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Master's Thesis
Academic Year 2022

Yonamoto Flower Bottles: Building Connection
in Elderly Community through Plant-Related
Activities



Keio University
Graduate School of Media Design

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A Master's Thesis
submitted to Keio University Graduate School of Media Design
in partial fulfillment of the requirements for the degree of
Master of Media Design

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Abstract of Master's Thesis of Academic Year 2022

Yonamoto Flower Bottles: Building Connection in Elderly Community through Plant-Related Activities

Category: Design

Summary

The global spread of COVID-19 has caused multiple adverse mental and physical effects on the elderly, such as social isolation and loneliness. Therefore, measures need to be taken to alleviate this problem for the elderly and workers in the community.

In this study, the authors co-work with local community workers to design a community activity called “decorating Yonamoto flower bottles,” which used the rich plant resources of the local community as a medium to invite the elderly community residents to make plant-decoration and adorn watering bottles in the community’s shared garden.

This study aims to reduce loneliness in the post-COVID-19 period by establishing and strengthening community activities for older adults living in the community to enhance social participation and their quality of life. As a result, this study confirmed that community activities based on local community characteristics could effectively and widely attract the elderly and enhance their community participation.

Keywords:

Community activity, Aging community, Horticulture Activity, Co-creation

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didn't think that the problems of the elderly were very serious. But as I grew up and had more and more experiences, I felt more and more able to empathize with some vulnerable people and appreciate their difficulties. For two years, it was a pleasure to do activities with a group of healthy, active seniors and could contribute to their lives. I have also learned a lot from the elderly residents of Yonamoto community that I can use for the rest of my life, thanks to them.

Chapter 1

Introduction

1.1. Background

Aging is a problem many countries are dealing with, and the rate of global aging is rapidly accelerating. According to reports , by 2050, one in every six persons on the planet will be beyond the age of 65. Japan is a society that is a “super-aged“ society with a median age of 48 (the oldest in the world), with 28.7 percent of the population being 65 or older ¹.

In 2019, Covid-19 was spreading globally, posing a significant threat to the global economy, people’s lifestyles, health, and well-being [1]. Furthermore, it has been noticed that older people have become more vulnerable to the impact of Covid-19, both in terms of mental and physical health, which has led to a significant increase in mortality among older people during Covid-19 [1].

There has been much research on how to mitigate the negative effects of Covid-19 on older adults and improve their physical and mental health during the pandemic period [2] [3] [4], but most of the research conducted in urban settings, and few studies focus on the situation of older adults living in suburban or rural communities [5]. In a study of older adults in rural Japan [5], found that older adults living in rural areas were more vulnerable than those living in urban areas, and that “injuries” they got during the Covid-19 period will continue to affect their lives even after the pandemic had subsided [6].

This study was based on Yonamoto, Chiba Prefecture, Japan, with the 44.2%

1 United Nations, Department of Economic and Social Affairs, Population Division (2019). World Population Ageing 2019: Highlights (ST/ESA/SER.A/430). <https://www.un.org/en/development/desa/population/publications/pdf/ageing/WorldPopulationAgeing2019-Highlights.pdf>(202.6.30 checked)

aging rate. During interviews with local residents and community workers, we encountered similar problems for residents due to Covid-19. For example, some residents told us their communication with distant relatives decreased because of the limitations of geographic location and the lockdown policies; another case is from the residents that even though he has lived here for a long time, he has never been involved in any community activities and the Covid-19 worsened the situation. Some residents also state that there are people from different backgrounds in the community and it is hard to find common topics with them, etc. When we interviewed the staff of local social welfare organizations, they also felt that addressing the loneliness of older adults in the community should be prioritized, especially during the pandemic period. Therefore, it is necessary to discuss how to improve the physical and mental health of older adults living in suburban communities, as they usually have fewer medical resources and live further away from the city, etc.

In the discussion of enhancing the quality of life (QOL), physical and mental health of older adults, *social participation* is a concept that requires particular attention, which refers to a person's involvement in social activities that provide interactions with others in the community [7]. Improving social participation is effective in reducing social isolation, and is a key component of *social capital* [8]. Higher social capital is positively associated with the psychological and physical dimensions of quality of life [9]. Furthermore, higher social capital has been shown to be important for health and well-being [9]. Consequently, making it easy for people to develop and maintain social relationships is a fundamental strategy of improving the QOL of the elderly.

However, the solution to increasing social participation, especially among suburban elderly residents, often depends heavily on the context of the program and the resources available locally. In this study, we will discuss how to effectively use local resources, cooperate with local organizations to set up a community activity to help older adults in the community to improve their social participation and reduce isolation.

