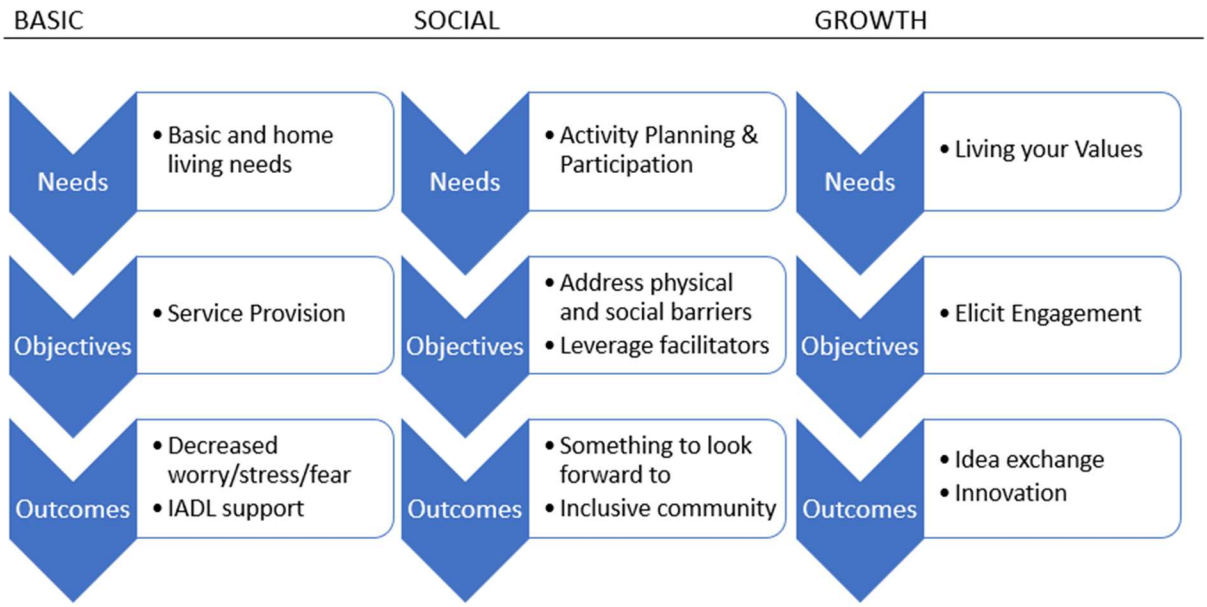
[2] Originally a five-tiered model (physiological needs, safety needs, love and belonging, esteem, self-actualization), Maslow's theory later developed to include three additional tiers (cognitive needs, aesthetic needs, and transcendence needs). Ultimately an eight-tiered pyramidal model explains the motivation of humans as a hierarchy of needs requiring satisfaction at the lowest levels to flexibly achieve the highest levels of happiness.

Figure 16.
Thematic Domains mapped to Conceptual Framework



Aim 2 sought to have participants describe associated interactions of individual and community barriers and facilitators to participation in society. As such, within these three domains, themes of Needs were identified. Furthermore, an aspect of Aim 3 was eliciting suggestions about objectives to overcome barriers and leverage facilitators. As such, Objectives were identified by participants. The themes that emerged were ultimately paired with outcomes developed in the outcomes chain to present the qualitative results (Figure 17).

Figure 17.
Qualitative Strand: Needs, Objectives, Outcomes

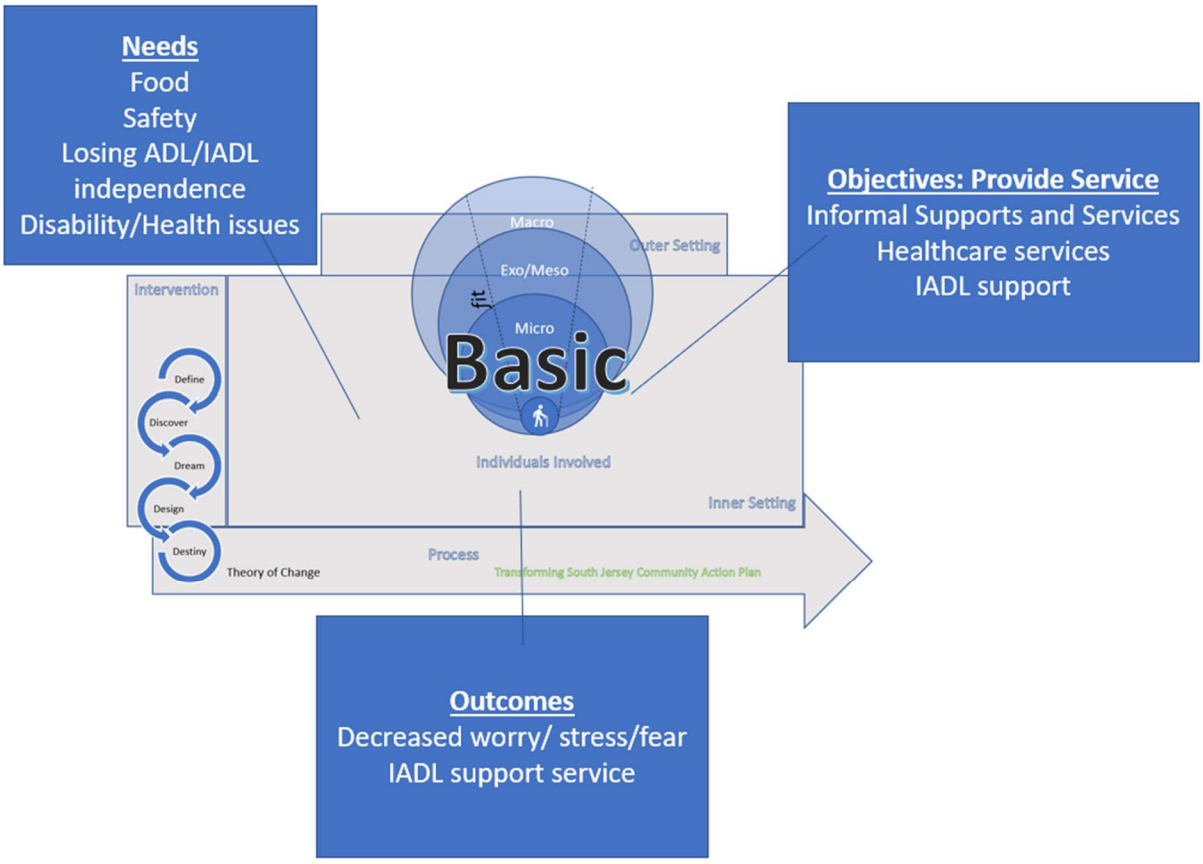


The following 4D sections will unpack *needs* followed by respective *objectives* for each domain: Basic, Social, and Growth. The subsequent 4E section will describe the outcomes chain. After the mixing of the data in 4F, the theory of change is presented.

4D.2 Basic Domain

The Basic Domain can be captured within CFIR in the *Individuals Involved* and *Inner Setting*. Image 17 below shows how the themes (described next) are mapped to the Conceptual Framework.

Figure 18.
Basic Domain Mapped to Individuals Involved and Inner Setting



4D.2.1 Basic and Home Living Needs

Basic and Home Living Needs is a theme that emerged and contains codes: Food, Safety, Losing Independence, and Disability/Health Issues. These codes describe the essence of basic needs of community dwelling older adults within the three communities studied.

Table 12.
Expanded codes for Basic and home living needs theme

Needs	**Basic and home living needs**
	Food
	Safety
	Losing ADL/IADL Independence
	Disability/Health Issues

Participants describe both how these needs are met and how they are lacking. At the most physiological level is food and safety and generally these needs are being met according to participants by a variety of services such as the food pantry, food trucks, the ability to grocery shop or have groceries delivered. Caring for oneself (Activities of Daily Living (ADL)) and operating in and caring for one's home (Instrumental Activities of Daily Living (IADL)) tend to be more concerning for participants both in the present and in the near future should a change arise (i.e. loss of ability to drive). IADL tasks are those tasks that are required for home maintenance and chores. These are essential for community dwellers. The theme is a demonstration of how disability and health issues contribute to loss of independence and how this loss affects basic ADL and IADL tasks. When participants are concerned with meeting these basic and home living needs, there is great difficulty in meeting social and growth needs. This is exemplified by Participant 11 who describes how support with IADL tasks could contribute to her ability to take part in leisure interests:

> "It would reduce stress. And another part is, for me to go out and do that [lawn maintenance], first of all, it sounds wonderful. You're out exercising, but that's major physical labor that probably, when you're 70, you shouldn't be doing it, particularly as a woman. And me, just having somebody do this every two weeks for me, that's freed up my time to go ride my bicycle and be active, or to do something in my house, fix things in the house or something like that" (Participant 11).

Food. Food is a cross-cutting code whereby under this basic need it represents acquiring healthful food for sustenance in order to meet a physiological need.

> "Every Wednesday, they bring out a mobile food truck. Whereby seniors can go and purchase produce and fruits at a very low price. In addition to that, the CCU Missionary

Baptist Church, once a month has a food giveaway. I think they join with Philabundance and specifically for seniors" (Participant 8).

Safety. The safety theme is defined as feeling safe and secure in one's home and community; free from violence, crime, blight; and the ability to safely locomote in one's community. Participants express that they desire to feel safe:

> "You know what? Also, what's important to seniors, the idea of feeling safe. The idea of feeling safe. Especially in these times when if you are a senior who stays connected to, because many seniors do, to news media by way of either radio or TV. And you hear the kinds of criminal activities that take place…" (Participant 8).

Participants also give examples about ways they do and do not feel safe in their community. Participant 5 shares why he feels safe in his community:

> "I think there's some parts of the community that might be more concerning to live in, but I feel fine. Mainly, I live on one of the main streets and things like that, which is good, versus a back one where there could be problems or something. I feel safe. Yeah, I do. I do. Yeah, I feel comfortable" (Participant 5).

On the other hand, Participant 6 describes why she does not feel safe in a section of her neighborhood that was once thriving with businesses and has a walking path:

> "When you go another side, [park area name], go that way, no good. Bad. Bad. Don't go there. Bad. Near the creek, no…bad, bad, bad. The guys sleep over there, hang on there. I over there. The reason I go over there, I go wash my car and my and before you, you have to bang over there, them bang [on my car]. No good. You don't want to walk there, no way, Jose. No, no, no. No, I'm not going to go there. Yeah, yeah, because did you know, people tell me lots of house empty, [Town 2]. Empty, empty. Nobody pay property

tax. After everything, they'd have to build them up. Bad. Bad. You see how many killed, you see how many killed. How many killed, it go down. You know, church, you can look, you can look at the church if you pass the church. The church go down. I mean, bad. Yes, the church. The building crap. Everything." (Participant 6)

Losing ADL/IADL Independence. This subtheme represents textual evidence describing a decline in functional ability typically related to physical, cognitive ability from basic self-care (ADL) to household/IADL ability. Participant 12 discusses her limitations since having a stroke "Well, I take my time going down the steps and I make sure somebody is with me when I get down and up" (Participant 12) and Participant 6 discusses how her limitations in IADL property maintenance and potential loss of driving will force her to move in order to garner more support:

"You know when I leave, I got to be sad because I grow up in New Jersey…But I know have no choice. I have to go with my granddaughter…Yeah, more help, more support. Because pretty soon after 80, I don't know. I [don't know if I] have to go take a driver license test or not somebody tell me when you 80, you have to go get a new license. I don't know, I hope not… No, I can't do no more behind the back yard, you know, now I got to ask my granddaughter come to visit me but not now, she say later on, she got to go Lowe's and buy... I don't know what in English called. Peat moss, and put around the front yard for me. No, garden nothing [for two years]…Yeah. Now I have to give up..." (Participant 6)

Participant 7 describes how the loss of independence coupled with a lack of support has affected older adults she knows, resulting in institutionalization:

> “I see so many seniors who don't have either family in the area that can check on them and then they end up having to leave their home, which, oftentimes, they don't last long after that because they've left a very familiar place for some place that is not familiar, and then also their independence is lost, so if we can find ways to keep seniors in their homes, it'd be much better for them and for the community.” (Participant 7)

Disability/Health Issues. While not explicitly asked in the interviews, eight participants identified living with a chronic disability or health issue and one reported having acute disability from a COVID-19 infection. These conditions span from major organ system failures including heart disease, kidney disease, stroke; cancer reported as colon, blood, and lymphoma; asthma and arthritis; and acute conditions including COVID-19, and broken bones of the foot and shoulder. Participants describe a range of experiences related to these conditions where some have limited functional impact and others report severe impact on functional activity and ability to participate. Participant 6 describes the impacts of arthritis on her ability to care for herself and to contribute to others, “Because my hand, I get arthritis really bad. A lot of time I never cook…I don't know how to explain to you. My health, it's not too good to health… Or like now I did not go help nobody, nothing no more. Now I'm not go help, because I can't…” (Participant 6). Participants Participant 9 and Participant 2 describe their experience with a heart condition, “And then I ended up getting health issues. Serious health issues. I ended up getting congested heart failure and almost didn't make it” (Participant 9). “I was diagnosed with a lousy heart, so I'm waiting to hear from the surgeon to have some surgery” (Participant 3). Participant 4 reports how cancer has affected her ability to function, “Well, I'm 66 and I was diagnosed with colon cancer this year. So it's been a little rough. Well, right now with going through this treatment, I can't do much. I used to watch her [my great niece]… and I don't anymore…the little one I can't

anymore" (Participant 4). Participant 12 discusses the impact of her recent stroke "I'm 70 years old. I live alone in an apartment. I just had a stroke two months ago and I'm recovering from that…I still got a little weakness in my left leg" (Participant 12). She later describes the impact of this weakness on her ability to utilize steps and a need for an apartment on the first level.

Because of the general aging process (i.e. arthritis) and the rise of chronic conditions, older adult participants have indicated that satisfying basic and home living needs might be completed with the provision of services to support these areas of function. Thus, the emergence of the next theme, Service Provision Objectives, captures participant experiences and suggestions.

4D.2.2 Service Provision Objectives for basic and home living needs

Aim three sought to garner objectives for overcoming barriers and leveraging facilitators identified by community dwelling older adult participants. Participants were queried about suggested objectives based on domains that they identified as helpful or problematic within their community, and in this case specifically related health and function in the home. This theme is described by Informal Supports and Services, Healthcare Services, and IADL Support.

Table 13.
Expanded codes for Service provision objectives theme

Objectives	**Service Provision Objectives for Basic and Home Living Needs**
	Informal Supports and Services
	Healthcare Services
	IADL Support

Informal Supports and Services. Presently there are informal services that exist typically through family and friend channels or neighbor networks. Participants describe these informal supports and services as both provisioned and received. These participants describe informal support and services received by them:

> “Since I got the cancer I do have a lot of support, my family, just so hard. Just takes a lot out of yourself… I have a lot of good neighbors… They'll knock with something of flatter or knock to see how I'm doing, they'll call me. They're really good like that here. Some of them aren't some are. You know how that goes” (Participant 4).

> “My wife's employer came down to see me. I was shocked when I was in intensive care... he went to see me there. And yeah, there was support there. I had another guy who, [Wife] was telling me he was crying. He was all upset. And this other guy, he was also very upset. He constantly was calling [Wife], finding out how am I doing. And he couldn't reach her because she was spending a lot of time with me in the hospital…Yeah, and she ended up taking a 30-day leave of absence just so that she could take care of me, which is something you never forget” (Participant 9).

Other participants describe informal neighbor networks that have been established to support one another:

> “On a personal level, my neighbors and I, those of us who are the original owners who are in my age group, and we rely on each other if we have problems or need a ride somewhere. We have new people that moved into my neighborhood, for example. This isn't where I helped somebody else, but my neighbor next door, she's a young couple with two young kids. She must text me once a week, at least once a week, and just asks how I'm doing. She's just a lovely” (Participant 11).

> “I remember when [Name] called to ask me if there was some seniors on my block who needed their sidewalks and driveways shoveled in the snow. So I told my next door neighbor and that got done” (Participant 7).

These informal services described are established; others describe how future supports and services related to basic caregiving and home living (IADL) tasks are needed with suggestions for development, described below in IADL Service.

IADL Service. Participants have expressed a desire for local communities to develop formal service systems that are trusted and funded in order to support older adults living in the community.

> "I think services, for instance. We might have senior who may not be able to mow their lawn. It'd be nice to have a service where you could pick up the phone and say, listen, I really need my lawn mowed. Can you do it? And hopefully there will be a fund that would pay for it…Or a senior has a plumbing issue or something and they don't have the funds to do it. If there was a number of the senior center that we could call and say, listen, I need a plumber, or the house needs fixing up and, group of people can get together and go help the seniors" (Participant 7).

> "When you talk about people staying in their homes and stuff, I will say the other big issue is some resource available to ... cutting grass might just sound like a ... that seems like a frivolous thing, but you will get cited if your weeds or grass are higher than six inches. And you will get cited. I would love to see some resource in the township that maybe can do services for seniors at a reduced cost maybe, to help out with those types of things… Smaller things, really, what I had to go through to find somebody to just do basic yard maintenance is unbelievable. And everybody has this complaint about the same thing. And if you then become on a fixed income, which I'm not yet, I don't think I'll be able to afford that… Now, I think some ... from an aging perspective, some of the things I would like to not have to stress over is, A, finding people who can help do

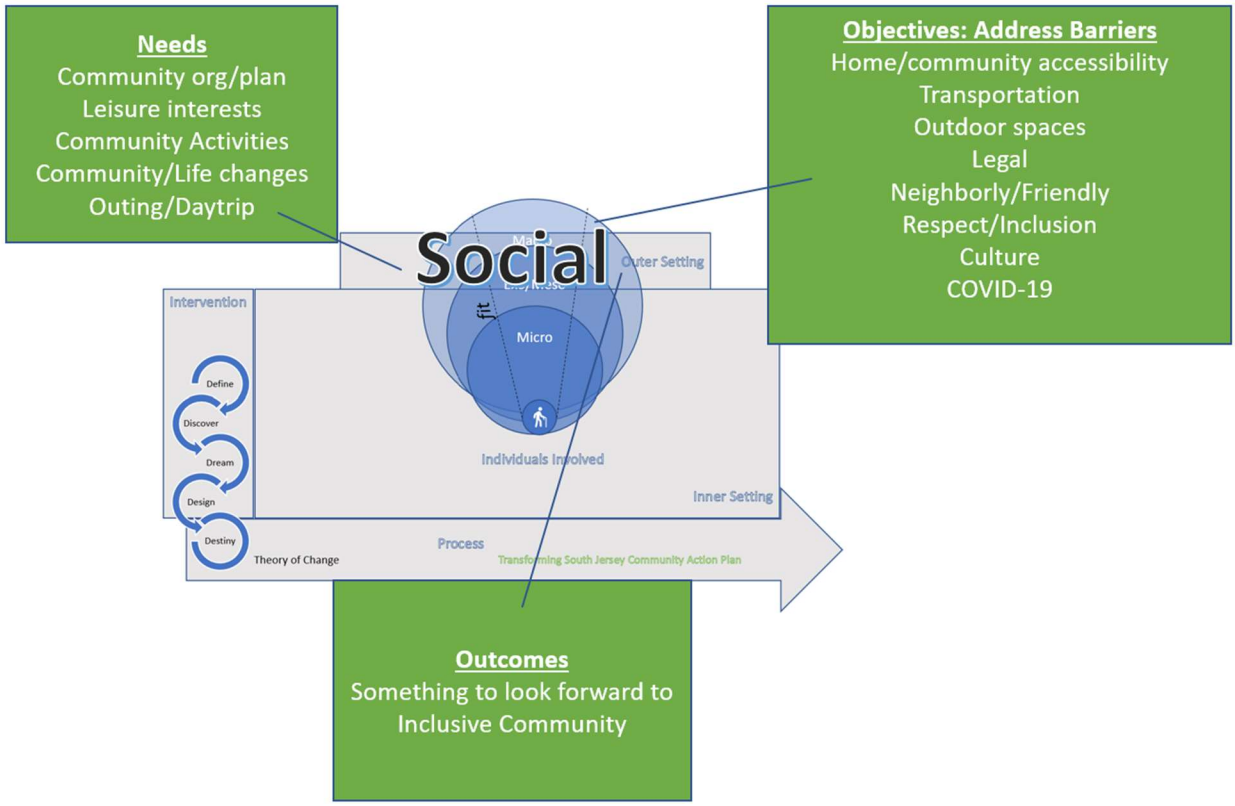
repairs, finding people who can help maintain your property. If you're talking about wanting to age in place, they're the things. I'm right now in the process of looking at different companies to help me do certain renovations that I want now that I've made my mind up that that's probably what I want to do…It would be nice to have those types of resources in the township to say if you need somebody to come and help assess your property and see what kind of things would you want to do, and do it while ... I'm working, so I can do it now while I'm working versus being on a fixed income, things like that. You have to become your own construction expert over the years, or repair expert…

and people that are reasonable to work with seniors and that you can trust. Or maybe even like ... There are things, and I bring that to mind in terms of what types of activities could the township do, maybe some meetings for people to have those types of discussions, and presentations, and for thinking about how to fix your home to stay in place, things like that" (Participant 11).

4D.3 Social Domain

This theme is represented within the conceptual framework of this paper using CFIR's *Outer Setting*. The image below depicts the social domain mapped to the conceptual framework.

Figure 19.
Social Domain Mapped to Outer Context



4D.3.3 Activity Planning & Participation Needs

In order to meet the social needs, participants have expressed needs to take part in organizing and participating in community events. Activity Planning and Participation Needs is described by the following codes: Community Organizing/Planning, Leisure Interests, Community Activities (including Cross-Generational Participation), Community and Life Changes, and Outing/Daytrip.

Table 14.
Expanded codes for Activity planning and participation needs theme

Needs	**Activity Planning and participation needs**
	Community organizing/planning
	Leisure Interests
	Community Activities Cross- Generational Participation
	Community and Life Changes

	Outing/Daytrip

Community Organizing/Planning. These are actions that townspeople take to do something in the town such as being on a committee or putting together an activity. Planning often deals with restoration and beautification, corroborating Maslow's indication that aesthetics is a (mid-order) need for humans.

> "I am involved in a lot of things in town. In town, I've been involved with Main Street Hammonton for many years. I actually was involved before there was a Main Street Hammonton and Downtown Revitalization. That's been kind of a passion of mine. I've been the design chair person for [name of organization] for a long time" (Participant 1).

> "For both projects we did fundraising activities among the service organizations. And in all the stores ... not in all the stores, a lot of stores in town, we had these little yellow canisters where you put a penny at the top and it would roll down. It could be a nickel, dime, quarter, but put coins, and they were contributions. And we'd go around and collect the coins. And the park became known as the Penny Park Playground because of that" (Participant 2).

> "When I'm on a board of commission I'm just not there to rubber stamp and just say yay or nay. I actually do my due diligence. I'm a commissioner now for the utility authorities. And before I was on the phone with you, I was on a webinar about water and waste work. Cause I want to learn every single thing I need to know about that. What the workings of that board is, permission is it's job. So I can make intelligent, informed decisions. So it's not just being a part of it, but it's being a knowledge of…Because I don't want to look stupid. I'm not going to say, yeah your name to something. And I don't really know what

I'm saying yay or nay to..Not doing that. And I don't want to just sit there and just listen to stuff. I really know what they're talking about. That doesn't work for me." (Participant 7)

"Yeah. So as I said, I retired in 2008. But prior to that I ran for the school board in 2006, and I've been on the [town] Board of Education since 2006. And also, I sit on a board of trustees of a non-profit organization." (Participant 8)

"Yes. I'm involved, certain times, with the drug commission and whatever. Sometimes I go to party meetings, Democrat party meetings and whatever." (Participant 10)

"Yeah. I mean, our Board of Health are all volunteers. We're all volunteers, and we're appointed and volunteers. There's several retired women on there that I will just say to you, they'd walk circles around anybody that I know. They are active in so many ... and not just in the township, but throughout the county and the state. Very active in all types of community service programs, whether it's to do with breast cancer, prostate cancer, I don't know, everything." (Participant 11).

Participant 2 describes how planning a community project and actuating that plan brings together community members emphasizing a need for socialization:

"It does engender community ownership in a good way and gets people ... back to my inside world, outside world. Okay, you can have a gated community and your pool and your backyard, and never have to leave your house because you've got every comfort known to man. But then there's no community. Back to your word, community. We have

15,000 houses, but we have no community. And some of these projects, yeah, they serve a purpose for sure, but almost an unintended consequence, they foster community." (Participant 2)

On the other hand, there are participants who desire socialization and are interested in planning speakers, activities, and events, but do not feel they are equipped to take on planning tasks, "Yeah. I talked with the manager. She says, "Soon as things start to open, we'll open. We got to be extra careful."" (Participant 4). And another participant describes trying to start something is challenging:

"Like I said, me and my friend were talking the other night about the service dog because they used to bring their dogs here and show us what they're capable of doing. And that was really neat, but that just stopped… So they don't do that no more. And I wouldn't know how to start it." (Participant 12)

Leisure Interests. Leisure interests are those activities that are nonobligatory and intrinsically engaging (American Occupational Therapy Association, 2020b). Participants have identified several areas of leisure interest including the theatre, reading, music, travel, and fitness/sport. These interests, even those that are perceived as solitary interest can give rise to social activities, "Yeah, I love all kinds of recreation. I'm a reader. I love to read..." (Participant 9).

"I'm an avid reader. And it's a place that just has access to interesting resources, and the librarians are phenomenal. They just are. They're knowledgeable about everything, and they're very helpful with everything. They know everything that's going on in the township as well." (Participant 11)

“But I really would like a book club in town.” (Participant 1). Knowledge of these leisure interest needs can give rise to objectives, such as a book club in a library, for example, that can be triangulated and balance individual areas of leisure interest with social participation in the community.

Community Activities. Community Activities are formal activities within the community or senior centers that bring people together. They are not necessarily designed by people who attend them, but rather attended by towns members. Participants continue to emphasize that community activities are a demonstration of socialization needs and as such are organized under this social domain. Participant 8 describes the joy bingo night brings while also contributing to scholarships for her community youth:

> “The Winslow Township Rotary Club annually gives out scholarships, academic scholarships to children in our school district. They do that, by of course, having fundraisers. And I'm a person, I love bingo. And so the Rotary Club has an annual bingo night and most of the proceeds from that go towards their scholarships.” (Participant 8).

Participant 1 describes the activities that take place for older adults in collaboration with the nearby university:

> “We have Stockton University, Kramer Hall here in Hammonton, and I would go to various things that they would have during lunch hours. For instance, their SCOSA program, which is senior, I don't know what it is. It's about seniors. SCOSA stands for something. A lot of their things are in Egg Harbor Township and other places, but they would have speakers and nutrition and mindfulness, and all kinds of different things like that. And it used to be during lunch hour, so I would go to them. And then, anytime they

have an art show or whatever, I usually make sure I'm there, and everybody knows me there because I show up." (Participant 1).

Participant describe how senior based clubs and senior centers offers several activities for older adults:

"Well, there is a place that's called the Canoe Club, and it was built by the community itself through taxpayer dollars. And you have to be over 50 in order to enter the building, and it's right on the Hammonton Lake, very pretty, very nice building. And there are people who go there very regularly. They play cards, they have guest speakers, they have different events. It's also used as a polling place on election day, but that's one of the... There's always been a Senior Citizen organization, and this Canoe Club sort of grew out of that, a Senior Citizen organization." (Participant 14).

"Well, when they were open you always had a schedule of events that took place at the center. Trips, bingo nights, dance classes. So, yeah. Oh yeah. Trips to New York to see plays, especially at Christmas time. And when the casinos were very active there were trips to and from the casino. So I would say the hub for senior activity here in Winslow is clearly situated in the Ed Duble Center." (Participant 8)

And yet even older adults in these communities who know about the senior centers and clubs report that they do not utilize the centers:

Well, I understand the senior center is really good. I've just never been involved in it as of yet. That's great that they have that. For a lot of people, I think it's given a lot. I have friends outside... I have certain friends that I'm in touch with, and that keeps me socially going, which is valuable"(Participant 5).

> “I know there's a senior center up by the Winslow High School up there on 73... that I only visited a couple of times. Two or three times. And it's just the time element. On the weekends, we end up doing other things, and my wife would only be able to go on the weekends because by the time she gets in, she really doesn't want to do too much of anything. But I would definitely like to go there and just talk with other people my age. That's the key. Yes, at least something where we could get together. I been telling Mary, I said "We really should just go down there, see what they have." Sometimes they have casino trips. Sometimes they offer little trips, day trips, and that sort of thing. And sometimes they offer free food. And that's when we would go. When there's free food (laughs)” (Participant 9).

And other older adults living in older adult communities within their towns feel there are not enough planned activities to meet their planning and participation needs, “No, they don't do much here. If they did I would participate on the days that I feel well” (Participant 4). Another participant also expressed this lack of planned activity, “I mean, all we do is just sit on the porch. There's nothing really to do. No activities or nothing (Participant 12). Participants also clarified that while COVID-19 has impacted activities, that this was a problem before the pandemic:

> “No, we tried to have block parties, but they don't like to have anything around here. I mean, you can't even have a yard sale, so they're very strict for some reason. They used to have Christmas parties for everybody that lived here. They don't even do that anymore. They just stopped doing it. That was before COVID…They have a building up front where office is, and they used to hold bingo and dinners and all that, but they don't even do that anymore. We're not allowed to use it unless we have homeowners insurance and a lot of people can't afford that because we're all on fixed income” (Participant 12).

Cross-Generational Activity. A subtheme of Community Activity, participants also suggest a strong need and desire for cross-generational activities that include community members from across the lifespan, children through older adults:

> "…they always had this promenade where the kids were able to walk outside and walk down the sidewalk. It even happened when I was in high school, you walk this whole gambit to go into the building. And so everyone in the community got to see kids all dressed up in prom, gowns and tuxedos. And when that had occurs, the number of people who would be there, it would be aunts and uncles and cousins and sisters and brothers and moms and dads and grandparents. The parking lot would be absolutely full, and all these people lined this walkway and the kids would walk through and everybody would Ooh and aah. It was just fun. " (Participant 14)

This idea of cross-generational interaction as a component of activity needs is also recommended by two participants through "I would say sports" (Participant 10):

> "there's been a swim club since 1958. It's a typical summer swim club. It's still hanging on by the skin of its teeth, as Bruce Springsteen would say. But it's still in existence. But that was the springboard kind of to a high school team that then fell by the wayside. So I think reinstituting a high school swim team and having a community aquatic center would be one next thing that Hammonton could use. And again, bring people together, get them out of their houses, and get them into a common space outside their house." (Participant 2).

Furthermore, cross-generational activity is recommended within the schools through "More involvement at the school system" as well as through education in general, "We got libraries, unused, books that haven't been used..." (Participant 10):

> “I'd have to look into it, but I think there's opportunities to become involved with the kids at the high schools and the elementary schools to do ... you know how they have, I don't want to say grand-mom working with the kids. But I think there's opportunities like that that could be encouraged.” (Participant 11).

The sentiment of cross-generational involvement seems to be a favorable way to develop and nurture relationships that would be beneficial to all ages as exemplified by these two experiences highlighting involvement of older adult participants and school-aged children:

> “And she has a teenage daughter that I had gotten her involved as a volunteer with the Board of Health, and so she was interested in going into the healthcare field. I adopted her as a mentor to take her on” (Participant 11).

> “And I guess the one that I am most proud of, project, is ,we gave a grant and continue to give grant money to the high school, to start what they call, The Devil's Pantry. Our school mascot is the Blue Devils. The Devil's Pantry has clothing and food and gift cards to Walmart and ShopRite for students who have needs that they can not get at home, if they have a food problem and they have clothing issues. We also put in a washer and dryer so that kids could bring their laundry to the school. And the laundry would be done for them by one of the teachers and picked up at the end of the day. And it was done through one of the teachers and the school social worker. And the kids who come, they are anonymous to everybody else. They just kind of reach out or one of the teachers will reach out and say, hey, you know about the Devil's Pantry? You might want to visit it after school or before school, or during lunch or something like that. And kids have been doing that. So we have been helping a lot of kids, especially during this pandemic. Even during the pandemic, kids are getting food or clothing, things that they need. It is always

wonderful to be part of an organization and get to be with other people, especially with the Hammonton Education Foundation. Right now, I am the oldest member. And so I am working with all of these young people, some of which were my students. They are teachers now or they are moms and they have joined the organization. And so I get to interact with them. I love that." (Participant 14).

Community and Life Changes. Change throughout life is inevitable. As disability and health issues can present as a change and were described in Basic needs, changes related to socialization, such as the death of a friend or spouse, as well as changes within the community make participation in community life ever changing over time. For some, these changes spur more community participation, and for others it limits the desire and ability to access communities in order to participate.

"Gee. I'm 86. Most of the people that we knew here are gone. Matter of fact, with the exception of... really, there are very few people, it's two couples that we're really friendly with that are left. Everybody else is either dead or moved away. So I don't have that much involvement in the community now because of that." (Participant 3)

One participant describes how community and life changes not only limit community participation, but spur a desire to leave the community altogether:

"And it's changed. It's naturally more family-oriented. There's very very very rare that I come across anybody that's near my age. And that's another thing. We really would love to get out of here…Four of my friends moved. All recently. Who moved out? Who moved out of state completely? Who moved five miles away? Which, in my mind, that's not a move, but... that's what he chose because it was cheaper in taxes. And that's why he

> chose to do that. He was a really good friend of mine. I really liked him. There's not much left here for me. For us." (Participant 9)

Participants describe how loss of friends impact their community life, "But most of the neighbors that moved here when I moved here, I mean, several of them have passed away that were my best friends, and some have moved away." (Participant 11)

> "And, a lot of old people, because no Thailand allow here, because I know one, she passed away, and my good one, she pass away. Okay? I don't have no more, because orient people come that time, World War II, old now. We in 80. And, all of my friend is my age, and she pass away. I no have nobody to go in, and now have Korea people, them younger. When she come take me, she names [name], good girl. Every week, bring me food…[…]have lot of Korea people, more than Thailand. Thailand almost gone now. Everyone I know, them passed away and go back to Thailand." (Participant 6)

Yet this loneliness that Participant 6 does spur community outings, "No, no, take the bus because I lonely sometime in the house. I want to go somewhere and eat." (Participant 6)

Outing/Daytrip. The USER-P was used to measure the satisfaction of outings and daytrips and these are defined as the satisfaction with going out such as eating out, visiting a café, the cinema, a concert, alone or with others and daytrips and other outdoor activities such as shopping, attending events, going to the beach, church or mosque. As such, this theme represents the outdoor activities and daytrips that participants plan and participate in. Outings and daytrips has been identified by participants as a need both for socialization as well as practical purposes such as grocery shopping. As mentioned previously in the Basic and Home Living Needs, food represents both a basic need and a social need. Participants discuss how these social outings and daytrips encompass the social aspects of food.

> "Yeah, I take the bus and I go all day, I sit down in the bench. Lot of old people sit. Like on Saturday, them close, lot of things close. And Chinese people them bring vegetable. Them grow them own vegetable in the garden and them [inaudible 00:18:47] sale on sidewalk…When I walk on the street, like I walk on the street, sometimes exercise, walk over there and go to Starbucks, drink coffee. You know, [inaudible 00:15:19] drink coffee and watch people. People walk dog, walk around, and I'm see me, "Hi, Participant 6."" (Participant 6)

> "Yeah, so for entertainment, we enjoy going out, eating dinner or lunch. Lunch or dinner. We really enjoy that a lot. And I love the town of Hammonton." (Participant 9)

> "Sometimes [the senior center has] casino trips. Sometimes they offer little trips, day trips, and that sort of thing. And sometimes they offer free food. And that's when we would go. When there's free food. (laughs)" (Participant 9)

The crosscutting subtheme of food is discussed again later in socialization.

4D.3.4 Objectives for Addressing Physical & Social Barriers, Leveraging Facilitators

Similarly to meeting Basic and Home Living Needs, Social Needs of Activity Planning and Participation can be met through suggested participant objectives. Participants have indicated a number of barriers and facilitators related to the physical and social environment of communities. Addressing these barriers and leveraging facilitators may allow community dwelling older adults to plan and participate in their communities. These physical areas include: Transportation, Home and Community Accessibility, and Outdoor Spaces. Legal issues surrounding insurance impact the ability to acquire physical spaces and structures for utilization of social activities. As such, it is discussed between physical and social areas. The social areas

include: Neighborly/Friendly, Respect and Inclusion, Culture, and COVID-19. One participant sums up this theme and the objective to address barriers:

> "Yes, whatever you want to help them do or include them in, whether it's transportation, socialization, healthcare, you have to make it available, you have to make it non-threatening. And by available, has all kinds of things. There has to be a physical plant, there has to be transportation or people who will help you when you get there to do it. Do you know what I mean? It's the whole package when I say available" (1-20).

Table 15.
Expanded codes for Objectives for addressing physical and social barriers theme

Objectives	**Objectives for Addressing Physical and Social Barriers, Leveraging Facilitators**
Physical	Home and Community accessibility
	Transportation
	Outdoor spaces
	Legal
Social	Neighborly/Friendly
	Respect and Inclusion
	Culture
	COVID-19

Physical: Home and Community Accessibility. The ability to enter and exit one's home as well as the "convenience" of walkable sidewalks and paths and access to buildings in town are the hallmarks of this theme. Addressing the barriers that exist within accessibility and leveraging facilitators to access are suggested objectives for increasing participation within the community. When participants struggle because of home barriers, using guidance from Maslow, might suggest that participants spend their energy navigating entry and exit rather than having this need met and using their energy outside of the home and in the community, "I know there's a waiting list for a downstairs apartment, but you know. And I gave him a doctor's note saying I need to be moved downstairs so I can get access to outside more" (Participant 12). Participants who are

considering down sizing as they age cite accessible homes as a desirable feature, “This is a split level…we would like to have a sizeable rancher” (Participant 9). When coupled with progressive conditions, participants describe the need for communities to have services that overcome physical barriers:

> “We were pushing for Parkinson's because the sun goes down, these people can't get out. They may have an appointment, but guess what? They may not be able to move to get out when they have it. Aside from that and the larger stakes, there aren't... You're aware of movement specialists, right?” (Participant 5)

One participant describes the limitations around the doctor’s office as all offices are on the third floor. She discusses that she is unable to climb the steps and has a fear of elevators, thus she goes outside of the community to access a doctor, “Around here, one building, and third floor only, no go up elevator. All of doctors in the third floor.” (Participant 6).

