Ordinary Innovations of Older Adults: An Interview Study to Understand Interest Development in Aging

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Abstract

Building and maintaining personal interests are important for older adults to promote an active and healthy lifestyle. In this paper, we discuss older adults' *innovative* ways of developing their interests and the related influence on their health and well-being. We conducted an interview study with 20 healthy older adults to investigate the practices around interest development and the impact of those experiences on their quality of life. We found out that older adults pursued *unexpectedly creative* ways to develop their personal interests, which not only contributed to emotional well-being, but also significantly influenced the liveliness and the sustainability of their local community which in turn sustained active aging.

Author Keywords

Active aging; ordinary innovation; interest development; older adults.

CCS Concepts

• **Human-centered computing** → **Human computer interaction (HCI)**; *Empirical studies in HCI*

Introduction

Active aging advocates for the viewpoint that older adults are the initiators who have the ability to maintain their health and well-being [e.g., 1, 6]. In this approach, older adults are not considered to be users with *deficits*, but rather they can be the guardians of their own health [[2]], provide assistance to family and friends [[8]], and construct their local community [[1]]. Prior research in this approach has focused on understanding the active elements of aging, such as socializing [[9]], participating in leisure activities [[4]], volunteering and engaging in community building [[1]], and exercising [[5]].

Using the active aging approach to understand older adults, we investigate healthy aging through the lens of interest development. Previous research suggests that engaging in hobbyist activities has a positive impact on older adults' social well-being [e.g., 4, 7]. In this paper, we further investigate the development and maintenance of interest-related activities (e.g., gardening, knitting) and its' influence on older adults through the following research questions: 1) how do older adults develop and maintain their interests, 2) what are their practices around interest building, and 3) how does interest building play a role in active aging.

Our study contributes to the active view of aging through the lens of interest development. Rather than just joining a group or adhering to socially normative expectations, we found out that older adults are actively engaging in *innovative* ideation and actions in pursuit of their interests and to continue developing their interests for a long term.

Method

We conducted 20 semi-structured interviews with older adults to understand their practices of building and maintaining their interests. In particular, we asked for examples, stories, and scenarios that keep them in pursuit for what they liked to do, and how those experiences contributed to their health and well-being. Each interview varied from 90 minutes to three hours.

All of our participants were recruited from either two senior centers or from community groups in a medium-sized city on the East Coast of the United States. They were healthy older adults aged 65 years old or above. Local heritage preservation, environmental sustainability, socializing and volunteering were some common interests shared by the participants.

All interviews were fully transcribed and coded iteratively using the comparative analysis method introduced by Glaser and Strauss [[3]]. In this paper, we presented relevant themes around ordinary innovations related to interest development.

Ordinary Innovations

Our study suggests that older adults took an active role in generating ideas around their interests and passions and turned those ideas into actions. We call those ideas and actions the *ordinary innovations* of older adults. Not only did those innovations enlighten older adults' self-interest and emotional well-being, e.g., feeling good about engaging in hobbies to help others, they also played a significant role in the *liveliness* and the *sustainability* of a local town, business, and organization.

Participant 16: *"We needed a bicentennial history, so I wrote it. It's something that is just, I find it very interesting. And I wanna make sure that it's preserved, and I wanna make sure that it's preserved correctly..."*

(female, interested in history)

Participant 15: *"It's important to me to try to hook people up with the different services that exist...Because the vast majority of visually impaired people never find their way to services, because they don't know about it...We're still our own distinct organizations. But before everybody was working independently of one another. We knew about each other, but we weren't coming together. And that coming together and that connection, I think, is something I'm passionate about."*

(female, interested in volunteering)

In general, our participants expressed feeling good when the things that they enjoyed doing ended up making a positive impact on others. For example, P17 was a retired web developer whose passion was building applications. He was proud and satisfied that he once wrote a web function to protect his friend's website from malicious attacks. The process of developing the web application engaged P17 in creative thinking and helped him to maintain positive emotions.

Aside from personal health benefits, we also identified a broader impact arising from older adults' ordinary innovations. That is, they devoted their efforts to the liveliness and the sustainability of their community as they constructed their own version of an active and healthy lifestyle through interest development.

Liveliness to a local town

From the interviews, we found out that older adults' everyday innovations had a positive impact on local businesses and culture.

