Gentrification and Aging-in-Place: Examinations of the Older African American Population in Portland, OR

Chanelle P. Parris
Portland State University

Follow this and additional works at: https://pdxscholar.library.pdx.edu/honorstheses
Let us know how access to this document benefits you.

Recommended Citation
https://doi.org/10.15760/honors.784

This Thesis is brought to you for free and open access. It has been accepted for inclusion in University Honors Theses by an authorized administrator of PDXScholar. Please contact us if we can make this document more accessible: pdxscholar@pdx.edu.
Gentrification and aging-in-place: Examinations of the older African American population in Portland, OR

by

Chanelle Parris

An undergraduate Honors Thesis submitted in partial fulfillment of the requirements for the degree of Bachelor of Science in University Honors and Psychology

Thesis Advisor
Raina Croff, Ph.D.
Assistant Professor of Neurology, OHSU

Portland State University
2019
Introduction

In the United States, Black populations are nearly twice as likely to develop Alzheimer’s disease (AD) and related dementias (ADRDs) compared to their non-Hispanic White counterparts, suggesting a racial health disparity (Manly, Jacobs & Mayeux, 1999). Additionally, these groups largely present with AD at an earlier age, but later in the disease course (Barnes & Bennett 2014). Similar ADRD increases are seen in Latinx populations who present with rates 1.5 times greater than White groups. This inequality is of particular relevance in the US which continues to grow and increase in racial and ethnic diversity. Moreover, as the option to age-in-place becomes more accessible, the role of the immediate neighborhood increases in significance as one’s mobility decreases. While the process of gentrification continues to be embraced in US, its effects primarily negatively impact minority ethnic populations. The aim of this study is to investigate the effects of gentrification on the older Black population in the North and Northeast neighborhoods of Portland, Oregon. Specifically, in what ways does neighborhood change manifest and how does this ongoing and pervasive change affect the cognitive health of an aging minority group?

Alzheimer’s disease is neurodegenerative, characterized by severe cognitive impairment and memory loss, with age being the greatest risk factor. An individual’s risk of an AD diagnosis increases by 10% starting at age 65, then by 50% when aged 85 years and older (Barnes & Bennett, 2014). As research has yet to identify genetic differences of the disease on the basis of race or ethnicity, it is important to examine alternative factors and influences that may explain the disparity in ADRD rates. Black populations largely present higher rates of comorbid diseases, such as diabetes, hypertension, vascular heart disease and some cancers, that may underscore an increased vulnerability to cognitive decline and AD development (Mays, Cochran...
& Barnes, 2007). Additionally, much of the early Alzheimer’s research was conducted using non-Hispanic White sample populations (Barnes & Bennett, 2014). These results were then generalized for a diverse population and used to inform the accepted understanding and presentation of the disease, its progression, diagnostic criteria and treatment options. Though efforts to investigate the health discrepancies have increased in recent years through the use of more diverse samples and studies that independently analyze these groups, the process is not timely. Current estimates indicate that by the year 2050, the population of older adults in the US, individuals aged 65 years and older, will grow to 20%; and of that proportion, 42% are expected to be minority ethnic people (Barnes & Bennett, 2014). This is expected to create an increased medical burden as AD is currently the sixth leading cause of death in the US, fifth among older adults (Matthews, Xu, Gaglioti, Holt, Croft, Mack, McGuire, 2019).

Emerging research that employs the sociocultural perspective takes into consideration the mitigating factors that may affect the health of minority ethnic populations. The Health Belief Model suggests that past and current experiences with racism have created barriers that limit access to proper brain health information and adequate brain care (Rosenstock, Stretcher, Becker, 1988; Sayegh & Knight, 2013). To support this claim, we see that Black populations broadly underestimate the danger of AD, as well as their individual risk of diagnosis. Moreover, older Black adults are more likely to dismiss the early signs of cognitive decline, assuming instead that it is a normal part of the aging process, a direct consequence of health miseducation (Barnes & Bennett, 2014). As a result, when they do eventually seek medical attention, they often present at more advanced stages of disease progression.