Another participant describes the difficulty of creating walkable paths for cycling and walking throughout the county, a desired alternative for driving amongst some seniors and a way to socialize and be active out in the community, “I was in a roadrunner's club. You know what I would love to see [a walking club] in this town.” (1-20)

> “And the other thing, I think, to encourage me to be more active too, like I said, I would like to see more infrastructure set up for things like cycling or walking paths that are safe. We have that in the parks. I know we've talked ... We have several parks that you could go to that are accessible that you could feel safe walking and things like that. But I would like to see something where I don't have to get in my car and drive there. To cycle anywhere, there's no safe route. I have to say one of my big goals in life would be to have a cycling circuit somewhere where you can ride safely from point A to point B, like to

ride to Berlin. My son lives in Voorhees, down near the Echelon Mall area, and there is no safe way to cycle there. Distance-wise, I could cycle there, but there's no safe way the cycle there. There's no safe way to cycle to Stratford…I've been cycling for so long, and I'm familiar with the bike coalitions and stuff. It costs millions of dollars to put bike lanes in. It's not as simple as like, "Oh, could you draw lines down such and such road?" It's more complicated than that." (Participant 11)

Participants recognize that access is crucial for participation within the community and the advocacy is a facilitator that can be leveraged.

"Well, again, I do take part in these things that try and make things more convenient for people in town, and have more things for people to do. There's that. Like I said, it's just a struggle to get people to show up sometimes. Well, advocate for walkable streets, for instance, and that kind of thing that the town could be involved with, which they are. They are working on that for younger people and for ... I'm not part of those groups, but I know there are people that are part of those groups and they try and get grants to improve the sidewalks and things so their people don't feel that they're dangerous to walk on, for instance. I guess things like that. More places for people to sit down and talk outside, which now is happening with all this outside dining. I think that's going to stay." (Participant 1)

Physical: Outdoor Spaces. Maslow describes a need for aesthetics in his seminal work. This is described as an appreciation for beauty, often referencing the outdoor and worldly beauty within nature. One participant describes how both people and the emphasis on maintaining beautification of the town may be a feature and asset within her community that keeps generation after generation living there:

“People. And we have a lot of natural resources here. Beautiful natural resources. And there's something about Willinboro that gets in your blood and you just don't want to leave. I can not tell you how many kids go away and come back. And come back and says, I don't know why I came back, but I just had to come back. But [inaudible 00:04:53] My two oldest ones live in town and so many of their peers have come back home. Our main thoroughfares have flower-beds and trees in the middle of the road. We have one, two, four parks. We have The Creek Devon throughout the town. And the outskirts of uptown.” (Participant 7)

Participants describe a need for additional outdoor spaces and the barriers that reduce the amount of desired outdoor spaces:

> “We could use more green spaces, I guess, in town. And that's a problem too, because a town can only buy things at the appraised value. They're not allowed to spend more, and of course property becomes more expensive, so it's harder to get those properties. People want more money for them, so I think that's one reason we might not have more, what they're called little pocket parks or something, in different little neighborhoods. It's been talked about, but it always seems to run up against that problem” (Participant 1)
>
> “We probably could use a good building so would be just go out and sit out of the sun. Like I said, they used to have it tent up over here and people would go out there and, putting up a picnic and all. They don't even do that anymore.” (Participant 12)
>
> “The senior citizen place is very small. It can only house x amount of people, and of course with this pandemic it would probably be even worse now. 50% capacity

give or take. It certainly will be nice if, for example, somebody just donated some land... and built some nice senior complex, larger complex than what's existing now. So more people could get involved." (Participant 9)

Physical: Transportation. Transportation is the ways in which one moves about the community/method of locomote and access to transit including driving (self or others) and public transit (typically does not include walking) (WHO, 2007). Transportation is identified as both a barrier and a facilitator. When communities have the physical and logistical infrastructure of required within the community to suit the needs of older adults, Activity Planning and Participation (needs) are able to be accessed and met. Additionally, transportation may be required to meet Basic and Home Living Needs such as access to medical appointments and for grocery shopping. When older adults are located centrally, transport tends to be reported as more reliable, "Transportation's not too bad. We have a bus that comes here, and they have that LogistiCare for doctor's appointments. (Participant 4). "We have access-link for the people that need to go back and forth to the hospital or the doctors. We have access to that." (Participant 12). "Yeah, because also the senior center has a little bus that they basically pulls up and takes them shopping." (Participant 7).

The ability to drive oneself has been a notation of independence by participants, "I mean, I got a car. I mean, I can drive and all that stuff. I'm not disabled or anything in that respect" (Participant 9). "I am totally independent. I mean, for me, everything I do, I need my car, and I get myself to all of those places myself…" (Participant 11). There seems to be concern surrounding the potential of losing the ability to drive and concern for community members who may not have family or friend networks available to drive them, "…And, she ask me to give her lift. I say I can't, because my daughter tell me, "Mama, you don't know how to drive good. Why

you got to pick people? You going to kill them." (Participant 6). "…somebody tell me when you 80, you have to go get a new license. I don't know, I hope not…" (Participant 6). And furthermore, road conditions can be problematic for all drivers, but addressing the road conditions are not always clear between townships and counties, "But things that the township can do, I mean, know which roads are township or which ones are county, or issues like with the infrastructure and road repairs. Some of these back roads are so full of potholes" (Participant 11).

Participants often reference that there is a need to arrange for transportation services. It is possible that a sense of independence sits within the ability to have spontaneity. When one is able to come and go as they please within their own choice, enfranchisement and agency are held within the individual. Waiting long periods or spending time arranging for transportation services is time consuming, tiresome, rigid and planned. The sense of spontaneity and agency is lost when one becomes dependent on others.

> "Because transportation, not only technology, but transportation is an issue for some older people here as well… She said the taxi service is unreliable. There is a shuttle or through Medicare, she could get to a doctor's office, they would provide transportation, but she was not sure if Medicare would, and I still do not know that, would have done that for vaccinations. And she would need a three-day notice in order to set that up. So there were kind of roadblocks for her. And then I found out that through my research, I found out that New Jersey Transit was offering a train to the mega site…. There is a shuttle that does stop in certain neighborhoods and will take you as far as Buna and Vineland to doctors and shopping. But once you get there you do what you have to do, and then you have to wait for that shuttle to come back. And there may be like several

hours in between when that shuttle is going to come back for you. So it is not a bad thing, but it is not as efficient I think as it could be." (Participant 14)

"People do take advantage of the smaller shuttle that'll take them to groceries, like the ShopRite and that area. But you have to call and you have to make an appointment, and I mean, I don't know if some people are hesitant from that. And when the building on Bellevue Avenue was opened as a senior center, the bus would stop there and there would be a group of people that would get off. But again, you have to make arrangements for that. I've never had to use it, but there are people that do use that." (Participant 1).

"Well, first of all, you can get transportation. It's a challenge. There's Tricare, there's access, what's the other one, access for people with wheelchairs. I've helped people do it, so there is transportation around but the challenge is hook them up with it. I know how to do it or I could get through it, and I still drive. How do you spread the word that if you need transportation? The secret is keeping people aware, but how do you do it until they need it, do you know what I mean?" (Participant 13)

Counties and townships have developed busing services for seniors; however participants identify limitations with the services. "BurLink is a little Jitney bus from the county. And we do have one or two stops in town" (Participant 7). There is a bus depot which is, I guess, about three miles away from me. But they only go mainly to Deptford Mall. That's it. I mean, everybody needs a car" (Participant 9).

"I guess it's been about, maybe, three or four years now, that the Township has purchased a beautiful, really a magnificent senior transportation vehicle. Oh it's terrific. It's a beautiful vehicle. Now that, I applaud whoever came up with that idea to do that. But

that's an absolute asset. It's a big plus for seniors here in Winslow, because certainly it does what it says, it's a transportation vehicle. It's for all kinds of things" (Participant 8).

"I think the number one issue is transportation. And I appreciate they now have ... that probably took a lot to get those buses. They have two bus services now. But they go to the senior communities. I don't live in a senior community, but I'd like not to drive to Berlin to go food shopping. I don't know if I necessarily want a supermarket in the neighborhood, but a bus to Berlin would be nice that anybody could get on. For me, transportation is really the big issue for me. And again, as I'm thinking about getting older, yes, we can get things delivered here without a problem. It's interesting because normally-I'm not far from Atco, and Atco used to have a supermarket and it went bust. It was there for years. It wasn't the best supermarket in the world, but it was the most convenient to not have to run all the way up to Berlin. There was a local delicatessen. It was just a very ... I think because way back when, there wasn't anything here, so they had to create those resources. Now I'm just going to say thank goodness for WaWa. You know? I don't know" (Participant 11)

Public transportation is available, however not always convenient which forces participants to rely on family or informal networks.

"My number one is transportation. I don't understand why the bus, the New Jersey Transit, doesn't come down here. It comes up through Sicklerville, and it comes over on the White Horse Pike. The White Horse Pike is once an hour, that's it. That would be

wonderful to get to the high-speed line. Right? But you go through every neighborhood under the sun to get to the high-speed line" (Participant 11).

"Well, we have a couple of taxi cabs. There is a shuttle that the county runs through. I don't know how many people take advantage of it. I did have tenants that lived close to Egg Harbor Road, and they would take it. They would go to work in Bridgeton, because the shuttle goes that far. So, I guess they're scheduled. We have the train that's not that far away, that goes to Philly or Atlantic City. But I think it's still hard for some people to get around to appointments. Like I said, I happen to have a couple of children that live nearby and get me things, or take me if I can't go to an appointment, or if they feel they should be with me when I go to a certain appointment. I do go mostly alone" (Participant 1).

Informal networks of transportation have been developed for community senior activities:

"The one I said at the other senior center in town, so that would be a thing people could just show up for. It's handicap access and all that. But I don't know how they would get there. But I do know that, at the Canoe Club, a lot of times people would go pick up other people, or take them home, once you got friendly. You would hear if, "Well, I picked this one up," or they did do things like that, because as you get to know people, you just know sometimes what their needs are." (Participant 1).

Community members see a need for addressing transportation in order to promote continued independence and participation within a reasonable time frame:

"Well, at this point I'm pretty independent, but as time goes on if driving became an issue, I think I would love to see scaled up transportation situations available. I mean, what's available now, it's pretty limited and it sounds like it's not really reliable in terms

of time and things, the program. You could be waiting forever. So that would be something I would think would be valuable." (Participant 5).

"No. I am totally independent. I mean, for me, everything I do, I need my car, and I get myself to all of those places myself… I can't project out what it will be like when I'm not driving. But I can say when I'm not driving, I think if things were to stay the way they are, I'd be pretty isolated" (Participant 11).

"Mainly, do they have transportation? Right now, I can go and do what I want when I want to. If it comes to a point that I have to give up my transportation, my driving, that's really difficult because you're really limited. You don't have your own life anymore. You have to arrange for it…That's the really hard part, I think. So therefore, if you have to pay for it all the time, you limit how much you're going to get out. That could be depressing. There should be transportation to it provided. For those who can't get to the senior center, is there a possibility that they can pick people up to go to the senior center, different neighborhoods or something?" (Participant 5)

"I think that transportation thing might be a big thing. I'm not sure…Yeah [improving transportation in town], for small trips, like around town kind of thing. Maybe for getting people out that have trouble. (Participant 1)

Legal. Insurance and interpretations of the law represent how physical barriers and knowledge based barriers can limit development of activities and thus socialization.

"Insurance causes a lot of problems these days, problems that weren't there years ago. Towns have to follow so many rules and whatever, so you always have to take that into consideration… The rules of the insurance. They have insurance. The town has

insurance, but there are things they'll let you do and things that I guess would make your insurance go up. I don't know. That's always a consideration." (Participant 1)

"They have a building up front where office is, and they used to hold bingo and dinners and all that, but they don't even do that anymore. We're not allowed to use it unless we have homeowners insurance and a lot of people can't afford that because we're all on fixed income." (Participant 12)

Social: Neighborly/Friendly. As discussed previously, community members have a need and desire to socialize. Kind exchanges, both verbal and action oriented, between community members represents the theme of Neighborly/Friendly; these are primarily superficial, but, as described in some instances, can develop into true friendships. "From time to time, I'll meet somebody that I know. I'll say hi, but never into a very conversation. It's very brief….We just didn't talk about it or anything. It was just, "Hi, how you doing?" (Participant 9). Neighborliness/Friendliness may be a precursor to inclusion. It is through these kind exchanges, that older adult community members may begin to feel respected and included in the community (described in the next theme).

"…when we first moved, we didn't know anybody, really. And we were sort of adopted by a very Italian family and we're not Italian. And they were very kind to us and we used to eat dinner over there a few nights a week. And that was... It was wonderful. I could never can get over the fact that we became so close. We were so different. And, I guess those are my best days here was my relationship with that family and their extended family too." (Participant 3)

Social: Respect and Inclusion. The theme of inclusion represents being a part of the group/community, but also includes exclusion and not being a part of the group/community. This

theme encompasses past, present, and future objectives for addressing this social domain. Participant 7 captures the idea of respect and inclusion within the fabric of America:

> "I think they often stay in this country that we float, we toss away what is old. Whereas in other countries that's revered and they appreciate great wisdom. Totally different thoughts, your way you don't matter anymore. You just go." (Participant 7).

When asked about feeling included or what could be done to bring a sense of inclusion, Participant 3 replied, "Wow. That's tough question. Nothing. I think they don't need me really. I'm sort of... I'm just here." (Participant 3). And Participant 9 reported a similar sentiment in his community, "Included. That, I don't think so. I don't think I was really ever, quote, "included" in the community." (Participant 9). "That was always a criticism of Hammonton. Oh, they're so closed, you can't make any... You'll never be considered a Hammontonian, even if you live here 30 years." (Participant 14). This particular community has worked to overcome this criticism:

> "But there was a time when Hammonton was considered closed off and not very friendly, but I always, again, making the excuses as I said I do for people, I'd say it's because we have all this family around us, so we don't mean to be exclusive, it's just you don't think about it as much, reaching out to other people because you've got all these people around you that are related to you and you're caring for them, or being friendly with them, or visiting with them. But now, I think we've become a lot more inclusive, and I don't think we have that reputation anymore." (Participant 1)

On the other hand, several participants identify that they are indeed included in their communities or that they create avenues to ensure they are included:

> "I always feel included in my community. I insert myself. [laughter]. I just do that. Just insert myself. So, whether I'm included in that I just need to show up. And there are times

when, like last night, one of the council women said would you come on to the council meeting and get give an update on the green team? And all that you're doing with the green team? So I did that. So, that happens sometimes. But I don't think I ever not feel included. Cause like I said, I just include myself. If it's something I want to go to or be involved in, I'll just include myself… And then it was what something will happen. And I'm like, why didn't you tell me about that? Oh, I just assumed you'd be too busy. Let me be the judge if I'm too busy. Don't assume my calendar." (Participant 7).

"I guess I've always felt included and never felt not included. It's one of the things about growing up here and live living here all my life, I've always felt part of the community, always felt included in the community, I guess, because I always reach out and became part of whatever was available, Women's Civic Club and the Hammonton Education Foundation and Hammonton Homeschool Association. I mean, I've always been active in all kinds of endeavors here." (Participant 14)

Through the inclusion of older adults, innovation can arise. "I'm quite sure you need other voices and other voices and other ideas because they may come up with something she hadn't thought about yet." (Participant 7). Objectives that consider cross-generational and varied cultures have been suggested to overcome barriers of exclusion, desrespect and leverage inclusion:

"I think, one of the major problems I think, and I always bring that up, is probably one of the biggest words of dictionary is respect. These kids nowadays, they're crazy, for lack of a better word. Coming up, we always had respect for our elders. There is none now, there is none. And I think that's basically due to the parents at home, if they are at home, put it that way..." (Participant 10).

I think there's a lot of kids that could jump at that opportunity for community service or something. Then it would involve different age groups supporting other people in the community." (Participant 11)

Social: Culture. This subtheme provides representations of both respect and disrespect of a culture different than the dominant culture. Stories of disrespecting minority groups were pervasive:

"Because, I come from another country, it really hard, and when I walk over there, I try, I try. I try, right? I try so hard, because sometimes you lonely, feeling bored or…and all the like career people, them go over there, hang happy, learn something. Something like that. But, I go, and I not comfortable. Because of the way people talk to you." (Participant 6)

"I remember going into the [town] post office, I guess it was a Saturday morning, and all these immigrants would be lining up to send their money home. And, one man even came in with a jar of children's vitamins, and he got an envelope and he poured all of the vitamins into an envelope. And, I thought, "Oh, my God. By the time they get to their destination, they're going to be powder. They're not going to be in any shape," but he was sending these home. And, I recall people standing in line with me and being annoyed that it was taking time. And, I was like, "Wait a minute. These are family people. They're reaching out to their families. The money that they're making, they're sending home to their family. How could you be annoyed with them taking up the time to do that?" I mean, that didn't compute with me, you know? And, the people standing there who were being annoyed, they weren't being quietly annoyed either, their body language, their sighing, all this... I mean, how uncomfortable do you want to make these people feel? Really, I wanted to shake them. I was so inflicted." (Participant 14)

And yet, historically, the representation of minority groups has always created division, as one participant describes the town history and envisions how it is through coming together, respecting cultures that are different from your own, that respect and inclusion can be facilitated:

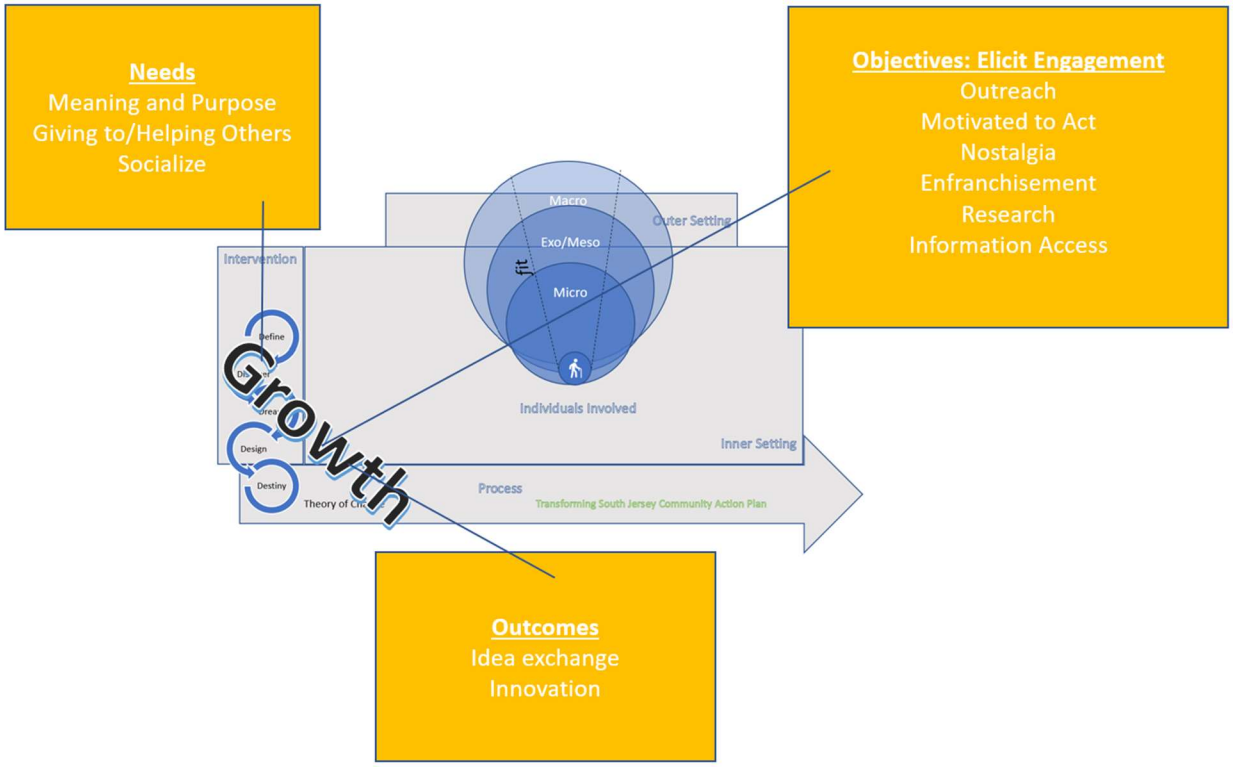
> "So you know, it's pretty heartwarming to see how they were ... they had their obstacles. It was New England culture versus Italian culture. It wasn't an easy mix. But eventually it got done. It meshed to the point that the Italian population, as I said, became dominant, and still is… I think that make an effort to be open to, A, newcomers, and B, in general, people who don't look like us, who don't look like the majority of the population, and C, find a way to get them involved in the community, to let them know that we want to take advantage in a good way, take advantage of their talents, and as a consequence, get them to feel as a full-fledged Hammontonian. I think it would be a more tolerant community. And I think if you think about the Italian example, it's right there before our eyes, because they weren't the dominant culture in the probably 1860s to I'm guessing a little bit 1920 era. And it took time. And there was resistance and all the unfortunate human quality that we have that doesn't always treat others as they should be treated. And it takes time sometimes. But we can accelerate that if we have an attitude that yeah, this is a good thing, that diversity is a good thing, that openness to other ideas, other cultures, other viewpoints, is a good thing. And involving as many people in the community, hopefully mostly pulling in the same direction, and if they're pulling in a different direction, understanding why they're pulling in a different direction, and maybe even changing directions if you find out your direction isn't the only direction. And that would be something I'd really ... and that would be for the world, that wouldn't just be for Hammonton." (Participant 2)

COVID-19. Conducting research during the global pandemic has created an avenue for it to arise as a theme. Every participant mentioned the pandemic. Discussions around COVID-19 primarily represent social objectives. The pandemic has stopped several important activities in the community that help older adults to stay engaged. Many discuss what they miss both large and small like visiting a neighbor, communion services, going to the senior center, and stifled travel and plans. Socially speaking, “Certainly, community is gone during COVID.” (Participant 5). “Because of the COVID, I couldn't go visit her, but I used to love sitting and talking and laughing with her” (Participant 4). The pandemic has also shut down senior centers due to shelter-in-place mandates in New Jersey, “I belong to the Winslow senior club, but they closed that down because of COVID. We used to go there for bingo. That's about it.” (Participant 12). Some older adults have been able to stay connected with technology, others have enjoyed some quiet. Wearing masks and not seeing a smile has been a struggle. Vaccination talk is of struggles to get it and excitement to receive. The innovative and unintended consequences of the pandemic are also discussed as objectives that can be leveraged, “In some ways the pandemic has been a little bit of help because people have been, the restaurants have been doing sidewalk cafe type things. And that brings people together also.” (Participant 14). “We've always been asking for telemedicine, and fortunately, it came through because that's the silver lining of what we're going through now. You know?” (Participant 5).

4D.4 Growth Domain

The Growth domain is placed within the *Adapted Intervention* and *Process* of CFIR. The image below maps the Growth domain to the conceptual framework.

Figure 20.
Growth Domain Mapped to Intervention and Process



4D.4.5 Growth Needs: Living your Values

Maslow (1987) describes self-actualization and transcendence as growth and higher order needs. While these are characteristics of an *individual* in CFIR, here it is the *processes* by which an individual(s) discovers and lives their values and purpose which may be done through the development of innovations in the theory of change and community action planning, thus Growth Needs: Living your Values are placed within the *Adapted Intervention* and *Process* of CFIR. As discussed previously, the professional discipline of occupational therapy describes that self-actualization and transcendence by way of occupation is indeed a discovery process that is actualized through meaningful activities:

> "A core philosophical assumption of the profession, therefore, is that by virtue of our biological endowment, people of all ages and abilities require occupation to grow and

thrive; in pursuing occupation, humans express the totality of their being, a mind-body-spirit union. Because human existence could not otherwise be, humankind is, in essence, occupational by nature" (Hooper & Wood, 2014, p. 46).

The crux of this domain arises from specified *Values* of the self and community and *Interests*. *Living your Values* are defined as community-oriented, participant-identified beliefs, needs, and desires that serve as a beacon to participation in their community. Because these are individual characteristics, Values identified by participants highlight Basic and Social needs and include sentiments of safety and comfort, inclusivity, relationship building, information (described in more detail in next section), and accessibility previously described in those domains. While values emphasize Basic and Social Needs, this theme extends beyond these needs to needs of self-actualization and transcendence. Thus, this theme is described by the expanded codes: Meaning and Purpose, Giving to/Helping Others, and Socialize.

Table 16.
Expanded codes for Living your values growth needs theme

Needs	**Living your Values: Growth Needs**
	Meaning and Purpose
	Giving to/ Helping Others
	Socialize

Before describing these expanded codes, **acknowledgement of valuing Basic and Social Needs is first discussed.**

Participants emphasize that they value safety and comfort in their homes and communities:

"I guess I like the size of it and it just feels like home. I feel comfortable. It's quite interesting, when I go to something where I'm a minority in my community being white,

and it's really weird when you go to a place where it's all white. It's become part of... I value my neighbors. I mean, they've been nice. They're always there for me. Anything comes up, if I forget to bring my garbage in, the man next door will call, "Are you okay?" That's pretty nice." (Participant 5)

"I mean, true, everything around is local. You got a lot of restaurants. You got the medical facilities. I got all my doctors are very local…Well, this particular development that I live in is very, very, very quiet. There's no violence. That's the things I do value. If we had to travel miles to get to a medical facility, of course that's very important for me." (Participant 9)

Participants value inclusivity:

"You couldn't buy such a mixed neighborhood. They mixed and they all got along with one another and they learned to eat all different foods that they probably never would've been exposed to as did we. It was just terrific." (Participant 3)

Participants value Relationship building:

"I guess getting to know the people more. I mean, we tend to have a lot of family people in Hammonton, but it's nice to reach out to other people. That's been good, I think. I've met a lot more people, interesting people, because we have a lot of new people in Hammonton. " (Participant 1)

Participants value Information on community activities in town as well as general municipal and health information:

"I'm talking about the local mag, the Gazette, whatever. There's a little section every week that says what's going on in the community and they tell you what's going on in the churches, what's going on whatever here and there. But they used to say the canoe club

every Monday, Tuesday, Wednesday, Thursday, and of course that's out. But I'm sure that will come back when things return to normal, Lord willing." (Participant 13)

Participants value the natural aesthetics of their home and community:

"One, I like the location. I grew up in a city, so being where I have trees…" (Participant 11)

"I live here many year, and I keep up my home nice. My front yard beautiful, have plenty flower come up every year. Long time ago, the soldier, he lend a room a here, and he like to put flower. He put all the flower, and now them come back every year. It front yard, it pretty… I really happy, and I happy in this house because I grow up in here…" (Participant 6)

Meaning and Purpose. In order to give rise to full growth potential, one must have a sense of feeling of significance, having purpose or a reason to exist, and for this potential of significance and existence to be embedded into the community. Bidirectionally, seeking or knowing one's Meaning and Purpose allows for one to live (or strive to live) their values and Living one's values gives meaning and purpose to life:

"Well, at this point of my life, and I think every human being perhaps comes to the point when you realize in a sense what your purpose is and what your destiny is. And I've come to realize that I'm meant to be a server, I'm convinced. A server who communicates, I'm convinced that, that's my destiny." (Participant 8)

Symbiosis is also identified in meaning and purpose:

"I think it's my need to be needed. I don't know that the community needs me as much as I need to be needed by the community…So I just always grew up wanting to be needed and wanting to be part of things and I never stopped. And a lot of people like that, I think.

> But it was really, I guess it's being needed or me needing to be needed, it's just been always a, just part of my personality... I mean, that's the only way... I've never thought about it before, but I think that's just it. And, I just always liked being involved, and so I do become involved." (Participant 14).

The value of being an involved and engaged citizen who creates and revitalizes his community provides meaning and purpose to Participant 2:

> "But again, as I'm saying this, I guess I'm kind of seeing a trend on my own life. I never really thought it ... thoughtfully—nothing existed [in the community before]. And now it's [parks, committees, etc.] existed for 16 years...But it was just, again, tangible things you can point to and say, "Hey, we did that." And people want to see something. It's not we talk about it, but yeah, we did it. We did it. It's done. Remember what the sidewalks used to look like? Wow. Yeah, that's really an improvement. And remember that building that sat there 40 years? Now it's a theater" (Participant 2).

Helping others through organizing to service those inflicted with a progressive neurological condition is a core value that brings meaning and purpose to Participant 5:

> "They're great people. I've gotten to know a lot of the people from the organizations as well, and it's given me meaning… But truly, having people be able to feel good about what they're doing is so important. That keeps them going. You need that. When you have no goals or all of a sudden nothing's going on, it brings on depression and brings on... Will they then take their meds as they should? That's all important stuff."
>
> (Participant 5)

Giving to/Helping Others. This is contributions to others in the community from money to expertise, to general support. This core value is exemplified by a quote from Participant 11, "I

think people in the township, my impression ever since I've lived here is they do like to help other people versus being helped. Does that make sense?" (Participant 11). Participant 8 expands on the reason this may be so, "They have information that they can pass on. And also, I guess, it's just part of being a human being, you always want to feel needed." (Participant 8). Participant 4 explains how she provided physical support to people in her community:

> "Oh, wow. I mean, I help a lot of people. I did before, and I even helped them in the building where I live… once I shampooed a lady's rug. That's before the bad chemo crept in…I'm always seeing if everybody's okay." (Participant 4).

Provision of services that can relieve formal caregivers of their duties is reported as a Growth Need that exemplifies Living your Values:

> "…we just had a young woman that I did teach and I know her mom very well and have for years. She was in a terrible automobile accident, and I've been reaching out to her and friends to find out what we can do for her family. And so far, it's been frustrating, except the only thing we can offer right now are prayers. And she's in them having multiple surgeries, all kinds of broken bones all over her body. So now I know in the future, they may need some help, and I would be very happy to help out with [Name's] care to give her parents a break. We'd love to do that…primary caregivers need a break every once in a while, and I'd be very happy to go over and do whatever I can to help out with Lori, even if it's for her mom and dad, to be able to go out to dinner or mom and dad be able to just get away for a day or whatever. I'd be very happy to go over and stay with her. And that's one of the things that I wanted to do with the Hammonton at Home. That was one of our goals, was to be able to relieve people who are primary caregivers for people with Alzheimer's and having their family at home and never got a chance to do it. I didn't get a

chance to come to fruition. But now with what Lori is going through and what her family is going to be going through, I'd be very happy to do that" (Participant 14).

Participant 3 describes that he, at this age and stage in his life, is only able to give monetarily and feels there is not much else he can offer:

> "You know I really don't know other than contributing money to fix the town clock or if there's a drive to like from the historical society or something like that. I don't know. I don't know anything that we can at our age really offer to the community other than not getting in the way of progress, I guess. I mean, it's you get to a point where I don't know what you can offer when you're 86, really." (Participant 3)

Provision of navigating information is yet another way participants express how they help others:

> "I might go over and help them out or if they need some phone calls to find some information, I've done that, if they need somebody to go to the store, so those are some of the things I've done to help people" (Participant 7).

Socialize. Socialization has been identified as an area that older adult participants value, "I haven't been looking for any support aside from social based and then something to do." (Participant 13). Socialization as a value goes beyond the needs of relationships and inclusivity and emphasizes cognitive and aesthetic needs, serving as a bridge to the higher self and an opportunity to learn and act on the needs of others. While it is clear that Maslow's theory of motivation does not require satisfaction in a linear hierarchy, this quote demonstrates how when needs at a basic level are met, participation and growth needs can be addressed,

> "Yeah. That's something on a Wednesday night, they have a dinner. It was meant for homeless people and really needy people, but these people did not show up, and what happened is, a lot of older people ... And I know at first, it was like, "Well, why are they

coming?" But the thing is, there was a hunger for socialization, so they were needy for that.

This is also a demonstration of food as a cross cutting theme. Earlier, food was described as a basic, physiological need, but it has also served as a social need and is often used to bring people together socially.

The desire for socialization emphasizes Maslow's cognitive need for learning about people and satisfying one's curiosity:

> "I'm pretty sociable. I don't sit there like a bump on the log. I'll talk to people. Well, again, communicating more with people is a key. Communicating with... Again, I hate to keep bringing this up, but communicating with people around my own age. Because that way we do have something in common. We could talk about various subjects. I'm very open-minded. And I would welcome somebody to just have a nice conversation with." (Participant 9)

Finally, these social values create a bridge to the higher self, the opportunity for self-actualization and transcendence:

> "You get to know people and you learn experiences from. Because they tell their life stories to you. You learn a lot from older people, let me tell you. I mean, I'm old, but I like talking to the older ones. They have a lot of experience. But they're shut in." (Participant 12)

> "Because without a doubt, seniors have a wealth... Of course because they've lived long enough, they have a wealth of knowledge…They have information that they can pass on. And also, I guess, it's just part of being a human being, you always want to feel needed.

You need to feel needed, feel valued. That adds to your own personal wellbeing also." (Participant 8).

4D.4.6 Eliciting Engagement Objectives

Just as meeting Basic and Home Living Needs and Social Needs of Activity Planning and Participation can be met through suggested participant objectives, so too can Growth Needs: Living your Values. In order to ensure the growth needs are met, objectives related to eliciting engagement emerged. These objectives include Outreach, Motivated to Act, Nostalgia, Engranchisement, Research, and Information Access.

Table 17.
Expanded codes for Eliciting engagement objectives theme

Objectives	**Eliciting Engagement Objectives**
	Outreach
	Motivated to Act
	Nostalgia
	Enfranchisement
	Research
	Information Access

Outreach. In order for participants to have needs of Living your Values met at a community level, outreach has emerged as a critical need, "A lot of people don't reach out for them... There is... Environment nowadays is not what it should be." (Participant 10). Outreach is described as the means by which older adults are contacted by community/members.

"I would say, more community contact. By that I mean, actively focusing on reaching out to seniors. That is, actually going to where they live. If indeed there could be some sort of program or initiative developed around that idea, I think I'm just talking about outreach. Outreaching to seniors. Yeah, outreaching on a regular basis. Somehow set up a schedule, get volunteers who would actively outreach to seniors. Now, those volunteers should be

young enough that, of course, they can go door-to-door or complex-to-complex. But yet, old enough such that seniors would trust them. That would be my idea." (Participant 8).

One community specifically targets community members of any age to become actively involved in community:

> "There's something called a citizens form a campaign. You can sign up and apply to be on a board of commission. So I'd say September, October, because they make their appointments in January. They're really urging people to fill it out, get more involved. It's just your name, address, phone number, what board or commission that you're interested in. They tell you, put down three in case you don't get one. What your qualifications are for that particular board of commission. You can attach your resume if you want. And then you just submit it. On the back of the form it has all the boards commission." (Participant 7)

On the other hand, outreach may be undesirable to some older adults:

> "When you talk about what could you do to get seniors engaged, that's a very hard thing to read here. I have several neighbors here who wouldn't want you to do that. It's very interesting... Well, I think one of the questions is, it's some of the things when I'm thinking about how to answer you, the question would be to what level do you want to be involved. You know what I mean?" (Participant 11)

Motivated to Act. This subtheme is related to the ideas generated for positive change or the involvement one presently has in their community. It relates to the varied levels of participation and motivation to be involved in bringing ideas to action. Some individuals express they are highly motivated because they have always been this way or were raised this way:

> “I don't know. I guess it's genetic. Like I said, my aunts were always involved in things, and my mom was years ago, but then they had a business that kept her busy. But when I was a young kid, it was very involved in PTA and the church, and all those kinds of things. Even the town and politics when I was growing up, so you would see that even though they had a business that they worked in. But then, she wasn't as involved. Well, she was involved with the hospital very much, with the volunteer group there.” (Participant 1).

Others express that due to their involvement elsewhere in the community, they may not have the motivation or energy to take on new modes of bringing ideas to action:

> “Not really. I would talk to people about it, but I've got enough going that I have to get done myself that I can't- It's just I've got some much to do here that I'm not getting done. It's got to get done, so I really don't have that time. I do do the Parkinson's, and that keeps me motivated and keeps me feeling good about doing... Hopefully, people like it.” (Participant 5).

One participant expressed he did not feel engaging in new opportunities to bring ideas to action would spur change, “Not really. I think I'm at the age where, just take things as what they are. Not going to change. And after that last election, I really got into it then. Nothing's going to happen” (Participant 10). And, yet some participants do not feel motivated to bring ideas related to community participation to action because the idea of leading is overwhelming:

> I wouldn't have an idea of how to do it really. No. I don't feel motivated to bring the ideas to action. I mean, the people that and the people... No. I don't really... I've never really brought it up. I don't feel motivated to do it. Like I say, things may change. Things will change once the COVID thing goes away.” (Participant 3)

However, if someone else spearheads the objectives, participation and assistance might be a level of involvement offered:

> "If somebody leads the way. I told you, I am not temperamentally suited to be a leader. There is too much politics and too many people who want the credit. I just want to do it, I don't want no credit, just leave me alone and let me help." (Participant 13).

While some may be motivated to engage others in participation, the absence of opportunity shortfalls the motivation to engage others:

> "We were talking about that the other night with my friend that we need to get something started here for people that are, I call them shut-ins because they never come out. And there's a lot of them that are willing to come out, but there's nothing to do here." (Participant 12)

Another participant suggests a strategy for eliciting engagement for individuals who may not want to lead the entire mission:

> People just want to give. If you give them the opportunity, if you create the structure. You don't say to them go build a playground. You say listen, "I'm working on this project, I could really use your help, you know what we really could use is" ... and then people, I think by nature mostly, would say, "Oh, I can do that, I'd love to help do that. Or that would be great for my kids or my grandkids." So getting the community involved." (Participant 2).

Wonderful Experience/Nostalgia. Community based events or experiences from any point in time that participants consider to be wonderful. Often it is a reflection on a past time in one's life, "I guess more community things were back when my kids were little and we would do things" (Participant 5). "Most of my good experiences was sports. I played everything"

(Participant 10). The nostalgic reflection of previous times in one's life may be a clue to tapping into reminiscence as a way to engage older adults and recreate experiences for achieving self-actualization and transcendence:

> "We did a lot of publicity on the first one. And people showed up. And I thought, oh man, this is somebody I don't know and they just saw it in the paper and came with their hammer, screwdriver or drill and just wanted to help. And it's nice to get ... when I was a kid, I was an outside kid. I see kids today are inside kids. My parents didn't ... we had boundaries, but we had freedom and you created and you'd use your imagination. And to me, that was a great way to grow up. I had so many friends. Just walk out the front door, and it was Baby Boomer era, and there were kids all over the place. And it was just a fun way to grow up**. So in some ways, it was replicating that in different contexts, so say how can we get people together to find the joy of just finding a project** and then, as I say, being able to look at it. It's not saying let's do a study and then the study sits on the shelf somewhere. No disrespect to your study... something you can drive by and say, yeah, yeah, remember when we built that thing, remember we needed the [drill]…" (Participant 2)

Enfranchisement. Hammel and colleagues (2008) describes enfranchisement as the choice of and access to opportunity. An element to volition/motivation to act, the idea of choice may influence motivation to participate:

> "I was just going to say it sounds like it's finding maybe that key interest. Being involved is solely ... for some people, solely in that, and really putting your energy and effort, and having some choice to do so." (Participant 11).