1.2. Objective

In several theories about solutions to community problems, the two concepts of community empowerment [10], community development [11], and all refer to the idea that “communities use their resources to solve their community problems” which means that by organizing the local resources of the community, it is an effective and efficient way to solve the problems within the community. By having community members come together to take collective action, having the people who need help as enablers, practitioners with available knowledge and skills as collaborators, and organizing social resources such as the power of local governments and NPOs, it is possible to effectively generate solutions to community problems, and build stronger and more resilient local communities.

In this study, the goal is to study: 1.How to help the residents in the suburban community improve their level of social participation and allow residents to better engage in community life. 2.Effectively reduce the negative emotions of the elderly during Covid-19 and restore their confidence in community participation through co-creation with residents and community workers. 3.Construct the network of older adults in the community through the means of community activities, try to help them decrease their loneliness, improving QOL. The research goal is to create a friendly community for the elderly after the pandemic and try to encourage more people to come out engage into the community.

1.3. Method

The whole process of the research can be divided into three main parts: preliminary research, development of proposal, and evaluation. Different methods were conducted in different stages . In the ethnography part, we aim to know the basic information about Yonamoto residential complex, the elderly’s daily live content live there, and facility in there. Ethnographic method [12] was conducted in this stage which allows us to observe communities directly by going into it or indirectly through the eyes of the participants. I participated in activities within the community, observed older adults as they participated in community activities, and interviewed them and relevant stakeholders in the community. It was also

during the first phase that, after I attended the local activity and visited the place several times, I realized the richness of the plant-related resources in Yonamoto residential complex : there are many plant species, flower beds, shared garden, etc. Also, I found the passion of the community social welfare into organizing the community activities, which eventually made me decide to organize a community activity and use plants as the theme of the activity.

In the second part of the study, based on the preliminary research, I started to develop a plan to achieve the research goal: In this phase, I mainly co-creation with community workers, I made prototypes to present our ideas, and participated in periodical meetings in the community to listen to opinions and feedback, and iterate my design to make it sustainable and locally adapted into the context.

In the final phase of evaluation: after the I tested my design, I invited participants to fill out questionnaires, used focus groups, and observations method to see if our designs were having an impact in the community and what impact the design could be made. We also interviewed iterate on our design through the qualitative and quantitative data, and feedback.

In summary, both qualitative and quantitative data analysis methods were used in the overall study. Discussions about focus groups and interviews were recorded by audio or video recording, and after each meeting and interview was completed, I recorded key information in the form of a diary, or summary feedback, so that the accuracy of the information could be ensured during the review.

1.4. Conclusion

In this paper, we discuss what roles communities and community activities can play in mitigating the “negative effect” among older residents in a post-epidemic context. By using theories of community problem solving as the methodology and foundation of the study, solutions are found within the community. Throughout the investigation, the ethnography method was used to understand the context of our users and research areas and ultimately to find an appropriate medium to tie up the whole activities. The author co-creates with the stakeholders to develop a long-term and systematic plant-based workshop through a value co-creation approach. In the process, questionnaires, interviews, and focus groups

among stakeholders and participants were conducted to evaluate the design and to explore their feelings before and after participating in this designed workshop. This research started in the period in which Covid-19 spread, and was based on a case study in Yomanoto residential complex. All the findings and process and how this design was done step by step was documented, and it will provide some clues for community relations, social participation, and community development for older adults in the post Covid-19 time.

1.5. Structure of this paper

1. Chapter 1 presents generally the background information of this study, the motivation of the study as well as the purpose and the research methodology.
2. Chapter 2 introduces some relevant research and concepts such as social participation, community development, and self-determination theory to provide theoretical support for this thesis.
3. Chapter 3 introduces the step-by-step process of design development, including pre-research, design concepts, design development and finally the final work.
4. Chapter 4 presents the results of the evaluation of the final design.
5. Chapter 5 summarizes the findings of the thesis and the limitations of this study and the points that need to be improved in the future.

Chapter 2

Related Works

2.1. Social participation

In the concept of participation, two aspects are most frequently discussed. One is *social participation* and the other is *community involvement*, both of them has widely proved to be beneficial to the elderly. “Social participation” is defined as “consciously and actively engagement in outdoor social activities leads to interacting and sharing resources with others in the community, and the person has personal satisfaction resulting from that engagement. [13].” The term “community involvement” is defined as “participation in activities of a complex, social and non-familial context that occur outside the home” [14]. These activities may include meeting with family or friends, participating in recreational activities, volunteering, and cultural or social activities.