In order to more directly address this disparity, non-pharmacological solutions are needed for groups at risk or currently suffering from increased rates of cognitive impairment. Modifiable
factors such as exercise, social engagement and cognitive stimulation have been proposed as preventative care alternatives that may reduce or delay progression of cognitive decline (Alzheimer’s Association, 2016). Research finds that frequent engagement in cognitively stimulating activities, together with active social networks, is related to a reduced risk of ADRD (Wilson, Mendes de Leon, Barnes, Schneider, Bienias, Evans, Bennett, 2002; Barnes & Bennett, 2014). As the option to age-in-place is becomes more appealing to older adults, the neighborhood they inhabit becomes an important daily motivator for the implementation of these positive brain health activities (Smith, Lehning & Kim, 2018).

In the United States, gentrification has more than doubled in the last three decades – from 9 percent to 20 percent (US Census Bureau, 2013). This process most frequently affects low-income, minority ethnic neighborhoods, where residents are forced out and rapid change progresses without consideration for long-standing community networks. Though the topic of gentrification, in terms of urban planning, is well informed; there is a lack of research investigating the psychological effects on members of the resulting displaced community. As of 2013, Portland, Oregon ranked the largest and fastest gentrifying city in the country, with 58% of its neighborhoods gentrified or in the process (US Census Bureau). In areas such as Portland, where large minority groups have historically lived, neighborhood losses and broken community ties can introduce undue stress and social isolation to an older population (Burns, Lavoie, Rose, 2012). As the trend toward gentrification and neighborhood change continues in major US cities, it is important to understand the psychological stress placed on the affected populations, which can negatively impact physical, mental and cognitive health (Mays, Cochran, Barnes, 2007).
Methods

**SHARP Program**

The Sharing History through Active Reminiscence and Photo-Imagery (SHARP) program led by Raina Croff, Ph.D., at Oregon Health & Science University (OHSU), is an intervention aimed at improving the cognitive health of the aging Black population in Portland, Oregon (Croff, 2018). The study’s primary objective was to increase physical activity, cognitive stimulation and social engagement that could delay or reduce cognitive decline that leads to dementia. This was achieved through the use of culturally relevant 1-mile walking routes through historically Black neighborhoods in North and Northeast Portland. Routes were tracked via GPS and preprogrammed for participants on tablets provided by the SHARP program. In addition, each route utilized three Memory Markers and conversational reminiscence prompts that work to engage participants in conversation related to local history and place-based memories. Memory Markers were designed to be culturally meaningful, archival images of Black life and community within the neighborhood from 1940 to 2010; this time period reflects a great shift from prosperity to community disconnection as a result of neighborhood change.

The study, which took place in 2017, engaged 18 community-dwelling African Americans aged 55 years and older without a prior Alzheimer’s diagnosis in 6 months of small-group walking. Baseline Montreal Cognitive Assessments (MoCA) were administered at the beginning of the study to determine eligibility and establish a baseline. Based on the scores of the MoCA, 8 of the 18 participants were found to have mild cognitive impairment (MCI). Research concludes that individuals with MCI experience more memory loss than is normal for their age group (Alzheimer’s Association, 2016). Participants were then organized in groups of three, referred to as triads, that remained intact throughout the program’s six-month period. Groups were
organized with two participants with normal cognitive health and one participant with MCI. The use of triads allowed for open communication and discussion with like-minded individuals with similar shared experiences.

Participants were encouraged to speak openly and honestly about their experiences in the neighborhood, as well as, to describe and/or name surrounding locations and speak of any information relating to history of place. Memory Markers and the present built environment functioned not only as a form of cognitive stimulation during the route, but also to create a collaborative celebratory history of the Black community in the area. Many of these participants have been fixtures in the community for decades and have witnessed the changes over time. This acted as a further incentive for participants and illustrates the importance of place, both past and present. Together, in the space created by SHARP, participants were free to speak, express and reflect on their feelings about gentrification, the changing city landscape, and their new place in a different social environment. Finding alternative healing treatments for larger groups, such as the model presented by SHARP, creates safe spaces for collective healing and introduces proactive, culturally relevant brain health activities which may delay or reduce premature cognitive decline.