For example, P16 had a great passion for heritage preservation because her family has lived in the United States since the American Revolution (1776). She was motivated to write the bicentennial history of her town because of her interest in the past and her knowledge of the things that happened over many years. She told us that it was important to her to write the bicentennial history since she hoped to correctly preserve this history for others (as described by participant 16).

Not only did she voluntarily write the history, she also actively contributed various heritage preservation initiatives from ideation to execution. For example, she and her best friend worked on an idea they came up

with together, which was to promote the economic development of the main street of their town. By the time she talked to us, she was reaching out to different historic organizations to get some external support and explore opportunities for business development on the main streets to grow.

Sustainability to an organization

Another important aspect related to personal interests that unfolded in the interviews is the *sustainability* of an organization. Older adults generated ideas and took action to keep groups alive as part of their interest building process.

After retirement, P15 actively engaged in a local group whose mission was to connect people experiencing visual impairment with sight services. Ever since P15 was a child, she always had a passion for helping people in need. In retirement, she found purpose when she joined the group to help those who gradually lost sight as part of the aging process. Two years ago, the group faced the danger of falling apart when the leadership changed. Then P15 implemented a new collaborative structure to keep the group alive and growing. Her new structure focused on building partnerships with other groups, recruiting new members and providing opportunities to connect group members with sight services. As P15 mentioned, her idea for the new collaborative model came from her passion for helping others. It was a successful transition for the group because of the value she was able to bring to the members of the group (as described by participant 15).

Our participants' stories demonstrate that older adults actively dealt with challenges and problems to develop

their interests, which had a positive impact on the liveliness of a local community and the sustainability of a group. During that process, they took initiative to generate creative ideas and solve emergent issues that led to emotional and social well-being and a more active lifestyle.

Conclusion and Future Work

Our interviews suggest that older adults often generate and develop ideas around their personal interests, and that supporting these practices could be one way to engage older adults in creative thinking and active aging.

Future Work. For the next step, we plan to cultivate a holistic view on the interest development of older adults through the lens of everyday innovation. We aim to design systems to support the everyday innovations of older adults to promote active aging. We also plan to broaden our investigation to other communities and groups, e.g., startups, to understand the practices and outcomes of actions taken in those contexts to see if there are further opportunities to engage older adults in innovative thinking.

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References

[1] John M. Carroll, Gregorio Convertino, Umer Farooq, and Mary Beth Rosson. 2012. The firekeepers: aging considered as a resource. *Univers. Access Inf. Soc.* 11(1), 7-15.

[2] Jeannette Durick, Toni Robertson, Margot Brereton, Frank Vetere, and Bjorn Nansen. 2013. Dispelling ageing myths in technology design. In *Proceedings of OzCHI '13*, 467-476.

[3] Barney Glaser, and Anselm Strauss. 1967. *The Discovery of Grounded Theory: Strategies for Qualitative Research*. Aldine de Gruyter, Hawthorne, NY.

[4] Amanda Lazar, and David H. Nguyen. 2017. Successful Leisure in Independent Living Communities: Understanding Older Adults' Motivations to Engage in Leisure Activities. In *Proceedings of CHI '17*, 7042-7056.

[5] Soud Nassir, Tuck Wah Leong, and Toni Robertson. 2015. Positive Ageing: Elements and factors for design. In *Proceedings of OzCHI '15*, 264-268.

[6] John Vines, Gary Pritchard, Peter Wright, Patrick Olivier, and Katie Brittain. 2015. An Age-Old Problem: Examining the Discourses of Ageing in HCI and Strategies for Future Research. *ACM Trans. Comput. - Hum. Interact.* 22(1), 2.

[7] Xiyang Wang, Tiffany Knearey, Fanlu Gui, Srishti Gupta, Haining Zhu, Michael Williams, and John M. Carroll. 2018. The Safety Net of Aging in Place: Understanding How Older Adults Construct, Develop, and Maintain Their Social Circles. In *Proceedings of PervasiveHealth'18*.

[8] Ginger White, Tanya Singh, Kelly Caine, and Kay Connelly. 2015. Limited but satisfied: low SES older adults experiences of aging in place. In *Proceedings of PervasiveHealth '15*, 121-128.

[9] Chien Wen Yuan, Jessica Kropczynski, Richard Wirth, Mary Beth Rosson, and John M. Carroll. 2017. Investigating Older Adults' Social Networks and Coproduction Activities for Health. In *Proceedings of PervasiveHealth'17*, 68-77.