There are many studies on the impact of social participation on the lives of older adults in which active social participation has been shown to contribute significantly to the physical and mental health of older adults, for example: older adults who are socially active have a lower risk of functional disability, improved health-related quality of life, and lower utilization of formal health care [15]. In addition, there are studies that demonstrate that active social engagement can support older adults, including longevity, cognitive function, higher levels of health-related quality of life, and prevention of depression [16]. Thus, community and social participation is a key component of healthy aging and an important consideration for future health care delivery [17].

There are also many studies that have attempted to generalize the models of social participation process. In Levasseur et’s study [16], based on the main goals of these social activities,they identified six proximal and distal levels of personal involvement with others: 1) performing activities to prepare for contact with oth-

ers, 2) getting along with others, 3) interacting with others without doing specific activities with them. 4) doing activities with others. 5) helping others, and 6) contributing to society. In addition, Aw, Su and Koh [18] also summarized the continuum of social participation steps for older adults from (1) marginalization and exclusion, to (2) “comfort-zoning”, then (3) seeking consistent social interactions, (4) expansion of social network, and (5) giving back to society.

However, it has also been noted that the impact of on the health of older adults may vary depending on its content and the type of activities engaged in [13]. Frequent social participation can make older adults feel obligated and may have a negative impact on their health [19]. Considering older adults’ social participation from different contexts and perspectives can also have different effects, for example, from a social psychological perspective: continuum theory and disengagement theory describe the advantages and disadvantages of older adults’ participation in community activities, respectively; discussing social participation in cultural and policy contexts, community participation can also differ between Asians and Europeans [14]. Therefore strategies to promote community inclusion need to be tailored to the community context and the characteristics among community members.

Therefore, how to determine the appropriate social participation strategies according to the actual situation of the elderly and reduce the burden of the elderly in community participation is what this study wants to explore.

2.2. Solutions to community problems

2.2.1 Community development

A community is a social unit with commonality such as norms, religion, values, customs, or identity. Communities may share a sense of place situated in a given geographical area (e.g. a country, village, town, or neighborhood) or in virtual space through communication platforms.¹ In 1986, McMillan and Chavis identified [20] define the four elements of “sense of community”:

¹ Definition of community.

<https://en.wikipedia.org/wiki/Community>(2022.7.3 checked)

- Membership: people in a specific community can feel a sense of belonging or of share a sense of personal relatedness.
- Influence: people in community can feel themselves mattering, they can make a difference to a group and the group mattering to its members activity
- Reinforcement: community can integrate and fulfill the members' needs.
- Shared emotional connection.

“*Community development*” is a governance model based on the community of social life. It is commonly state that the residents living in the same geographic area continue to take collective action to address the issues of their community and create common well-being, creating a strong social bond among residents and between residents and the community environment. [21] Based on community development theory, utilizing the local resources, including operand and operant resources [22], are the most effective way to solve community problems because the community problem originally generated within community context, including people and environment, solutions generated from within the community are the closest to the local residents and are also the easiest to implement in the community scenario [21].

Community development can solve community problems and enhance the quality of life of community residents. It is involved in all aspects of residents “daily lives” The ultimate goal of community development is to encourage residents to participate in community affairs, to promote community development, to stimulate the sense of ownership of the community, and to strengthen community cohesion. Therefore, the key to community development is to stimulate residents’ awareness of community participation and to actively engage in community development [23].

While there is much discussion of community development, many researches focus on the regional economic revitalization of areas, and few focus on the role of community development in social participation, especially in senior communities. Therefore, it is worthwhile to investigate how the concept of community development can be used to empower the aging community during the post Covid-19 period, strengthen the ties between older adults and the community, and enhance their social participation.

2.2.2 Empowerment theory

Empowerment theory is defined as the process of active participation in personal, interpersonal, community, and political needs, and the theory focuses on vulnerable groups, including older adults, so the approach is often widely used in social work, health care, and other areas of practice [24]. The approach advocates the active inclusion of people from different backgrounds and with different experiences, such as viewing the people being helped as “problem solving enablers” and the practice workers with available knowledge and skills as collaborators [25], to participate together in discussions about the development strategies at the community, geographical, and even larger levels.

By leveraging the strengths of diverse groups and working with them, it is possible to leverage the views of different groups on specific and nuanced issues and effectively use their experience to solve problems and validate solutions through a collective approach, creating a sense of community and raising awareness. In summary, empowerment theory is an innovative way of thinking that promotes resource/strength-based development of interpersonal support networks as a core component of community building and focuses on personal, interpersonal, community, and political issues [24].

In studies with older adults, empowerment theory has been validated to produce positive outcomes on the care-giving process and caregiver quality of life [26]. There are studies have also collected and summarized different empowerment approaches for older adult communities [27], and four specific ways of designing empowerment for older adult have been summarized through case studies, namely motivational empowerment, relational empowerment, artifact empowerment, and information empowerment. They motivate the participation and contribution of the elderly through internal motivation empowerment; connect external resources through external relationships to enhance the synergy of problem solving and welfare creation among the elderly group; support the activities of the elderly through different forms of design artifacts such as tools, resources and facilities; focus on the realization of the right to know and voice of the elderly and establish two-way communication opportunities between the elderly and the external world.