**Analysis**

Audio from each walk was recorded, transcribed and coded into storytables. Storytabling is an initial coding process developed by Dr. Croff whereby narratives are summarized and free-coded based on emergent themes and stories. Storytables serve as a sort of index for the large body of transcribed narratives. The storytabling method was performed by trained research assistants in an effort to reduce rater bias. For the purposes of this study, these compiled storytables were then re-coded in order to reflect a shared language and develop a codebook.
Twenty-seven walking narratives were selected for analysis; though two were ultimately excluded at the start due to incomplete file uploads and audio recordings, resulting in a total of 25 storytables that each reflected a different walking route from the perspective of all 18 participants.

In order to create a cohesive codebook, three complete readthroughs of the storytables were conducted utilizing Glaser’s Grounded Theory, an inductive coding technique that derives themes and codes organically based on the natural flow of discussion (Glaser, 1992). The first readthrough worked to establish a basic understanding of the narratives and to familiarize the analyst with the material. A second round of analysis resulted in rudimentary codes and subcodes that were created based on emerging themes and organized based on the shared language of the literature and the SHARP Program. The third and final round of coding sought to condense, define and organize the themes, codes and subcodes into the codebook. The resulting codebook was then only edited to reflect minor definition changes. Codes and themes related to gentrification were then examined and conceptualized in order to address the question of this study (see Table 1).

**Results**

The coding process resulted in many themes that contribute to the question of the impact of gentrification on older Black cognitive aging. This was critical in order to establish an understanding of the history and community built in North and Northeast Portland by the Black population. This analysis focuses on three emergent themes: neighborhood and community, memory and neighborhood change.
NEIGHBORHOOD & COMMUNITY

Neighborhood

The first code that emerged during analysis, ‘neighborhood’, arose based on general mentions of place, as well as, conversations and discussions about the role and importance of specific neighborhood establishments. For instance, as many participants had grown up in the area, they often pointed out familiar locations of interest, such as the schools they attended, parks they played in and churches their family attended. Additional sub-codes within ‘neighborhood’ included discussions of neighbor relations and transportation throughout the area. Examples of familiar establishments and discussions of how place operated in daily life reinforces the strong connection and significance of the physical locations and landmarks.

Community

The term ‘community’ was created based on discussions of the tight-knit community (through connections with fellow community members) and the role participants themselves played in their neighborhood. Participants often spoke of their relationships and connections to fellow community members that were deeply ingrained within the neighborhood. Individuals had either grown up or lived in the area for a significant amount of time, resulting in close community and familial ties. It was common for family and friends to be spread throughout the neighborhood, illustrating a multi-generationality that helped establish the Black community. As one individual described:

We had a big family here. My grandparents are here. All my aunts and uncles are here. On my mom’s side. Yeah. And yeah so I was always aware. And they were
all living in different parts of the city, so there was no place you went where they
didn't know.

Participants who have lived in Portland’s historically Black neighborhoods since their childhood
reflected on how this close proximity established strong networks of support:

Yeah, but along with knowing the people would report on you, it also gave me a
sense of security because I knew that ... Oh little Maxey? You know? Yeah. Yeah.
And people would look out for me. And I wasn't afraid. Because everybody knew
everybody, and I think that is what's so important about community that I miss.
And I think it probably prompted me to get involved with the Black Educational
Center with my son. Because that really was a village. [...] Really living in a
village where we did look out for each other and each other's children.

It was concluded that the creation of community is built on the sense of belongingness,
acceptance and kinship that is created through the relationship of the physical space and the
people within it.

Furthermore, conversations about and relating to community involvement worked to
emphasize the current importance of community. This was illustrated through discussions of
volunteering, community outreach, and the various ways in which participants kept up-to-date
and active regarding changes in the neighborhood.