The idea of having choice in activities could increase the likelihood of participation when there are a variety of levels to choose from, "…to what level do you want to be involved. You know what I mean?" (Participant 11). Participant 2 describes how this principle can be utilized to elicit engagement:

> "Something small. And it's not scary, it's not daunting. Sometimes they start small and all of a sudden they realize, you realize what skillset they have, and you say hey, can you help us with this also. And yeah, it's an easy entrée. Not try to trick them. That's all you need them for initially. But sometimes now there's a buy in. They have a piece of it. It's their playground or it's their aquatic center, it's their clock. Maybe a $50 contribution. But yeah, hey, what are you doing, don't do that to the clock, don't do that to the playground equipment, I had something to do with that." (Participant 2)

Research. Involvement in research can sometimes be an avenue to participation within the community. This research, for example, is an avenue to participation with the Orton Foundation Heart and Soul program with Transform South Jersey. In fact, one participant describes an element of how she is involved in gathering data for the community research, "we've gathered some little stories. We haven't done the in-depth ones yet, what we call the thick stories. We're gathering thin data." (Participant 14)

Having a champion to encourage participation was what inspired Participant 3 to participate:

> "What inspired me to say yes was [Friend] asked me to do it, really. I don't usually... I do do things like this. I'm involved in one at Harvard, a long time study that I've been in since probably 1970. So sometimes I do things like this." (Participant 3)

Participant 5 also serves as a champion of research, "Well, my underlying goal was to get people into research, sign them up because that's the only way we're going to go forward and that's so

important." (Participant 5). While the idea of a champion emerged from this research theme, the concept is well developed in CFIR and can be extended to elicit engagement in all avenues of participation.

Information Access. Information access is defined as knowing where to find information and the multiple ways information is made available. Information that is available online can be a barrier for older adults who do not utilize the internet, "Well, information is disseminated through mostly online…" (Participant 14).

> "Small change? Probably access to information. Finding ways that people get access to information. Because a lot of seniors are not on the internet, a lot of seniors don't have email. And they tend to get information the old-fashioned way, like newspaper. So I don't think they're getting information sometimes in a timely basis because we're trying to figure out how to get information to them. [Our community uses] Council websites and other websites. Other entities in town. Email. Facebook. And so I would say social media. Every so often there may be be a robo call, but they might not pick up the phone…And got it back, our community newspaper, but you have to go to places to pick it up. It's not delivered. So, it's been difficult trying to get information out to people. And it's not just seniors, it's everybody… That's one of those we're struggling with. Trying to figure how to get information out." (Participant 7)
>
> "I think the fact that there's no longer newspapers to know... Well, it's not there's no longer, but people don't get the newspaper anymore so they don't know as much about what's going on. I don't know what other way they... Well, that's probably why they do the calls because there's no newspaper. That's the only way to let people know of what's coming up." (Participant 5)

> "But, yeah. And again, I don't even know what's out there... because I never really looked on the computer or did anything… I don't even get any... Oh, the only thing I do get is some kind of little magazine from the Township. And I'll get that around close to Memorial Day, and even that's not very... It just gives you information about trash.

Having varied streams within communities, such as the robo calls, is critical to ensure information is understood and made available for language and literacy barriers, "I cannot read good." (Participant 6).

Participants identify that information should not only have breadth in the ways in which it is communicated, but also that it should be available in multiple places within the community:

> "Well, actually having information at libraries but also getting some information maybe into doctors' offices and to the senior center and other places and churches, churches and synagogues, I mean, just to be able to get the information out about what's available." (Participant 5).

4E: Outcomes (Chain)

Funnel and Rogers (2011) recommend that a theory of change incorporate or give rise to an outcomes chain. In order to do this, *objectives*, suggested by qualitative results, contribute to the linkage to the outcomes. The Outcomes represent CFIR's *Intervention/Adapted Intervention*. This is because the suggested objectives and desired outcomes (the building blocks of a theory of change) represent the opportunity for the creation of interventions, including policies and programs, actuated through community action plans (theory of action) that are grounded in a theory of change. Outcomes can be organized in short term, intermediate, and long term outcomes, and each circle of the outcomes chain independently represents an outcome. Decisions about short term, intermediate, or long term outcomes are decided upon in a theory of action.

Outcomes chains can be developed by creating "if-then" statements (Funnell & Rogers, 2011). This was accomplished during the interview process by asking participants, "What is a small change that could make a big impact?" This question tended to prompt participants to reflect on the interview broadly, although some participants did identify new areas. These areas were then probed to discover what outcome the participant desired by repeatedly asking, "and what might that result in?" The outcomes chain was developed first by each individual participant and then observed for themes (See Appendix G for outcomes chains).

Once all participants were interviewed and the outcomes chains were created, clear outcomes (as themes) emerged: Decreased Worry/Stress/Fear, IADL Support, Something to Look Forward to, Inclusive Community, and Idea Exchange and Innovation.

Table 18.
Main Outcomes (chain) Themes

Outcomes Chain Themes
Decreased Worry/Stress/Fear
IADL Support
Something to Look Forward to
Inclusive Community
Idea Exchange and Innovation

Decreased Worry/Stress/Fear. Participant 3 describes how local grocery deliveries would decrease his worries and also support local businesses, "It's just worrying, being concerned about just going out is a big deal." (Participant 3). Participant 10 discusses how cross-generational activities can spur community connectedness and reduce concerns about safety, "A closer knit community. No doubt about that. I mean, number one, the police can be everywhere if you have involvement from each faction or whatever…" (Participant 10). Enhancing trust amongst new and minority groups in communities can enhance trust and reduce fears according to Participant 14, "Trust [results in] more interactions between the communities. I think that that

might be very, very helpful, that people wouldn't be afraid to reach out to each other and become friends." (Participant 14).

IADL Support. IADL support was a suggested outcome as a small change that could make a big impact by Participant 3. Furthermore, Participant 11 and Participant 1 describe how IADL support is a needed outcome:

> "[having a lawn service] would reduce stress. I just think some type of maintenance services, and again, even if you had to show proof of income or something like that, I wouldn't object to that. But just something that takes that burden off so that you can be more active in other ways." (Participant 11)
>
> "Well, maybe things they can't do for themselves anymore, or maybe things their husbands used to do if they're widows. Small things around the house. And there's yard work, I guess, that somebody can't work on anymore. Everybody can't afford to pay somebody." (Participant 1)

Something to Look Forward to. Participant 5 discusses how having information available about activities in the community can provide opportunities and interest for activities resulting in "having things to look forward to." Participant 8 describes how outreach can provide this opportunity as well:

> "That results, I believe, in seniors feeling more inclusive. Feeling less left out, feeling that they do have access to knowledge and knowing about various activities that they are interested in. As opposed to not going day-by-day, month-by-month, not having the opportunity of having that information made available to them. What it does, I would think, it opens up. And I'm hoping that I'm using the right words to describe. It opens up living for a senior because as you begin to get older, certain challenges, certain goals

you've met, you see. And then you begin to say, "Gee, what else is there for me to do? What else is there for me to look forward to?" Excuse me. Because certainly, seniors as we age, of course, our mobility begins to be limited, you see. And in limiting our ability, I think the worst thing or one of the sad things for a senior, is to begin to feel they're losing their independence. And that is critical for seniors, the fact that we would be losing our independence." (Participant 8).

Inclusive Community. A sense of community is the outcome described by several participants. The idea of having conversations with other older adults is detailed as part of a sense of community, "You get to know people and you learn experiences from." (Participant 12). The creation of and inclusion in activities that are communicated to older adults results in "feeling part of the community" according to Participant 5. Participant 14 states that providing support informally or formally "would make the community definitely inclusive."

Idea Exchange and Innovation. Participant 12 describes how important it is to learn from older adults, "Because they tell their life stories to you. You learn a lot from older people, let me tell you. I mean, I'm old, but I like talking to the older ones. They have a lot of experience." Participant 7 describes how getting information out would result in an informed and engaged community that could spur innovation:

"Well, you'll have the unheard voices will be heard. More ideas that people may not have thought of. Oh my gosh. That could be phenomenal. Cause now you probably have more out-of-the-box thinking you go, oh my gosh, I never thought about that. That's a cool idea. You know?"

Further, Participant 2 discusses why diversity in ideas is critical and that involvement in the community is one way we can embrace new ideas:

"But we can accelerate that if we have an attitude that yeah, this is a good thing, that diversity is a good thing, that openness to other ideas, other cultures, other viewpoints, is a good thing. And involving as many people in the community, hopefully mostly pulling in the same direction, and if they're pulling in a different direction, understanding why they're pulling in a different direction, and maybe even changing directions if you find out your direction isn't the only direction." (Participant 2)

4F: Mixing of Data Part II

This mixing utilizes the Part I mixing to connect with the results of the qualitative strand in order to integrate into the final results. A joint display is used to show the qualitative results as explanatory of quantitative findings. Table 18 demonstrates a Joint Display of the qualitative results as explanatory of quantitative findings (J. Creswell & Plano Clark, 2018). Meta-inferences are included and are discussed in Chapter 5.

Table 19.
Joint Display of Integrated Findings

Construct: Availability of healthcare on Satisfaction with participation	
Quan	WHODAS score, Information, and **Healthcare**, were associated with satisfaction with participation. The explained variance of these independent variables in predicting satisfaction was moderate.
Qual	**Availability of Healthcare:** "I mean, true, everything around is local. You got a lot of restaurants. You got the medical facilities. I got all my doctors are very local…Well, this particular development that I live in is very, very, very quiet. There's no violence. That's the things I do value. If we had to travel miles to get to a medical facility, of course that's very important for me." (Participant 9)
Meta-inference	Having local and accessible healthcare services may allow older adults to have their health needs addressed in order for them to participate in identified basic, social, and growth needs bringing satisfaction to participation.
Construct: Availability of Information on Satisfaction with participation	
Quan	WHODAS score, **Information**, and Healthcare, were associated with satisfaction with participation
Qual	**Availability of Information:** "Small change? Probably access to information. Finding ways that people get access to information. Because a lot of seniors are not on the internet, a lot of seniors don't have email. And they tend to get information the old-fashioned way, like newspaper. So I don't think they're

	getting information sometimes in a timely basis because we're trying to figure out how to get information to them" (Participant 7)
Meta-inference	Information access has been identified as a significant barrier to participation in communities particularly when it is distributed only through virtual channels or community locations. Participants who can access information to events, programs and services have nearly nine times higher satisfaction with participation. Thus, improving accessibility of information, with consideration to the home, is critical to improve participation satisfaction.
Construct: Functional Ability on Satisfaction with participation	
Quan	**WHODAS score**, Information, and Healthcare, were associated with satisfaction with participation. The explained variance of these independent variables in predicting satisfaction was moderate.
Qual	**Functional Ability:** "I'm 70 years old. I live alone in an apartment. I just had a stroke two months ago and I'm recovering from that…I still got a little weakness in my left leg… there's a waiting list for downstairs apartment, but you know. And I gave him a doctor's note saying I need to be moved downstairs so I can get access to outside more…I mean, all we do is just sit on the porch. There's nothing really to do. No activities or nothing" (Participant 12). "Well, I'm 66 and I was diagnosed with colon cancer this year. So it's been a little rough. Well, right now with going through this treatment, I can't do much. But in fact, she's at the door right now. Can you call me back? Like in 20 minutes and we'll resume it. The immunotherapy people are here… Because I used to watch her and I don't anymore…the little one [my great niece]… I can't anymore." Participant 4
Meta-inference	Participants who described having a disability that impacted their functional performance were less satisfied with participation.
Construct: Functional Ability of Satisfaction with participation in outdoor mobility (driving a car, traveling by bus or train, cycling to work or going shopping)	
Quan	Decreasing WHODAS scores (i.e. toward functional independence) resulted in a higher likelihood of satisfaction in mobility. The explained variance in predicting satisfaction was moderate.
Qual	"Well, I take my time going down the steps and I make sure somebody is with me when I get down and up" (Participant 12) "I do go the grocery store…My niece [drives me]." (Participant 4) "Because certainly, seniors as we age, of course, our mobility begins to be limited, you see. And in limiting our ability, I think the worst thing or one of the sad things for a senior, is to begin to feel they're losing their independence. And that is critical for seniors, the fact that we would be losing our independence." (Participant 8) …. There is a shuttle that does stop in certain neighborhoods and will take you as far as Buna and Vineland to doctors and shopping. But once you get there you do

	what you have to do, and then you have to wait for that shuttle to come back. And there may be like several hours in between when that shuttle is going to come back for you. So it is not a bad thing, but it is not as efficient I think as it could be." (Participant 14) If they delivered, I would be delighted. They don't deliver. You have to go. Yeah, you can call something in, but you got to go pick it up and driving... I don't drive much anymore so that becomes a problem" (Participant 3) Right now, I can go and do what I want when I want to. If it comes to a point that I have to give up my transportation, my driving, that's really difficult because you're really limited. You don't have your own life anymore. You have to arrange for it. (Participant 5) "I mean, I got a car. I mean, I can drive and all that stuff. I'm not disabled or anything in that respect…I mean, everybody needs a car." (Participant 9)
Meta-inference	Functional ability specifically impacted outdoor mobility whereby participants with disability indicate they require additional support. The loss of independence in mobility that would allow for independence in community accessibility decreases the likelihood that participants are satisfied with outdoor mobility. The decreased accessibility makes taking public transit difficult and inconvenient and relying on others further spurs a cycle of dependence. Older adults who maintain their independence with driving find it essential for their outdoor mobility.
Construct: Functional Ability of Satisfaction with participation in exercise	
Quan	Decreasing WHODAS scores (i.e. toward functional independence) resulted in a higher likelihood of satisfaction in exercise. The explained variance in predicting satisfaction was moderate.
Qual	"Well, I can't do a lot of walking at this point, but I am trying to use my... I've got a bike. Actually, it's a motorized bike that was made for Parkinson's, actually. [Spouse name] didn't use it as much, but I'm trying to do that more and more." (Participant 5) "And the other thing, I think, to encourage me to be more active too, like I said, I would like to see more infrastructure set up for things like cycling or walking paths that are safe. We have that in the parks. I know we've talked ... We have several parks that you could go to that are accessible that you could feel safe walking and things like that. But I would like to see something where I don't have to get in my car and drive there." (Participant 11)
Meta-inference	For individuals with less functional disability there is greater satisfaction with exercise. When environments support people with varied ability levels, they feel more encouraged to be active in exercise.
Construct: Functional Ability of Satisfaction with participation in outings (satisfaction with going out such as eating out, visiting a café, the cinema, a concert alone or with others)	
Quan	Of the 6 independent variables **none** were statistically significant when

	controlling for age and depression.
Qual	"How could they support me? Gee. I'm 86. Most of the people that we knew here are gone. Matter of fact, with the exception of... really, there are very few people, it's two couples that we're really friendly with that are left. Everybody else is either dead or moved away. So I don't have that much involvement in the community now because of that." (Participant 3) "I guess those locked in their home, what their needs are and how they can engage more in the community. And last year the prisoners in their homes. Yeah. Yeah. So really getting to those who are maybe home bound and asking them what their needs are." (Participant 7) "It's just that the COVID thing has changed everything really. It's distorted what used to be reality. And that really that makes such a big difference. I would think that if you ask me the same question, if I was around in a year, my answers might be different because things might've changed, but COVID sort of puts a damper on everything really." (Participant 3) "Well being with the pandemic we haven't done much other than senior building. So there's not really much I could tell you. I mean senior building is... They have stopped all the activities being under a pandemic. So really, there's not much to tell you in the last past year." (Participant 4) "Certainly, community is gone during COVID." (Participant 5)
Meta-inference	It is possible that individuals have been impacted by COVID-19 pandemic in NJ where many of these types of activities have been closed. Also at the time of the interviews and survey collection it was wintertime in NJ so outdoor venues were not optimal for dining out.
Construct: Functional Ability of Satisfaction with participation in daytrips (shopping, attending events, going to the beach, church or mosque)	
Quan	Decreasing WHODAS scores (i.e. toward functional independence) resulted in a higher likelihood of satisfaction in daytrips. The explained variance in predicting satisfaction was moderate.
Qual	" COVID has shown different examples about how you could get your food delivered, and I have had food delivered through Amazon, and Walmart, and things like that during the pandemic itself." (Participant 11) When I walk on the street, like I walk on the street, sometimes exercise, walk over there and go to Starbucks, drink coffee. You know, drink coffee and watch people. People walk dog, walk around, and I'm see me, "Hi, Participant 6."" (Participant 6) "Yeah, so for entertainment, we enjoy going out, eating dinner or lunch. Lunch or dinner. We really enjoy that a lot. And I love the town of Hammonton. Sometimes [the senior center has] casino trips. Sometimes they offer little trips, day trips, and that sort of thing. And sometimes they offer free food. And that's

	when we would go. When there's free food. (laughs)" (Participant 9)
Meta-inference	The ability to have functional independence allows for a greater ease of attending outdoor trips and activities in or hosted by the community.

The purpose of the outcome joint display below is to further connect the mixed methods explanatory design results to desired outcomes. While mixed methodology is utilized by translational researchers, it is not inherently translational. It is important to demonstrate not only how the qualitative findings explain the quantitative findings, but also how the connected results can be used for translation to a public health impact. Thus, Table 19 below displays the overarching outcomes of the study and the meta-inferences. It can be used by towns to avoid goal displacement when developing action plans (Funnell & Rogers, 2011).

Table 20.
Joint Display of Outcomes

Domain Construct	*QUALITATIVE Outcomes chain themes*	*QUANTITATIVE USER-P Satisfaction constructs*	*Meta Inferences*
Social		Work	Did not emerge as a main outcome, but may be a barrier to community participation as described in the interviews of working participation (e.g. time/ bandwidth limitations)
Basic	Decreased worry/stress/fear IADL Support	IADL/ household duties	When (if) participants have the supports in place, particularly as one ages or in the presence of disability, there is a decrease in worry stress and fear and a greater opportunity to become more involved with the community.
Basic, Social		Outdoor mobility (transportation/going shopping)	Expanded code in social domain described transportation limitations particularly for non-drivers and may serve as a mediating infrastructure for improving outcomes. Transportation is considered to be an IADL and could be a mediator from inner to outer setting.
Social		Exercise	Expanded code in the social domain as part of leisure interests demonstrates

			that exercising may be a mediating activity toward outcomes
Social, Growth	Something to look forward to Inclusive community	Going out (eating out/café/cinema/concert)	Outreach and information that is inclusive of all older adult persons with varied ability levels allows for opportunities for participation in community activities giving older adults something to look forward to and an opportunity to get to know one another and to highlight the wisdom and other contributions of older adults
		Daytrips/outdoor activities (shopping, events, beach, church/mosque)	
Social		Leisure at home (crafts/reading/computer)	Expanded code in the social domain as part of leisure interests demonstrates that leisure interests may be a mediating activity toward outcomes
Social, Growth	Inclusive community Idea exchange and innovation	Relationship with partner	Learning from one another and those from diverse backgrounds was emphasized as a way to find common ground toward inclusivity and innovation in communities.
		Relationships with family	
		Contacts with friends and acquaintances	

4G: Theory of Change

Community action plans that are grounded in a theory of change unique to the community represent a tailored plan for a community, or what the Consolidated Framework for Implementation Research (CFIR) would refer to as an *adapt*able *intervention.* The CFIR was developed to provide organization and uniformity of complex constructs on multi-leveled systems to drive implementation. The theory of change forms a component of evidence strength and quality identified in the CFIR intervention, but it also represents the *process* (LJ Damschroder et al., 2009). The findings of this research (the theory of change) points to basic, social, and growth needs as an essential antecedent to engaging in community planning and participating in the community, but the specifics of what each of those represent must be uncovered community to community (hence, adaptable). This was accomplished through

identifying objectives within basic, social and growth domains and then intersecting objectives with desired outcomes from the outcomes chain. For example, one community may have a food insecurity problem requiring attention to basic needs. The objectives for a problem such as this might be to create a food service (e.g. pantry) and the outcomes could be to have a well-nourished older adult community. What this does not specify is the mechanisms and activities for achieving the establishment of a food pantry. This is required within the next phase, the theory of action. Ideally, the developed theory of action (community action plans) will develop intervention(s) to be tested within communities.

Participants have described that they vary in motivation for participation in community action planning (see expanded code Motivated to Act). Most of the participants indicate that they are willing to contribute to action planning if their role in contribution is at an optimized level relevant to their interest and capacity (Environmental Press/just right challenge/*fit*). This finding confirms the hypothesis that the presence of supportive community features congruent with the older adult's functional ability level (i.e. *fit*) are associated with higher satisfaction with participation in the community. Thus, *supportive community features* is captured beyond physical, social, and service domains of the WHO Age Friendly Cities and demonstrates the criticality of supportive community *planning*.

The theory of change developed is an opportunity to focus on the critical, early stage process (i.e. the theory of change) that can strengthen interventions in communities. The use of CFIR shows that the intention of process is not always to see *how* something works or does not work, but also to see *why*. Grounding action plans that lead to innovations/interventions within a theory of change allows us to see the *why* of the process. New hypotheses in future research can test this. Discovering breakdowns in processes (the *how* of action planning) may contribute to

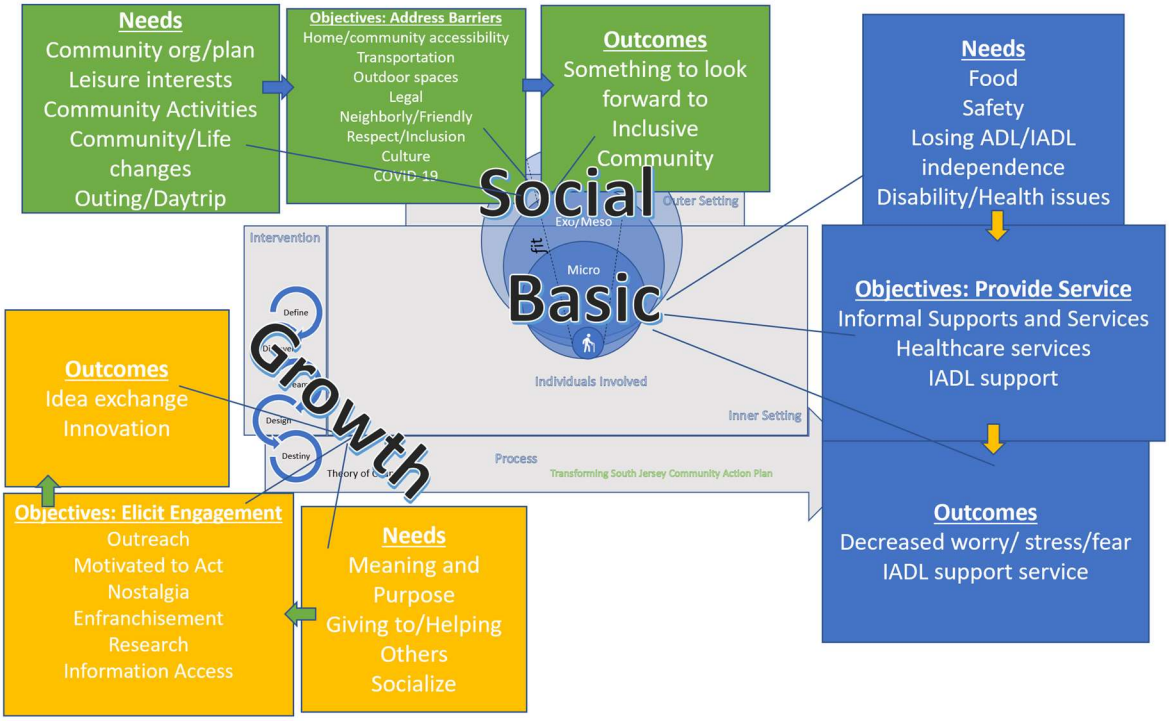
opportunities for innovations that can facilitate the connection of interventions within particular community settings (LJ Damschroder et al., 2009). Because participants co-developed the theory of change, they may feel "buy in" (Participant 2) and be more inclined to participate in the theory of action if the planning *fit* is optimized. The theory of change coupled with the translational stakeholder meeting (described in next section) identifies fidelitous empowerment procedures that can bridge further engagement with older adults in planning. In fact, participants in the study specifically described the ways in which they would like to participate (e.g. varied levels).

Figure 21 below visually displays the three domains: Basic, Social, and Growth. Emergence of themes from the qualitative research describe needs within each domain: Basic and Home Living Needs, Activity Planning & Participation Needs (Social Needs), and Living your Values (Growth Needs). Next, *needs* are followed with *objectives* (rather than selected and defined activities, which occurs during the theory of action) that suggest aims for meeting each need area: Service Provision Objectives (Basic/Home Living), Addressing Physical and Social Barriers (Social), and Eliciting Engagement (Growth). The outcome themes were matched with the appropriate need and objective to form the theory of change. The final result is a model that outlines the member-checked themes espoused as a full theory of change, encompassing the situation analysis (needs), the focused scope (objectives), and the desired outcomes (outcomes).

Additionally, the needs are intended to be displayed on equal platforms to depict that they needn't be addressed hierarchically, but rather through practical, grassroots, and community specific avenues and may be addressed at any level (basic, social, growth) serially, iteratively, or simultaneously, capturing anticipated complicated aspects of a full program theory (Funnell & Rogers, 2011). The theory of change articulates a set of needs that are desired and explains that *older adults are empowered to participate in one's community when there is support for basic*

and home living needs, when options for participation match one's level of ability, interest, and values, and when one is invited knows where to find information about programs, services, or events.

Figure 21.
Theory of Change



4E: Dissemination and Pre-Implementation: Presentation and Discussion of Findings

4E.1 Preparation for the Stakeholder Meeting

With member-checked results, several documents were generated in order to prepare for the meeting. An executive summary was sent to meeting participants to review and provide any further feedback or questions ahead of the meeting. The candidate developed a semi-structured document in order to stay within the allotted one hour time agreed upon. Telephone conversations and email correspondences with meeting participants helped to shape suggested discussion points for the meeting such as role within the community, expectations of the

dissemination meeting, primary finding interest (e.g. participants could identify the most important topic to them for discussion, such as inclusion or IADL support service), and review of a matrix planning tool derived from Funnel and Rogers (2011) to actuate results. During the meeting planning and scheduling, a discussion with a Heart and Soul coach led to a suggestion to share any phone numbers of participants who agreed to be contacted for follow up research to spur further elicitation and engagement in the Heart and Soul planning process. Prior to the meeting, one research participant called to state he would be unable to attend. The candidate and participant discussed the semi-structure points the meeting would entail and how a summary would be developed and sent to meeting participants, and any feedback was encouraged. Furthermore, a discussion about how the results can be used was an emphasis of the meeting and the student researcher offered to connect this participant with the Heart and Soul group. The research participant excitedly agreed to this connection as well as review and provide any feedback if necessary.

4E.2 Presentation of Study Findings

The final theory of change was emailed to meeting participants by way of the executive summary. The most salient findings were collaboratively discussed amongst the group which included representative older adult participants, leaders in Transform South Jersey including gatekeepers, and foundation leadership. This discussion-based, collaborative dissemination strategy emphasizes the Community-based participatory research (CBPR) constructs in an effort to enhance translational impact. This translational approach levels the power dynamic, ensures communities receive results that can be utilized in their community, enables interactive dialogue, and builds trust (McDavitt et al., 2016).

The meeting session began with an introduction of the purpose of the research and an emphasis on the need to merge the science that exists with what communities can and are doing in terms of action planning for the benefit of older adults to participate and age in place. In addition to the candidate, 11 meeting participants introduced themselves and their role to one another. The student researcher described her understanding that the communities involved in Heart and Soul and this study have expressed that they are not yet in the planning stages and that an objective of the session is a broad overview of how to embed older adult perspectives in the community planning process. The student researcher offered to work individually with communities upon readiness. It was communicated that a summary of the meeting would be written and shared. Participants were invited to ask general clarifying questions about the results of the study; however, presumably due to the high level of collaboration and involvement in the project, no questions related to results were asked. Most participants expressed they were ready to discuss planning and implementation.

4E.3 Discussion of Study Findings

Participants discussed their expectations as well as what stood out to them about the study results. The overwhelming sentiment was to learn and understand how the results of this research can 1) be used to make action plans to benefit communities involved in the study, 2) transcend results to broader communities. Furthermore, participants expressed a desire to 1) understand how the results can foster safe options for aging in place (i.e. through home modifications), 2) facilitate inclusivity and trust to 3) spur engagement and socialization of older adults, especially older minority adults, in these communities, and 4) identify specific processes for getting started on planning. Participants expressed an understanding of the importance of time for the process of building and developing plans.

4E.4 Pre-Implementation and Planning Discussion

Leveled Engagement. Concerns about the planning process were also discussed. For example, consideration of how to cost-effectively implement the suggested outcomes and where to begin addressing trust and engagement in the community. As participants discussed their concerns, the student researcher offered local knowledge derived from the results of the study. For instance, when engagement was discussed, the researcher provided the suggestion about provision of roles to meet the needs of a wide range of participants through time and presence commitments. In particular, having a leadership position in planning would require a large time commitment and physical presence, but that other opportunities such as infrequent attendance options or those that do not require physical presence could allow older adults with low energy and difficulty with mobility to participate. This spurred a conversation around other ideas to generate engagement, such as bridging generational divides and including minorities. The student researcher offered local knowledge about suggested strategies offered by participants in the study to develop and nurture existing activities that are cross-generational.

Communication/Information. Discussion of technology barriers also arose and, once again, the candidate described the findings of the study to include a need for multiple streams of information to accommodate the varied ways older adults receive and consume information. This included the suggestion of active and passive information dissemination using virtual and physical means in both home and community settings.

Enfranchisement and Champions. One participant expressed concern about serving older adults who are declining in function but may be refusing services. The candidate addressed this in two ways: 1) agency, as described in the literature (i.e. enfranchisement (Hammel et al., 2008)) as well as the results of this study, is critical; having a preference to use a service or

program should be the choice of the older adult (Moulaert et al., 2016; Rosenwohl-Mack et al., 2020). If they do not want the service than the service may not be for them or may need to be adapted to fit their needs. And 2) the importance of a champion. The use of champions was described for this study as a means to get participation. This strategy can also be used to garner participation for older adults who may have hesitancy about participating in a program, engaging in an activity including engaging in planning. Participants shared experiences of their own championing. One participant poignantly described the importance of representativeness on committees. She described that if communities want to involve older adult minorities (or any marginalized group be it age, disability, or race), a representative that matches those characteristics must be a planning member. This championing member would be most effective in developing a trusted connection and garnering participation. Getting leaders and champions who fit the characteristics of marginalized voices is critical for participation and is consistent with both the process of this research study as well as the study findings.

Social and Cultural Capital. Utilizing social and cultural capital were also discussed as was the analogy of building not only physical infrastructure of "bridges" in communities, but also extending this idea to social bridges where it is critical that people come together to discuss solutions. One participant explicitly used social and cultural capital, defining it for the group and articulating how this study and the Heart and Soul process are ways to develop such capital. Participants highlighted that it is through the continuous relationship building process that champions emerge and trust is built.

4E.4 Presentation and Discussion of a Matrix Planning Tool

Addressing barriers during the pre-implementation and planning discussion became a natural segue to the introduction of the Matrix Planning Tool derived from Funnel and Rogers'

(2011) *Purposeful Program Theory: Effective Use of Theories of Change and Logic Models*. The purpose of the program matrix is to initiate the beginning and iterative steps of developing a theory of action and ultimately a program or service within the community. The tool can be used at various stages in the planning process. During this stage, the tool is used to consider a wide range of possibilities to actuate the desired outcomes from the theory of change. The Matrix Planning Tool was partially filled out with study results in order to demonstrate to meeting participants the types of information that might be included for each community. Meeting participant comments about how results could be used were shared through this matrix including writing in participant suggestions directly onto the matrix in red (to distinguish from the study results). The presented Matrix Planning Tool is displayed below in Table 21. In addition to the summary of the meeting, the Matrix Planning Tool was provided to meeting participants.

Table 21.

Matrix Planning Tool: From Theory of Change to Theory of Action (Adapted from Funnell & Rogers, 2011)

Outcomes Chain	**Success Criteria: Attributes**	**Needed Resources: Inputs**	**Planned Activities**	**Anticipated Outputs**
Older adults in the community have **Decreased Worry/ Stress/ Fear** (Intermediate)	Age: 65+ Demographic: disabled and non disabled; all races/ethnicity; community dwelling Level of worry/stress/fear is measured	Human Schools and Libraries Police	Beautification projects Cross-generational activities (e.g. sports, library)	IADL Support Opportunities to take part in other activities/interests Enhanced trust amongst minority groups

Older adults in the community have **IADL Support** (Short Term)	IADL support service established in community and utilized by X# of older adults. Established Grocery Delivery Service Established trusted lawn and home maintenance service at reduced rate Companion service Navigation of healthcare services Qualifiers based on age vs. income that allow for usability (e.g. income not set so low that no one can use)	Human Leader Adult with a teen Buy in from companies (e.g. charging delivery service) Hammonton Family Center/ Health Coalition Grant funding (for services) Liability insurance	Youth volunteers for IADL services Survey community to ascertain use of IADL service	Decreased worry/ stress/ fear
Older adults in the community have **Something to Look forward To** (Short Term)	Agenda is printed for reviewing Discussion topics Shows/ entertainment (free) Full package liability for each	Donated funds Human Central location for information funnel Accessible building and outdoor space for activities	Outdoor luncheon with adult games (i.e. badminton) Quarterly Volunteer/outreach to seniors about types of entertainment of interest in light of ability level Committee	Inclusive activities

	person at no expense		Developing information	
Older adults live in an I**nclusive Community** (Long Term)	Feeling of inclusivity is measured	Model friendly behaviors	PR Civic Association Events Working with Church/congregation leaders/influencers	Older adults recognized as having valuable contribution "contagious" reciprocated behavior Welcome wagons Reputation
Older adults are able to participate in **Idea Exchange and Innovation** (Short Term)	Elicit Engagement/ Older adults feel motivated to act Leveled elicitation (leader, leveled volunteer, idea contributor)	Information (active/passive physical/virtual) that is explicit/ succinct Coordinated information exchanges between library, town, physician offices Human-Outreach services established Spaces (e.g. library/ senior center)	Special meetings/speaking topics	Wisdom shared Cultures valued for unique ideas/contributions Innovative ways to give back to society Innovative socializing opportunities A sense of meaning and purpose/ feeling needed Nostalgia Choice/agency

The columns were reviewed, and it was suggested by a participant to give broader overview of success criteria. The candidate described how this was an excellent point and that this document is malleable and that in addition to broad success criteria it should also be measurable through quantifying and qualifying. Discussion around success criteria included a

need to demonstrate quantitatively in the non-profit sector so that funding streams continue to flow. In terms of connecting this with communities a discussion about merging those quantitative numbers with qualitative feelings/storytelling about how programs might be working would be most meaningful to communities. All in all, it was emphasized that, much like mixed methods research, both kinds of success criteria are critical to capture in order to determine success within the action planning process. The interconnectedness of each outcome was also emphasized; communities might focus and scope only one outcome, but, as with all dynamic systems, there can be variable outcomes effecting other systems associated with it. From this discussion, participants expressed an understanding of the development of success attributes and factors that will contribute to success of outcomes.

One meeting participant shared previous struggles for designing interventions for older adults describing the many barriers to planning. The candidate emphasized that this is one of the main purposes for the use of the Matrix Planning Tool because it is designed to identify any potential barriers by listing out all resources and activities that are needed to address them. Thus, the planning tool drives the incorporation of the older adult theory of change within the Heart and Soul program and contributes to community action planning success. Furthermore, it was emphasized that connections between activities and outcomes must be made explicit. This piece of action planning emphasizes the importance of focusing and scoping; utilizing established networks to create activities that can capture the theory of change. Participants have been invited to work directly with the candidate when they reach this phase. Thinking through the focus and scope is important for planning a successful program without losing sight of the goals and outcomes that older adults identified in the study (Funnell & Rogers, 2011).

Finally, participants agreed that the session was helpful, sending emails and messages of the importance of this scholarly work and collaborative efforts as well as the usefulness of planning tools. One meeting participant wrote, “Thank you Emily for the information you have provided us today. Once we are in the phase of reaching our older adults in [Town] I look forward to reaching out to you for your input and guidance.” Another meeting participant wrote, “The matrix for action will be a great addition to the tools that Heart & Soul provide during the planning piece.” Efforts to increase person-centered planning processes to produce and provide generalizable knowledge of effective strategies can be better designed now that a) participation barriers and facilitators are understood and b) suggestions to overcome barriers and leverage facilitators have been elicited. Planning teams now have the translational tools to create customizable, theory-driven, and evidence-based approaches for strategies to engage older adults with varied ability levels to feel empowered to participate not only in their communities, but also in the development of community action plans. The community action planning process can be used for older adult community members to 1) design and inform community action plans, 2) participate in and develop plans and/or activities, whereby they can 3) benefit from innovations that triangulate the study’s theory of change for basic, social, and growth needs with the World Health Organization’s Age Friendly Cities domains of physical infrastructure, social and civic activities, and development of home and community based services within their community (World Health Organization, 2007a; 2018). Participation in the process or the outcomes of innovations from the process is cyclical, fostering continued participation and refinement and forging a path toward aging in place.

CHAPTER 5

CONCLUSION

5A: Summary of Main Results

As indicated in the literature review, older adults, especially older adults with chronic disease and disability, are not well represented in community action planning that can support aging in place interventions, programs, and policies. Correspondingly, the gap in empirical research on the participation and planning processes involving older adults in suburban communities prompted the goal of this study. The goal of this study was to understand fidelitous empowerment procedures of older adult participation in society through development of a theory of change that induces person-centered community action planning. This study uncovered log jams to participation in three New Jersey suburban middle income communities from the perspective of the older adult community dweller. Determinants associated with satisfaction with participation (dependent variable) were functional ability (WHODAS),availability of healthcare services, and availability of information to events, services, and programs. Participants identified that needs at a basic, social, and growth level must be met in order to participate at a desired level of interest, to achieve the highest attainable level of quality of life, and to age in place and community. These findings were the basis for the development of a theory of change. The theory of change articulates: *it is empowering to participate in your community when there is support for your basic and home living needs, when you're invited and know where to find information about programs, services, or events, and when options for participation match your level of ability, interest, and values*. The translational impact of this study is captured through the collaborative efforts between the older adult participants' theory of change and the planned utilization of the theory of change (i.e. through use of the planning matrix) to move along the

translational spectrum for community action planning initiated in the Dissemination and Pre-Implementation meeting with Transform South Jersey.

5B: Interpretation and Discussion of Findings

Within the context of the Consolidated Framework for Implementation Research (CFIR), it can be seen that these basic, social, and growth domains must first be understood as needs, suggested objectives to meet needs, and desired outcomes within the *individuals involved*, the *inner setting*, and the *outer setting* so that *interventions* (theory of action) can be designed with explicit *processes* grounded in the theory of change. It is important to note that while CFIR provides excellent organizational understanding by domain, these domains intersect at various areas and, as such, elements of *processes* are utilized in each CFIR domain. It is the collective process across domains that developed the theory of change. As such, this study can be holistically envisioned as a *process* for co-developing a theory of change.