However, much of the research on empowerment theory to support older adult communities is about digital services, with little focus on older adult communities

in specific contexts, and discussions of community resources for older adults require more specific cases to incorporate and practice the theory. In this study, we relied on community empowerment theory to organically organize and resource in the local community, and invited groups from different backgrounds to join in the solution of community problems at different stages. This study provides a case study for the practice of community empowerment theory in a specific context.

2.3. Horticultural activities and Craft-making activities

2.3.1 Horticulture activities

Gardening is a popular and common leisure activity for older adults [28]. There are various types of gardening activities, including static and dynamic, indoor and outdoor, for example, sensory engagement with plant environments, walking, moving, or wandering through plant environments, counting, sorting, table-top gardening work with potted plants, digging, tilling, plowing, or working with soil, making plant-based foods and products, weeding, pruning or harvesting [29]. They are able to enhance the physical and mental health of the body by stimulating all five senses [30]. Because of the nature of horticultural activities, it has become common to use horticulture or plants as a medium to accomplish specific therapeutic purposes for specific people. According to the definition of the American Horticultural Therapy Association (AHTA)², horticultural therapy represents a systematic treatment intervention that uses natural features, plant care, and gardening activities to increase the physical and psychological health of participants.

Whether it is horticultural therapy for a patient population or horticultural activities for a healthy or sub-healthy population, many studies have confirmed that these activities are effective in improving physical and mental health, increasing well-being and achieving a delayed aging effect [28]. Gardening activities

2 Definition of horticulture therapy.

<https://www.ahta.org/ahta-definitions-and-positions>(2022.6.30 checked)

can also be used as rehabilitation or as an adjunct to the treatment of chronic diseases, because they stimulate all five senses.

As for the investigation of the reasons behind why gardening activities have a positive effect on people, academic research into the reasons behind horticultural therapy can probably be grouped into the following points: [29] 1.Recovery effect. 2.Directed attention fatigue. 3.Tactile immersion, peaceful persistence, physical exertion. 4.Time may be lost or a different sense of time may be experienced during repetitive physical activities in a plant environment. 5.Touch plants has the potential to heal because it can express intention, make an impact, and invite reciprocity.

Due to the exponentially aging population and the spreading of Covid-19, it is becoming increasingly necessary to find practical, affordable, and easily implemented interventions for successful aging [18]. Informal use of horticultural horticulture as an intervention is increasing with older adults [15], when designing psycho-social interventions with plants, it is worth considering how to harness the power of human-plant interactions to reach the corresponding goals. In addition, different kinds of interactions may be better suited for different settings or groups and can be adjusted based on the availability of space or resources [18].

2.3.2 Craft-making activity

Making crafts is a popular activity among the elderly [31]. An essential element of making crafts is that the maker can take full ownership of the activity; they can also decide how easy or difficult it is for them to make something [32]. In addition, they can choose the overall process, including coming up with ideas and designs, preparing and evaluating the product, and the process [33]. The holistic process includes all phases of the process.

Crafts provide tools for happiness [34]. Crafting may make it possible for people to work toward self-selected goals, which can help individuals feel better. Thus, a handmade product is not just the result of a process; it may include a variety of complex values and emotions that shape the maker's identity. Argues that the pleasure derived from handling and making is inherent in human nature. This pleasure is associated with the act of making and the intelligence of the body, which further emphasizes the significance of bodily actions and motor functions

[33].

In this way, the craft maker can express and positively address his or her feelings and simultaneously develop his or her skills while taking steps to find solutions. Tubbs and Drake [35] argue that achieving success in specific activities may lead to personal emotional reinforcement. More specifically, they argue that through the design process or the process of handling, assembling, and forming raw materials, crafting can help individuals realize that they too can positively influence and organize their own lives.

The analysis revealed that the elements that participants characterized as enhancing their well-being were the following: the raw materials, the artifacts, the sense of achievement, the possibilities for personal growth, the development of physical and cognitive skills, the control of one's body and feelings, and the social and cultural dimensions of craft. Craft as a meaningful leisure activity had positive effects on the craft makers' well-being by fostering the feelings of self-managing and empowerment [33].

In this study, because the older adults in the community have a particular passion for crafts, many of the arts that older adults make daily can be seen on the walls of the community center, and many older adults are often seen making crafts when we visit the community. Based on this phenomenon, in the design phase of this study, we developed a local handicraft-making activity, integrated it with other community activities, and provided a case study for expanding handicraft-making activities in the elderly community.