MEMORY

Community mapping (based on spatial memories)

As they walked, participants frequently pointed out familiar locations and were able to
name or describe its history based either on their connections to others (family members, friends
and other community members) or through their own personal experiences. Detailed stories and
histories that were formed around the place in question, were termed spatial memories; or, memories and knowledge that emerged due to the participant’s specific location on the route. In a process later termed community mapping, participants displayed an ability to map the old neighborhood organization that they were once familiar with, and that no longer exists, on top of the existing landscape. This was achieved by relating their position along the walking route to memories and recollections of past experiences and interactions with people in and around the area, as seen in the following interaction:

Speaker A: *Okay. This is the beginning of Willy's corner.*

Speaker B: *Yeah, right here.*

Speaker C: *That's why you got a picture up there. Is that Willy? Yeah.*

Speaker B: *The big record.*

Speaker C: *Yes.*

Speaker D: *Oh, that's nice.*

Speaker C: *They putting these [historical plaques] on the corner now.*

Speaker A: *To reflect what used to-*

Speaker C: *That used to be here.*

Speaker D: *There was a record shop, our only black record shop?*

Speaker C: *Yes.*

Speaker D: *You would have never thought. Willy was not outgoing, he was quiet, he had this barbershop, and he did that to the day he died. And he had the record shop, so it was two buildings with space in between them. And that was the only place we could come buy our records. Our little '45s back in the day.*
Speaker C: Yeah.

Speaker A: *The best part, who was it? [name]*, they used to be in the record shop.

   Oh, and [name], the one with the eye.

Speaker C: Oh, yeah.

Speaker A: [name]?... We used to go in there and he would just... We would act like we were buying records, but we would go in there just to hear the music, and it turned into a mini party. And he don't kick nobody out but we all having a good time.

However, both these processes, spatial memories and community mapping, were most effective when participants were previously familiar with the neighborhood. If they had not lived in or frequented the area of interest, then these processes were underdeveloped or nonexistent. Analysis also illustrated that neighborhood change could easily disrupt these memory and recall abilities.

Lastly, the shared backgrounds of the SHARP participants (all long-standing residents of the N/NE Portland neighborhood, with similar race and age experiences) facilitated a collaborative problem-solving environment. When walking in less familiar areas, triads often shared fragments of memories or location information in an effort to remember and remap the old neighborhood. This process was referred to as active reminiscence, as the participants were working together in the moment to recall related information in an attempt to remember.

**NEIGHBORHOOD CHANGE**

It is important to recognize the ways in which gentrification is observed and noted by those directly affected by it. This was achieved through the examination of the code
‘neighborhood change’. Additionally, this code works to illustrate the influence of the ‘neighborhood’ and ‘community’, respectively.

**Identifying change**

While walking along SHARP routes, participants generally first recognized ‘neighborhood change’ through observable differences in their surroundings. These included changing appearances of houses and building architecture, building and location history (often discussed in terms of former neighborhood establishments that were enjoyed in the past that have since been replaced), and the constant local construction that signals destruction of history. Though participants displayed a general unease and displeasure about business changes and property turnover, there were still places that intrigued participants. Additionally, they acknowledged positive improvements that have occurred in the area (repairs to roads or sidewalks).

A noticeable issue that arose during the walks was a growing frustration about participant’s inability to remember certain location information and not being able to map the old neighborhood organization.

Speaker A: *I just don’t remember.*

Speaker B: *And that’s what happens when the community change. It just erases the whole memory of whatever was here.*

Speaker A: *Right.*

Speaker C: *Right. It's too bad there aren't photos of that.*

Speaker A: *That's the problem with it.*

Speaker B: *Then people age, and they're gone.*

Speaker C: *Right.*
This problem was understood to be due to the ongoing and rapid changes that have occurred in recent years. Even when unable to properly map an area, either due to lack of experience in the neighborhood or from the lost history, they were able to identify change through other visual cues such as architecture, color, design and style of nearby houses and businesses. This was a technique utilized by participants to determine if gentrification had reached the area yet. The modern styles and differing color palettes often meant the property had changed hands and was now White-owned, suggesting gentrification. Additionally, these context clues could relate information about the neighborhood broadly. For instance, the more original homes that were still intact, the less gentrification that had affected the neighborhood. Though similar tactics were enforced to evaluate businesses as well, the changing homes were a frequent and upsetting theme. Lastly, some participants were seen to adapt to these lost context clues by utilizing other tools, such as technology/the Internet, social media and people they ran into on the route to try to problem solve.