5B.1 Major Findings

The overarching mixed methods question: *In what ways do the themes derived from older adult participants provide insight to a theory of change process for engaging older adults in community action plan development in middle income, suburban Southern New Jersey communities?* is answered through the mixing of findings, the development of the theory of change, and the Pre-Implementation and Planning stakeholder meeting.

Results of the multiple regression analysis demonstrate that the more functionally independent a participant, the more likely they are to be satisfied with participation. This is not a surprising result given what is known about disability and participation (American Occupational Therapy Association, 2020b; Hattjar, 2019; World Health Organization, 2015). This study demonstrates that participants with functional difficulties are well represented where 89% of

participants have at least some disabling characteristics (*individuals involved*). Given this, those participants who indicate that healthcare services are available in their community also are more likely to be satisfied with their participation (*outer setting*). This is corroborated by the qualitative findings whereby participants stress the importance of support in their basic and home living needs, particularly in the face of disability (*inner setting*). Similarly, older adult participants who report that information about local events, programs and services is easily available also are more likely to be satisfied with participation (*outer setting*). This, too was discussed by participants in the qualitative findings as a critical need for eliciting engagement and supporting participation (*process*). Studies show satisfaction is associated with participation related to the experience of participation. Put another way, satisfaction is associated with participation in desired activities/occupations (Bergström, Guidetti, Tham, & Eriksson, 2017), and participation is associated with functional independence (American Occupational Therapy Association, 2020b; Hattjar, 2019; World Health Organization, 2015). The findings from this study are consistent with the literature. Because of the association between functional ability and satisfaction with participation in this study, it is critical that communities develop activities that embrace those with varied ability levels to increase participation and satisfaction. By doing so, older adults can be reintroduced into communities as valuable, respected members who matter and have much to offer, a benefit to all. Furthermore, the burden (psychologically and financially) of institutionalization can be reduced which saves taxpayer dollars and gives older adults agency in where they want to age.

The qualitative results not only helped to further explain the quantitative results, but they also identified areas that were not present in the survey questioning. Consistent with the literature, this study shows that older adults, and all people, have basic (i*ndividua*l/ *inner setting*)

and social needs (*outer setting*) (Maslow & Frager, 1987; Vaughan et al., 2016; Yang & Sanford, 2012) and it is critical to understand those needs for each unique community. Furthermore, this study highlights the symbiosis between 1) the desire of older adults to contribute and to show how their wisdom can benefit their communities and 2) how community inclusion can benefit full growth as a human on the latter end of the lifespan (i.e. growth needs). Developing interventions that elicit this interdependence is critical. As older adults loose friends and in the absence of younger family members and changing family dynamics (whether by distance or personal commitments) (Blanchard, 2013; Cannuscio et al., 2003; Gitlin et al., 2013; Lehning, 2012), a social family of the community is needed to support participation and ultimately aging in place.

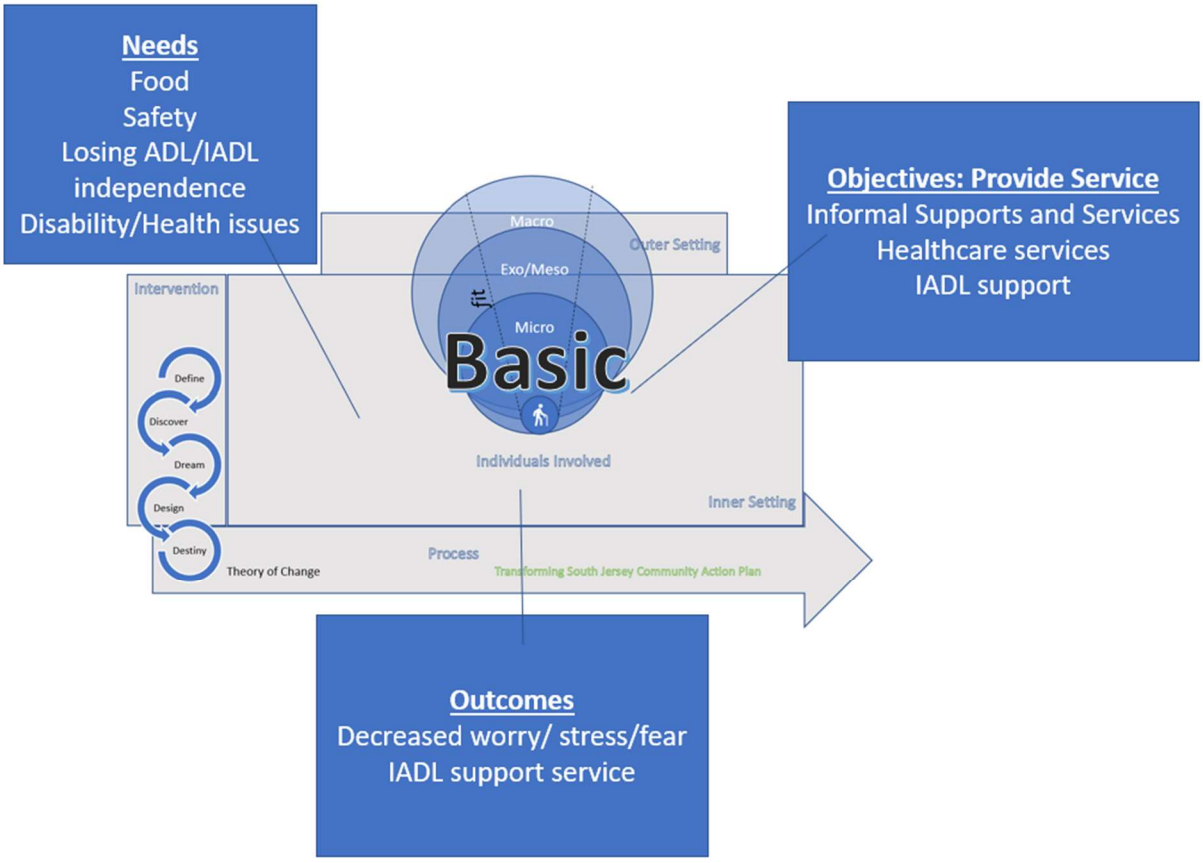
5B.2 Joint Display Interpretation of Connected Results

The joint displays and meta-inferences are fully described in the results of Chapter 4 Mixing of Data Part II and unpack the complete Theory of Change. The purpose of a joint display is to show the qualitative results as explanatory of quantitative findings (J. Creswell & Plano Clark, 2018). Condensed versions of the Joint Display from Chapter 4 are provided in each subsection for context. As described in explanatory sequential mixed methods designs, the meta inferences from the joint displays indicate how the qualitative findings offer a deeper understanding of the quantitative results (J. Creswell & Plano Clark, 2018). Below describes these joint findings in relationship to the CFIR.

5B.1.1 Relationship of Basic Needs/Service Objectives and Individuals Involved/Inner Setting

As shown in Chapter 4, Figure 22 below depicts how the identified basic domain with needs and objectives maps to CFIR's *individuals involved* and *inner setting*.

Figure 22.
Basic Domain Mapped to Individuals Involved and Inner Setting



An emphasis on service provision (including healthcare services) highlights the explained quantitative results using the qualitative results. In other words, the qualitative results of service provision objectives help explain the quantitative results of healthcare services within the community. The qualitative results expand healthcare to include HCBS, social supports and services, and a desire for healthcare to more fully encompass IADL support.

Service Provision. Below is the condensed joint display for Service Provision (e.g. Healthcare services). The synthesized inferences are described and further contextualized with the literature.

Table 22.
Condensed Joint Displays for Basic Service Provision

Construct: Availability of healthcare on Satisfaction with participation	
Meta-inference	Having local and accessible healthcare services may allow older adults to have their health needs addressed in order for them to participate in identified basic, social, and growth needs bringing satisfaction to participation.

Domain Construct	*QUALITATIVE Outcomes chain themes*	*QUANTITATIVE USER-P Satisfaction constructs*	*Meta Inferences*
Basic	Decreased worry/stress/fear IADL Support	IADL/ household duties	When (if) participants have the supports in place, particularly as one ages or in the presence of disability, there is a decrease in worry stress and fear and a greater opportunity to become more involved with the community.
Basic, Social		Outdoor mobility (transportation/going shopping)	Expanded code in social domain described transportation limitations particularly for non-drivers and may serve as a mediating infrastructure for improving outcomes. Transportation is considered to be an IADL and could be a mediator from inner to outer setting.

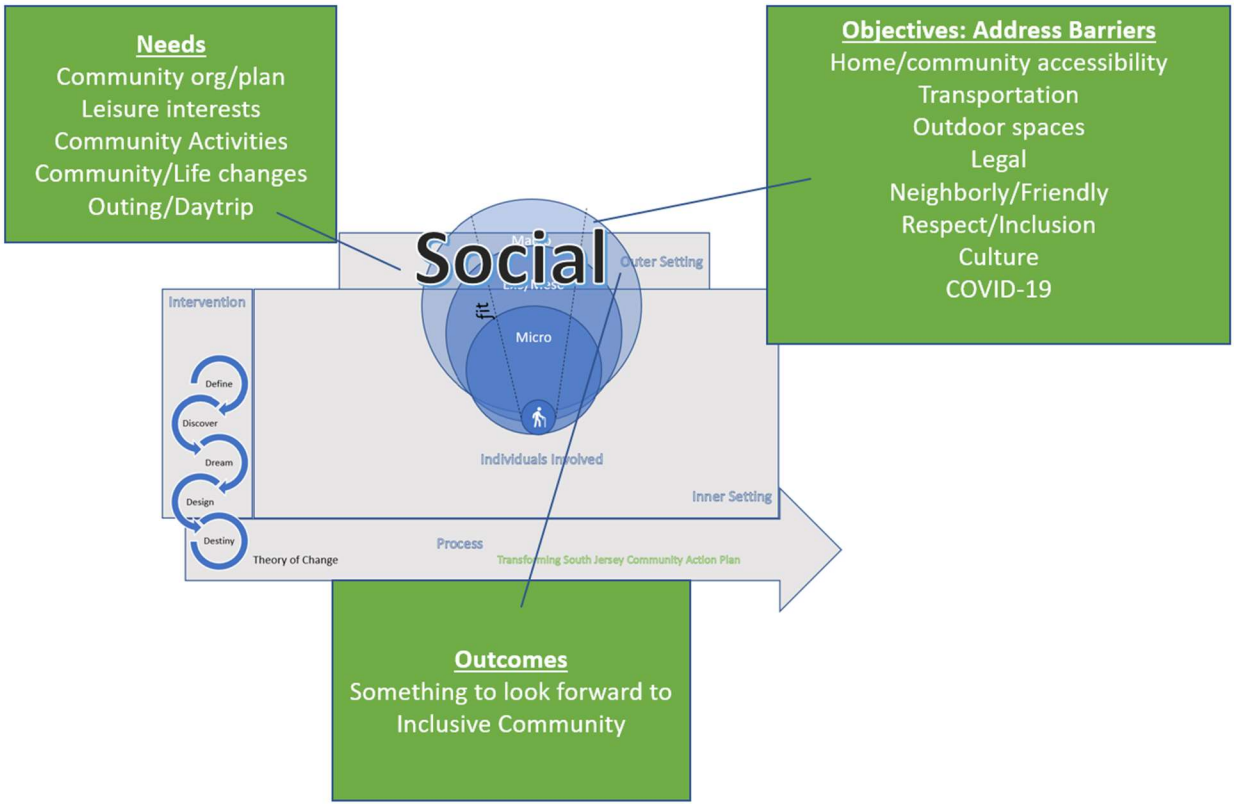
Older adults in this study have expressed that convenient healthcare services are valuable in meeting their basic needs and that there is a desire to have additional supports in place to promote safety and independence within the home specifically to include home living (IADL) needs. When existing supports (e.g. physician office nearby) and suggested supports (e.g. IADL/HCBS) are in place, older adults in this study believe they will have less worry, stress, and fear as they age in place and that these will allow for more opportunities to become involved in the community. This is consistent with the literature that discusses services particularly within the home environment. Gitlin, Szanton and Hodgson (2013) found that older minority adults with disability and chronic conditions are at higher risk for isolation and depression, have less

ability to perform ADL's, leisure and work, are more likely to be frail, have falls, be hospitalized, and have a higher mortality rate. These poor outcomes are exacerbated by unsupportive home and community environments (Gitlin et al., 2013). Individuals who are living alone and potentially isolated may be suited for social considerations for interventions such as special services focusing on support for outings, meals, and housework (Yi et al., 2021) particularly because of the emphasized importance older adults place on community supports (Flores et al., 2019). In a new scoping review of quantitative studies over the past decade, authors Mah and colleagues (2021) found several personal and community/social factors that contribute to the utilization of homecare services to support aging in place. Green and colleagues (2020) describe the problems associated with cost and coverage for home modifications as well as concerns for older adults to find trusted resources to complete modifications. The authors claim that a cost analysis shows that these modifications could reap savings and public health benefits at only two percent of the Medicare budget. This study demonstrates that older adult suggestions for supports are not only consistent with older adults throughout the nation (and non-US developed nations), but that these suggestions are also cost-effective. Thus, it is reasonable to consider that meeting the basic and home living needs through the suggested objective of service provision will result in the outcomes of decreased worry, stress, and fear indicated by the older adults in the theory of change.

5B.1.2 Relationship of Functional Ability and Social Needs/Objectives within the Outer Setting

As shown in Chapter 4, Figure 23 below depicts how the identified social domain with needs and objectives maps to CFIR's *outer setting*.

Figure 23.
Social Domain Mapped to Outer Setting



Functional Ability. Below is the condensed joint display for Functional Ability (i.e. WHODAS). The synthesized inferences are described and further contextualized with the literature.

Table 23.
Condensed Joint Displays for Functional Ability

Construct: Functional Ability on Satisfaction with participation	
Meta-inference	Participants who described having a disability that impacted their functional performance were less satisfied with participation.
*Construct: Functional Ability of Satisfaction with participation in **outdoor mobility*** (driving a car, traveling by bus or train, cycling to work or going shopping)	
Meta-inference	Functional ability specifically impacted outdoor mobility whereby participants with disability indicate they require additional support. The loss of independence in mobility that would allow for independence in community accessibility decreases the likelihood that participants are satisfied with outdoor mobility. The decreased accessibility makes taking public transit difficult and inconvenient and relying on others further spurs a cycle of dependence. Older adults who maintain their independence with driving find it essential for their outdoor

	mobility.
*Construct: Functional Ability of Satisfaction with participation in **exercise***	
Meta-inference	For individuals with less functional disability there is greater satisfaction with exercise. When environments support people with varied ability levels, they feel more encouraged to be active in exercise.
*Construct: Functional Ability of Satisfaction with participation in **outings*** (satisfaction with going out such as eating out, visiting a café, the cinema, a concert alone or with others)	
Meta-inference	It is possible that individuals have been impacted by COVID-19 pandemic in NJ where many of these types of activities have been closed. Also at the time of the interviews and survey collection it was wintertime in NJ so outdoor venues were not optimal for dining out.
*Construct: Functional Ability of Satisfaction with participation in **daytrips*** (shopping, attending events, going to the beach, church or mosque)	
Meta-inference	The ability to have functional independence allows for a greater ease of attending outdoor trips and activities in or hosted by the community.

Domain Construct	*QUALITATIVE Outcomes chain themes*	*QUANTITATIVE USER-P Satisfaction constructs*	*Meta Inferences*
Basic, Social		Outdoor mobility (transportation/going shopping)	Expanded code in social domain described transportation limitations particularly for non-drivers and may serve as a mediating infrastructure for improving outcomes. Transportation is considered to be an IADL and could be a mediator from inner to outer setting.
Social		Exercise	Expanded code in the social domain as part of leisure interests demonstrates that exercising may be a mediating activity toward outcomes
Social, Growth	Something to look forward to Inclusive community	Going out (eating out/café/cinema/concert)	Outreach and information that is inclusive of all older adult persons with varied ability levels allows for opportunities for participation in community activities giving older adults something to look forward to and an opportunity to get to know one another and to highlight the wisdom and other contributions of older adults
		Daytrips/outdoor activities (shopping, events, beach, church/mosque)	
Social		Leisure at home (crafts/reading/computer)	Expanded code in the social domain as part of leisure interests demonstrates that leisure interests may be a mediating activity toward outcomes

Older adults both with and without functional disability have identified that outdoor mobility (defined in the USER-P as driving a car, traveling by bus or train, cycling to work or going shopping) is a barrier to participation. A surprising finding was that transportation did not reach statistical significance in this quantitative strand of the study. It was not until transportation emerged as a strong theme in the qualitative strand that lack of statistical significance in the quantitative strand became more surprising. Every qualitative participant identified barriers to public transit and indicated how important driving is for independence and access to their suburban community. Furthermore, considering the loss of the ability to drive became a point of concern for many participants. Nevertheless, the qualitative findings help explain that transportation is indeed significant despite not reaching statistical significance quantitatively. While some towns and counties have made efforts to develop public transit (i.e. busing and shuttles), participants report these are often inconvenient and time consuming. Older adult participants have a preference for driving themselves or with friends, neighbors, or family. Older adult participants with functional disabilities report higher dissatisfaction with outdoor mobility (e.g. modes of transportation). Efforts to support transportation infrastructure may serve as a mediator toward improving outcomes related to inclusive community participation. Participants provided some suggestions for improvement, however most indicated the many barriers from a county and cost level that could affect addressing transportation locally. These findings are consistent with the literature that indicates access to transportation is a mediating source for social participation in communities and that affordable, reliable, accessible, and the limited existence of convenient transportation is a barrier (Kathy Black et al., 2015; Levasseur et al., 2015; World Health Organization, 2007a). There are two ways the literature identifies addressing transportation barriers in metropolitan communities: 1) address signage and roads to promote

continued independence with driving (Chippendale & Bear-Lehman, 2010; CRAMM et al., 2018; Graham et al., 2017; Greenfield, 2016; Lehning, 2012; Menec et al., 2011; World Health Organization, 2007a) and 2) develop volunteer transportation through village networks (Kathy Black et al., 2015; Graham et al., 2017; Greenfield, 2016; Wu & Tseng, 2018). These two recommendations confirm the limited solutions to public transit that older adults identified in this study.

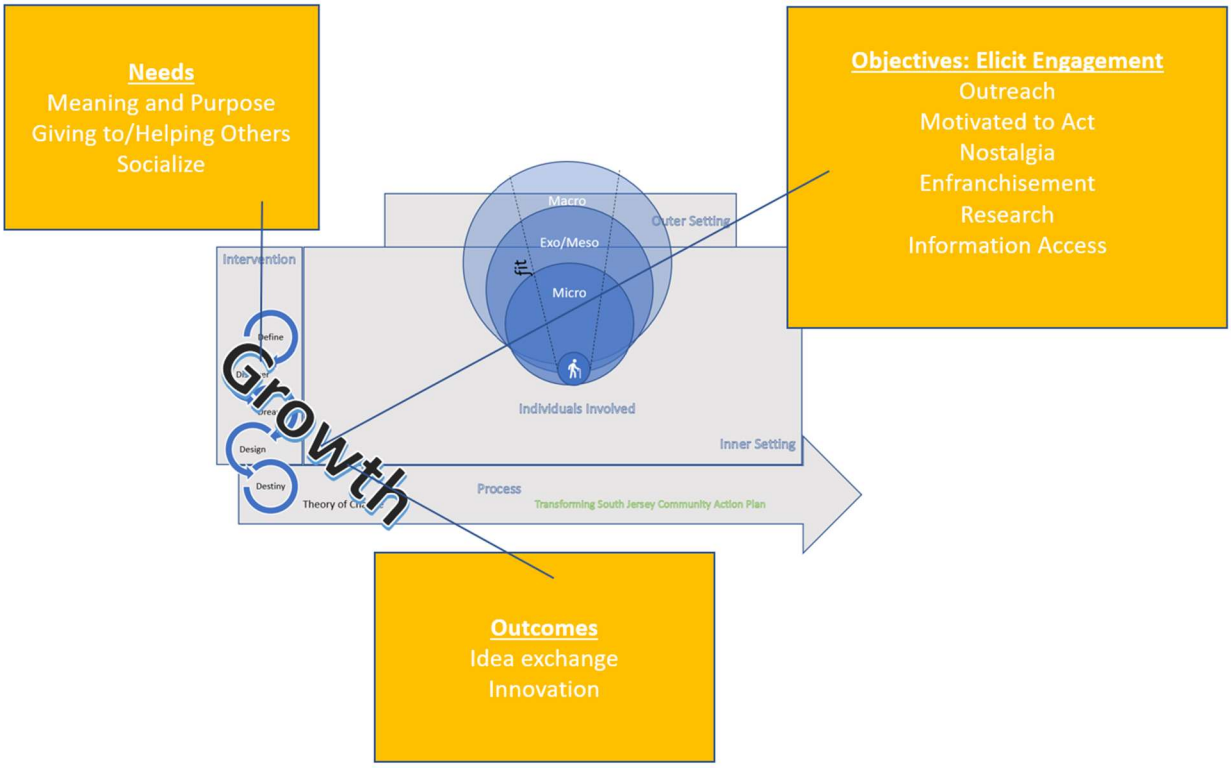
Exercise and daytrips, outcome variables of the logistic regression, are also impacted by functional ability level. Qualitative results indicate that when environments support older adults to participate, they are more encouraged to take part in physical activity like exercise. Results from the study indicate that suggested objectives for designing community activity programming that meets a wide variety of functional ability needs (e.g. accessibility) may serve as a mediator toward outcomes for satisfaction and participation in an inclusive community. However, accessibility related to functional ability is only one piece of the results related to desired outcomes of inclusivity. Results indicate that socially inclusive environments must also incorporate targeted areas of interest to older adults (e.g. daytrips to senior center with leisure interests such as bingo) that are supportive of all ability levels. Furthermore offering socialization over food and dining is a suggested strategy to increase participation. These findings are consistent with recent literature that utilized an integrated review to examine universal design. The authors call for spaces that are diversity-friendly and accommodating, but they extend beyond access and toward occupational participation. The authors claim that access does not necessarily offer the ability to engage in meaningful and preferred occupations (Watchorn et al., 2021). Physical and social accessibility over a meal is a critical consideration to appraise when action planning committees convene and begin to design community activities

that are meaningful, purposeful, and interesting to older adults (including the civic participation of an older adult action planning committee member).

5B.1.3 Relationship of Growth Needs/Objectives and Information Processes

As shown in Chapter 4, Figure 24 below depicts how the identified growth domain with needs and objectives maps to CFIR's *intervention* and *process*.

Figure 24.
Growth Domain Mapped to Intervention and Process



Information. Below is the condensed joint display for Information. The synthesized inferences are described and further contextualized with the literature.

Table 24.
Condensed Joint Display for Information

Construct: Availability of Information on Satisfaction with participation	
Meta-inference	Information access has been identified as a significant barrier to participation in communities particularly when it is distributed only through virtual channels or community locations. Participants who can access information to events, programs and services have nearly nine times higher satisfaction with

	participation. Thus, improving accessibility of information, with consideration to the home, is critical to improve participation satisfaction.

Domain Construct	*QUALITATIVE Outcomes chain themes*	*QUANTITATIVE USER-P Satisfaction constructs*	*Meta Inferences*
Social, Growth	Something to look forward to Inclusive community	Going out (eating out/café/cinema/concert)	Outreach and information that is inclusive of all older adult persons with varied ability levels allows for opportunities for participation in community activities giving older adults something to look forward to and an opportunity to get to know one another and to highlight the wisdom and other contributions of older adults
		Daytrips/outdoor activities (shopping, events, beach, church/mosque)	
Social, Growth	Inclusive community Idea exchange and innovation	Relationship with partner	Learning from one another and those from diverse backgrounds was emphasized as a way to find common ground toward inclusivity and innovation in communities.
		Relationship with family	
		Contacts with friends and acquaintances	

Due to the span of ages and varied levels of technology use in older adulthood, information about community events, programs, and services require multiple forms of active and passive dissemination that encompass physical and virtual dispersion. Direct and active dissemination to one's home (i.e. mailing information) and local community (i.e. hanging flyers at frequented locations) as well as active virtual (i.e. robocalls, direct email listservs) and passive virtual (i.e. social media and websites) dissemination are recommended by older adults in the study to maximize outreach. Multiple forms of information dissemination is a mediator toward the desired outcome of something to look forward to. Miyashita and colleagues (2021) report that health literacy allows for exertion of control in one's life and may mediate access to a larger pool of resources and social supports which gives way to participation in one's community.

Outreach that is inclusive and respectful of older adults from a wide variety of abilities and cultural backgrounds are desired for eliciting engagement and are mediators toward the desired outcome of exchanging ideas and innovations in an inclusive community. Older adult participants have generated a number of suggestions for providing information that are cost-effective and should be considered for action planning. Involving older adults using their suggested strategies in the next phase (i.e. theory of action, community action plans) can allow for growth needs of giving and helping as well as socialization both through the participation in and the outcomes of action planning. Understanding the desire to both receive and provide social support have been identified as a focus by Miyashita and colleagues (2021); and exploring opportunities for goals examining self-help and provision of support to one another has been shown to improve community participation and quality of life. Purpose in life and *mattering* have been shown to be predictors of wellness and well-being. Mattering is defined as a sense that you are important and valued (Flett & Heisel, 2020; Sorrell, 2021). Outreach and elicitation efforts identified in this study indicate ways that communities can show how older adults matter and that their engagement and participation can give purpose and value to their lives.

5B.1.4 Synthesized Discussion of Connected Results

Maslow discusses that when higher level needs are met, there is improved biological efficiency, increased longevity, decreased disease, improved sleep, improved appetite as well as improvements in psychological states such as anxiety and fear (Maslow & Frager, 1987). Many of these characteristics are identified as preventative factors for institutionalization according to a systematic review that found that nursing home placement is based on cognition and/or functional impairment and the lack of support for ADL/IADL tasks (Luppa et al., 2010). The older adults in this study have consistently set objectives to meet ADL/IADL needs and the

literature demonstrates that provision of home care and home modification is cost-effective and has public health and safety impacts (R. K. Green et al., 2020; Szanton et al., 2014). Furthermore, interventions that address and enhance IADL participation are shown to improve social participation (Papageorgiou, Marquis, Dare, & Batten, 2016). It is increasingly recognized since the passing of the Americans with Disabilities Act that designing community spaces to allow for physical access is imperative for inclusivity, however calls for research to examine how older adults and persons with disabilities engage in occupation in these spaces is critical (Watchorn et al., 2021). Barriers to inclusivity as a result of ageism and discrimination impacts the will of older adults to participate in their communities (Kathy Black et al., 2015; Sorrell, 2021) and participants in this study have suggested a number of multicultural and cross-generational ways these can be addressed. Eliciting older adults to participate in community planning and community activities in meaningful ways that bring value and purpose to their lives has been identified in this study; however, the information streams to elicit participation are decentralized and often web-based. Information using technology and internet-based outreach has been identified as a barrier to older adults and has been exacerbated by the pandemic where many older adults do not have access or knowledge for technology use (Kotwal et al., 2021). As such, social isolation and associated mental health conditions has worsened for many older adults both in this study and in other studies conducted over the past pandemic year and efforts to address health needs have been difficult to navigate (Kotwal et al., 2021). Furthermore, opportunities for older adults in this study to meet growth needs by meaningfully giving back to society is consistent with occupational therapy literature that shows how supporting volunteer efforts in the community or mentorship help older adults to maintain independence and enhance community participation (Papageorgiou et al., 2016). Correspondingly, purpose in life has been

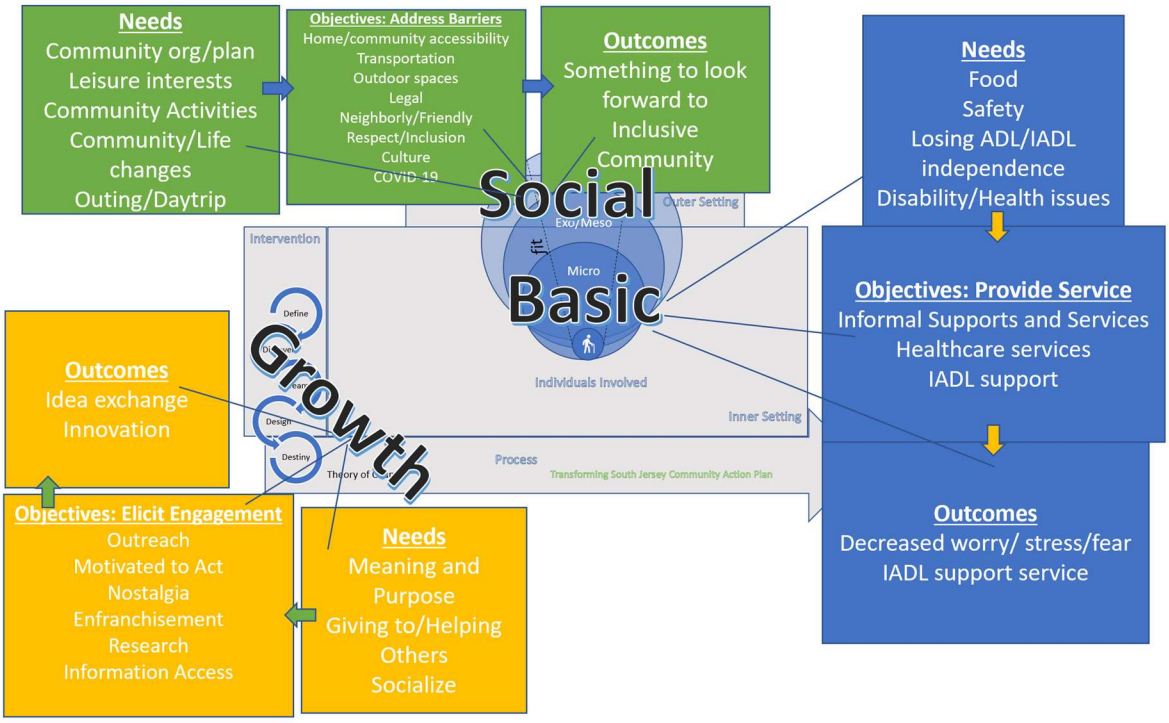
shown to have positive health outcomes and improved quality of life in older adults including those with disabilities (Musich, Wang, Kraemer, Hawkins, & Wicker, 2018; Yeung & Breheny, 2019) and eliciting engagement, as suggested by participants in this study, is a way for communities to demonstrate that older adults are valued, matter in their communities, and can share wisdom about resiliency (Flett & Heisel, 2020). Maslow further argues that as humans, we have evolved "…beyond Darwinian-survival, [and] there is a case for growth values to reach full humanness, or actualization of potentials" (Maslow & Frager, 1987, p. 104) and that the achievement of self-actualization cannot and does not occur in young Americans, but rather is specific to older adults. Correspondingly, the core beliefs of the practice of occupational therapy exemplify these higher order growth needs (with occupation defined as the everyday personalized activities that people do):

> "A core philosophical assumption of the profession, therefore, is that by virtue of our biological endowment, people of all ages and abilities require occupation to grow and thrive; in pursuing occupation, humans express the totality of their being, a mind-body-spirit union. Because human existence could not otherwise be, humankind is, in essence, occupational by nature" (Hooper & Wood, 2014, p. 46).

5B.1.5 Relationship of Theory of Change and Theory of Action (planning)

The full theory of change, displayed below in figure 25, articulates a set of needs that are desired and explains that *older adults are empowered to participate in one's community when there is support for basic and home living needs, when options for participation match one's level of ability, interest, and values, and when one is invited, knows where to find information about programs, services, or events.*

Figure 25.
Theory of Change



Actuating this theory of change began with a stakeholder meeting where using the study findings (i.e. the theory of change) was discussed. Four themes, recognized as the fidelitous empowerment procedures of older adult participation in society, emerged during the Dissemination and Pre-Implementation stakeholder meeting to spur community action planning. The empowerment procedures include: 1) leveled engagement, 2) communication, 3) enfranchisement and champions, and 4) social and cultural capital. Participants described these as the needed factors for utilization of the theory of change for developing a theory of action that involves older adults in the planning process.

Leveled Engagement. Dissemination and Pre-Implementation meeting participants discussed their desire to elicit participation from older adults. Empowered aging concepts take the idea of shared responsibility for participation for both the individual older adult and the

community (Moulaert et al., 2016). Much like an occupational therapist grades up and down (modifies) activities to improve function or respond to difficulties (Schell, Gillen, Scaffa, & Cohn, 2013), the idea of providing varied levels of opportunity should be considered during action planning and when designing opportunities for participation within the community.

Communication. Participants in the study and in the stakeholder meeting identified the importance of communicating information to older adults in communities. It is important to address several components of communication for older adults in communities and these were identified by older adults in the study as well as stakeholder participants. These communication strategies are also supported by the literature. Information must be clear and have reduced complexity of information. Simple messaging should be visually appealing and able to connect older adults to programs, services and activities in their communities. Communications should have consistent messaging that can expand access and awareness of community information. These communications should be delivered through multiple sources or channels for information to be digested by older adults in the community in order to spur community participation (Kathy Black et al., 2015; De Wit et al., 2018; Miyashita et al., 2021; Rosenwohl-Mack et al., 2020; World Health Organization, 2007a).

Enfranchisement and Champions. Once information about an innovation or opportunity is made known through efficient information and communication channels, the choice to participate in known opportunities (referred to as enfranchisement (Hammel et al., 2008)) is important for older adults to affirm (Moulaert et al., 2016; Rosenwohl-Mack et al., 2020). Enfranchisement emerged as a theme in this study both in transportation as well as the decision to be involved, and at what level, in a community endeavor. Furthermore, the agency of the decision can be influenced by a champion. Champions have been critical to this study to

garner participation and this theme also emerged in the growth domain as part of the objectives using research to elicit engagement. The concept of champion is well developed in CFIR and other implementation science literature (Bonawitz et al., 2020; Brownson et al., 2012b; Laura J. Damschroder et al., 2009; Shea, 2021) and during the dissemination and pre-implementation meeting, emerged again as a critical factor for eliciting engagement in action planning and the community. The desire to engage minority older adults was decidedly agreed to be possible through other minority committee members. Shin (2014) calls these mediating individuals cultural brokers and utilization of cultural brokers can lead to effective connections to the community.

Social and Cultural Capital. Participants in the study describe the importance of relationship building in the social domain objectives in terms of being neighborly and demonstrating respect and inclusion, particularly of non-dominant cultures. Thomas and Blanchard (2009) use the metaphor of a brick building where the people in a community are the bricks and the relationships they develop are the mortar. The resulting structure is social capital (W. H. Thomas & Blanchard, 2009). While there is no singular definition of social capital and the term is evolving, this study defines social capital and its interrelationship with aging in place as the gained benefit to older adults to age in home and community based on community relationships and the assets they produce (Cannuscio et al., 2003; Greenfield, 2014). The action planning process, as described by participants in the Pre-Implementation and Planning stakeholder meeting, can be used to leverage existing relationships while also building new networks and relationships with aligned goals from the theory of change toward participation and aging in place.

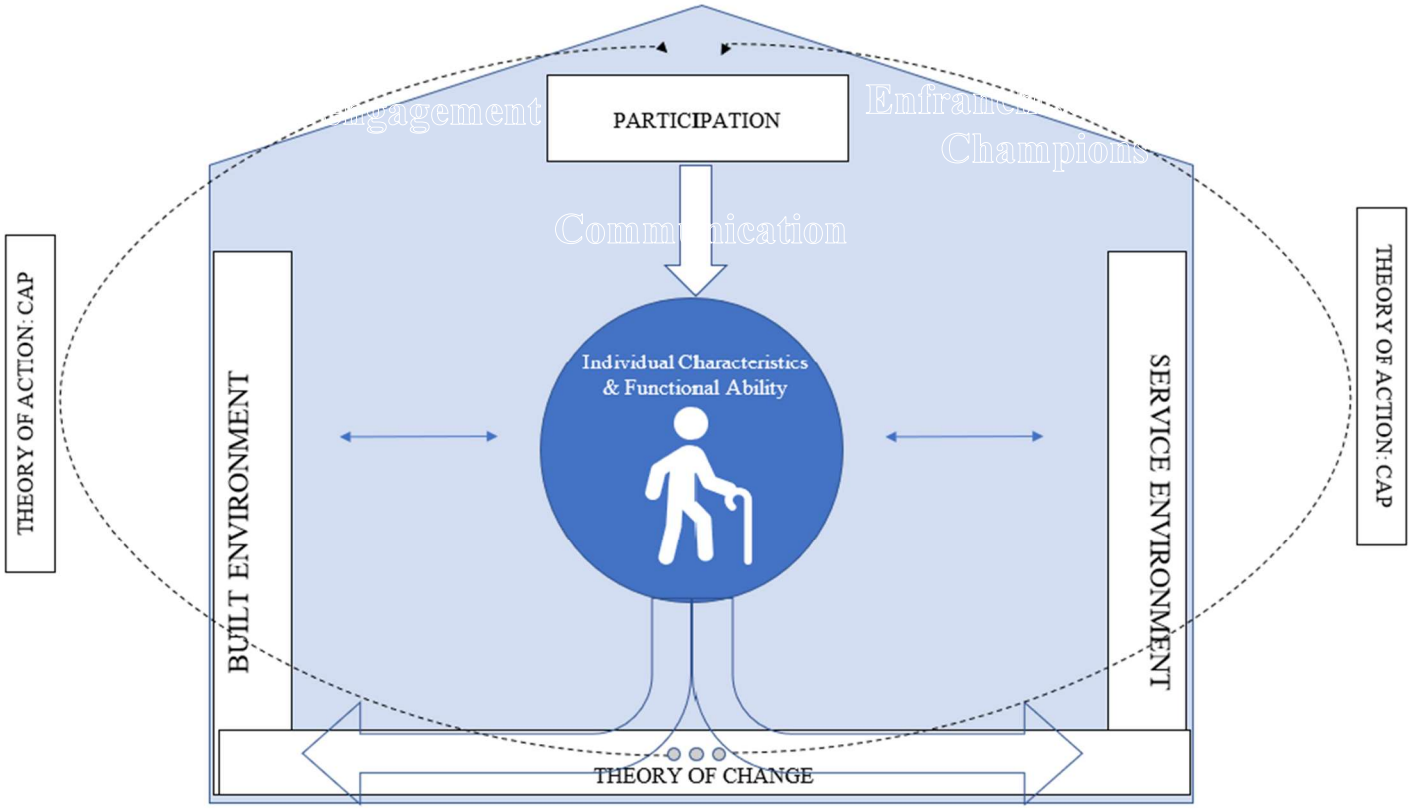
5B.3: Study Heuristic

The goal of this mixed methods study was to understand fidelitous empowerment procedures of older adult participation in society through development of a theory of change that induces person-centered community action planning. The overarching research question *In what ways do the themes derived from older adult participants provide insight to a theory of change process for engaging older adults in community action plan development in middle income, suburban Southern New Jersey communities?* has been answered through a systematic process of understanding older adult perspectives about their own individual characteristics and those of the community and through the building of a theory of change. Synthesizing the multisource methods into a theory of change grounds action planning interventions, programs, and/or policies in an evidence and theory-based model that allows for replication and potential generalizability.