2.4. Community activity and motivation theory

2.4.1 community activity

'Community activity' means the normal activities taking place within a local community to include residential, site preparation and construction, government, commercial, institutional, and industrial activities.³

Good community activity can prevent mental health deterioration, improve so-

3 Definition of community activity.

<https://www.lawinsider.com/dictionary/community-activity>(2022.7.4 checked)

cial health, and maintain higher levels of functional ability to maintain cognitive function beneficial in community-dwelling older adults. [36] In addition, research has shown that social activity is beneficial for a variety of health status, including physical & mental health, and QOL. Individuals can improve self-esteem, competence, and acquire meaningful social roles by engaging in social activities. [36]

Therefore, combining the benefits of community activities and the characteristics of the elderly, encouraging older adults to participate in community activities is the cornerstone of the active ageing strategy in many countries. [37]

Community activities can take various forms and types, such as online or physical activity, but regardless of their organization, community activities have specific objectives in the respective contexts: for example, to increase the activity level of residents in the community or to enhance the sense of belonging to the community. The participation in community activities is very helpful to enhance the social participation of older adults.

However, it has also been suggested that despite the clear health benefits of participating in community activities, many people still choose to “stay at home” or stay quo. As empirical studies of older adults and psycho-social theories of aging, not all older adults are eager to engage in new community activities or social participation, they may prefer familiar social interactions. [18] [7]. It was also shown in the study of the Japan building association⁴ that the factors in influencing older adults’ participation in community activities are, for example, whether residents can feel shared feelings towards the activity, whether residents can feel interests, and the outer reviews towards to activity.

Also in terms of for the maintenance of community activities for older adults, there are studies that discuss that community activities are easy to start but difficult to maintain because as older adults age and physically deteriorate, it is difficult to keep them engaged if there is not an effective way to maintain and enough attraction. [38]

In older adult communities, participation in the community becomes more dif-

4 A Handbook for Community Building to Promote Elderly People’s Participation in Community Activities.

<https://www.kenken.go.jp/japanese/contents/publications/data/178/all.pdf> (2022.7.15 checked)

difficult with age due to physical frailty and limited mobility. How to sustainably develop community activities to attract more local elderly residents, and different levels of residents to join, and make them feel valued, is the point this study wants to explore.

2.4.2 Self-determination theory

Self-determination theory (SDT) is an integrative model for understanding the mediators of behavior change and maintenance [39]; it argues that there are two main types of motivation - intrinsic and extrinsic - and that both are powerful in shaping ourselves and the way we behave [40]. According to Deci and Ryan, extrinsic motivation is a behavioral drive based on an external source that leads to external rewards. Such sources include grading systems, employee evaluations, prizes and accolades, and the respect and admiration of others. Intrinsic motivation, on the other hand, comes from within. Internal drivers motivate us to act in specific ways, including our core values, interests, and personal sense of morality. Intrinsic and extrinsic motivations seem to be opposed - intrinsic motivation drives behavior consistent with our “ideal self,” while extrinsic motivation leads us to conform to the standards of others.

SDT theory has played an important role in the study of long-term social participation of older adults. SDT predicts that adherence will be affected if one’s primary motivation to engage in activity comes from extrinsic factors [39]. On the other hand, individuals who are intrinsically motivated are more likely to adhere to regular activities. Intrinsic motivation is most likely to lead to sustained exercise behavior, however, it must be maintained. Previous research suggests that intrinsic motivation requires the satisfaction of three basic psychological needs: *autonomy*, *competence*, and *relatedness* [39]. Autonomy means people need to feel that they are masters of their destiny and have at least control over their lives. Most importantly, people need to feel that they have control over their behavior. Competence is another need that involves our achievements, knowledge, and skills; people need to build their competence and develop mastery of essential tasks. Relatedness (also called a connection): people need to have a sense of belonging and connection to others; each of us needs others somehow [40].

Extrinsic motivation may be the primary factor that initiates participation, but

intrinsic motivation and the satisfaction of psychological needs are more strongly associated with adherence [39]. In a study on older adults' adherence to long-term exercise, it was stated that older adults (over 50 years) who exercise regularly have higher intrinsic motivation and are more likely to adhere to exercise when they feel enjoyment from exercise than those who quit or do not participate [41]. In addition, among older adults [42], overall psychological need satisfaction for autonomy, competence, and relatedness is positively associated with exercise adherence. For example, older women who exercise consistently have a greater sense of autonomy and report higher levels of perceived social support compared to participants who are sedentary or do not adhere to regular exercise [42]. In addition, extrinsic motivators such as perceived health benefits and improved fitness are the primary motivators for regular physical activity among individuals aged 55-93 [43].