**Displacement and demographics**

Yet another aspect of gentrification discussed by participants was the role of displacement and the resulting change in population size and demographics. In the North and Northeast Portland neighborhoods displacement has been historically facilitated by the processes of redlining and pricing out, in which increased rent forces residents out of the neighborhood. In the area of interest, much of the displaced population has resettled in the East Portland neighborhoods along the edge of the city, allowing a new demographic to take over. The influx of this new group, which is primarily White, younger and of a higher socioeconomic status, facilitates gentrification. This is achieved through a power shift that stems from the change from Black to White home and property ownership. The changes to the neighborhood are viewed as a
capitalist venture targeted at enticing and accommodating this new desired demographic and the increasing population size of the neighborhood. As pointed out by SHARP participants, it then becomes difficult to find certain products and services because local establishments are no longer serving them or their interests.

Additionally, participants spoke about the ways in which they remain active and support the remaining Black community in an effort to counteract continuing neighborhood change. Participants demonstrated a substantial knowledge and history of the changes in the neighborhood. As they walked, many displayed a strong awareness of local establishments that had been lost over the years and updated each other about the businesses currently at risk of being shut down. At an individual-level, we see community activism through participants’ past and current attempts to dissuade fellow Black community members from selling their property: as well as, through active participation in neighborhood decisions such as what should be built on newly available land.

Discussion

In order to understand the ways in which the aging Black population is affected by gentrification, we first needed to build an understanding of how the neighborhood and community operates for this specific group. This was a vital first step especially for this population, because culture greatly impacts the creation of Black community. A strong attachment to place can be observed in the long-time residents, whose lives have become deeply ingrained in the neighborhood. Results demonstrated that the concept of community is very important to this group because of the interconnectedness between place (i.e. neighborhood) and the family, friends and fellow community members within it. This is even more significant for
this Black community where fellow residents and neighbors often illustrated multigenerational ties and long-standing community networks. Participants who grew up in the area reflected that these familial and communal ties were built on trust and safety, which produced strong networks of support.

With the rampant and pervasive change that has been occurring in the neighborhood, participants disclosed a growing disconnection from the community. This was understood to be the result of the loss of friends and fellow community members who have been displaced, power shifts in property and home ownership which repress the voices of the remaining Black residents, and the overall loss of neighborhood history and character through ongoing visual changes and business closures. Though participants make efforts to remain active and heard in the community amid the constant and pervasive change, stress and bitterness identified during analysis has been linked to unhealthy physical and mental health.

We can see the effect of attachment to place and long-standing community ties in participants’ memory processes. The application of one’s personal knowledge and history of an area in an attempt to map their surroundings is referred to as community mapping. Community mapping is similar to the psychological theories behind spatial cognition and mental maps (Siegel & White, 1975; Newcombe & Huttenlocher, 2003). However, whereas mental maps work to represent, locate and track physical and geographical layouts, the process of community mapping emphasizes the importance of an individual’s attachment to their neighborhood, through the relationship between place and one’s personal experiences, memories and interactions with others. The development of these maps has been created and reinforced through daily involvement in the neighborhood over time. However, analysis showed that the processes of gentrification easily disrupt memory processes.
Analysis revealed several ways in which gentrification is recognized by the remaining residents. Gentrification appeared to be first observed in the physical changes in the neighborhoods. These changes were identified as arising in the form of new and differing architecture, loss of culturally significant establishments, name changes and constant construction that results in a general reorganization of the neighborhood. The level of widespread change that is witnessed in the area of interest means that the visual clues that participants rely on in order to orient themselves and identify their location, no longer exist and their surroundings become unrecognizable. While walking on SHARP routes, participants expressed irritation and frustration when unable to remember or map the previous organization of the neighborhood. The participants – long-standing community members who either grew up or lived in the area for decades – largely found these instances of change unnecessary and increasingly frustrating, attributing local construction to the destruction of neighborhood history and Black community.