Figure 22, The Conceptual Framework in Action as a heuristic, represents the fidelitous empowerment procedures. The theory of change, and the process utilized to develop it, grounds/centers the perspectives of older adults with varied functional ability levels (center of the figure). The older adult suggestions for enhancing healthcare/home and community-based service (service environment) and ensuring a supportive and accessible physical infrastructure (built environment) are pillars for participation. Elicitation for social engagement and participation must be shepherded by accessible information. This iterative process intersected with an understanding of basic, social, and growth needs and objectives can spur elicitation for community participation including action planning. Recommendations for a theory of action to contain the developed theory of change to move along the translational spectrum for community action planning have been discussed, developed, and co-disseminated with older adult participants and Transform South Jersey. The translational impact is captured through the

collaborative efforts between the older adult participants' theory of change and the pre-implementation and planned utilization of the theory of change to move along the spectrum for community action planning.

Figure 26.
Conceptual Framework in Action: Fidelitous Empowerment Procedures Heuristic



5B.4 Limitations

The study presents with several limitations. Although traditional marketing concepts including the *7 P's* (price, place, promotion, people, process, physical evidence, product) (Jacobs & McCormack, 2019) along with social marketing theories were applied to develop a strategy to target older adults in the community while adhering to NJ's COVID-19 restrictions, the quantitative portion of the study had a small sample size (n=64). The small sample size resulted

in poor representation of minority groups. Only 10 African American/Black individuals participated and one Asian American/Pacific Islander. No Hispanic participants were represented. Correspondingly, the survey missed an opportunity to have a selection for mixed race and to choose more than one race (ethnicity was collected separately from race, however). Efforts to connect with older minority groups are important in developing a theory of change, action, and overall program theory for communities. In one of the towns, qualitative interviews from townspeople highlighted the importance of connecting with Hispanic populations as this is a growing sector in their community. CDC data in Appendix B provides the percentage by race per town. In comparison to the averages by race and ethnicity, this study underrepresents the Black/African American population (44.5%) and the Hispanic population (4.86%) while overrepresenting the white population (62.6%).

Table 25.
Race and Ethnicity comparison

	All Town CDC Census Average	Study Average
White	62.6%	77%
Black/African American	32.5%	16%
Asian/Pacific Islander	1.2%	2%
Hispanic/Latinx	4.86%	0%

Lack of access to information, which emerged as an important sub-theme, was a limitation for this study as the most suitable channels for communication with older adults may not have been fully available or utilized to advertise the research. Despite flyers and messaging emphasizing the study as an accessible option in which participants could safely participate in their communities from the comfort of their own home during a global pandemic, a major

limiting factor was not having the option for a mailed or paper copy of the survey in addition to phone and internet-based availability of surveys. Financial restrictions made this option inaccessible due to costs of printing and mailing, known to be the highest cost in recruiting older adults for community-based studies (Nkimbeng et al., 2020).

There are limitations with the use of the USER-P as a data collection tool. Despite its validation for use and indications of ICF classifiers (validated across several populations; Cronbach's α= 0.70-0.91 (Post et al., 2012)), during analysis it was clear that the domains of outdoor mobility, going out (outings), and daytrip would benefit from being more clearly defined/refined. For example, outdoor mobility would indicate to many therapists as walking or use of a wheelchair in the outdoor community in addition to other means of transport (Rantanen, 2013); however, the USER-P authors define outdoor mobility as transportation and going shopping. Shopping is dually captured in the daytrip domain. Distinguishing mobility as two separate categories 1) modes of transportation and 2) outdoor physical mobility (defined as walking or wheelchair mobility as well as the use of gait speed) would better clarify outcomes of satisfaction in these domains. Furthermore, going out and daytrip are closely related and would benefit from being distinguished as satisfaction with 1) community IADL's (e.g. grocery shopping, going to repair stores) and 2) social participation and community leisure activities (e.g. eating out, going to the movies, attending religious/spiritual services).

Another limitation was the combining of three communities to develop a theory of change. This decision was made to pool the groups due to varied levels of participation in each town. While all of the communities are in nearby suburban towns, these towns, much like many suburban communities in South Jersey, have varying needs, varying policies, and are made up entirely differently in terms of demographics, physical structure, social opportunities, and

services available. This is also true of "communities within communities" in which, for example, an independent 55+ community is nested within a larger community. As emphasized throughout this paper, these individual nuances are what are needed to create a situation analysis to tailor targeted strategies or action plans to meet these needs. The limited participation required that some areas be analyzed together amongst the three communities which may neutralize any nuanced findings for each town. Green and Glasgow (2006) describe the impossibility of populations, contexts, and situations that are representative for external validity and that theory and local epistemologies can be combined strategically. This study's use of multisource methods is evidence of this strategic combination strengthening the validity in these three communities, however, the generalizability of the study to other suburban communities should be heeded with caution given the infinite combinations of individuals, inner and outer settings. Translational science has long called for population-based studies that produce policy and plans under real-world circumstances which can test external validity (L. W. Green & Glasgow, 2006).

5B.4.1 COVID-19

COVID-19 has posed significant challenges to older adults and for those in the community, isolation is a serious problem (Steinman, Perry, & Perissinotto, 2020). Community based participatory research (CBPR) is often used to amplify the voices of those in the community affected by the issue being studied in order to create actionable change (Brownson et al., 2012a). Older adults in community settings can be difficult to target as collaborators in a non-COVID era (Israel, 2013), and the pandemic has made accessing this population in a safe way increasingly difficult (M. A. Cohen & Tavares, 2020). CBPR tenants include collaboration, community resources, and co-learning with community members. Correspondingly, CBPR during the COVID-19 pandemic could have allowed older adults to feel a part of their

community even during these isolating times. In order to answer the study research question, the researcher must first be able to safely access the target population of older adults themselves. The COVID-19 global pandemic was a barrier to safe data collection as this population was the highest at-risk group. At the launch of the study, participation was severely lulled and measures to enhance participation were sought. These measures may have resulted in self-selection bias due to the means with which the study was advertised and the fact that it was a call-in option. Furthermore, there was great reliance on community gatekeepers. If community members did not know the gatekeepers, this reduced the likelihood of knowing about the study particularly for individuals with limited computer access to information.

It is also likely that the pandemic skewed perceptions of older adults about their participation and this was captured in the qualitative findings, “You're coming at this from a very skewed point in everybody's lives where we haven't done anything in more than a year. You know what I mean?” (Participant 13).

> “It's just that the COVID thing has changed everything really. It's distorted what used to be reality. And that really that makes such a big difference. I would think that if you ask me the same question, if I was around in a year, my answers might be different because things might've changed, but COVID sort of puts a damper on everything really.” (Participant 3)

While these should be taken into consideration when reviewing the results of the study, it should be noted that many participants described that the pandemic exacerbated already existing problems related to the needs of older adults.

As the pandemic surges on, COVID-19 has shown us that there is a strong need for community. While a well-known public health approach is rooted in community engagement

(Alberti, Castaneda, Castrucci, & Harrison, 2020), the pandemic has spotlighted the need for effective communication strategies to reach older adults for not only basic needs, but also for participatory action and efforts for inclusive communities. The difficulty in reaching older adult through mainstream approaches used by communities such as websites and email were ineffective in reaching target groups. It required unified targeted approaches by trusted community champions to reach the majority of participants, whom were a large majority white race.

5C: Recommendations and Implications

There are a number of recommendations and implications from this research. Future research using community based participatory action (CBPAR) that is empathetically conducted with larger, randomized samples is recommended and discussed below. Furthermore, the implications for practice and policy are also discussed.

5C.1 Future Research

The WHO global research agenda collaborates on innovations that can support healthy aging. WHO emphasizes a need to take a systems approach to change at all societal levels. They have developed action areas that align with the Global strategy for the 2020-2030 decade: 1) Addressing social determinants of health, 2) curbing agism and misconceptions about aging, 3) developing person-centered innovations in chronic disease and conditions, and 4) embracing age friendly communities that capitalize on older adult opportunity addressed locally and broadly (World Health Organization, 2021). These pressing global needs impact the health and quality of life of older adults and warrant urgent action.

The American Association of Retired Persons' (AARP) *Livable Communities* has developed a *Network of Age-Friendly States and Communities* (2019) which provides guidance

for development of Community Action Plans. Centralizing these plans within the Global Network of Age-friendly Cities and Communities (World Health Organization, 2018) is recommended by AARP. While states have begun to recognize how critical local planning and communication of those plans within a centralized database is, South Jersey suburban communities have not joined these established networks making it difficult to ascertain whether or not individual communities have begun to develop aging in place programming or the effectiveness of community action plans. Efforts by non-profits like New Jersey Future (n.d.) and Transform South Jersey have the potential to bridge their work and centralize planning within national and global databases so that continuous improvement and planning can be made. Collaborating with researchers to conduct this may lead to improved bi-directional mergers of practice-based evidence and evidence-based practice.

Future research should consider examining the ways with which Transform South Jersey utilized the theory of change within the larger action planning process. Participant representatives and "coaches" from all three communities involved with Transform South Jersey have indicated a desire to work with the candidate to develop action plans that embed the theory of change. Development of a CAPABLE (Szanton et al., 2014) style program that can address Basic and Home Living Needs within these communities in collaboration with the candidate and Rutgers, the State University of New Jersey is one possible way to address the identified theory of change. Building relationships with stakeholders was a critical step to bridge to more community groups, government, and ultimately the older adults being targeted and these relationships can continue to be leveraged to address aging in place needs. Other considerations for future research include addressing the many limitations, such as a larger diversity and

utilization of multiple information channels in a larger community study that involves randomization methods within comparative effectiveness research.

5C.1.2 Action Planning Research

The goal of this mixed methods study was to understand fidelitous empowerment procedures of older adult participation in society through development of a theory of change that induces person-centered community action planning. The established fidelitous empowerment procedures in this study are the developed needs and suggested objectives embedded in the theory of change that informed the themes extracted from the stakeholder meeting (i.e. leveled engagement, communication, enfranchisement and champions, social/cultural capital). Strategies for eliciting participation can be utilized for community action plan elicitation because, by extension, community action planning *is* participation in society. While not in the scope of this study, expectations of the action planning process include developing additional ways for older adults to participate in society by, for example, 1) having support for oneself and one's home freeing time for community participation; 2) social participation including community activities that are facilitated by reducing physical and social barriers (i.e. transportation, cultural respect and inclusion); and 3) opportunities for growth needs to be met through eliciting engagement in order for older adults to live their values (e.g. helping others brings meaning and purpose to one's life).

In order to develop community action plans that shape policy and facilitate meaningful participation, local communities must first begin to develop an evidence-based understanding of strategies for engaging older adults in the plan development processes. This study shows that in order to elicit engagement of older adults within these three communities, varied levels for planning and participation must be accommodating to their level of need and interest. When

planning activities to support the theory of change, "intervention[s] that addresses volitional components can contribute to improving participation" and thus should be considered (Harel-Katz & Carmeli, 2019, p. 94). For example, for an older adult with significant functional impairment, ensuring accessibility to planning and implementation opportunities is critical for initial contact and demonstrates efforts towards inclusion, but must also consider the interest of the individual. Furthermore, understanding that ability level may wax and wane, such as for participants who receive chemotherapy one week and not another, and accommodate for varied participation day to day and week to week. For example, an older adult in the community might have significant interest in developing walkable pathways, but if they are working and volunteering in other roles, they may have little bandwidth to spearhead/lead a new project, but may be willing to contribute ideas in planning meetings. Offering a breadth of roles perhaps through the development of a committee, as suggested by a participant, that ensures older adult representation may be a way for communities to initiate. As the prevalence of disability rises in the older adult population, a need for systems thinking in community-based approaches, such as that of a community based occupational therapy practitioner, can serve as health agents and brokers of innovation with proven effectiveness in action research (American Occupational Therapy Association, 2020b; Jackson et al., 1998; Scaffa & Reitz, 2001). Additionally, the interests of older adults must be considered and also leveled, a collaborative skill well known to occupational therapy practitioners (Schell et al., 2013). Certainly, the receipt of a grant from Transform South Jersey enables groups of all ages and abilities to come together and have their voices and ideas represented. Grantor groups may benefit from the knowledge of the outcomes of this study as strategies for engaging older adults with limitations stemming from individual

characteristics such as functional ability (and changing functional ability), community characteristics such as services availability, physical access and social inclusion.

As previously discussed, this translational study aims to use the real-world theory of change to create action plans in communities. The partnership with Transform South Jersey has created an avenue for this transition to occur. Stakeholders expressed a desire to continue working with the candidate to develop plans that embed the theory of change.

5C.1.3 Empathetic Research

Future studies must consider ramping up collaboration and securing funding when designing research studies in translational research (Brownson, Colditz, & Proctor, 2012; Drolet & Lorenzi, 2011; Israel, 2013). Particularly because the aims of translational research are to create real and lasting changes in communities (National Center for Advancing Translational Science (NCATS), 2020). In order to do this, we must have the voices of communities embedded in theory of change, theory of action, program theory, and ultimately see it through to the creation, development, and sustainability of created programs or actions (Brownson et al., 2012; Damschroder et al., 2009; Funnell & Rogers, 2011). Community organizations and academic institutions must recognize and nurture the time needed to develop relationships in communities. Cooperative Extension programs in state universities have a similar pedagogy to translational science and facilitating this collaboration could bridge long established community connections to aging in place. Practice-based evidence and participatory action research are critical to bridge bottom up innovation and mental models with top-down evidence based practice (Austin, 2018; Drolet & Lorenzi, 2011; Moulaert & Garon, 2016). We must look to translational science, team science, implementation science, and acknowledge the many ways of knowing (i.e. dialectical pluralism, epistemological justice) if we as scientists, community members, community

organizations, policy makers, and clinicians want to bring and utilize “evidence” to and from communities to create desired, human-centered, flexible and long lasting change that improves quality of life.

5C.2 Practice Implications

According to The American Occupational Therapy Association (2020a), only 3.2% of occupational therapy services are community-based. The profession has long called for the role of occupational therapy to be established within the community as OT’s broad scope has the capacity to address many societal issues (Scaffa & Reitz, 2001). The OT Practice Framework (American Occupational Therapy Association, 2020b) emphasizes the role of occupational therapy within community and public health and there is a need to establish the unique value of OT within community-based practice that is reimbursable. This study demonstrates how service delivery models of community based practice in occupational therapy can operate within an interdisciplinary team. In particular, the development of home and community based services similar to the CAPABLE (Szanton et al., 2014) study that include IADL and transportation supports identified by older adult participants in the study. Studies such as Szanton and colleagues (2014) as well as Green and colleagues (2020) demonstrate the cost-effectiveness of such programs. Furthermore, similar to the role of a social worker, the inclusion of an occupational therapist in local government municipalities could enhance multileveled and graded involvement of community-based innovations, a skillset within the scope of occupational therapy. Knowledge brokering is a technique in which prior knowledge is reimagined and applied to new contexts to facilitate innovation and to deliver the right information to the right people at the right time (Hargadon, 2002). Occupational therapists as knowledge brokers can speed innovation by eliciting older adult participation and co-develop health promotion and

preventative activities that can be centralized in locations such as a community or senior center effectively empowering older adults as change agents and knowledge brokers themselves (Ward, House, & Hamer, 2009). Establishing these services within local government with the backing of research are critical steps to demonstrate evidence-based interventions that can serve as entrée to reimbursable positions (Scaffa & Reitz, 2001).

5C.3 Policy Implications

The World Health Organization (2007a) reports that older adults have much to offer society and are well positioned to do so. The literature highlights the desire and need for opportunities for structured volunteerism and ways to "give back" (Kathy Black et al., 2015; Corrado et al., 2019; Flores et al., 2019) and this has been emphasized in this study. Furthermore, allowing the older adult to have agency through choosing, deciding, and acting on innovations in a multileveled fashion as suggested by Moulaert and colleagues (2016) has now been empirically corroborated in the theory of change as a strategy for embedment into a theory of action. The call to action for program development and measurement at the levels of the person, service, and system to examine domains (National Quality Forum, 2016) such as those put forth by the WHO (2007a) for measurement of predictors of participation in the community has begun to be answered in this study through the precursory steps of the development of a theory of change.

The process of developing a theory of change represents the early phases required in person-centered planning as defined by National Quality Forum: "An approach to assessment, planning, and coordination of services and supports that is focused on the individual's goals, needs, preferences, and values. The person directs the development of the plan, which describes the life they want to live in the community. Services and supports are coordinated across providers and systems to carry out the plan and ensure fidelity with the person's expressed goals,

needs, preferences, and values" (NQF, 2016, p. 48). Translational aspects of the study are designed to actuate the latter half of the definition through consumer leadership in system development, defined as "the design, implementation, and evaluation of the system at all levels" (National Quality Forum, 2016, p. 36). While NQF focuses on the development of Home and Community Based Services, this study widens the scope to all services and activities both health related and participation related recognizing that health is additionally impacted through social determinants (Miyashita et al., 2021). As such, policies must focus on addressing both HCBS as well as participatory and preventative activity opportunities within the community.

Policy efforts on federal and state levels are critical to support local community efforts toward participation and service provision that facilitate aging in place. Federal initiatives such as funding area agencies on aging (AAA) who, as a collective Aging Network, support HCBS and informal caregivers. HCBS can provide states and local communities with the means to actuate innovative, person-centered, and cost-effective programming that prevent or delay institutionalization (National Association of Area Agencies on Aging (n4a), 2019). While the Older Americans Act's (OAA) continued passage supports AAA, the allocated amounts are insufficient to support aging communities. Communities must be prepared to address their aging needs and without adequate funding to HCBS and caregivers, the current infrastructure is unsustainable (National Quality Forum, 2016; Seeman et al., 2010). Communities must address larger social determinants, such as housing needs that include home modifications, and while these preventative costs appear to be large upfront costs, studies show that their impact is lasting and cost-saving to the nation (R. K. Green et al., 2020; Jackson et al., 1998; National Association of Area Agencies on Aging (n4a), 2019; Szanton et al., 2014). Appropriating funds to grant making agencies, such as the US Department of Housing and Urban Development (HUD) Older

Adult Homes Modification Program (US Department of Housing and Urban Development, 2021), provides funding for continued practice and research efforts that can support community efforts to develop evidence-based, aging-friendly policies that facilitate aging in place. Integrating home and community based needs that address social determinants in innovative ways, such as through naturally occurring retirement communities (NORC) and village models, also warrants funding for CBPAR to create and refine evidence-based policy (HUD Office of Policy Development and Research, 2013). Communities that can partner with researchers, such as state universities like Rutgers, the State University of New Jersey, can merge efforts in local communities with research evidence and these communities can provide practice-based (community-based) evidence of fidelitous and tailorable components. Research shows HCBS hold promise (Marek et al., 2012; Xu & Intrator, 2020), but are underfunded, decentralized, and difficult to measure (Davitt et al., 2016; National Quality Forum, 2016). A holistic and evidence-based understanding of costs and benefits of HCBS can be developed if communities can begin to use national databases that can warehouse innovations. Once these are stored in national and global repositories such as that of AARP and the WHO (AARP, 2019; World Health Organization, 2018), researchers can begin an integrated analysis and produce richer evidence-based policies to support aging in place.

The COVID-19 pandemic spotlighted long standing problems with institutionalized care including system failures related to CMS payment structures, staff shortages, and limited supplies (Grabowski & Mor, 2020). More than 25% of COVID-19 deaths were nursing home residents, a startling statistic given that 95% of older adults are community dwelling (Kathy Black et al., 2015; Jansson, 2019). In the aftermath of the COVID-19 pandemic, policies that reduce, prevent, and delay institutionalization are needed now more than ever.

5D: Conclusion

This study utilized multisource methods to develop a theory of change: evidence-based literature, theoretical guidance, constructs of participatory action research focusing on quantitative and qualitative data in mixed methodology from older adults and community networking, and empowerment processes. The theory of change extended to include suggested and desired outcomes in order to root action plans in an explicit theory of change that translationally captures the voices of older adults within the community. The theory of change articulates a set of needs that are desired and explains that *older adults are empowered to participate in one's community when there is support for basic and home living needs, when options for participation match one's level of ability, interest, and values, and when one is invited knows where to find information about programs, services, or events.*

Researchers, community members and organizations, policy makers, and community-dwelling older adults can benefit from the results of this study. Communities can continue to develop their action plans with the foundation of the theory of change designed with, by, and for diverse older adults. Older adult community members can serve as the beacon for innovation in 1) research that examines their role in action planning, 2) advancement of community-based practice and 3) development of age-friendly policies. This study highlights the value of consumer-led, person-centered participation within the complex intersection of basic, social, and growth needs (theory of change) and emphasizes the need for older adult consumer demand (Andrew E. Scharlach, 2016) from the community to develop innovations that not only address these needs, but also as an opportunity to show how older adult participation in the development of said innovations can demonstrate the value of older adults to communities paving the way for sustainable, age-friendly policies to spur aging in place.

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APPENDIX A

SURVEY QUESTIONS

Table 26. *Survey Questions*

Inclusion Criteria Questions							
		0 NO	1 YES	TOWN	AGE		
1	Do you live in [town] for at least some of the year?						
2	Are you 65 years of age or over? What is your exact age?						
Demographics							
	What is your exact age?						
	What is your gender?	Male	Female	Other			
	What is your race? White, Black or African American, American Indian or Alaska Native, Asian American/Pacific Islander?	White	Black or African American	American Indian or Alaska Native	Asian American/ Pacific Islander	Hispanic /Latino/ Spanish origin	
	Do you identify as having Hispanic/Latino/or Spanish origin?						
Community Characteristic Questions[3] *Next, please think about your community. I'm going to read you several statements and ask you to tell me how much you agree or disagree with each of them*							
Outdoor Spaces and Buildings		Strongly Disagree 1	Disagree 2	Agree 3	Strongly Agree 4	Don't Know 8	Refused 9
3	My community is walkable with sidewalks and paths that are maintained. Do you strongly disagree, disagree, agree, or strongly agree with that statement?						
4	Public buildings are accessible to						

[3] This is an adaptation of the survey used in "John, D. H., & Gunter, K. (2016). engAGE in community: Using mixed methods to mobilize older people to elucidate the age-friendly attributes of urban and rural places. *Journal of Applied Gerontology, 35*(10), 1095-1120."

	people with different abilities. Do you strongly disagree, disagree, agree, or strongly agree with that statement? *Note*: *A 'public building' includes any building that is accessible to the general public. This could include privately-owned buildings such as stores*						
5	(How much do you agree or disagree with the statement...) Roads are adequately marked with visible signs. (If needed: Do you strongly disagree, disagree, agree, or strongly agree with that statement?)						
Transportation		Strongly Disagree 1	Disagree 2	Agree 3	Strongly Agree 4	Don't Know 8	Refused 9
6	How do you usually get around town? *Select All That Apply*	Drive self 1	w/c or scooter 2	Walk 3	Bike 4	Other 77	Refused 99
Public transit 5	Friends or family 6	Taxi, Uber, Lyft 7	Special needs transit 8	Don't Know 88			
7	(How much do you agree or disagree with the statement...) There is adequate public transportation in my community. (If needed: Do you strongly disagree, disagree, agree, or strongly agree with that statement?)						
8	(How much do you agree or disagree with the statement...) There is adequate special needs transportation in my community. (If needed: Do you strongly disagree, disagree, agree, or strongly agree with that statement?) IWR Note: 'Special needs transportation' can include either transit for people with cognitive or physical disabilities or transit for the elderly or						

	anyone who is unable to drive. Examples include						
9	(How much do you agree or disagree with the statement...) There is a driver network, either formal or informal, that will provide a ride for people who cannot drive themselves. (If needed: Do you strongly disagree, disagree, agree, or strongly agree with that statement?)						
Communication and Information		Strongly Disagree 1	Disagree 2	Agree 3	Strongly Agree 4	Don't Know 8	Refused 9
10	(How much do you agree or disagree with the statement...) Information about local events, programs and services is easily available. (If needed: Do you strongly disagree, disagree, agree, or strongly agree with that statement?)						
Community support and health services		Strongly Disagree 1	Disagree 2	Agree 3	Strongly Agree 4	Don't Know 8	Refused 9
11	(How much do you agree or disagree with the statement...) Health care, including mental health services, is available. (If needed: Do you strongly disagree, disagree, agree, or strongly agree with that statement?)						
Individual Characteristics Questions[4]. *This part of the survey is about any difficulties you have because of health conditions. By health condition I mean diseases or illnesses, or other health problems that may be short or long lasting; injuries; mental or emotional problems; and problems with alcohol or drugs. Keep all of your health problems in mind as you answer the questions and think about increased effort, discomfort or pain, slowness, or changes in the way you do the activity. I'd like you to think back over the past 30 days. I would also like you to answer these questions thinking about how much difficulty you have had, on average, over the past 30 days, while doing the activity as you usually do it. I'm going to read you several statements and ask you to tell me how much*							

[4] This is an adaptation of an original work "WHODAS 2.0 12-item Instrument. Geneva: World Health Organization (WHO); 2010. License: CC BY-NC-SA 3.0 IGO. This adaptation was not created by WHO. WHO is not responsible for the content or accuracy of this adaptation. The original edition shall be the binding and authentic edition.

difficulty you have with each of them: none, mild, moderate, severe, or extreme/cannot do. *In the past 30 days how much difficulty did you have in:*							
Understanding and Communicating		None 1	Mild 2	Moderate 3	Severe 4	Extreme or cannot do 8	Refused 9 or Don't Know 8
12	In the past 30 days how much difficulty did you have Learning a new task, for example, learning how to get to a new place? (None, Mild, Moderate, Severe, or Extreme difficulty/ can not do)						
13	In the past 30 days how much difficulty did you have Concentrating on doing something for ten minutes? (None, Mild, Moderate, Severe, or Extreme difficulty/ can not do)						
Getting Around		None 1	Mild 2	Moderate 3	Severe 4	Extreme or cannot do 8	Refused 9 or Don't Know 8
14	In the past 30 days how much difficulty did you have Standing for long periods such as 30 minutes? (None, Mild, Moderate, Severe, or Extreme difficulty/ can not do)						
15	In the past 30 days how much difficulty did you have Walking a long distance such as a mile? (None, Mild, Moderate, Severe, or Extreme difficulty/ can not do)						
Self-Care		None 1	Mild 2	Moderate 3	Severe 4	Extreme or cannot do 8	Refused 9 or Don't Know 8
16	In the past 30 days how much						

	difficulty did you have Washing your whole body? (None, Mild, Moderate, Severe, or Extreme difficulty/ can not do)						
17	In the past 30 days how much difficulty did you have Getting dressed? (None, Mild, Moderate, Severe, or Extreme difficulty/ can not do)						
Getting along with people		None 1	Mild 2	Moderate 3	Severe 4	Extreme or cannot do 8	Refused 9 or Don't Know 8
18	In the past 30 days how much difficulty did you have Dealing with people you do not know? (None, Mild, Moderate, Severe, or Extreme difficulty/ can not do)						
19	In the past 30 days how much difficulty did you have Maintaining a friendship? (None, Mild, Moderate, Severe, or Extreme difficulty/ can not do)						
Life Activities-Household		None 1	Mild 2	Moderate 3	Severe 4	Extreme or cannot do 8	Refused 9 or Don't Know 8
20	In the past 30 days how much difficulty did you have Taking care of your household responsibilities? (None, Mild, Moderate, Severe, or Extreme difficulty/ can not do)						
Life Activities-School/Work *If you work (paid, non-paid, self-employed) or go to school, answer question below. Otherwise, skip to Participation in Society.*		None 1	Mild 2	Moderate 3	Severe 4	Extreme or cannot do 8	Refused 9 or Don't Know 8
21	In the past 30 days how much						

	difficulty did you have Your day to day work/school? (None, Mild, Moderate, Severe, or Extreme difficulty/ can not do)						
Participation in Society		None 1	Mild 2	Moderate 3	Severe 4	Extreme or cannot do 8	Refused 9 or Don't Know 8
22	In the past 30 days how much of a problem did you have joining in community activities (for example festivities, religious or other activities) in the same way as anyone else can? (None, Mild, Moderate, Severe, or Extreme difficulty/ can not do)						
23	In the past 30 days how much have you been emotionally affected by your health problems? (None, Mild, Moderate, Severe, or Extreme difficulty/ can not do)						
Patient Health Questionnaire-2 (PHQ-2) Over the last 2 weeks, how often have you been bothered by the following problems?		Not at all	Several days	More than half the days		Nearly every day	
24	Little interest or pleasure in doing things						
25	Feeling down, depressed or hopeless						

Participation in Society[5]

Next, I'd like to ask you about your participation: how satisfied you are with your daily life.

	Participation Satisfaction *How satisfied are you with your current daily life? Explanation: - NA (not applicable): only enter this if you are unable to work or study or do not have partner.*	Very dissatisfied	Dissatisfied	Neutral	Satisfied	Very Satisfied	N/A
26	* *How satisfied are you with your* Paid work, unpaid work or education *Please note: complete for the most important activity (Are you: Very dissatisfied, dissatisfied, neutral, satisfied, very satisfied; Or not applicable)*						
27	*How satisfied are you with your* Household duties *Such as: cooking, cleaning, shopping, taking care of or supervising children, DIY, gardening (Are you: Very dissatisfied, dissatisfied, neutral, satisfied, very satisfied)*						
28	*How satisfied are you with your* Outdoor mobility *Such as: driving a car, travelling by bus or train, cycling to work or going shopping, etc. (Are you: Very dissatisfied, dissatisfied, neutral, satisfied, very satisfied)*						
29	*How satisfied are you with your* Sports or other physical exercise *Such as: tennis, cycling, gym, long walks (Are you: Very dissatisfied, dissatisfied, neutral, satisfied, very satisfied)*						
30	*How satisfied are you with your* Going out *Such as: eating out, visiting a cafe, the cinema, a concert, alone or with others (Are you:*						

[5] This is an adaptation of an original work "van der Zee CH, Priesterbach AR, van der Dussen L, Kap A, Schepers VP, Visser-Meily JM, Post MW. Reproducibility of three self-report participation measures: The ICF Measure of Participation and Activities Screener, the Participation Scale, and the Utrecht Scale for Evaluation of Rehabilitation-Participation. J Rehabil Med 2010;42:752–757."

	Very dissatisfied, dissatisfied, neutral, satisfied, very satisfied)						
31	*How satisfied are you with your* Day trips and other outdoor activities *Such as: shopping, attending events, going to the beach, church or mosque (Are you: Very dissatisfied, dissatisfied, neutral, satisfied, very satisfied)*						
32	*How satisfied are you with your* Leisure activities at home *Such as: crafts, reading, computer (Are you: Very dissatisfied, dissatisfied, neutral, satisfied, very satisfied)*						
33	* *How satisfied are you with* Your relationship with your partner *(Are you: Very dissatisfied, dissatisfied, neutral, satisfied, very satisfied)*						
34	*How satisfied are you with* Your relationship with your family						
35	*How satisfied are you with* Your contacts with friends and acquaintances *(Are you: Very dissatisfied, dissatisfied, neutral, satisfied, very satisfied)*						
Thank you so much for your time today							
Follow up questions		YES	NO	Miscellaneous comments			
36	Are you willing to be contacted again if I have questions about the survey?						
37	Are you willing to be contacted for a follow up paid interview?						
38	Would you be willing to be contacted for future research or participation outside of this research?						
Thank you so much for your valuable time!							

Key
Inclusion and Follow up Criteria
Individual Characteristics (Independent Variable)

Community Characteristics (Independent Variable)
Participation (Dependent Variable)

APPENDIX B

CENSUS DATA AND TOWN PROFILES

Table 27.
All Town Census Data

Town	**Total Population**	**65 + population older adult n(%)**	**Median Household Income**	**65+ Race n(%)**	**Gender 65+ M F**	**Presence of Disability (Hearing, Vision, Cognition, Ambulatory, ADL) 65+ N(%)**
Atlantic County: Hammonton	14,284	2,613(18.3)	$71,313	White 2,465 (94.3) Black or African American 75 (3) American Indian and Alaska Native 0(0) Asian 26 (0.1) Native Hawaiian and Other Pacific Islander 0(0) Hispanic/ Latino 120 (4.6)	1134 (43,4) 1479 (56.6)	924 (35.4)
Burlington County: Willingboro	31, 545	5,567	$74,110	White 1546 (27.8) Black or African American 3,722 (66.9) American Indian and Alaska Native 6 (0.1) Asian 65 (1.2) Native Hawaiian and Other Pacific Islander 8 (0.1)	M 2418(43.4) F 3149 (56.6)	2,398(43.1)

				Hispanic/ Latino 368 (6.6)		
Camden County: Winslow Twp	38, 923	4,862	$77, 823	White 3196 (65.7) Black or African American 1,339 (27.5) American Indian and Alaska Native 9 (0.2) Asian 172 (3.5) Native Hawaiian and Other Pacific Islander 0(0) Hispanic/ Latino 164 (3.4)	M 1,966(40.4) F 2,732(56.2)	1,597 (32.8)

Town Profile for Atlantic County: Hammonton, NJ

Hammonton is known as the blueberry capital of the world. According to the town website, it is a close-knit community with natural beauty. The town is accessible through the Atlantic City Expressway as well as state and county roads. It is also accessible by rail and bus. Currently the town has requested bicycle and pedestrian planning assistance from NJDOT to improve signage and infrastructure needed to support safe access to downtown and other locations in the community. The town website is: https://www.townofhammonton.org/

Town	**Total Population**	**65 + population older adult n(%)**	**Median Household Income**	**65+ Race n(%)**	**Gender 65+ Male n(%) Female**	**Presence of Disability (Hearing, Vision, Cognition, Ambulatory, ADL) 65+ N(%)**
Atlantic County: Hammonton	14,284	2,613(18.3)	$71,313	White 2,465 (94.3) Black or African American 75 (3) American Indian and Alaska Native 0(0) Asian 26 (0.1) Native Hawaiian and Other Pacific Islander 0(0) Hispanic/ Latino 120 (4.6)	1134 (43,4) 1479 (56.6)	924 (35.4)

Town Profile for Burlington County: Willingboro, NJ

Willingboro is comprised of 12 sections which they refer to as "parks." It is known for mature trees and parks with fishing available and affordable family homes. Additionally, the town is home to the Kennedy Center recreation center. According to the history of the town on their webpage (and consistent with scholarly literature), post WWII demands for affordable housing gave rise to the suburbs including here in Willingboro. The town shows pride for its diversity and caring as well as always striving for betterment. https://www.willingboronj.gov/

Town	**Total Population**	**65 + population older adult n(%)**	**Median Household Income**	**65+ Race n(%)**	**Gender 65+ M F**	**Presence of Disability (Hearing, Vision, Cognition, Ambulatory, ADL) 65+ N(%)**
Burlington County: Willingboro	31, 545	5,567	$74,110	White 1546 (27.8) Black or African American 3,722 (66.9) American Indian and Alaska Native 6 (0.1) Asian 65 (1.2) Native Hawaiian and Other Pacific Islander 8 (0.1) Hispanic/ Latino 368 (6.6)	M 2418(43.4) F 3149 (56.6)	2,398(43.1)

Town Profile for Camden County: Winslow Township, NJ

Winslow Twp has many local businesses and farm and fruit stands. The historical society reports that the town was established in 1845. Winslow has several parks, youth programs including athletic programs for children with special needs and the 4-H Youth Development Cooperative Extension, a library, and community and faith based programs and opportunities for residents to get involved. The Winslow Township Senior Center offers activities and trips to older adults: http://www.winslowtownship.com/

Town	**Total Population**	**65 + population older adult n(%)**	**Median Household Income**	**65+ Race n(%)**	**Gender 65+ M F**	**Presence of Disability (Hearing, Vision, Cognition, Ambulatory, ADL) 65+ N(%)**
Camden County: Winslow Twp	38, 923	4,862	$77, 823	White 3196 (65.7) Black or African American 1,339 (27.5) American Indian and Alaska Native 9 (0.2) Asian 172 (3.5) Native Hawaiian and Other Pacific Islander 0(0) Hispanic/ Latino 164 (3.4)	M 1,966(40.4) F 2,732(56.2)	1,597 (32.8)

APPENDIX C

INFORMED CONSENTS

Informed Consent for Participation in a Research Study: Survey

Title of Study: FACILITATING AGING IN PLACE AND COMMUNITY BY EMPOWERING PARTICIPATION IN SOCIETY: A MIXED METHODS STUDY ON THE CO-DEVELOPMENT OF A THEORY OF CHANGE WITH SUBURBAN-DWELLING OLDER ADULTS

IRB #: NCR202854

Principal Investigator Name: Philip Van der Wees, PhD

Version Date: Version_Survey_1_03SEPT2020

Note: The following is to be read orally for verbal consent to participate in this research study (Part I: Survey).

INTRODUCTION:

You are invited to participate in a research study conducted by Emily Balog, a doctoral candidate, under the direction of Dr. Van der Wees of the Department of Clinical Research and Leadership at George Washington University. You are being asked to take part in this study because you are at least 65 years old and live in one of the following communities: Hammonton, Winslow Township, or Willingboro, NJ. Taking part is completely voluntary and even if you decide you want to take part, you can quit at any time. You can ask Emily Balog any questions that will help you decide if you want to take part in this study by calling her at 856-500-2881.

PURPOSE:

The purpose of this study is to understand how your personal abilities as an older adult and characteristics of your town affect how you take part in your community. How you take part in

your community, if you have any difficulty, and if you are satisfied with your community life can help your town to know what is needed to support their townspeople. With the support of your community you and others are more likely to grow old safely, independently, and comfortably in your town.

PROCEDURES:

If you choose to take the survey, you will answer a survey of 50 questions that should take about 15 minutes. I will read you several statements and ask you to rank how much you agree or disagree with each of them by pressing a number on your telephone keypad. This will follow for questions about how much difficulty you have with certain activities, how often you participate in activities and how satisfied you are with participating in activities at home and in your community.

You may refuse to answer any of the questions, and you may stop taking part in this study at any time. At the end of the survey you will be asked if you are willing to be followed up with.

BENEFITS:

Studies show that taking part in community life is an important factor in keeping older adults out of nursing homes. Your experience in the community can help town leaders, community members and organizations to understand what features can help you be involved.

You may not benefit directly or right away from taking part in this research study. By taking part in this research survey you are helping your community to think about action plans that can support your needs. You are also helping scientists to understand how important it is to involve older adults in planning.

This survey voices your experience in your community. Your opinion can create changes in the future that support people of all ability levels as they age.

RISKS & CONFIDENTIALITY

This study is low risk. Some people might feel uncomfortable answering questions that ask about personal ability. You can skip any questions.

Every effort will be made to keep your information private. There is always a small chance that someone not on our research team could find out that you took part in the study or connect you with the information collected today. To reduce this risk, all collected information will be stored in a password protected computer file that only the research team can access. Your name will not be used. The anonymous results of this research study will be presented in a doctoral paper. Results will possibly be published in professional journals, discussed at scientific conferences and/or presented to people in or associated with your community. The people who participate in this survey will not be named or identified.