SDT can be used to predict and explain the psychological models used to analyze older adults during community participation, especially as an essential factor that allows participants to stay active over time - intrinsic motivation is a critical evaluation criterion in this study.

2.5. Contribution

This article is based on theories related to community development and empowerment, and applies them to a practical case study in Chiba Prefecture, Japan. Based on these theories, we provide an application case in an elderly community in the suburbs of Chiba Prefecture, Japan, which enriches the practical application scenarios of these theories. In combination with the theories of SD-logic [22], we developed the concept of decorative local watering bottles using local operand and operant resources. This involved an innovative combination of gardening and handicraft activities. Overall, we have explored a localized and community-based activity in this senior community that can contribute to community activities for seniors and how to organize activities that may be of interest to local people based on local resources.

Chapter 3

Design

3.1. Ethnography

This research was conducted in Yonamoto residential complex in Yachiyo City, Japan. Yonamoto housing complex is a large residential complex of 106 buildings built in 1970. It has 3,020 households, the elderly rate of residents was 24.2% in 2018¹, by September 30, 2021, there were 5218 people living in the complex, and the aging rate of residents rose to 44.8%², which is at a high level within Yachiyo city.

I first visited Yonamoto residential complex on March 30, 2021. During the preliminary field research phase, I aimed to gain a comprehensive understanding of the current living conditions and environment of the community, for example the surrounding facilities, transportation, and the management structure of the community (described in 3.1.1-3.1.4), through observation and conversation with the community staff. It is also important that I want to establish a trusting relationship with the community workers and the residents, to decrease the influence of being an “outsider” by making several visits and participating in community meetings and activities.

1 Population data of yachiyo city.

<https://www.city.yachiyo.chiba.jp/21004/page000022.html>(2022.7.6 checked)

2 Regional disaster prevention plan of yonamoto housing complex.

<https://www.ur-net.go.jp/aboutus/publication/web-urpress63/special2.html>(2022.7.6 checked)

3.1.1 Setting

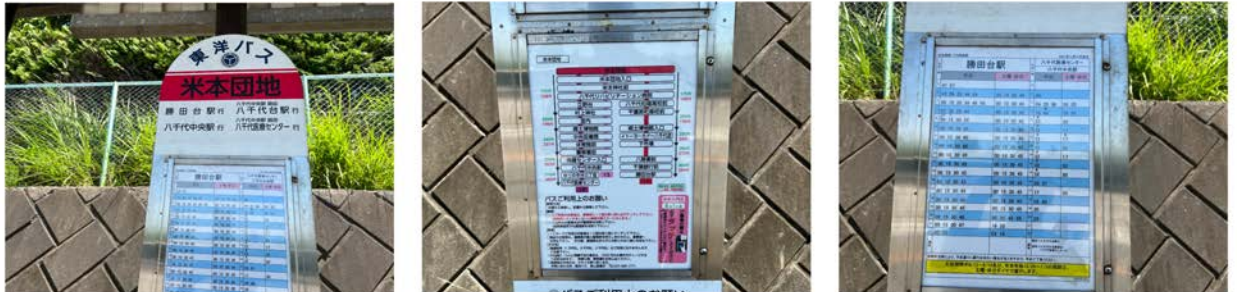
Introduction to the surrounding area around Yonamoto

Yonamoto residential complex is located on a high plateau on the east side of the Shinkawa River ³ When I first visited Yonamoto residential complex, I took about a 2-hour travel from Nogata Station in Nakano-ku, Tokyo to reach there. When I arrived, my first impression was that this complex was far from the station where we took the railroad, as I didn't have a car, so I had to take a bus to get there, which took about 20 minutes. Although there were more than 70 buses (4 buses per hour) going to Katsutadai station (figure3.1), I still felt very long while waiting for the bus. When the bus passed the national road (figure3.3), and slowly drove to the right into the bus station of Yonamoto complex, I felt that this national road would be convenient for people who can drive, but for people without cars, and for most elderly people on foot, this national road rather reduced their motivation of passing because this road was often crossed by many large trucks, cars, and motorcycles quickly, and accompanied by loud engine noise. Walking along the footpath on both sides of the road, I knew that these cars would not hit me, but it was still frightening when they passed by.

The complex is basically surrounded by farmland and trees. There is a group cite called "Michinoeki" (figure3.4) about 7 minutes walk northwest towards the national highway outside the complex, where has many stores and restaurants and in the center of the Michinoeki, an area was set up where visitors could rest, and a TV was placed in the middle, which would broadcast some sports programs, local propaganda films, and so on. Not only for the first time, but every time I visited afterwards, we saw many elderly people resting here after buying food from the vegetable vending shop, and it was a stress-free place. Next to Michinoeki, there is also an agricultural center (figure3.5) for the residents of the neighborhood to communicate. There are a variety of cultural activities, such as picking fruit and vegetables activities for the elderly and children, as well as health-related lectures.