Current research suggests that the older adult populations that age in gentrifying places report higher stress levels and lower overall mental health (Smith, Lehning & Kim, 2018). Rapid and ongoing changes in gentrifying neighborhoods make spatial and geographical positioning difficult for aging adults; and may result in confusion, disorientation and an increased risk of getting lost due to unfamiliar surroundings. In order to cope with or avoid felt experiences of stress and discomfort, individuals may reduce the amount of time they spend out in the changing neighborhood. Decreased interaction with one’s environment promotes social isolation and exclusion from the community (Burns, Lavoire & Rose, 2012). Further effects can be seen in decreased exercise and social activity levels, both of which enable advancement of cognitive decline.
Using a model that encourages participation through a culturally celebratory tone, the SHARP program allows participants to reintegrate themselves in the neighborhood in a supportive environment with people who have similar life experiences. In the process, individuals are able to remap and refamiliarize themselves in the changing environment, boosting confidence while increasing physical activity and social engagement.

**Funding**

This work was supported by generous funding from the Alzheimer’s Association Research Grant to Promote Diversity AARGD-17-44365, the Oregon Roybal Center for Aging & Technology (ORCATECH; P30AG024978), the NIA - Layton Aging & Alzheimer’s Disease Center (P30 AG008017), and by Cooperative Agreement Number U48DP005006 from the Centers for Disease Control and Prevention. SHARP is administratively supported by the Oregon Prevention Research Center. Student research assistance came from the NIH BUILD EXITO Program. PreSERVE Coalition serves as SHARP’s Community Advisory Board.
References


Table 1. Condensed codebook illustrating the 4 central themes emphasized in this study.

<table>
<thead>
<tr>
<th>Code</th>
<th>Sub-Code</th>
<th>Code Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Community</strong></td>
<td>-Community members</td>
<td>Examples that illustrate the sense of community and belongingness created by a combination of the neighborhood and community members and close community ties</td>
</tr>
<tr>
<td></td>
<td>-Disconnection</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-Involvement (Volunteering, community projects, community activism)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-Multigeneration</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-Community spaces</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-Community engagement</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-Community pride/city pride</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-Church and community</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-Black community spaces</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-SHARP participants</td>
<td></td>
</tr>
<tr>
<td><strong>Neighborhood</strong></td>
<td>-Activism/engagement</td>
<td>Examples that discuss the role of neighborhood, general mentions of place and establishments in the neighborhood</td>
</tr>
<tr>
<td></td>
<td>-School</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-Development</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-Houses</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-Deviance (crime, drugs, arson, safety)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-Community mapping*</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-Neighbors/neighbor relations</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-Church</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-History</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-Observations of surroundings</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-Neighborhood establishments</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-B/W relations in neighborhood</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-Neighborhood improvements (repairs to roads or sidewalks)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-New neighborhood establishments (+)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-Transportation (public transit, TRIMET, bicyclists)</td>
<td></td>
</tr>
<tr>
<td><strong>Neighborhood change</strong></td>
<td>-Building/location history</td>
<td>Related to change in the neighborhood</td>
</tr>
<tr>
<td></td>
<td>-Appearance of houses or buildings in the neighborhood</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-Changing racial demographics &amp; relations</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-Displacement</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-Constructions=destructions</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-Traffic (-)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-Parking (-)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-Increased number of people (-)</td>
<td></td>
</tr>
<tr>
<td>Memory</td>
<td>Related to the various occurrences of memory that emerged. Including active reminiscence, the act of trying to remember, community mapping, and memory loss.</td>
<td></td>
</tr>
<tr>
<td>--------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>-Memory aids</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-Active reminiscence</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-Spatial memories</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-Community mapping*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-Active memory -Community mapping (change)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-Keepsakes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-Memory loss frustration</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>