The Office of Human Research of George Washington University can provide further information about your rights as a research participant. Please write down the telephone number (202) 994-2715.

COMPENSATION

If you decide to take the survey, you will be entered into a lottery to win a gift card which is worth $150. Your odds of winning are approximately 1 in 45. The drawing for this prize is planned to be held by December 15, 2020 (or as soon as your community has 45 participants). If you win you will be notified by me, Emily Balog, by December 16. If you win, I will call you on the telephone number you are calling from today. By pressing ONE now you are saying you understand and agree to participate in this voluntary research study. Press ONE to begin answering the survey questions.

Informed Consent for Participation in a Research Study: Interview

Title of Study: FACILITATING AGING IN PLACE AND COMMUNITY BY EMPOWERING PARTICIPATION IN SOCIETY: A MIXED METHODS STUDY ON THE CO-DEVELOPMENT OF A THEORY OF CHANGE WITH SUBURBAN-DWELLING OLDER ADULTS

IRB #: NCR202854

Principal Investigator Name: Philip Van der Wees, PhD

Version Date: Version_Interview_1_03SEPT2020

Note: The following is to be read orally for verbal consent to participate in this research study (Part II: Interview).

INTRODUCTION:

You are invited to participate in a research study conducted by Emily Balog, a doctoral candidate, under the direction of Dr. Van der Wees of the Department of Clinical Research and Leadership at George Washington University. You are being asked to take part in this study because you are at least 65 years old and live in one of the following communities: Hammonton, Winslow Township, or Willingboro, NJ. Taking part is completely voluntary and even if you decide you want to, you can quit at any time. You can ask Emily Balog any questions that will help you decide if you want to take part in this study by calling her at 856-500-2881.

PURPOSE:

The purpose of this study is to understand how your personal abilities as an older adult and characteristics of your town affect how you take part in your community. Your ideas can help to make action plans about what you need from your community. A plan that uses your ideas can help you and others to grow old safely, independently, and comfortably in your town.

PROCEDURES:

If you choose to take part in this study, you will answer interview questions about what makes it harder or easier to participate in your community. I will also ask you for ideas to support older adults. The interview should take about 30-60 minutes.

You may refuse to answer any of the questions, and you may stop taking part in this study at any time. At the end of the interview you will be asked if you are willing to be followed up with.

BENEFITS:

Studies show that taking part in community life is an important factor in keeping older adults out of nursing homes. Your experience in the community can help town leaders, community members and organizations to understand what features can help you be involved.

You may not benefit directly or right away from taking part in this research study. By taking part in this research study interview you are helping your community to better understand what you think is important in your town and what is needed. Your ideas can help your community to make action plans. You are also helping scientists to understand how important it is to involve older adults in planning. This interview voices your experience in your community. Your opinion can create changes in the future that support people of all ability levels as they age.

RISKS & CONFIDENTIALITY

This study is low risk. Some people might feel uncomfortable answering questions that ask about personal ability. You can skip any questions.

Every effort will be made to keep your information private. There is always a small chance that someone not on our research team could find out that you took part in the study or connect you with the information collected today. To reduce this risk, all collected information will be stored in a password protected computer file that only the research team can access. Your name will not

be used. The anonymous results of this research study will be presented in a doctoral paper and possibly published in professional journals, discussed at scientific conferences and/or presented to people in or associated with your community. The people who participate in this survey will not be named or identified.

The Office of Human Research of George Washington University can provide further information about your rights as a research participant. Please write down the telephone number (202) 994-2715.

COMPENSATION

If you decide to participate, you will be given a gift card valued at $20 for your time. I will write your name and address at the end of the interview onto an envelope and mail your gift card immediately.

By stating YES to take part in this research you acknowledge:

- Your participation in the study is voluntary.
- You are 65 years of age or older.
- You are aware that you may choose to terminate your participation at any time for any reason.

Do you wish to participate in this research study by answering the interview questions?

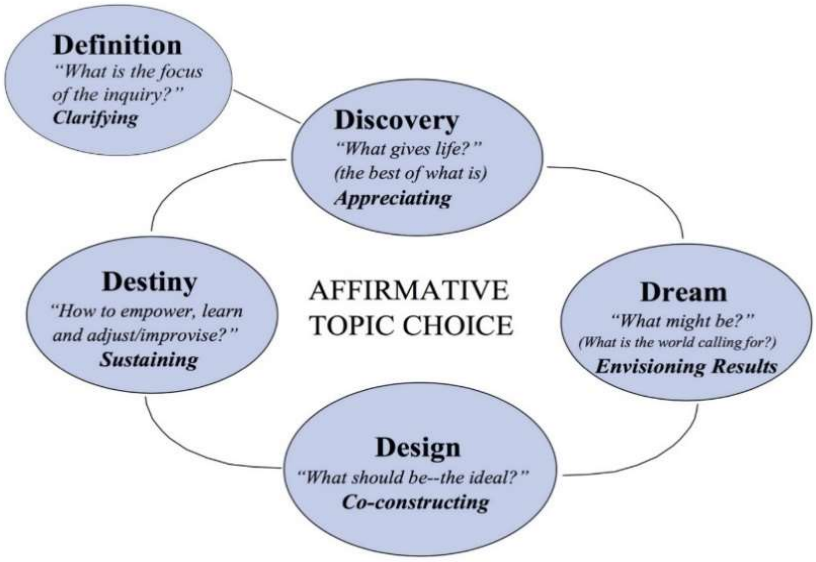
APPENDIX D

INVITATION

Figure 27.
Invitation

APPENDIX E

INTERVIEW QUESTIONS



***Read informed consent; obtain verbal "yes" RECORD--let participant know recording in progress**.

RAPPORT BUILDING

Discuss self/project.

I'd love to know a little bit more about you. (probes: what is a significant achievement in your life? where would you like to see yourself in five years?)

DEFINITION

Focuses/clarifies inquiry.

Before we begin with questions I want to provide you with two definitions.

Community and Participation (define).

Do you have any questions?

1. What inspired you to say yes to the follow up interview?

DISCOVERY

High point moment story (question elicits a powerful story)

2. Take a minute and think about a time when you participated in your community and had a wonderful experience (this can be big or small, a trip to the store, a day out, hearing about and going to an event, a smooth visit to a healthcare professional).

2b. Could you tell me about a time when you felt supported in your community to overcome any challenges you face because of health conditions or general difficulties? (or is there someone in your community who has health conditions or difficulties that YOU helped support?)

2c. Tell me about a time when you felt included by your community.

DREAM

Valuing self, community, etc. Questions that helps envision the future.

3. What do you value most about your community in [Hammonton, Willingboro, Winslow Twp]

4. How can [town] support you in being involved or taking part in the community?

5. And what are things <u>you</u> could do to add value and strength? (or are you presently doing things or is someone you know doing things that are adding value and strength?)

What makes you feel needed by your community?

6. What solutions would be a winner for both older adults and the community?

DESIGN

Continuity, things to keep.

7. What features in the community would you want to keep (think about things like outdoor spaces and buildings, transportation, access to information and healthcare, opportunities to be involved and included).

7b. Do these features support you in your current function? Will they support you or others if they have trouble functioning?

8. What is a small change that could make a big impact?

DESTINY

Positive images of the future desired.

9. If the community [does this small change] then what might this result in? (Keep asking what this will result in).

10. What types of activities are needed to bring about this change?

11. What specific resources are needed to conduct these activities?

12. What advise (strategies) do you suggest for ways to engage older adults in the community? Are you motivated to bring these ideas to action (action planning)? (what might help you to feel encouraged about bringing these ideas to action?)

CONCLUSION

13. What possibilities exist that have not been thought about yet?

14. What other questions should I ask you or other older adults that will help us all to understand what is needed to take part in the community?

15. Is there anything else you'd like to share?

16. Is it ok if I follow up with you with any questions? I'd really like to share results with you, can I reach out to you to ask you about the results? Would you be interested in presenting the findings from this research with me?

Thank you so much for your time today! STOP RECORDING.

Obtain address for gift card, share information about Transform South Jersey.

APPENDIX F

INTERVIEW THANK YOU

Thank you so much for participating in both my survey and interview. Your insight has contributed to valuable knowledge for understanding how communities can support older adults to participate in society, including participation in the action planning process. Your point of view is critical to finding long lasting solutions for aging in place.

I see you as a valued partner in this research and I look forward to sharing the results of this research with you. I will reach out to you to discuss the results soon. Until then, **please spread the word about this research** and pass along the phone number to take the survey, **1-800-665-2741**, to your friends and acquaintances who live in Hammonton, Willingboro, or Winslow Township. The survey is also available online and can be found by visiting https://sites.google.com/view/aging-in-place/home.

The results from this study will be presented to Transform South Jersey. This organization has provided a grant to your community to develop the Heart and Soul of the community. I would love for you to join me in sharing the results with them. You are also welcomed to join with them in bringing your ideas to action in the community. You can visit https://transformsouthjersey.org/ to learn more.

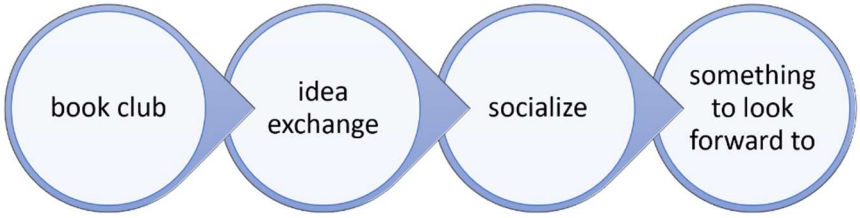
Again, my sincerest thanks and gratitude,

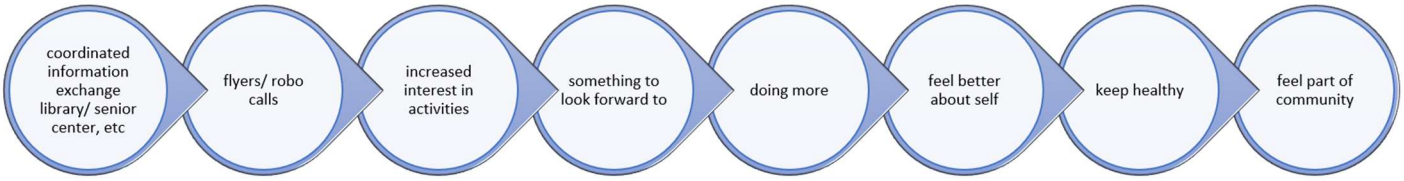
Emily Balog

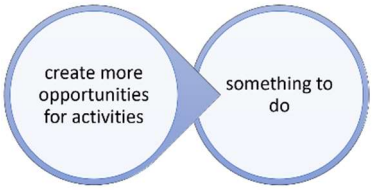
Doctoral Candidate, George Washington University

APPENDIX G

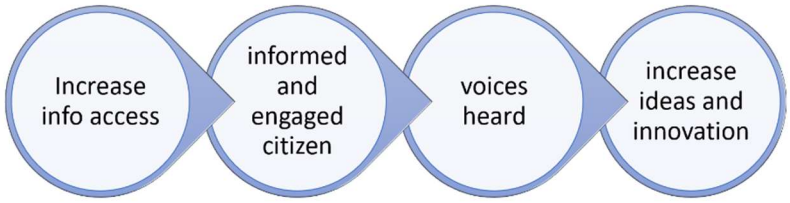
OUTCOMES CHAINS

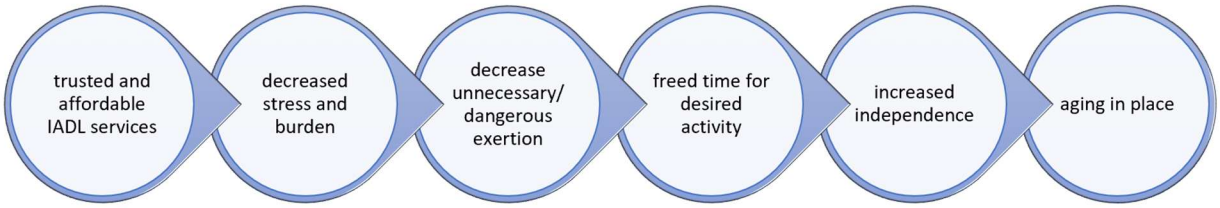


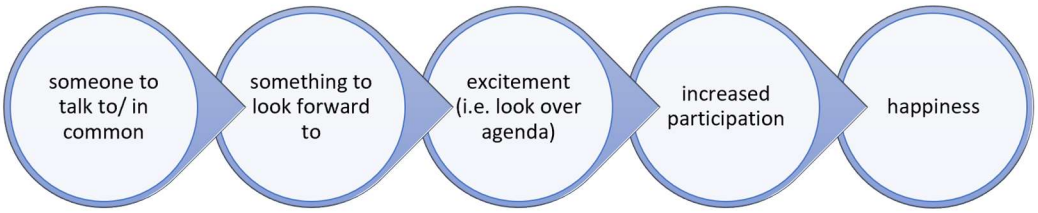


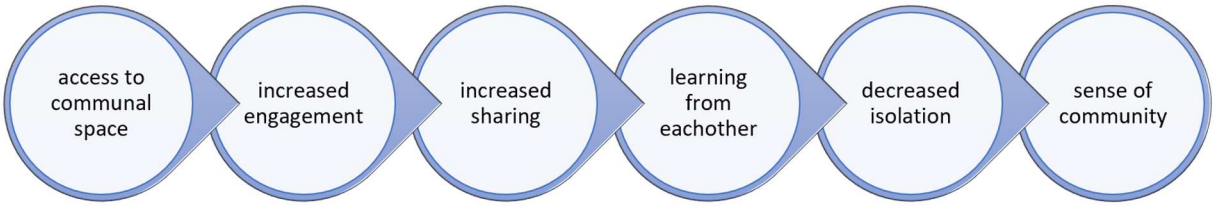


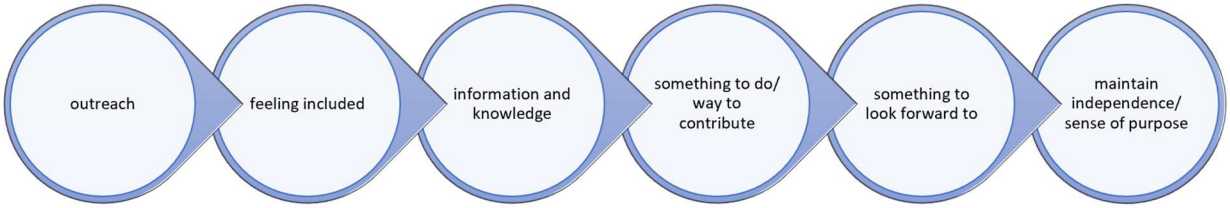
beautification of park/buisiness area
reduce homelessness
increase safety and comfort
improve economy
increase participation and frequenting of parks/ business

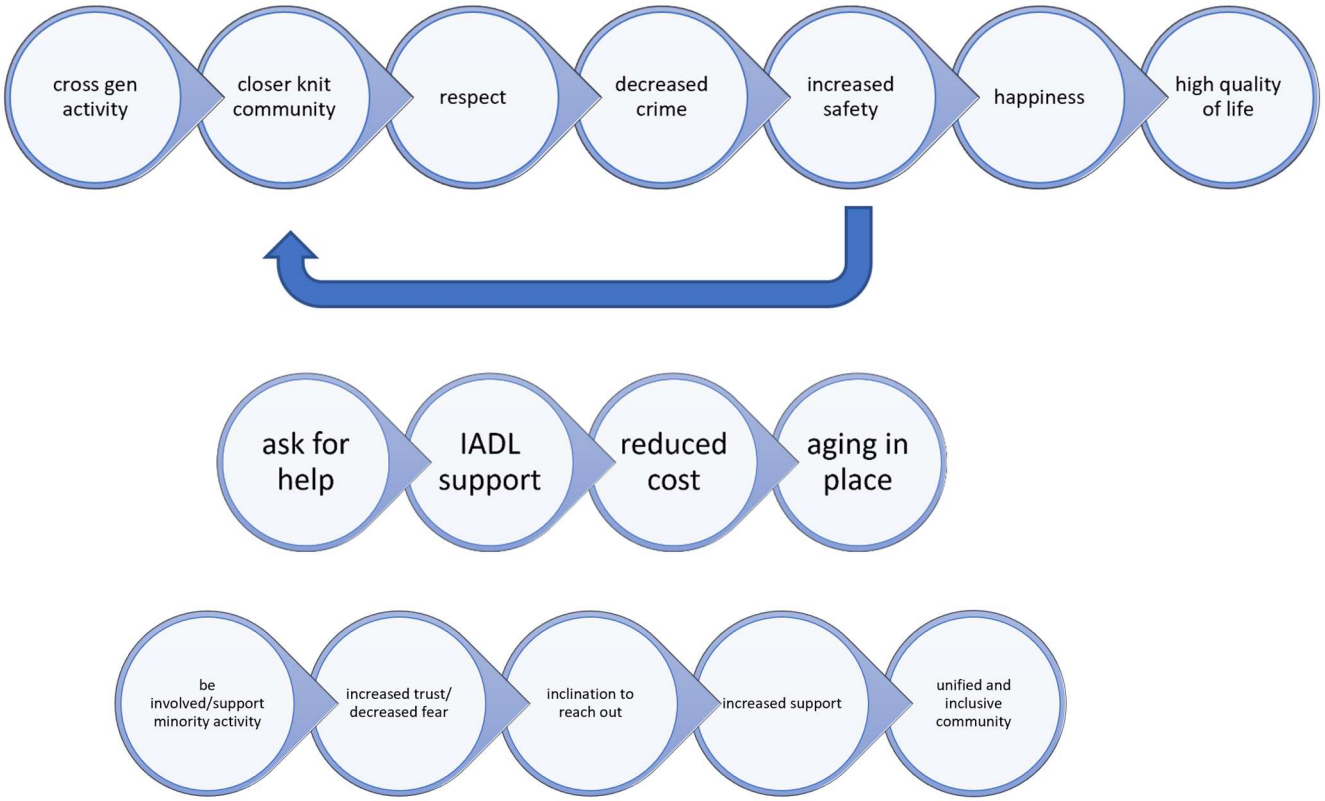

Increase info access
informed and engaged citizen
voices heard
increase ideas and innovation


trusted and affordable IADL services
decreased stress and burden
decrease unnecessary/ dangerous exertion
freed time for desired activity
increased independence
aging in place


someone to talk to/ in common
something to look forward to
excitement (i.e. look over agenda)
increased participation
happiness


access to communal space
increased engagement
increased sharing
learning from eachother
decreased isolation
sense of community


outreach
feeling included
information and knowledge
something to do/ way to contribute
something to look forward to
maintain independence/ sense of purpose


cross gen activity
closer knit community
respect
decreased crime
increased safety
happiness
high quality of life
ask for help
IADL support
reduced cost
aging in place
be involved/support minority activity
increased trust/ decreased fear
inclination to reach out
increased support
unified and inclusive community

APPENDIX H

EXECUTIVE SUMMARY

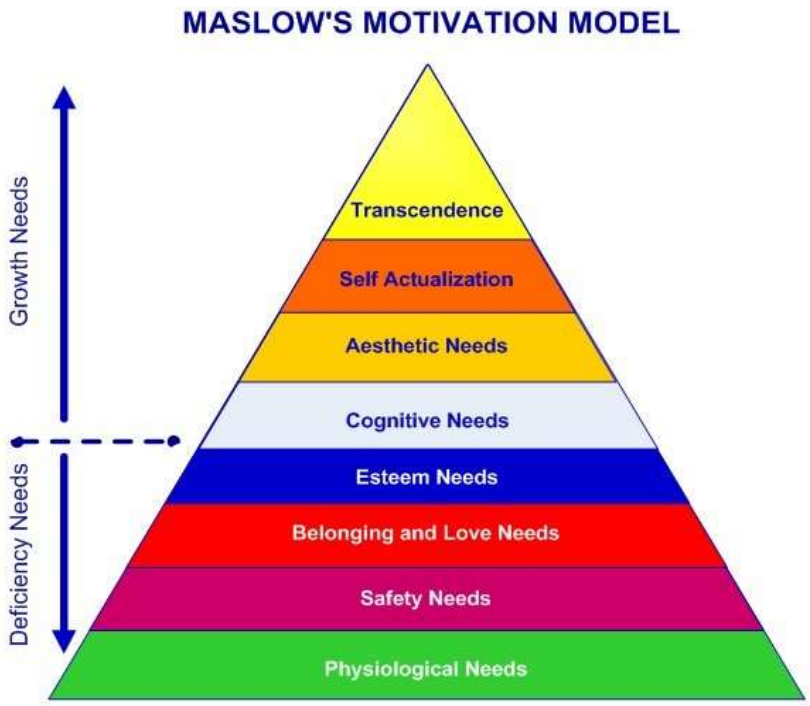
APPENDIX I

MASLOW'S THEORY OF MOTIVATION

Maslow's Theory of Motivation & Motivational Model

One of the most well-known motivational theories in psychology, Maslow's theory of motivation, originated in 1943 and was updated and expanded upon by him each decade until 1987. The 1987 version is utilized in this study for explanatory purposes, though many of the foundational concepts can be found in his early works. Originally a five-tiered model (physiological needs, safety needs, love and belonging, esteem, self-actualization), the theory later developed to include three additional tiers (cognitive needs, aesthetic needs, and transcendence needs). Ultimately an eight-tiered pyramidal model explains the motivation of humans as a hierarchy of needs requiring satisfaction at the lowest levels to flexibly achieve the highest levels of happiness. Maslow describes this hierarchy: "At once other (and higher) needs emerge and these, rather than physiological hungers, dominate the organism. And when these in turn are satisfied, again new (and still higher) needs emerge, and so on. This is what we mean by saying that the basic human needs are organized into a hierarchy of relative prepotency" (Maslow & Frager, 1987, p. 38). The eight-item hierarchical model is displayed below in Figure 23.

Figure 28.
Maslow's Motivational Model (Maslow & Frager, 1987).



While the theory receives criticism for the emphasis on early ordered need satisfaction, Maslow's later developments emphasized the flexibility and multi-modal, continuous processes for experiencing self-actualization and transcendence, depicted at the tip of the pyramid. Authors Tay and Diener (2011) who studied subjective well-being around the world indicate that each of Maslow's areas independently contribute to well-being, however not necessarily in the order Maslow originally presents: "Motivational prepotency does not mean that fulfilling needs "out of order" is necessarily less fulfilling. Thus, humans can derive "happiness" from simultaneously working on a number of needs regardless of the fulfillment of other needs" (p. 364). Maslow discusses that when higher level needs are met, there is improved biological efficiency, increased longevity, decreased disease, improved sleep, improved appetite as well as improvements in psychological states such as anxiety and fear. He argues that as humans, we have evolved

"…beyond Darwinian-survival, [and] there is a case for growth values to reach full humanness, or actualization of potentials" (Maslow & Frager, 1987, p. 104) and that the achievement of self-actualization cannot and does not occur in young Americans, but rather is specific to older adults. Correspondingly, the core beliefs of the practice of occupational therapy exemplify these higher order growth needs (with occupation defined as the everyday personalized activities that people do):

> "A core philosophical assumption of the profession, therefore, is that by virtue of our biological endowment, people of all ages and abilities require occupation to grow and thrive; in pursuing occupation, humans express the totality of their being, a mind-body-spirit union. Because human existence could not otherwise be, humankind is, in essence, occupational by nature" (Hooper & Wood, 2014, p. 46).

Interestingly, authors Tay and Diener (2011) also found that those living in countries where basic needs are met within citizens have higher life evaluations. Ultimately the implications indicate that perhaps a mix of needs being met each day is what would produce overall well-being and that it mustn't be only at an individual level, but also a societal level.

APPENDIX J

MULTIPLE REGRESSION ASSUMPTIONS

Multiple Regression Assumptions

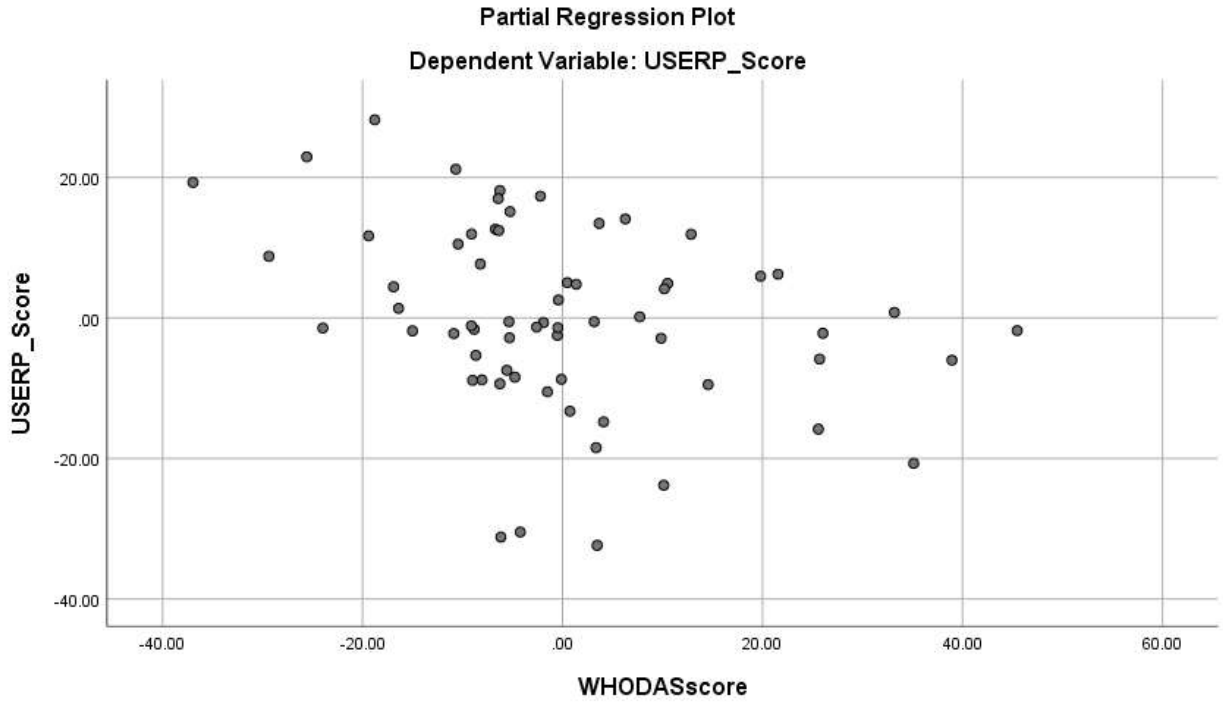
In order to conduct a multiple regression analysis, eight assumptions must be met. The first two assumptions were met a priori: 1) a continuous dependent variable and 2) two or more independent variables. The remaining six assumptions were tested during the conduction of the analysis and described below (Laerd Statistics, 2015).

Multiple Regression Assumption 3: Independence of observation.

There was independence of residuals, as assessed by a Durbin-Watson statistic of 1.439. This number should be near the value of 2 (Laerd Statistics, 2015).

Multiple Regression Assumption 4: Linearity.

The scatter plots indicate that predictor variables to the USER-P score are linear. The plot is a demonstration of one of the partial regression plots.



Multiple Regression Assumption 5: Homoscadasticity.

There was homoscedasticity, as assessed by visual inspection of a plot of studentized residuals (a test that detects outliers) versus unstandardized predicted values (Laerd Statistics, 2015).

Multiple Regression Assumption 6: Multicollinearity.

There is no multicollinearity as there are no correlations greater than 0.7 (see Table X: Correlations) and the VIF values (VIF is 1 divided by Tolerance) are less than 10. VIF values greater than 10 are an indicator of a collinearity problem (Laerd Statistics, 2015).

Table 28
Pearson Correlation among the Independent Variables

	1	2	3	4	5	6	7
1. USER-P	--						
2. Age	-.22	--					
3. WHODAS	-.52	.09	--				
4. Depressed	-.45	.19	.36	--			
5. bldg	.24	.07	-.21	-.10	--		
6. Info	.467	-.14	-.39	-.10	.23	--	
7. Healthcare	.36	.00	-.08	-.18	.14	.18	--

Multiple Regression Assumption 7: Checking for unusual points.

Casewise diagnostics demonstrate no significant outliers, no studentized deleted residuals that are greater than +/-3 standard deviations, no risky leverage points as indicated by values

around or below the value of 0.2, and no highly influential points as indicated by Cook's Distance values not exceeding 1(Laerd Statistics, 2015).

Multiple Regression Assumption 8: Normal Distribution.

As indicated by the histogram in Figure 23 and the P-P Plot in Figure 24, residuals are approximately normally distributed, thus no transformations are required.

Figure 29
Histogram showing normal distribution

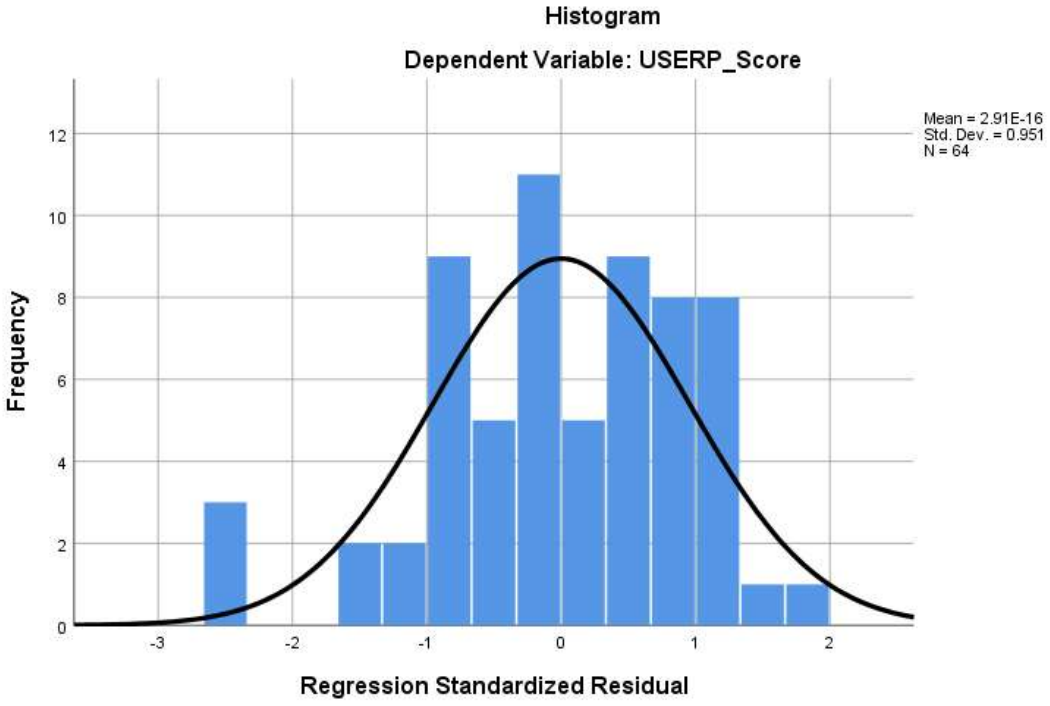
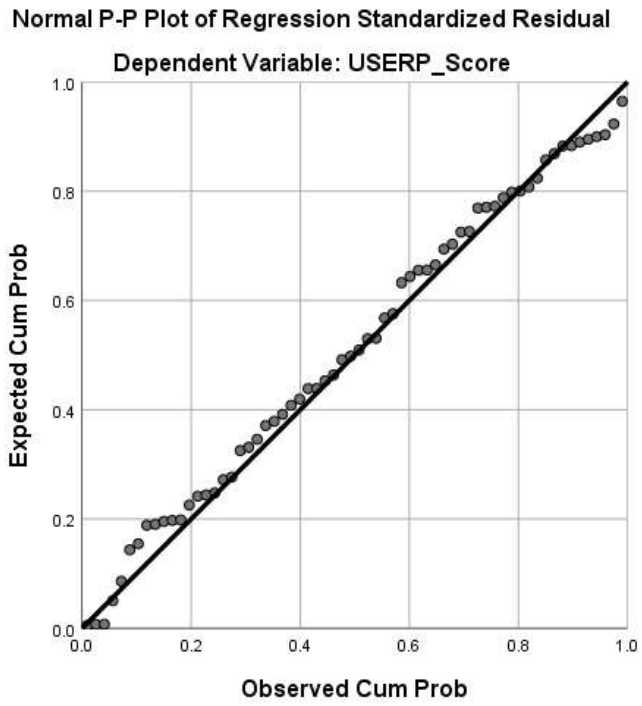


Figure 30

P-P Plot demonstrating normal distribution



APPENDIX K

LOGISTIC REGRESSION ASSUMPTIONS

Logistic Regression Assumptions

As with linear regression, logistic regression also requires satisfaction of seven assumptions. Assumptions 1 through 4 are determined a priori: 1) a dichotomous dependent variable, 2) independent variables measured as continuous or nominal, 3) independence of observation whereby the participant is either satisfied or dissatisfied with the selected community participation dependent variable, not both. Assumption 4 regards cases per independent variable. There is wide debate on assumption four. It is suggested that the regression has at least 10-15 cases per independent variable (Babyak, 2004). For the purpose of this small study, five independent variables is an acceptably powered sample size to run the regression.

Logistic Regression Assumption 5: Linearity.

Linearity of the continuous variables with respect to the logit of the dependent variable was assessed via the Box-Tidwell procedure for each dependent variable. A Bonferroni correction was applied using all terms in each model (includes constant and interaction items) resulting in statistical significance for satisfaction with outdoor mobility, exercise, outing, daytrip being accepted when $p < .00454$, <.007, <.006, and <.007 respectively (Tabachnick & Fidell, 2014). Based on this assessment, all continuous independent variables were found to be linearly related to the logit of the dependent variable.

Satisfaction with Outdoor Mobility: Bonferroni Correction

Variables in the Equation

	B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I.for EXP(B) Lower	Upper

Step 1[a]	Age	-5.286	8.487	.388	1	.533	.005	.000	84864.299
	WHODASscore	.024	.282	.007	1	.932	1.024	.590	1.779
	Town			2.424	2	.298			
	Town(1)	-1.689	1.115	2.294	1	.130	.185	.021	1.643
	Town(2)	.075	1.321	.003	1	.955	1.078	.081	14.343
	Depressed(1)	-1.187	.986	1.449	1	.229	.305	.044	2.108
	C_bldg(1)	.966	1.141	.717	1	.397	2.626	.281	24.560
	C_Info(1)	.779	.914	.726	1	.394	2.179	.363	13.077
	Age by In_Age	.978	1.595	.376	1	.540	2.659	.117	60.525
	In_WHODASscore by WHODASscore	-.017	.066	.064	1	.800	.983	.864	1.120
	Constant	80.522	119.684	.453	1	.501	934229369657797300000000000000000.000		

a. Variable(s) entered on step 1: Age, WHODASscore, Town, Depressed, C_bldg, C_Info, Age * In_Age , In_WHODASscore * WHODASscore .

Satisfaction with Exercise: Bonferonni correction

Variables in the Equation

								95% C.I.for EXP(B)	
		B	S.E.	Wald	df	Sig.	Exp(B)	Lower	Upper
Step 1[a]	Age	-16.116	11.548	1.947	1	.163	.000	.000	677.621
	WHODASscore	-.568	.299	3.612	1	.057	.567	.315	1.018
	Depressed(1)	-19.353	10619.525	.000	1	.999	.000	.000	.
	C_Info(1)	1.906	1.044	3.333	1	.068	6.728	.869	52.071
	Age by In_Age	2.993	2.174	1.896	1	.169	19.944	.282	1412.906
	In_WHODASscore by WHODASscore	.120	.070	2.910	1	.088	1.127	.982	1.293
	Constant	240.145	162.003	2.197	1	.138	1.965E+104		

a. Variable(s) entered on step 1: Age, WHODASscore, Depressed, C_Info, Age * In_Age , In_WHODASscore * WHODASscore .

Satisfaction with Outing: Bonferonni Correction

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I.for EXP(B) Lower	Upper
Step 1[a]	Age	-6.679	6.841	.953	1	.329	.001	.000	836.011
	WHODASscore	-.195	.190	1.049	1	.306	.823	.567	1.195
	Depressed(1)	-1.170	.850	1.895	1	.169	.310	.059	1.642
	C_Info(1)	.923	.706	1.709	1	.191	2.518	.631	10.050
	GenderID(1)	-1.284	.806	2.540	1	.111	.277	.057	1.343
	Age by In_Age	1.256	1.287	.953	1	.329	3.512	.282	43.718
	In_WHODASscore by WHODASscore	.042	.044	.899	1	.343	1.042	.957	1.136
	Constant	95.989	96.093	.998	1	.318	4.868E+41		

a. Variable(s) entered on step 1: Age, WHODASscore, Depressed, C_Info, GenderID, Age * In_Age , In_WHODASscore * WHODASscore .

Satisfaction with Daytrip: Bonferonni Correction

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I.for EXP(B) Lower	Upper
Step 1[a]	Age	-2.668	7.454	.128	1	.720	.069	.000	153435.981
	WHODASscore	-.435	.290	2.252	1	.133	.647	.367	1.142
	Depressed(1)	-21.349	11125.799	.000	1	.998	.000	.000	.
	GenderID(1)	-1.032	.997	1.071	1	.301	.356	.051	2.515
	Age by In_Age	.490	1.401	.122	1	.727	1.632	.105	25.442
	In_WHODASscore by WHODASscore	.092	.068	1.810	1	.179	1.096	.959	1.253
	Constant	45.596	104.862	.189	1	.664	6338360403 3501480000. 000		

a. Variable(s) entered on step 1: Age, WHODASscore, Depressed, GenderID, Age * In_Age , In_WHODASscore * WHODASscore .

Logistic Regression Assumption 6: Multicollinearity.

Multicollinearity was previously tested in the multiple regression analysis and thus meets the assumption of no multicollinearity.

Logistic Regression Assumption 7: Outliers.

No significant outliers are required to meet this assumption. There were two standardized residuals with a value beyond +/-2 standard deviations (-4.47, -3.10), which were kept in the analysis.