3 Introduction of Yonamoto residential complex.

<https://ja.wikipedia.org/wiki/%E7%B1%B3%E6%9C%AC%E5%9B%A3%E5%9C%B0>(2022.7.6 checked)



Time schedule of bus in Yonamoto terminal station

miro

Figure 3.1 The bus schedule of the Yonamoto terminal



Source: Google

Figure 3.2 Location of Yonamoto residential complex



Yonamoto housing complex



Bus station in
Yonamoto housing complex



The No 16 national
highway

miro

Figure 3.3 Location of Yonamoto residential complex



Michinoeki



Public rest area
(outdoor) of Michinoeki



Public rest area(indoor)
of Michinoeki

miro

Figure 3.4 Michinoeki



Figure 3.5 Agricultural center near Yonamoto

Introduction to the interior facilities of the Yonamoto complex

The complex has all the facilities needed for daily life, including a convenience store, supermarket, post office, Yachiyo City government branch, community center, three kindergartens, and an elementary school (which was integrated by May 2022 because the population of children is decreasing), UR office, community comprehensive support center, and rehabilitation facilities. The supermarket and 7-11 and supermarket provide fruits and vegetables for the residents' daily needs, and in the supermarket, the working staff will set up a dietary & nutrition advisory board for the elderly, as there are many older people in the area.

Organizations in Yonamoto complex

Elderly residents at the Yonamoto residential complex who get both “public” support from the UR (Urban Renaissance Agency), which manages the complex, the Yachiyo City Social Welfare Committee, which supports the lives of the elderly, and the Aso Mutsu Community Comprehensive Support Centre, as well as “private” support from the complex's volunteer activities.

The role of the Aso Mutsu Regional Integrated Support Centre is aim to be a “counselling organisation that provides support so that people in the community can continue to live together with peace of mind”. It is a municipal facility that aims to provide integrated support from a medical, care, prevention, housing and



Figure 3.6 Square in front of community center

daily living perspective to enable people to continue living independently in the community for as long as possible. It is staffed by around eight medical, health and welfare specialists, including care managers, public health nurses, nurses and social workers.

Hokkori

Hokkori (figure 3.7) is a place where residents can gather, chat and do community activities during their leisure time in the Yonamoto complex. It was initially established with the vision: A place where people can feel safe to be there without having to do anything.

Hokkori is located in a more central location in the community. The area in Hokkori can be divided into the following areas: a communication area, a display area, a kitchen, a separate room, and a reception area. In the display area, the community workers place some of the works produced by the community residents: for example, paintings, handicrafts. They also put up notices on the walls about local events. In addition to the work produced by the older residents, there will also be some work produced by children. These works of art are very welcoming for visitors like us and the residents, who can feel the love when they see them. The communication area is a relatively more utilized area. Residents can freely interact and do things they like, such as painting, crafting, etc. On a day-to-day basis, the community center staff also play music to help to maintain the

atmosphere. Regular meetings are also held in the Hokkori and events such as children's days.



The daily routing in Hokkori



The decoration wall in Hokkori

mira

Figure 3.7 The interior of Hokkori

Natural resources

On my first and many subsequent visits, I was always fascinated by the walkway (figure 3.8) and the natural resources in the community (figure 3.9) (figure 3.10). The wide walkway set up in the middle of the community is perhaps one of the most important symbols of the Yonamoto community. Shared gardens and lawns surround the walkway on both sides, and the flower beds are planted with various kinds of plants that open in different seasons, which makes the natural beauty of the Yonamoto area quite excellent and distinctive in all seasons of the year. The trail allows only bicycles and walkers to pass through, providing a suitable environment for the elderly to walk, and there are many resting areas and facilities

such as benches on both sides. The walkway, which connects the north and south areas of Yonamoto complex, is long and takes about 20-30 minutes to complete at a relatively unhurried pace but can be burdensome for older and less mobile seniors.



Figure 3.8 The main walkway in Yonamoto complex

In front of each residential building, there is also a tiny flower bed where residents can plant their favorite plants, but according to the staff, no cash crops, such as vegetables, can be grown. During our visit, I saw many different kinds of plants and that some residents had arranged and decorated this flower bed with great care to make it more meaningful.