APPENDIX L

CODEBOOK

BASIC

Theme	Code	Description	Example of text from QUAL strand
Basic and Home Living needs *Caring for oneself (Activities of Daily Living (ADL)) and operating in and caring for one's home (Instrumental Activities of Daily Living (IADL)) tend to be more concerning for participants both in the present and in the near future should a change arise (i.e. loss of ability to drive). IADL tasks are those tasks that are required for home maintenance and*	Food	*sustenance to meet physiological needs; it is also a cross cutting code where food is described as an element of socialization.*	"there is the Hammonton Family Center that's right on Bellevue avenue. They offer meal. And again, people can go there, not only for lunch, you'll get a lunch there, they also have games… They really have been helpful for underserved populations and there's also food pantries." (Participant 14) "And one lady, when she cook her food on Sunday, she bring food for me because she know I can not cook, my hand… Yeah, he live alone. I feel bad for him. He live alone. I live alone. And one guy, he not far from me, he sometime come knock the door, "You go get food truck? Yes, I went to Willingboro, and I call on Willingboro lady, she say, "Ma'am, I in your rate now, but now today"… them have like a little truck like them bring you all kinds of good food. And now no more. Only on Monday" (Participant 6) "Every Wednesday, they bring out a mobile food truck. Whereby seniors can go and purchase produce and fruits at a very low price. In addition to that, the CCU

chores. These are essential for community dwellers. The theme is a demonstration of how disability and health issues contribute to loss of independence and how this loss affects basic ADL and IADL tasks.			Missionary Baptist Church, once a month has a food giveaway. I think they join with Philabundance and specifically for seniors." (Participant 8)
	Safety	*Feeling safe and secure in one's home and community; free from violence, crime, blight; the ability to safely transport.*	"You know what? Also, what's important to seniors, the idea of feeling safe. The idea of feeling safe. Especially in these times when if you are a senior who stays connected to, because many seniors do, to news media by way of either radio or TV. And you hear the kinds of criminal activities that take place. For instance, you hear about house invasions. And so I would think, and maybe the police department probably would not agree with this. But if there could be a component, some sort of social arm, so to speak. Of law enforcement, a unit. That would specifically be set up to stay in contact, you see. With seniors as it relates to helping them know, listen, this is a secure township and we are very concerned about our seniors being safe." (Participant 8) "When you go another side, Pennypack, go that way, no good. Bad. Bad. Don't go there. Bad. Near the creek, no. Near [inaudible 00:32:12] bad, bad, bad. The guys sleep over there, hang on there. I over there. The reason I go over there, I go wash my car and my [inaudible

		00:32:23] and before you [inaudible 00:32:24], you have to bang over there, them [inaudible 00:32:26] and do [inaudible 00:32:27] bang. I used to go over and somebody give me [inaudible 00:32:31]. I go cab over there, but no. No good. You don't want to walk there, no way, Jose. No, no, no. No, I'm not going to go there. Yeah, yeah, because did you know, people tell me lots of house empty, Willingboro. Empty, empty. Nobody pay property tax. After everything, they'd have to build them up. Bad. Bad. You see how many killed, you see how many killed. How many killed, it go down. You know, church, you can look, you can look at the church if you pass the church. The church go down. I mean, bad. Yes, the church. The building crap. Everything." (Participant 6)
Losing ADL/IADL independence	*A decline in functional ability typically related to physical, cognitive ability from basic self care to household/IADL ability.*	"You know when I leave, I got to be sad because I grow up in New Jersey…But [inaudible 00:16:21] I know have no choice. I have to go with my granddaughter…Yeah, more help, more support. Because pretty soon after 80, I don't know. I have to go take a [inaudible 00:16:36] driver license or not somebody tell me when you 80, you have to go get a new license. I don't know, I hope not… No, I can't do no more behind the back yard, you know, now I got to ask my granddaughter come to visit me but not now, she say later on, she got to go Lowe's and buy... I don't know what in English called. Peat moss, and put around the front yard for me. No, garden nothing… Two years, you gave it up. Okay…Yeah. Now I

			have to give up and now...” (Participant 6) “I see so many seniors who don't have either family in the area that can check on them and then they end up having to leave their home, which, oftentimes, they don't last long after that because they've left a very familiar place for some place that is not familiar, and then also their independence is lost, so if we can find ways to keep seniors in their homes, it'd be much better for them and for the community.” (Participant 7)
	Disability- health issues	*These are participant health or disability conditions that impact their life and warrant services for support whether temporary or chronic*	“I've got a pretty complex health situation… I've been on dialysis for the better part of 20 years. So that's another limiting factor. So I wish I had more time.” (Participant 2) “Well, I'm 66 and I was diagnosed with colon cancer this year. So it's been a little rough. Well, right now with going through this treatment, I can't do much. But in fact, she's at the door right now. Can you call me back? Like in 20 minutes and we'll resume it. The immunotherapy people are here… Because I used to watch her and I don't anymore…the little one [my great niece]… I can't anymore.” Participant 4
Service Provision	Informal supports and services	*These are informal (family, neighbors) supports and*	“Since I got the cancer I do have a lot of support, my family, just so hard. Just takes a lot out of yourself… I

	services in the community described by participants as provided to or received by older adults	have a lot of good neighbors… They'll knock with something a platter or knock to see how I'm doing, they'll call me. They're really good like that here. Some of them aren't some are. You know how that goes." (Participant 4) "I remember when [inaudible 00:12:39] called to ask me if there was some seniors on my block who needed their sidewalks and driveways shoveled in the snow. So I told my next door neighbor and that got done." Participant 7 "On a personal level, my neighbors and I, those of us who are the original owners who are in my age group, and we rely on each other if we have problems or need a ride somewhere. We have new people that moved into my neighborhood, for example. This isn't where I helped somebody else, but my neighbor next door, she's a young couple with two young kids. She must text me once a week, at least once a week, and just asks how I'm doing. She's just a lovely." (Participant 11)
Healthcare services	*These are services provided by healthcare professionals in the community and range from homecare to urgent care to doctors offices and hospitals. They are typically primary care (though there is mention of one community prevention health fair, which is not a regular/daily event for support)*	"In terms of healthcare, we are ... other than some doctors' offices on this end, the closest hospital is in Berlin, and that's that small ... I don't even know what they service now. I'm not sure if that's just an emergency room situation. I go to Philadelphia for my healthcare. And partly, that's my choice, but that's because what's around like at [inaudible 00:39:52] and stuff didn't exist before. My health specialists are all in

		Philadelphia, and that's my choice. We're pretty isolated in terms of healthcare facilities." (Participant 11)
		"I recovered at home. They sent therapists and nurses to help me… If you have it personally, you get it. Depends what insurance you have… I'm with United Healthcare, and they pay for everything I get so, they're pretty good." (Participant 12)
IADL Support	*Demonstration of the decline in function related to IADL and the suggestion to provide trusted service to support this decline*	"I think services, for instance. We might have senior who may not be able to mow their lawn. It'd be nice to have a service where you could pick up the phone and say, listen, I really need my lawn mowed. Can you do it? And hopefully there will be a fund that would pay for it…Or a senior has a plumbing issue or something and they don't have the funds to do it. If there was a number of the senior center that we could call and say, listen, I need a plumber, or the house needs fixing up and, group of people can get together and go help the seniors." (Participant 7)
		"When you talk about people staying in their homes and stuff, I will say the other big issue is some resource available to ... cutting grass might just sound like a ... that seems like a frivolous thing, but you will get cited if your weeds or grass are higher than six inches. And you will get cited. I would love to see some resource in the township that maybe can do services for seniors at a reduced cost maybe, to help out with those types of things… Smaller things, really, what I had to go through

to find somebody to just do basic yard maintenance is unbelievable. And everybody has this complaint about the same thing. And if you then become on a fixed income, which I'm not yet, I don't think I'll be able to afford that… Now, I think some ... from an aging perspective, some of the things I would like to not have to stress over is, A, finding people who can help do repairs, finding people who can help maintain your property. If you're talking about wanting to age in place, they're the things. I'm right now in the process of looking at different companies to help me do certain renovations that I want now that I've made my mind up that that's probably what I want to do…It would be nice to have those types of resources in the township to say if you need somebody to come and help assess your property and see what kind of things would you want to do, and do it while ... I'm working, so I can do it now while I'm working versus being on a fixed income, things like that. You have to become your own construction expert over the years, or repair expert…

and people that are reasonable to work with seniors and that you can trust. Or maybe even like ... There are things, and I bring that to mind in terms of what types of activities could the township do, maybe some meetings for people to have those types of discussions, and presentations, and for thinking about how to fix your home to stay in place, things like that." (Participant 11)

SOCIAL

Activity Planning & Community Participation	Community Organizing/ Planning	*these are actions that towns people take to do something in the town such as be on or putting together a committee or activity*	"But now, the community is really becoming more of people moving in, older people as well as younger people. I just met a woman who moved here from North Jersey because they just loved Hammonton. They would come here for the festivals and the theater and that type of thing. And she's about 10 years younger than me, and they just built a home here. And she's not the only one of our people from Hammonton, heart and soul. She said she encountered a 68-year-old woman who said, "I moved here four years ago and how can I get involved? I want to get involved?" So meeting new people in our community has been a real boom for me." (Participant 14) "I am involved in a lot of things in town. In town, I've been involved with Main Street Hammonton for many years. I actually was involved before there was a Main Street Hammonton and Downtown Revitalization. That's been kind of a passion of mine. I've been the design chair person for Main Street Hammonton for a long time. That's like signage and ... We don't have any rules, really, but we have some grants and if someone comes for a grant, then we did make sure that the sign code was a little better in Hammonton. That was one of the things we worked on. I mostly work with that and give

people advice, and colors, and things like that.

Then we have Third Thursday, so I make sure I'm there all the time…. I'm the chair person of the Historic Preservation Commission, and I was the chair person of the very first one that was put in, I guess around '76 or something like that. Yeah. I was on the Environmental Commission, I just let that one go, although they still send me stuff. Because that's another thing that's important to me, the environment and recycling, and things like that. And saving old houses is the ultimate recycle." (Participant 1)

"Yeah. So as I said, I retired in 2008. But prior to that I ran for the school board in 2006, and I've been on the Winslow Township Board of Education since 2006. And also, I sit on a board of trustees of a non-profit organization." (Participant 8)

"Yes. I'm involved, certain times, with the drug commission and whatever. Sometimes I go to party meetings, Democrat party meetings and whatever." (Participant 10)

"It does engender community ownership in a good way and gets people ... back to my inside world, outside world. Okay, you can have a gated community and your pool and your backyard, and never have to leave your house because you've got every comfort known to man.

		But then there's no community. Back to your word, community. We have 15,000 houses, but we have no community. And some of these projects, yeah, they serve a purpose for sure, but almost an unintended consequence, they foster community." (Participant 2)
Leisure interests	*activities that are nonobligatory and intrinsically engaging (American Occupational Therapy Association, 2020b)*	THEATER "No, this is year-round, and it's an equity theater. They use equity actors, which come with their own rules. They have to house them if they need housing, so they own a building next door. I used to go to all those shows, too, so I kind of miss that. And we have another theater in town that was an old church from the '60s. That, of course, has been closed down too. They had some good shows, too, with mostly musical people. Comedy. A couple comedy shows. Things like that. I try and go to all those things, so again, I like to do things in my own town. I'm not a big shopper out of town, so if I can find the stuff in town, even though I didn't like Walmart when it first came, I go to Walmart because it's here. Again, it's still employing people from town." (Participant 1) "The Playhouse is something that opened I'll say about five years ago. And it's been extraordinarily successful and they have musical shows there and some dramas occasionally." (Participant 3) READING

“But I really would like a book club in town. Every once and while I see one of the little tear offs in the supermarket but I haven't seen one in a long time. And of course now we're not going to be able to sit around and have a glass of wine and have a book club because you know the rest. I would like that.” (Participant 1)

“Yeah, I love all kinds of recreation. I'm a reader. I love to read...” (Participant 9)

“We'll start with that it's convenient where it is. I'm an avid reader. And it's a place that just has access to interesting resources, and the librarians are phenomenal. They just are. They're knowledgeable about everything, and they're very helpful with everything. They know everything that's going on in the township as well.” (Participant 11)

TV

“Thank you. But, you know, the older you get... I watch TV is what I do. You know what I mean? Especially with this, like you said. I don't go anywhere unless I have to.” (Participant 10)

MUSIC/CHOIR

“I happened to talk to a friend who said she was singing with a group. It's volunteer and all. I remember years ago, geez, who is it? Well, it turns out it the person

who's running it used to be in charge of Willingboro's music program. I got in touch with him and it's just a group of older people who sing. So they came and they do music afterwards for us. It makes a nice evening. You know?" (Participant 5)

TRAVEL

"My husband and I travel with friends and Lord willing we're going to do it again. I mean, last year we were going to go to the Amazon. This year we were going to go to Greenland and Iceland and of course that's not going to happen. Next year, Lord willing, [inaudible 00:17:44] all that, we're going to Japan with friends, and then 40 days coming back.

We meet them in the city and have, but we can't do that. My other friend who lives in Great Neck, we would meet her in the city or out on Long Island. The other friends would come down here and go to the casinos and get together with us." (Participant 13)

"every year before I used to go back my country, me and my daughter, and now she pass away, I scared to travel by myself. I no think I can do, but the girl named Lisa, she say, "Participant 6, next year, you go. I go with you." And my sister, "Okay, if Lisa bring you, you go home. I take you back."" (Participant 6)

"Sometimes them have tour bus, I take them go New York, everywhere, because one day I saw the tour bus pass, and I wonder where you guys go? He say, "We go Montreal for five day." I say, "I love to go [inaudible

00:04:12], I say. "You have to join the club." The guy, he say, because I see a lot of cars park there, I say, "Where you guys go?? I see [inaudible 00:04:21]. We go to Montreal. I say, "Oh, I always want to go Montreal, Canada. I never go." I go Niagara Fall before when my nephew come, he take me. When all the orient people come from Asia, they want to go to Niagara Fall, because beautiful. You ever went to Niagara Fall?" (Participant 6)

"And I love traveling, generally speaking, but because of the pandemic and even prior to that, it just didn't seem like we had the time to do that." (Participant 9)

FITNESS

"Well, I'm just going to say something... Well, when the nicer weather, warmer weather gets here, maybe having a little luncheon or something outside or a... little different types of adult games outside. Badminton or something low key like that. This way you would get your exercise, which I certainly need right now." (Participant 9)

"…stupid thing, a roadrunner's club for seniors, no. That was a joke, roadrunner's club for seniors. I was in a roadrunners club… You're getting together and run together. That was a sick joke. I was in a roadrunner's club.

		[Interviewer: “Maybe a walking club.”]. Yeah. You know what I would love to see that in this town.” (1-20)
		“Well, I can't do a lot of walking at this point, but I am trying to use my... I've got a bike. Actually, it's a motorized bike that was made for Parkinson's, actually. [Spouse name] didn't use it as much, but I'm trying to do that more and more.” (Participant 5)
		“And the other thing, I think, to encourage me to be more active too, like I said, I would like to see more infrastructure set up for things like cycling or walking paths that are safe. We have that in the parks. I know we've talked ... We have several parks that you could go to that are accessible that you could feel safe walking and things like that. But I would like to see something where I don't have to get in my car and drive there.” (Participant 11)
Community Activities	*these are formal activities within the community or senior centers that bring people together. they are not necessarily designed by people who attend them, but rather attended by towns members.*	“Well, there is a place that's called the Canoe Club, and it was built by the community itself through taxpayer dollars. And you have to be over 50 in order to enter the building, and it's right on the Hammonton Lake, very pretty, very nice building. And there are people who go there very regularly. They play cards, they have guest speakers, they have different events. It's also used as a polling place on election day, but that's one of the... There's always been a Senior Citizen organization, and this Canoe Club sort of grew out of that, a Senior Citizen organization.” (Participant 14)

		“No, they don't do much here. If they did I would participate on the days that I feel well.” (Participant 4) “Most folks here celebrate the seasons. For instance, I'm going to say from Valentines Day to Saint Paddy's Day, to especially in the Fall because I'm a Fall person. I love from October through the end of December, houses are decorated. Easter, the Township always has the big Easter egg hunt for the children. This Township celebrates the seasons and the holidays and the events, that causes the Township to come together. “ (Participant 8) “I think they can do that specifically through the Ed Duble Center, which is a senior center complex here in the Township. Well, when they were open you always had a schedule of events that took place at the center. Trips, bingo nights, dance classes. So, yeah. Oh yeah. Trips to New York to see plays, especially at Christmas time. And when the casinos were very active there were trips to and from the casino. So I would say the hub for senior activity here in Winslow is clearly situated in the Ed Duble Center.” (Participant 8)
Cross-generational* *subtheme of community activities	*Informal and suggested activities that include the lifespan from children through older adults*	“they always had this promenade where the kids were able to walk outside and walk down the sidewalk. It even happened when I was in high school, you walk this whole gambit to go into the building. And so everyone in the community got to see kids all dressed up in prom, gowns and tuxedos. And when that had occurs, the number of people who would be there, it would be aunts and uncles and cousins and sisters and brothers

		and moms and dads and grandparents. The parking lot would be absolutely full, and all these people lined this walkway and the kids would walk through and everybody would Ooh and aah. It was just fun. " (Participant 14)
		"And she has a teenage daughter that I had gotten her involved as a volunteer with the Board of Health, and so she was interested in going into the healthcare field. I adopted her as a mentor to take her on" (Participant 11)
		"I'd have to look into it, but I think there's opportunities to become involved with the kids at the high schools and the elementary schools to do ... you know how they have, I don't want to say grand-mom working with the kids. But I think there's opportunities like that that could be encouraged." (Participant 11)
		I think there's a lot of kids that could jump at that opportunity for community service or something. Then it would involve different age groups supporting other people in the community." (Participant 11)
Community and Life changes	*changes related to socialization, such as the death of a friend or spouse, as well as changes within the community*	"How could they support me? Gee. I'm 86. Most of the people that we knew here are gone. Matter of fact, with the exception of... really, there are very few people, it's two couples that we're really friendly with that are left. Everybody else is either dead or moved away. So I don't have that much involvement in the community now because of that." (Participant 3)
		"I really enjoyed visiting my neighbor who just died about 10 days ago." (Participant 13)

“No, I don't want to. I don't want to. And, a lot of old people, because no Thailand allow here, because I know one, she passed away, and my good one, she pass away. Okay? I don't have no more, because orient people come that time, World War II, old now. We in 80. And, all of my friend is my age, and she pass away. I no have nobody to go in, and now have Korea people, them younger. When she come take me, she names Suni, good girl. Every week, bring me food…[…]have lot of Korea people, more than Thailand. Thailand almost gone now. Everyone I know, them passed away and go back to Thailand.” (Participant 6)

“But most of the neighbors that moved here when I moved here, I mean, several of them have passed away that were my best friends, and some have moved away.” (Participant 11)

“You know my age, I'm 79 years old. I have some of my best friends, one lives in... we all lived together and now one lives in Connecticut, one lives in Florida and one lives in Kentucky. One still lives in Great Neck, one lives in Southold. I'm going through them in my mind. I do not have any long term friends who live within 10 miles of me. None. Now, I mean, I left. And then whose husband died and who... I'm at that age where people are hitting the box left and right. That part of it is tough” (Participant 13)

		“And it's changed.It's naturally more family-oriented. There's very very very rare that I come across anybody that's near my age. And that's another thing. We really would love to get out of here…Four of my friends moved. All recently. Who moved out? Who moved out of state completely? Who moved five miles away? Which, in my mind, that's not a move, but... that's what he chose because it was cheaper in taxes. And that's why he chose to do that. He was a really good friend of mine. I really liked him. There's not much left here for me. For us.” (Participant 9)
		“Yeah, I think the health care's better, but it was too bad we lost the hospital, but it's really hard for community hospitals to be on their own. I don't know that that'll ever come back.” (Participant 1)
Outing/daytrip	*The USER-P was used to measure the satisfaction of outings and daytrips and these are defined as the satisfaction with going out such as eating out, visiting a café, the cinema, a concert, alone or with others and daytrips and other outdoor activities such as shopping, attending events, going to the beach, church or mosque. As such, this theme represents the outdoor activities and daytrips that participants plan and*	“The Playhouse is something that opened I'll say about five years ago. And it's been extraordinarily successful and they have musical shows there and some dramas occasionally…And the place fills up. People come from all over to go there.” (Participant 3)
		“Yeah, I take the bus and I go all day, I sit down in the bench. Lot of old people sit. Like on Saturday, them close, lot of things close. And Chinese people them bring vegetable. Them grow them own vegetable in the garden and them [inaudible 00:18:47] sale on sidewalk…When I walk on the street, like I walk on the street, sometimes exercise, walk over there and go to

		participate in	Starbucks, drink coffee. You know, [inaudible 00:15:19] drink coffee and watch people. People walk dog, walk around, and I'm see me, "Hi, Participant 6."" (Participant 6) "Yeah, so for entertainment, we enjoy going out, eating dinner or lunch. Lunch or dinner. We really enjoy that a lot. And I love the town of Hammonton." (Participant 9) "Sometimes [the senior center has] casino trips. Sometimes they offer little trips, day trips, and that sort of thing. And sometimes they offer free food. And that's when we would go. When there's free food. (laughs)" (Participant 9)
Physical Barriers	Home entry/exit accessibility	The ability to enter/exit one's home	Oh, my neighbors have. Just my neighbors, you know?...Helping do my laundry and clean my apartment, stuff like that. [inaudible 00:07:08] It's hard to get the people that own it to do anything. I know there's a waiting list for downstairs apartment, but you know. And I gave him a doctor's note saying I need to be moved downstairs so I can get access to outside more." (Participant 12) "Like I said, better access to getting these people out of the apartment and doing something." (Participant 12) "We were pushing for Parkinson's because the sun goes down, these people can't get out. They may have an

		appointment, but guess what? They may not be able to move to get out when they have it. Aside from that and the larger stakes, there aren't... You're aware of movement specialists, right?" (Participant 5)
Community accessibility	*"convenience" of walkable sidewalks/paths and access to buildings*	"This is a split level…we would like to have a sizeable rancher" (Participant 9) Well, again, I do take part in these things that try and make things more convenient for people in town, and have more things for people to do. There's that. Like I said, it's just a struggle to get people to show up sometimes. Well, advocate for walkable streets, for instance, and that kind of thing that the town could be involved with, which they are. They are working on that for younger people and for ... I'm not part of those groups, but I know there are people that are part of those groups and they try and get grants to improve the sidewalks and things so their people don't feel that they're dangerous to walk on, for instance. I guess things like that. More places for people to sit down and talk outside, which now is happening with all this outside dining. I think that's going to stay." (Participant 1) "Around here, one building, and third floor only, no go up elevator. All of doctors in the third floor." (Participant 6)
		It's exercise, yeah. To cycle anywhere, there's no safe route. I have to say one of my big goals in life would be to have a cycling circuit somewhere where you can ride

		safely from point A to point B, like to ride to Berlin. My son lives in Voorhees, down near the Echelon Mall area, and there is no safe way to cycle there. Distance-wise, I could cycle there, but there's no safe way the cycle there. There's no safe way to cycle to Stratford. I've been cycling for so long, and I'm familiar with the bike coalitions and stuff. It costs millions of dollars to put bike lanes in. It's not as simple as like, "Oh, could you draw lines down such and such road?" It's more complicated than that." (Participant 11)
Transportation	*Transportation is the ways in which one moves about the community/method of locomote and access to transit including driving (self or others) and public transit (typically does not include walking) (WHO, 2007).*	"I do go the grocery store…My niece [drives me]." (Participant 4) "Well, at this point I'm pretty independent, but as time goes on if driving became an issue, I think I would love to see scaled up transportation situations available. I mean, what's available now, it's pretty limited and it sounds like it's not really reliable in terms of time and things, the program. You could be waiting forever. So that would be something I would think would be valuable." (Participant 5) "Mainly, do they have transportation? Right now, I can go and do what I want when I want to. If it comes to a point that I have to give up my transportation, my driving, that's really difficult because you're really limited. You don't have your own life anymore. You have to arrange for it…That's the really hard part, I think. So therefore, if you have to pay for it all the time, you limit how much you're going to get out. That could be

depressing."

There should be transportation to it provided. For those who can't get to the senior center, is there a possibility that they can pick people up to go to the senior center, different neighborhoods or something?" (Participant 5)

"Yes, ma'am I drive, but I'm not go far away… and now I cannot walk too far. I drove my car. I park in parking lot. And when everybody come, we go together… Lots of people, because I talk to meat lady, say the same thing. "Participant 6, you cannot depend on them. You got to ask me for [inaudible 00:35:09] and me you to go together, and now she don't have no car. And, she ask me to give her lift. I say I can't, because my daughter tell me, "Mama, you don't know how to drive good. Why you got to pick people? You going to kill them." (Participant 6)

"I mean, I got a car. I mean, I can drive and all that stuff. I'm not disabled or anything in that respect." (Participant 9)

"No. I am totally independent. I mean, for me, everything I do, I need my car, and I get myself to all of those places myself… I can't project out what it will be like when I'm not driving. But I can say when I'm not driving, I think if things were to stay the way they are, I'd be pretty isolated." (Participant 11)

“Well, we have a couple of taxi cabs. There is a shuttle that the county runs through. I don't know how many people take advantage of it. I did have tenants that lived close to Egg Harbor Road, and they would take it. They would go to work in Bridgeton, because the shuttle goes that far. So, I guess they're scheduled. We have the train that's not that far away, that goes to Philly or Atlantic City. But I think it's still hard for some people to get around to appointments. Like I said, I happen to have a couple of children that live nearby and get me things, or take me if I can't go to an appointment, or if they feel they should be with me when I go to a certain appointment. I do go mostly alone. But I think there are people that might have a need for that type of ... And again, insurance is the thing. I think there's some sort of Good Samaritan law, but I'm not sure about that, that people, volunteers take in people. And again, people don't want to ask. They're hesitant to ask for help, I feel.” (Participant 1)

“I think that transportation thing might be a big thing. I'm not sure…Yeah [improving transportation in town], for small trips, like around town kind of thing. Maybe for getting people out that have trouble. (Participant 1)

“Well, first of all, you can get transportation. It's a challenge. There's Tricare, there's access, what's the other one, access for people with wheelchairs. I've helped people do it, so there is transportation around

but the challenge is hook them up with it. I know how to do it or I could get through it, and I still drive. How do you spread the word that if you need transportation? But around here, you're going to find that my mother, my aunt, my sister, it's a family thing. If you need transportation, there have been a few in Hammonton, patients that I've taken care of. I didn't really want to work in Hammonton that much because I live in Hammonton, but of course I did. Several patients that I could think of who lived alone or were so cantankerous that their family wouldn't help them as frequently as they needed that I hooked up and enabled them to get hook up with Tricare and Access Link and things like that. I'm sure you're familiar with that. The secret is keeping people aware, but how do you do it until they need it, do you know what I mean?" (Participant 13)

"As I said, her problem was mobility. Actually she rides a trike and that is how she is getting out to the White Horse Pike in order to get her vaccination today. Because transportation, not only technology, but transportation is an issue for some older people here as well… She said the taxi service is unreliable. There is a shuttle or through Medicare, she could get to a doctor's office, they would provide transportation, but she was not sure if Medicare would, and I still do not know that, would have done that for vaccinations. And she would need a three-day notice in order to set that up. So there were kind of roadblocks for her. And then I found out that through my research, I found out that New Jersey Transit was offering a train to the mega site…. There is a

shuttle that does stop in certain neighborhoods and will take you as far as Buna and Vineland to doctors and shopping. But once you get there you do what you have to do, and then you have to wait for that shuttle to come back. And there may be like several hours in between when that shuttle is going to come back for you. So it is not a bad thing, but it is not as efficient I think as it could be." (Participant 14)

"Transportation's not too bad. We have a bus that comes here, and they have that LogistiCare for doctor's appointments. (Participant 4)

"Yeah, because also the senior center has a little bus that they basically pulls up up and takes them shopping." (Participant 7)

"Yeah, the transportation's not the greatest around here… There is a bus depot which is, I guess, about three miles away from me. But they only go mainly to Deptford Mall. That's it. I mean, everybody needs a car. Traffic is getting unbearable… But yeah, there really isn't many bus trips available for seniors. There is a bus transit that takes seniors to certain stores, I think, which I never really looked into…And then you have the hope that they come on time. (laughs)" (Participant 9)

"I guess it's been about, maybe, three or four years now, that the Township has purchased a beautiful, really a

magnificent senior transportation vehicle. Oh it's terrific. It's a beautiful vehicle. Now that, I applaud whoever came up with that idea to do that. But that's an absolute asset. It's a big plus for seniors here in Winslow, because certainly it does what it says, it's a transportation vehicle. It's for all kinds of things." (Participant 8)

"I think the number one issue is transportation. And I appreciate they now have ... that probably took a lot to get those buses. They have two bus services now. But they go to the senior communities. I don't live in a senior community, but I'd like not to drive to Berlin to go food shopping. I don't know if I necessarily want a supermarket in the neighborhood, but a bus to Berlin would be nice that anybody could get on. For me, transportation is really the big issue for me. And again, as I'm thinking about getting older, yes, we can get things delivered here without a problem. It's interesting because normally-I'm not far from Atco, and Atco used to have a supermarket and it went bust. It was there for years. It wasn't the best supermarket in the world, but it was the most convenient to not have to run all the way up to Berlin. There was a local delicatessen. It was just a very ... I think because way back when, there wasn't anything here, so they had to create those resources. Now I'm just going to say thank goodness for WaWa. You know? I don't know" (Participant 11)

"We have access-link for the people that need to go back and forth to the hospital or the doctors. We have

Outdoor spaces	*an appreciation for beauty, often referencing the outdoor and worldly beauty within nature*	access to that." (Participant 12) "We could use more green spaces, I guess, in town. And that's a problem too, because a town can only buy things at the appraised value. They're not allowed to spend more, and of course property becomes more expensive, so it's harder to get those properties. People want more money for them, so I think that's one reason we might not have more, what they're called little pocket parks or something, in different little neighborhoods. It's been talked about, but it always seems to run up against that problem" (Participant 1) "People. And we have a lot of natural resources here. Beautiful natural resources. And there's something about Willinboro that gets in your blood and you just don't want to leave. I can not tell you how many kids go away and come back. And come back and says, I don't know why I came back, but I just had to come back. But [inaudible 00:04:53] My two oldest ones live in town and so many of their peers have come back home. Our main thoroughfares have flower-beds and trees in the middle of the road. We have one, two, four parks. We have The Creek Devon throughout the town. And the outskirts of uptown." (Participant 7) "Again, this is just off the wall. The senior citizen place is very small. It can only house x amount of people, and of course with this pandemic it would probably be even worse now. 50% capacity give or take. It certainly will be nice if, for example, somebody just donated some land...

		and built some nice senior complex, larger complex than what's existing now. So more people could get involved." (Participant 9)
		"We probably could use a good building so would be just go out and sit out of the sun. Like I said, they used to have it tent up over here and people would go out there and, putting up a picnic and all. They don't even do that anymore." (Participant 12)
Legal	*Insurance/Lawsuits that impact socialization*	"No, they don't, but it's been talked about. Insurance causes a lot of problems these days, problems that weren't there years ago. Towns have to follow so many rules and whatever, so you always have to take that into consideration… The rules of the insurance. They have insurance. The town has insurance, but there are things they'll let you do and things that I guess would make your insurance go up. I don't know. That's always a consideration." (Participant 1)
		"But I think there are people that might have a need for that type of [assistance with transportation]... And again, insurance is the thing. I think there's some sort of Good Samaritan law, but I'm not sure about that, that people, volunteers take in people. And again, people don't want to ask. They're hesitant to ask for help, I feel." (Participant 1)
		"And that was also one of the issues when I was doing the Hammonton at Home research. We would have had to have a special insurance that would have covered anyone who volunteered to drive people to shop or to

go to doctors and that type of thing. Fortunately, the mothership of this organization, Village to Village, I guess it was called, the Village to Village Network. They had all this paperwork already set up. So it was not something that I would have had to try to research and do myself. There were insurance companies that would cover any village that decided to be part of The Village Network. So, that was helpful because that was always an issue. Am I going to let somebody in my car? What if, what if. There are a lot of what ifs." (Participant 14)

"But they've all closed. All the schools have closed now because of insurance purposes. They got to be too expensive to cover, et cetera." (Participant 5)

"Well, by resources, people that would want to do it [organize cross-generational activities]. That's one resource, so somebody that would have an interest in doing that, and then having the knowledge how to do that. I'm assuming there'd probably have to be some liability insurance associated with that. And it would have to be that people expressed the need for it. I'm expressing that as a need. Somebody else might say, "No, I'd rather go just use people that I know or something." Who knows? (Participant 11)

"Can't even think of the name of my place. They have a building up front where office is, and they used to hold bingo and dinners and all that, but they don't even do that anymore. We're not allowed to use it unless we

			have homeowners insurance and a lot of people can't afford that because we're all on fixed income." (Participant 12)
Social Barriers	Neighborly/Friendly	*Kind exchanges, both verbal and action oriented, between community members; these are primarily superficial, but, as described in some instances, can develop into true friendships* *Knowing that there are people in the community who can help or point to the direction of help; formal (municipal hall) or informal (neighbor)*	"I have a neighbor, except when he came over to talk to my husband about cutting down tree limbs, I don't know him. I knew his mother, I took care of his mother, but I don't know him. My other neighbor, [name], who just died about 10 days ago, of course I visited her a lot, but she's the only... everybody else we wave and if we're raking leaves and we see each other in the street we chat, but as a friendship, no." (Participant 13) "…when we first moved, we didn't know anybody, really. I had a cousin that lived here. I shouldn't say that. And we were sort of adopted by a very Italian family and we're not Italian. And they were very kind to us and we used to eat dinner over there a few nights a week. And that was... It was wonderful. I could never can get over the fact that we became so close. We were so different. And, I guess those are my best days here was my relationship with that family and their extended family too." (Participant 3) "Yeah. I have a lot of good neighbors…They'll knock with something…or knock to see how I'm doing, they'll call me. They're really good like that here. Some of them aren't some are. You know how that goes." (Participant

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“…I value my neighbors. I mean, they've been nice. They're always there for me. Anything comes up, if I forget to bring my garbage in, the man next door will call, "Are you okay?" That's pretty nice.” (Participant 5)

“The lady… she always help me. She know who I am because he say, "Hi [grandmotherly name]." “ (Participant 6)

“[Name] called to ask me if there was some seniors on my block who needed their sidewalks and driveways shoveled in the snow. So I told my next door neighbor and that got done.” (Participant 7)

“From time to time, I'll meet somebody that I know. I'll say hi, but never into a very conversation. It's very brief….We just didn't talk about it or anything. It was just, "Hi, how you doing?" That was it…[…]And they had a little boy. And talked to him for a little bit, but that was it. Just a few minutes and then adios…[…]I'll talk to her. There's a young woman that she started talking to me, I started talking to her, and before you know it, every time I go by her house, if she's out there, she talks to me.” (Participant 9)

“But it's a small neighborhood, so I can pretty much go

		around and talk to everybody. I do enjoy being in my community." (Participant 11)
Inclusion	*The sentiment of being a part of the group/community, not being a part/excluded and encompasses past, present, and future*	"I guess make feel like they're wanted to view. I think they often stay in this country that we float, we toss away what is old. Whereas in other countries that's revered and they appreciate great wisdom. Totally different thoughts, your way you don't matter anymore. You just go." (Participant 7)
		"I guess those locked in their home, what their needs are and how they can engage more in the community. And last year the prisoners in their homes. Yeah. Yeah. So really getting to those who are maybe home bound and asking them what their needs are." (Participant 7)
		"Well, now I'm kind of included a lot. I always feel included. There was a time when I was this real pain in the neck that nobody wanted to be around, I'll say. And I have found that, even when I was on the ... I always said this, I never cared for organizations that were all women. I always liked to be in organizations that were men and women together, and I always enjoyed that more. But I always noticed that, like at the foundation, or sometimes at the meetings even with Main Street or with Revitalization, a woman says something, and it's like it goes over somebody's head. A man says the exact same thing, like a minute later, and everybody pays attention. That always used to be a sore spot with me. That's why my husband really encouraged me to reach out, because I would come home and bitch to him." (Participant 1)

“I guess getting to know the people more. I mean, we tend to have a lot of family people in Hammonton, but it's nice to reach out to other people. That's been good, I think. I've met a lot more people, interesting people, because we have a lot of new people in Hammonton. When I say new, they may have even been here 25 years. But there was a time when Hammonton was considered closed off and not very friendly, but I always, again, making the excuses as I said I do for people, I'd say it's because we have all this family around us, so we don't mean to be exclusive, it's just you don't think about it as much, reaching out to other people because you've got all these people around you that are related to you and you're caring for them, or being friendly with them, or visiting with them. But now, I think we've become a lot more inclusive, and I don't think we have that reputation anymore.” (Participant 1)

“Well, I always... I don't know how to put this exactly. It was a mixed bag. I mean, I felt included because I was a total stranger and I came here and the community supported me so that I was able to have a successful dental practice for 50 years.” (Participant 1)

“Oh gosh. When I felt included, I guess I've always felt included and never felt not included. It's one of the things about growing up here and live living here all my life, I've always felt part of the community, always felt included in the community, I guess, because I always reach out and became part of whatever was available,

Women's Civic Club and the Hammonton Education Foundation and Hammonton Homeschool Association. I mean, I've always been active in all kinds of endeavors here." (Participant 14)

"So I just always grew up wanting to be needed and wanting to be part of things and I never stopped. And a lot of people like that, I think. But it was really, I guess it's being needed or me needing to be needed, it's just been always a, just part of my personality." (Participant 14)

"That was always a criticism of Hammonton. Oh, they're so closed, you can't make any... You'll never be considered a Hammontonian, even if you live here 30 years." (Participant 14)

"I always feel included in my community. I insert myself. [laughter]. I just do that. Just insert myself. So, whether I'm included in that I just need to show up. And there are times when, like last night, one of the council women said would you come on to the council meeting and get give an update on the green team? And all that you're doing with the green team? So I did that. So, that happens sometimes. But I don't think I ever not feel included. Cause like I said, I just include myself. If it's something I want to go to or be involved in, I'll just include myself… And then it was what something will happen. And I'm like, why didn't you tell me about that? O, I just assumed you'd be too busy. Let me be the judge if I'm too busy. Don't assume my calendar." (Participant 7)

“I'm quite sure you need other voices and other voices and other ideas because they may come up with something she hadn't thought about yet.” (Participant 7)

“Because, I come from another country, it really hard, and when I walk over there, I try, I try. I try, right? I try so hard, because sometimes you lonely, feeling bored or [inaudible 00:33:36] and all the [inaudible 00:33:38] like career people, them go over there, hang happy, learn something. Something like that. But, I go, and I not comfortable. Because of the way people talk to you.” (Participant 6)

“There's never been a time since I've been here that I've ever felt excluded from this community.” (Participant 8)

“In Hammonton, it's very family oriented, and honestly, to put your nose in as a non-family member and a non-professional, you may do something with them one day and then find out two weeks later that they did a whole bunch of stuff and didn't include you because they were doing it with their family. How do you break that, I don't know, in a small town.” (Participant 13)

“On the other hand, the community was very Catholic and it's a religious thing so it was sort of to a great degree at that time excluded from a lot of things that occur because so many of them were church related,

but in general, I always felt fortunate that they helped us to the degree that they did.” (Participant 3)

“Wow. That's tough question. Nothing. I think they don't need me really. I'm sort of... I'm just here.” (Participant 3)

“I don't like that. I okay. I come there because I lonely, but I don't want people ask lot of questions, and some guy you want to date, you know what mean date? He say you want to be my date this weekend, something. I don't like that.” (Participant 6)

“But that seems to be a hang up, right there. There's no one to really have a nice conversation with…

Included. That, I don't think so. I don't think I was really ever, quote, "included" in the community.” (Participant 9)

“Block party where they close the block off and all this business. We had an opportunity to join that, but I know what the hang up was because I stuck out like a sore thumb because of my age. Everybody was rather young, and we noticed that right off. Basically, it's a good thing to get to know one another and all this business, don't get me wrong. But for whatever reason, we were just kind of turned off by it and never joined it.” (Participant 9)

“Can you tell me about a time when you felt included by

		your community? Participant 12: No, not really." (Participant 12)
Respect	*A feeling of acceptance that propels trust*	"I guess make feel like they're wanted to view. I think they often stay in this country that we float, we toss away what is old. Whereas in other countries that's revered and they appreciate great wisdom. Totally different thoughts, your way you don't matter anymore. You just go." (Participant 7) "I think, one of the major problems I think, and I always bring that up, is probably one of the biggest words of dictionary is respect. These kids nowadays, they're crazy, for lack of a better word. Coming up, we always had respect for our elders. There is none now, there is none. And I think that's basically due to the parents at home, if they are at home, put it that way..." (Participant 10) "I'll probably talk about my neighborhood now. I think everybody in here pretty much respects everybody else and speaks to you with some respect. I don't know how else to describe that, that you feel like you're from here." (Participant 11)
Culture Subtheme of respect and inclusion	*Representations of both respect and disrespect of a culture different than the dominant culture*	"Because, I come from another country, it really hard, and when I walk over there, I try, I try. I try, right? I try so hard, because sometimes you lonely, feeling bored or [inaudible 00:33:36] and all the [inaudible 00:33:38] like

career people, them go over there, hang happy, learn something. Something like that. But, I go, and I not comfortable. Because of the way people talk to you." (Participant 6)

"I remember going into the [town] post office, I guess it was a Saturday morning, and all these immigrants would be lining up to send their money home. And, one man even came in with a jar of children's vitamins, and he got an envelope and he poured all of the vitamins into an envelope. And, I thought, "Oh, my God. By the time they get to their destination, they're going to be powder. They're not going to be in any shape," but he was sending these home. And, I recall people standing in line with me and being annoyed that it was taking time. And, I was like, "Wait a minute. These are family people. They're reaching out to their families. The money that they're making, they're sending home to their family. How could you be annoyed with them taking up the time to do that?" I mean, that didn't compute with me, you know? And, the people standing there who were being annoyed, they weren't being quietly annoyed either, their body language, their sighing, all this... I mean, how uncomfortable do you want to make these people feel? Really, I wanted to shake them. I was so inflicted." (Participant 14)

"Someone who lives not far from my house has a 96-year old mother that lives with her, and so she has a full-time or a daytime healthcare person that they've hired

to take care of her while her daughter and her son-in-law work.
And her new caretaker is African-American and went out for a walk on her break and someone in my neighborhood, because I consider that part still my neighborhood, it's my walking neighborhood. Someone stopped her and asked her what she was doing in the neighborhood. And I was like, "What?" Someone actually... Now there is an African-American family who lives in that neighborhood, but they stay, and I've tried to reach out to them too, but they really stay tight. So I guess trust is a big issue that I didn't know before. And now I'm learning about it. I had to be 74 before I found out that there are people, that people in the minority are distrustful of people who live here. And that's sad. That really is. But I guess we're going to find it in every community." (Participant 14)

So, we're trying our best to get the word out, so that we can engage as many people as possible. And then, here's the rub. The rub is, yes, we can get older people, yes we can get younger people, but can we get to those communities that are underserved, that normally feel excluded? That has been the roadblock. That is the hard part. And, I see that as being our biggest challenge. (Participant 14)

"And it was really terrific because where it was for many years, a community who was basically Catholic and Italian, the community was changing so that when my children grew up, our neighbors on one side were Persian, on the other side were Sicilian, on the other

		side were Filipino, next to them was Italian, and across the street from them was Indian…So my kids grew up. Really, it was terrific. You couldn't buy such a mixed neighborhood. They mixed and they all got along with one another and they learned to eat all different foods that they probably never would've been exposed to as did we. It was just terrific. I mean, we traveled with these people, wound up going to Persia, which was a great experience." (Participant 3)
		"I guess I like the size of it and it just feels like home. I feel comfortable. It's quite interesting, when I go to something where I'm a minority in my community being white, and it's really weird when you go to a place where it's all white. It's become part of... I value my neighbors. I mean, they've been nice. They're always there for me. Anything comes up, if I forget to bring my garbage in, the man next door will call, "Are you okay?" That's pretty nice." (Participant 5)
COVID-19	*The pandemic has stopped several important activities in the community that help older adults to stay engaged. Many discuss what they miss both large and small like visiting a neighbor, communion services, going to the senior center, stifled travel.*	"It's just that the COVID thing has changed everything really. It's distorted what used to be reality. And that really that makes such a big difference. I would think that if you ask me the same question, if I was around in a year, my answers might be different because things might've changed, but COVID sort of puts a damper on everything really." (Participant 3)
		"Well being with the pandemic we haven't done much

		other than senior building. So there's not really much I could tell you. I mean senior building is... They have stopped all the activities being under a pandemic. So really, there's not much to tell you in the last past year." (Participant 4)
		"Certainly, community is gone during COVID." (Participant 5)
		"Because of the COVID, I couldn't go visit her, but I used to love sitting and talking and laughing with her. Just doing things along those... that's my main thing. And against most rules, some patients that I took care of, I haven't worked in three years, but are still friends. [crosstalk 00:06:09] and when the COVID's over, I may go visit them again, that kind of thing." (Participant 13)
		"You're coming at this from a very skewed point in everybody's lives where we haven't done anything in more than a year. You know what I mean?" (Participant 13)
		"I belong to the Winslow senior club, but they closed that down because of COVID. We used to go there for bingo. That's about it." (Participant 12)
silver lining* *subtheme of COVID-19	*The innovative and unintended consequences of the pandemic* *COVID-19 has not only stopped activities, but it has spotlighted problems that were occurring*	"In some ways the pandemic has been a little bit of help because people have been, the restaurants have been doing sidewalk cafe type things. And that brings people together also." (Participant 14)

		pre-pandemic.	"But you're looking for funding, basically. You're looking for telemedicine. Well, now they're going to start doing the other things. We've always been asking for telemedicine, and fortunately, it came through because that's the silver lining of what we're going through now. You know?" (Participant 5) "COVID has shown different examples about how you could get your food delivered, and I have had food delivered through Amazon, and Walmart, and things like that during the pandemic itself. " (Participant 11)

GROWTH

Growth Needs: Living your values	Meaning, purpose	*Feeling valued, having purpose, being embedded into the community*	"But again, as I'm saying this, I guess I'm kind of seeing a trend on my own life. I never really thought it ... thoughtfully, nothing existed. And now it's existed for 16 years...But it was just, again, tangible things you can point to and say, "Hey, we did that." And people want to see something. It's not we talk about it, but yeah, we did it. We did it. It's done. Remember what the sidewalks used to look like? Wow. Yeah, that's really an improvement. And remember that building that sat there 40 years? Now it's a theater" (Participant 2)

			"They seem to appreciate that I show up for things, and the fact that I'm older now, they make a big fuss over older people… I don't know. I don't know. Somehow or other I became a celebrity at Kramer Hall, we'll say, from Stockton. Everybody knows me there. They don't even make me sign in, they sign in for me, and things like that. They're always happy to see me, and .." (Participant 1) "That's a good question. I think it's my need to be needed. I don't know that the community needs me as much as I need to be needed by the community…So I just always grew up wanting to be needed and wanting to be part of things and I never stopped. And a lot of people like that, I think. But it was really, I guess it's being needed or me needing to be needed, it's just been always a, just part of my personality... I mean, that's the only way... I've never thought about it before, but I think that's just it. And, I just always liked being involved, and so I do become involved." (Participant 14) "Oh, wow. I mean, I help a lot of people. I did before, and I even helped them in the building where I live [and that's what makes me feel needed by my community]." (Participant 4) "They're great people. I've gotten to know a lot of the people from the organizations as well, and it's given me meaning… But truly, having people be able to feel good

			about what they're doing is so important. That keeps them going. You need that. When you have no goals or all of a sudden nothing's going on, it brings on depression and brings on... Will they then take their meds as they should? That's all important stuff." (Participant 5) "And one thing the nuns told us was, do not just live in a community. You have to be about the community. As, do something positive to impact the community. So I don't know anything else. So it's just part of who I am. And then my dad served 27 years in the Philadelphia fire department. My cousin was one of the mayors of Philadelphia. So I come from a long line of family of service. So I can't take credit for it. It's just part of who I am because of how I was raised." (Participant 7) "Well, at this point of my life, and I think every human being perhaps comes to the point when you realize in a sense what your purpose is and what your destiny is. And I've come to realize that I'm meant to be a server, I'm convinced. A server who communicates, I'm convinced that, that's my destiny." (Participant 8) "Seniors also, of course, as well as being served, they like to feel as if they're needed. As if that someone needs their help, even if it's going out to schools and reading to the students. Because without a doubt, seniors have a wealth... Of course because they've lived long enough, they have a wealth of knowledge…They have information that they can pass on. And also, I

			guess, it's just part of being a human being, you always want to feel needed. You need to feel needed, feel valued. That adds to your own personal wellbeing also. Seniors, as well as things coming to them, various kinds of services coming to them. They also, want to feel as if they're needed. Knowing that, based on what I've done throughout my life that there's people out there who can benefit, even if it's going out and speaking to groups of people, youth. Even other seniors. Just knowing that what I've experienced and what I've accomplished could be of value to others." (Participant 8) "But you know, if I'm called upon like these meetings or whatever, and I don't go to all of them, but when I do, I try to have direct input" (Participant 10) "Again, my total association is how receptive the township is to having community members participate in, I'll say, the running of the government. I'll have to say that because we're an advisory board, the welcoming to come and join and participate on these other boards and advisory committees and things like that…I've had people in my neighborhood ask me questions, knowing I'm on the Board of Health. I can go find information for them and things like that." "Good. You get to know people and you learn experiences from. Because they tell their life stories to

			you. You learn a lot from older people, let me tell you. I mean, I'm old, but I like talking to the older ones. They have a lot of experience.But they're shut in." (Participant 12)
	Values & Interests	*Community-oriented, Participant-Identified beliefs , needs, desires that serve as a beacon to participation in their community.*	"I've always been community oriented. I've seen Hammonton undergo transformation within the last 15 years. I'm getting older myself and I want to have an enjoyable retirement period where I can be involved in the activities of community and create activities to make it more meaningful for other older adults to have an enjoyable life outside the home." Certainly want to keep the open space, the lack of congestion, the interconnectedness of people and the people's willingness to get involved in civic causes, to generally have people willing to serve in public offices or public positions. We have two volunteer fire companies that have been here for I think now ... one is 125 years old and the other is only slightly younger. And it's all volunteer. If there's a fire, they put out the fire." (Participant 2) "I guess getting to know the people more. I mean, we tend to have a lot of family people in Hammonton, but it's nice to reach out to other people. That's been good, I think. I've met a lot more people, interesting people, because we have a lot of new people in Hammonton. " (Participant 1) "How convenient it is. It's close to major highways, it's close to New York. It has enough places to do marketing

			and more than enough for me to shopping. What I really admire is how hard they've been working to revitalize the main street in Hammonton and setting up little shops and boutique shops and things of that nature. I really admire the community moving along in those lines… I said even now they have, I mean there's a shop called BreadHeads. I try to shop there when I can. They're opening a pickle store, whatever that is, but I plan on looking forward to it. But a lot of cute little things. And I don't know if it was politics or time to turn around or government grants, but the main street is looking pretty good. I'm pleased with that. I guess just keep the businesses and the churches, the parks. I don't want to see anything absolutely change. Over the years here, how long have I been here, since 86, so you do the math. I've belonged to Soroptimist, I was a participating member in a church. There's urgent care, I really give them a lot of credit. I think the urgent care is wonderful. I'm talking about the local mag, the Gazette, whatever. There's a little section every week that says what's going on in the community and they tell you what's going on in the churches, what's going on whatever here and there. But they used to say the canoe club every Monday, Tuesday, Wednesday, Thursday, and of course that's out. But I'm sure that will come back when things return to normal, Lord willing." (Participant 13) "You couldn't buy such a mixed neighborhood. They mixed and they all got along with one another and they

			learned to eat all different foods that they probably never would've been exposed to as did we. It was just terrific." Well, the medical facilities, the theater, the restaurants, our transportation of the train stopping here so that you can take it going East or West. Things I would like to see that at the large grocery store would stay here for shopping." (Participant 3) "…it's a very family-oriented community… I like it when there's things that draw people to be with one another. We didn't have eateries on Main Street for quite a while. And now we have several and they are doing very well and that's helping bring people together. And of course, Main Street, the organization, with their Third Thursdays, wonderful." (Participant 14) Well, my home, my apartment, the people. When you ask for something the office will do anything for you. That's about it. "Well, the people. There's nice people. Plus, I think it's a good place to live" (Participant 4) "I guess I like the size of it and it just feels like home. I feel comfortable. It's quite interesting, when I go to something where I'm a minority in my community being white, and it's really weird when you go to a place where it's all white. It's become part of... I value my neighbors. I mean, they've been nice. They're always

			there for me. Anything comes up, if I forget to bring my garbage in, the man next door will call, "Are you okay?" That's pretty nice." (Participant 5) "I live here many year, and I keep up my home nice. My front yard beautiful, have plenty flower come up every year. Long time ago, the soldier, he lend a room a here, and he like to put flower. He put all the flower, and now them come back every year. It front yard, it pretty… I really happy, and I happy in this house because I grow up in here… people are so nice. Police good. Police nice." (Participant 6) "People. And we have a lot of natural resources here. Beautiful natural resources. And there's something about Willinboro that gets in your blood and you just don't want to leave. I can not tell you how many kids go away and come back. And come back and says, I don't know why I came back, but I just had to come back. But [inaudible 00:04:53] My two oldest ones live in town and so many of their peers have come back home… Our main thoroughfares have flower-beds and trees in the middle of the road. We have one, two, four parks. We have The Creek Devon throughout the town. And the outskirts of uptown." (Participant 7) "I mean, true, everything around is local. You got a lot of restaurants. You got the medical facilities. I got all my doctors are very local…Well, this particular development that I live in is very, very, very quiet. There's no violence.

			That's the things I do value. If we had to travel miles to get to a medical facility, of course that's very important for me." (Participant 9) "one of the things that I absolutely love about living here in this particular area, is that everyone... Well, not everyone. Most folks here celebrate the seasons. For instance, I'm going to say from Valentines Day to Saint Paddy's Day, to especially in the Fall because I'm a Fall person. I love from October through the end of December, houses are decorated. Easter, the Township always has the big Easter egg hunt for the children. This Township celebrates the seasons and the holidays and the events, that causes the Township to come together… Township also does have, they've had it for the past 12 years, and that's the family community day that usually takes place in New Brooklyn Park here at the end of August. And any number of vendors come out, there's entertainment from the Camden County organization. They send out, what I call, a portable stage for us. So those are the things that I really do appreciate and have appreciated, being a part of living here in Winslow… The community wide, community based activities such as the family day that takes place. And again, I keep going back to the Ed Duble Center. Any and all activities that are sponsored by and held at the Ed Duble Center. " (Participant 8) "It's a very tight knit community. I have a very close relationship with the mayor and a couple of the

			councilmen. Beautiful community... They have community meetings, zoning board, each faction of the council... Very good. They really delve into individual problems and problems as a group" (Participant 10) "One, I like the location. I grew up in a city, so being where I have trees ... We're unfortunate that where my development is, we're not on top of each other, but it's a community. We're not in a ... I like where my house sits. I like the part of the township it sits in. I like the cohesiveness of the township government structure. And I will say the people that, like I said, are the original families that ever settled here, are all still involved in everything… There's a lot of features I really would like. I wouldn't want to see this become overdeveloped. I know there are ... I mean, it's like you're trying to have this balancing act. Oh, I don't want to drive all the way to Berlin to go to the supermarket. But then I go, "Well, what would I like to keep in terms of what the township looks like?" " (Participant 11)
	Giving to /helping others	*This is contributions to others in the community from money to expertise, to general support* *Nuances of volunteering informally (e.g. supporting a family member in need)*	"I just kept going, you know? I'm not one of these people that ... We have a lot of people that end up ... They'll leave a church if they don't like something, a priest or whatever. I never did that. I'm a person that sticks it out, and I can always find something that is good. I tend to be an explainer of things. Trying to make people understand why somebody's a certain way." (Participant 1) "It's very difficult being known to be an RN when your friends have issues and when to step away and be their

			friend and not their nurse, do you know what I mean?" (Participant 1) "You know I really don't know other than contributing money to fix the town clock or if there's a drive to like from the historical society or something like that. I don't know. I don't know anything that we can at our age really offer to the community other than not getting in the way of progress, I guess. I mean, it's you get to a point where I don't know what you can offer when you're 86, really." (Participant 3) "…we just had a young woman that I did teach and I know her mom very well and have for years. She was in a terrible automobile accident, and I've been reaching out to her and friends to find out what we can do for her family. And so far, it's been frustrating, except the only thing we can offer right now are prayers. And she's in them having multiple surgeries, all kinds of broken bones all over her body. So now I know in the future, they may need some help, and I would be very happy to help out with [Name's] care to give her parents a break. We'd love to do that…primary caregivers need a break every once in a while, and I'd be very happy to go over and do whatever I can to help out with Lori, even if it's for her mom and dad, to be able to go out to dinner or mom and dad be able to just get away for a day or whatever. I'd be very happy to go over and stay with her. And that's one of the things that I wanted to do with the Hammonton at Home. That was one of our

			goals, was to be able to relieve people who are primary caregivers for people with Alzheimer's and having their family at home and never got a chance to do it. I didn't get a chance to come to fruition. But now with what Lori is going through and what her family is going to be going through, I'd be very happy to do that." (Participant 14) "with my mom. She passed, I gave her a kidney... she needed a kidney. She was bad diabetic. She had it six years and she passed away from heart problems." (Participant 4) Oh, wow. I mean, I help a lot of people. I did before, and I even helped them in the building where I live… once I shampooed a lady's rug. That's before the bad chemo crept in…I'm always seeing if everybody's okay." (Participant 4) "I no cooked at all. But when them give me meat something, I giving and my neighbor she have lots of kids and I give them some. I share….but summertime I go under the tree and walk around and pick some nut up. And I give to the old people in the church. I do things like that…I went there and I go buy it. I go buy, but if I have some vegetables, something for my yard, I take with me and I gave to them. We share, we work together." (Participant 6) "I might go over and help them out or if they need some phone calls to find some information, I've done that, if

			they need somebody to go to the store, so those are some of the things I've done to help people" (Participant 7) "I think people in the township, my impression ever since I've lived here is they do like to help other people versus being helped. Does that make sense?" (Participant 11) "There's a church up the street, and years ago, I was having oil delivery. The gentleman that delivered my oil noticed I had not had my leaves picked up for years. And I was out trying to rake leaves up, and he just said, "Oh, I'm so-and-so up at the church up here, and I've got a couple of young boys that can come down if you can pay them something, that will do this for you. Just give them whatever you want to pay them." Participant 11: I think there's a lot of kids that could jump at that opportunity for community service or something. Then it would involve different age groups supporting other people in the community." (Participant 11) "They have information that they can pass on. And also, I guess, it's just part of being a human being, you always want to feel needed." (Participant 8)
	Socialize	*Engagement with others in social situations (AOTA, 2020)*	"Yeah. That's something on a Wednesday night, they have a dinner. It was meant for homeless people and really needy people, but these people did not show up,

			and what happened is, a lot of older people ... And I know at first, it was like, "Well, why are they coming?" But the thing is, there was a hunger for socialization, so they were needy for that. That's pretty much what has come of that. It's not just for monetarily needy people. They get a nice group, and then they get young people sometimes to help out. Kids have to do those service hours now, so it's a little mix of old and new. But like I said, I haven't been there in years, which is right around the corner from me. I could walk there if I wanted to. I still drive. I do still drive." (Participant 1) "I guess it's different if you're a shut-in than if you can be active. See, most of the people I know are active in the community, or they get around. They're involved with certain things. They're able to get to church, they're able to get to things. Just find something that you like and get involved in it. Because I know even down at the Canoe Club, there were some of the people would actually get together and go out to eat. For instance, the VFW has a dinner every other week. They just started up again. And we would have like two tables full of people that we call came from the Canoe Club. And again, it's showing up at these things. I mean, the price now is $10. I don't know if they raised it higher now, too, which maybe some people might not be able to afford. The dinner on Wednesday night was a little donation, like maybe if you didn't have it. The one I said at the other senior center in town, so that would be a thing people could just show up for. It's handicap access and all that. But I don't know how they would get there. But I do

			know that, at the Canoe Club, a lot of times people would go pick up other people, or take them home, once you got friendly. You would hear if, "Well, I picked this one up," or they did do things like that, because as you get to know people, you just know sometimes what their needs are." (Participant 1) "Because of the COVID, I couldn't go visit her, but I used to love sitting and talking and laughing with her. Just doing things along those... that's my main thing. And against most rules, some patients that I took care of, I haven't worked in three years, but are still friends. [crosstalk 00:06:09] and when the COVID's over, I may go visit them again, that kind of thing." (Participant 13) "I haven't been looking for any support aside from social based and then something to do." (Participant 13) "I said I would go to the canoe club, senior whatever. I would like to play cards, chat with people, compare recipes, tell war stories, whatever you do when old people get together. " (Participant 13) "I would like a book club. Now, the problem is, and anybody, if you tell me you like to read, I'm right up in your face, "Well, what have you read recently? What did you like, tell me about it," because I want to read it. I read too much. I would like there to be a book club. My problem is I would probably read the book in two days and it would be a month before they talk about it. But I really would like a book club in town. Every once and while I see one of the little tear offs in the supermarket but I haven't seen one in a long time. And of course now

			we're not going to be able to sit around and have a glass of wine and have a book club because you know the rest. I would like that." (Participant 13) "I've got The Galleys here and I just finished it and then we're going out and I'm going to give them my critique at dinner." (Participant 3) "He helps us out a lot on certain things. And we also had barbecues. And he'll have a barbecue in the back, and he always invited us and that sort of thing. He was just someone to really have a nice conversation with. You could really have a really good conversation." (Participant 9) "I'm pretty sociable. I don't sit there like a bump on the log. I'll talk to people." (Participant 9) "Well, again, communicating more with people is a key. Communicating with... Again, I hate to keep bringing this up, but communicating with people around my own age. Because that way we do have something in common. We could talk about various subjects. I'm very open-minded. And I would welcome somebody to just have a nice conversation with." (Participant 9) "I have to go back to the police department again. I was pretty well-known. Never had a problem within the community because my father was a policeman for 30 years, then I was. My brother was in a prosecutor's office and really never had no problems because... My

			thing about being a policeman, majority of the time, the best weapon you have is conversation. And I know how to talk to people and it's three fourths of the battle." (Participant 10)
Eliciting Engagement	Outreach	*The means by which older adults are reached out to/contacted by community/members*	"I would say, more community contact. By that I mean, actively focusing on reaching out to seniors. That is, actually going to where they live. If indeed there could be some sort of program or initiative developed around that idea, I think I'm just talking about outreach. Outreaching to seniors. Yeah, outreaching on a regular basis. Somehow set up a schedule, get volunteers who would actively outreach to seniors. Now, those volunteers should be young enough that, of course, they can go door-to-door or complex-to-complex. But yet, old enough such that seniors would trust them. That would be my idea." (Participant 8) "I think what's important here is outreach. And I think probably, if there was some sort of initiative set up whereby on a regular basis, lets say monthly, even quarterly. That there would be a group of volunteers who would contact seniors and say, "Listen, what is it that you think that we could provide for you in the area of entertainment? In the area of traveling?" Go to the source, ask them. Ask the seniors, what would they like? What would help them have a better outlook even about life? Considering the various kinds of health and ailments that they may be dealing with." (Participant 8) "I would say regularly scheduled activities that seniors, certainly, would be interested in. Because of course, I

			would say, as seniors age we have, some of us, less financial responsibility. And you have available to you a bit more financial surplus. And so if you're a senior who is, I'm going to say game orientated, then you want to play the bingo's, you want to go to the casino. And also, you want to be entertained, you want to go to shows." (Participant 8) "A lot of people don't reach out for them... There is... Environment nowadays is not what it should be." (Participant 10) "Try to get us access to this building up here. Because we weren't even allowed to use it for bingo because we wanted to get bingo going and they said we couldn't do it because they don't have homeowners insurance, and something about gambling, but we would use food, because there's family and everything." (Participant 12) "To help the older people that live around me because I live in a community where there's a lot of elderly and they're just stuck in their apartment. There's nothing to do here…We're not even allowed to have a yard sale, and that's a shame because we'd be making money for, would give it to somebody that needs it." (Participant 12) "I guess people to visit older people, maybe." (Participant 1)

			“Well, being part of the Board of Health, I'm aware that they survey and, first of all, know how many seniors there are in the township. I think there's the reaching out for all these senior locations that are residential areas for seniors. And then there's the fact of reaching out to people like me, and my neighbor across the street, and the one next door, who are not part of a "senior community." When you talk about what could you do to get seniors engaged, that's a very hard thing to read here. I have several neighbors here who wouldn't want you to do that. It's very interesting... Well, I think one of the questions is, it's some of the things when I'm thinking about how to answer you, the question would be to what level do you want to be involved. You know what I mean?” (Participant 11) “Most of the time I don't, but I'm just curious. [Friend] said, "Do it." So I said, "Okay." That's it boils down to. I didn't know if the information I give you is relevant, but I'm just telling you what I think. That's all.” (Participant 3) “Hammonton Health Alliance. So they also, it's a fairly new organization, I believe…And they reach out to the underserved population, especially the Hispanic community. “ (Participant 14) “And then St. Vincent DePaul, they picked up the food

			pantry and we have our church contributes to them, both product and financial, to continue their food outreach." (Participant 14) "I think if more of the community came out when the Hispanic community holds their little festivals, that would make a big impact. In the Fall, they raised the Puerto Rican flag at the town hall. So it's now permanently part of the flags in front of town hall. And of the people that were there, there were maybe five of us who were not Hispanic. And I think if there was more community support for those types of things, when those kinds of things... They also recreate at Easter, they recreate the carrying, they have a man carry a cross. It's sort of like a procession. If more of the rest of us joined in supporting those types of festivals, I think that would make a big impact." (Participant 14) "But I had kind of not given up, but thought maybe when I retired that would ... actually said it, not thought about it, said it, when I retire, that would be one of my goals to get, beyond that, a community center. But the email that came through was aquatic center. " (Participant 2) "So oftentimes, especially towards the end of the year, council will urge people to fill out the citizens (it's that call from COVID but not as much anymore, but it's still there). There's something called a citizens form a campaign, you can sign up and apply to be on a board of commission. So I'd say September, October, because

			they make their appointments in January. They're really urging people to fill it out, get more involved. I think the last two years more people have gotten involved because we haven't had a change over in council. We had three phenomenal women on council. Younger women. And they really inspired people to want to get involved. Cause at one time I was on 6 board of commission. People were signing up for it. Then now I'm one three. It's just your name, address, phone number, what board or commission that you're interested in. They tell you, put down three in case you don't get one. What your qualifications are for that particular board of commission. You can attach your resume if you want. And then you just submit it. On the back of the form it has all the boards commission." (Participant 7) "I guess those locked in their home, what their needs are and how they can engage more in the community. And last year the prisoners in their homes. Yeah. Yeah. So really getting to those who are maybe home bound and asking them what their needs are." (Participant 7)
	Motivated to act	*This is related to the ideas generated for positive change or the involvement one presently has in their community. It relates to the varied levels of participation and motivation to be involved in bringing ideas to action.*	"I'm, believe it or not, talking about these projects, horrible with tools. And they'd say, "We need an XYZ drill." And I'd say, "What the heck is that," to myself. I'd say, "Okay, does anybody have one?" And like in 15 minutes, four XYZ drills...I'd never seen the damn things before. People just want to give. If you give them the opportunity, if you create the structure. You don't say to them go build a playground. You say listen, "I'm working

			on this project, I could really use your help, you know what we really could use is" ... and then people, I think by nature mostly, would say, "Oh, I can do that, I'd love to help do that. Or that would be great for my kids or my grandkids." So getting the community involved." (Participant 2) "I don't know. I guess it's genetic. Like I said, my aunts were always involved in things, and my mom was years ago, but then they had a business that kept her busy. But when I was a young kid, it was very involved in PTA and the church, and all those kinds of things. Even the town and politics when I was growing up, so you would see that even though they had a business that they worked in. But then, she wasn't as involved. Well, she was involved with the hospital very much, with the volunteer group there." (Participant 1) "If somebody leads the way. I told you, I am not temperamentally suited to be a leader. There is too much politics and too many people who wan the credit. I just want to do it, I don't want no credit, just leave me alone and let me help." (Participant 13) I wouldn't have an idea of how to do it really. No. I don't feel motivated to bring the ideas to action. I mean, the people that and the people... No. I don't really... I've never really brought it up. I don't feel motivated to do it. Like I say, things may change. Things will change once the COVID thing goes away." (Participant 3)

			“Oh, I'm highly motivated. Highly motivated. And, sometimes I believe in saying to myself, "Why didn't you just listen? Why don't you just shut up?"” (Participant 14) “Yeah. I talked with the manager. She says, "Soon as things start to open, we'll open. We got to be extra careful." And they're all getting their shots here so they're going to wait until after that.” “Not really. I would talk to people about it, but I've got enough going that I have to get done myself that I can't- It's just I've got some much to do here that I'm not getting done. It's got to get done, so I really don't have that time. I do do the Parkinson's, and that keeps me motivated and keeps me feeling good about doing... Hopefully, people like it.” (Participant 5) “Yeah. [I feel motivated to bring these ideas to action].” (Participant 7) “Well, I don't know how to proceed about it, but it's worth discussing it. See what's what.” (Participant 9) “Surely, yes. [I feel motivated to bring these ideas to action]” (Participant 8)

			“Not really. I think I'm at the age where, just take things as what they are. Not going to change. And after that last election, I really got into it then. Nothing's going to happen. “ (Participant 10) “I would say I'm not looking for another level of activity at the moment. I think being on the Board of Health, like I said, I could freely choose to join the senior center, which really has wonderful activities in there, like really. I'm just not interested in that, personally interested in it at the moment. And I don't have the time to get involved in anything else because of work…When we meet on our Board of Health, we brainstorm all of these different ideas, and then they're brought up for consideration. Or if you have an idea that you don't know what to do with it, then our chairperson, she's and the township committee. She finds out how we can activate. Yeah, I mean, I bring up a lot of ...” (Participant 11) “We were talking about that the other night with my friend that we need to get something started here for people that are, I call them shut-ins because they never come out. And there's a lot of them that are willing to come out, but there's nothing to do here.” (Participant 12) “Well, it depends on what... There has to be something that I would really be interested in doing. There

			probably are things which I never really looked into to possibly volunteer for something. I'm not ruling that out. But it has to be something that I'll be interested in doing or helping. See what's available and, again, would it be something I'd be interested in doing?"Participant 9)
	Wonderful Experience/Nostalgia	*Community based events or experiences from any point in time that is considered to be wonderful. Often it is a reflection on a past time in one's life*	"I was on the volunteer rescue squad and that was a really big feeling camaraderie and getting something done that was useful." (Participant 13) "And we were sort of adopted by a very Italian family and we're not Italian. And they were very kind to us and we used to eat dinner over there a few nights a week. And that was... It was wonderful. I could never can get over the fact that we became so close. We were so different. And, I guess those are my best days here was my relationship with that family and their extended family too." (Participant 3) "I guess more community things were back when my kids were little and we would do things. Willingboro was different, but at first it was just swimming pools. There's a swimming pool in each." (Participant 5) "Yeah. You know, like every month right, them come in with the food trucks, them [inaudible 00:12:43]. Them come from [inaudible 00:12:44], them have all kinds of food and then pour in and leave food on the table. **And I go over there and help them.** I cannot open the

			backpack because my hand, and them hold the bag for me. I put cabbage, I put carrot, I put grape, whatever they have and leave on the table for people in the line to get. And when I come home, them gave me some. And then bring home and I eat them." (Participant 6) "Most of my good experiences was sports. I played everything" (Participant 10) "We did a lot of publicity on the first one. And people showed up. And I thought, oh man, this is somebody I don't know and they just saw it in the paper and came with their hammer, screwdriver or drill and just wanted to help. And it's nice to get ... when I was a kid, I was an outside kid. I see kids today are inside kids. My parents didn't ... we had boundaries, but we had freedom and you created and you'd use your imagination. And to me, that was a great way to grow up. I had so many friends. Just walk out the front door, and it was Baby Boomer era, and there were kids all over the place. And it was just a fun way to grow up**. So in some ways, it was replicating that in different contexts, so say how can we get people together to find the joy of just finding a project** and then, as I say, being able to look at it. It's not saying let's do a study and then the study sits on the shelf somewhere. No disrespect to your study... something you can drive by and say, yeah, yeah, remember when we built that thing, remember we needed the…" (Participant 2)
	Enfranchisement/	*Choice in available*	"I was just going to say it sounds like it's finding maybe

	agency	*opportunities*	that key interest. Being involved is solely ... for some people, solely in that, and really putting your energy and effort, and having some choice to do so." (Participant 11) "Even me, I personally don't want to be involved in a lot of things. That's the thing I choose. And what we do on the Board of Health satisfies my needs, and I have the ability to do those things. I personally don't really want to go on trips with the Senior Center at this point. Maybe there's a time I will. I like to do things with other people, but I also like to be by myself. That, I can only speak for myself." (Participant 11) "But at the same time, I want to be part of things. I don't necessarily want to be a part of things all the time either… That's the thing I choose. And what we do on the Board of Health satisfies my needs, and I have the ability to do those things. I personally don't really want to go on trips with the Senior Center at this point. Maybe there's a time I will. I like to do things with other people, but I also like to be by myself. That, I can only speak for myself.
	Research	*Scholarly activity that involves older adults as participants or as investigators*	"What inspired me to say yes was [Friend] asked me to do it, really. I don't usually... I do do things like this. I'm involved in one at Harvard, a long time study that I've been in since probably 1970. So sometimes I do things like this." (Participant 3)

			"we've gathered some little stories. We haven't done the in-depth ones yet, what we call the thick stories. We're gathering thin data." (Participant 14) "Then I got in touch with people who were doing research, and they each had a table that people could go to in advance. My main goal is sign people up, be my guest. That's the point because we need to get people in research. Well, my underlying goal was to get people into research, sign them up because that's the only way we're going to go forward and that's so important." (Participant 5) "Believe it or not, I'm doing surveys, and I'm getting paid for it online. Yeah, it's not a whole heck of a lot of money, but every little bit helps, as they say." (Participant 9) "And it was interesting, you focusing in this area because this area is fairly neglected in research. And I can say that because I've taught at several schools in the South Jersey area, and we're out in the middle of nowhere." (Participant 11)
	Information access	*Knowing where to find information; multiple ways for availability of information;*	"I don't know, because everything is advertised a lot, whether it's on, we have a town station, we have a town newspaper, we use flyers a lot still on ... We don't like to junk up the stores, but we do end up putting flyers in

			the windows for various things that go on around town, whether it's other churches ... Encouraging people to show up. But it doesn't always happen. I don't know how you…" (Participant 1) "The secret is keeping people aware, but how do you do it until they need it, do you know what I mean?" (Participant 1) "I'm talking about the local mag, the Gazette, whatever. There's a little section every week that says what's going on in the community and they tell you what's going on in the churches, what's going on whatever here and there. But they used to say the canoe club every Monday, Tuesday, Wednesday, Thursday, and of course that's out. But I'm sure that will come back when things return to normal, Lord willing." (Participant 1) "…She said she encountered a 68-year-old woman who said, "I moved here four years ago and how can I get involved? I want to get involved?"" (Participant 14) "Well, information is disseminated through mostly online… So, the newspaper is the Gazette, @hammonton.com, I guess. They have been helpful." (Participant 14) "It's hard to get ahold of anybody. It really is.." (Participant 4) "I guess, mainly, when the services... when I need certain things, they're available. Included. Well, just to

			know if I have questions or anything, you can call and ask about help for things, whether it be something for the house or just keeping up. That's mainly just knowing that community's there." (Participant 5) "Oh, yeah. Any kind of thing, take your car off the road when it's going to be snow and things, they use whatever the system is where they can call everybody." (Participant 5) "I cannot read good." (Participant 6) "I would presume that the senior center would deal with that kind of information and do different things on that. They've really built it up now. It's in one of the old schools that were closed down. Evidently, they provide a lot. I keep busy on my own with other things, but I would think that's a real plus for the community…. I think the fact that there's no longer newspapers to know... Well, it's not there's no longer, but people don't get the newspaper anymore so they don't know as much about what's going on. I don't know what other way they... Well, that's probably why they do the calls because there's no newspaper. That's the only way to let people know of what's coming up." (Participant 5) "Well, actually having information at libraries but also getting some information maybe into doctors' offices and to the senior center and other places and churches, churches and synagogues, I mean, just to be able to get the information out about what's available." (Participant 5)

			“The form is on the website. The form's in the municipal building. And then council will reiterate and say, talk to me. Please fill out the forms. There's boards and commissions that have vacancies. Or slots that are available. Please fill them out… On the back of the form it has all the boards commission.” “Small change? Probably access to information. Finding ways that people get access to information. Because a lot of seniors are not on the internet, a lot of seniors don't have email. And they tend to get information the old-fashioned way, like newspaper. So I don't think they're getting information sometimes in a timely basis because we're trying to figure out how to get information to them. [Our community uses] Council websites and other websites. Other entities in town. Email. Facebook. And so I would say social media. Every so often there may be be a robo call, but they might not pick up the phone…And got it back, our community newspaper, but you have to go to places to pick it up. It's not delivered. So, it's been difficult trying to get information out to people. And it's not just seniors, it's everybody… That's one of those we're struggling with. Trying to figure how to get information out.” (Participant 7) “But, yeah. And again, I don't even know what's out there... ... because I never really looked on the computer or did anything… I don't even get any... Oh, the only thing I do get is some kind of little magazine from the Township.

			And I'll get that around close to Memorial Day, and even that's not very... It just gives you information about trash. … Well, again, communicating more with people is a key. Communicating with... Again, I hate to keep bringing this up, but communicating with people around my own age." (Participant 9) Emily: How about information? Do you get information regularly from the community or from the place that you live? Participant 12: "No. Nothing." (Participant 12) "Right now, we depend on the Board of Health. Like I said, information is distributed out through social media and then our Board of Health members. We distribute flyers to people we know would be interested in specific things. But I honestly don't know. It's just such a ... The culture of the people that live here, and again, I'm only talking about the region that I reside in, is so different than other places I've lived in where people really just want you to mind your own business. But at the same time, I want to be part of things. I don't necessarily want to be a part of things all the time either." (Participant 11)