Figure 3.9 Shared garden in Yonamoto housing complex



Figure 3.10 The garden before residential building

Activities in Yonamoto

In Yonamoto complex, through the efforts of the community staff, the local government, and NPOs, many practical, effective, and successful activities have been held (figure 3.11), such as walking sessions, health walking sessions, Hokkori cafe, mutual-help meetings, community gymnastics and so on. These activities have undoubtedly contributed to enriching community life and promoting a healthy lifestyle for the elderly.

There are two local media that played a significant role in the development and promotion of these activities, the one is an officially released point card, called “happy card” (figure 3.12), another is the community newspaper (figure 3.13).

1. happy card

The happy card is a card that allows residents to record their participatory experience and times in community activities. It is made into a foldable 8 x 14 card to make it easier for residents to carry around. When residents participate in community activities (such as walking sessions or health sessions), they can earn points on the happy card, and when they get a certain number of points, they can redeem them for awards or certificates at the community center.



Medical Walking



Alzheimer's Seminar

Hokkri Cafe

miro

Figure 3.11 Community activities held in the community

枚目
よなだん HAPPY カード

お名前: _____ 開始日: _____



スタンプの設置場所:

- NPO法人わか (野菜販売時)
- ほっこり
- 阿蘇・睦地域包括支援センター

特典交換場所:

- 生活支援アドバイザー窓口 (UR管理事務所)
- 阿蘇・睦地域包括支援センター

お問い合わせ
阿蘇・睦地域包括支援センター
047-488-9525

1	2	3	4	5	6	7	8	9	10
/	/	/	/	/	/	/	/	/	/
/	/	/	/	/	/	/	/	/	/
/	/	/	/	/	/	/	/	/	/

マーク到達で特典GET!
満杯になったら包括にて新しいカードをお願いします。

希望される活動にチェックをお願いします。1箇所につき1日1スタンプ。1日で2箇所回れば、それぞれスタンプ可。1日3箇所まで3スタンプ。

わか: 野菜販売 レシピ作成

ほっこり: フリーペーパー配布提供 ラッシュ配り

寄付品 乗り絵や絵手紙

花壇の手入れ 手紙品の飾り付け

カフェのお手伝い

包括: ラジオ体操 交換ノートネタ提供

茶団ウォーキング 貝守り

手紙品の飾り付け

支倉: 行事の協力 サロン等の椅子出しや片付け

※本誌地
管理事務所: 手紙品の飾り付け 猫トレ

Figure 3.12 Happy card

The happy card is used as an incentive to promote activities within the community. When new activities are introduced to the community, adding them to the happy card system is a great way to help residents understand the activities and increase their motivation to join. In addition, the happy card can help monitor older people's health and develop good lifestyle habits over time.

2. Community newspaper

The community newspaper is an production we have been involved in designing and will be put out every three months in the community. It will be put onto notice boards, community centers, and other prominent places, and some will be printed and distributed to people in the community.

In the newspaper, there are several sections of content. Firstly, it will be updated with what is happening in the community during each quarter, such as major meetings in the community. Secondly, recent events in the community will be reported, such as regular walking sessions and new events such as the Hokkori cafe. There are also contributions from the community residents, such as plant walking way recommendation depending on the season. At the end of the paper, there are quizzes that are designed to interact with the elderly in the community, and when the answers are solved, they can be redeemed for happy card points at the community center.

The community newspaper has helped to promote the activities of the community to a certain extent, and the way the residents contribute to the newspaper is a relatively autonomous way of getting people involved, speaking out, and expressing their views.

3.1.2 User study

During the ethnography phase, in addition to getting to know the local people through observation, we did individual interviews with the residents. The interviews were conducted in an open-end form and were more of a casual conversation than a formal interview. The interview consisted of asking residents about their life in the community, their difficulties, participation and attitudes towards community activities, and the impact of Covid-19 on their lives. As our primary goal at this stage was to get to know the users and build relationships, we did not ask many complex and directional questions. Therefore for all questions, we do

米本団地発

よなもと暮らし

第5号

令和4年6月15日
発行・よなもと暮らし編集部
・阿蘇総合包括支援センター
・米本米寿会
・米本支会団地班 共同発行

「阿蘇米本学園行き」バス発車しまーす！

この4月から始まった1～6年生のバス通学、元米本小学校のバス停の朝の風景を見てきました。この日は小雨まじりでしたが、子ども達は7時前からそろそろやってきます。第1便は高学年と決まっているわけではないようで、兄弟一緒だったり、低学年でも早い便に乗り込む子どももいました。慣れた様子で学年ごとに整然と並び乗り込んでいます。第2便は主に1～3年生、一目散に駆けつけてくる子がいたりにぎやかです。最初は戸惑った子ども達も今はスムーズに乗車。
スクールガードの方々に見送られ元気に「行ってきまーす！」
スクールガードの方々が声をかけ見守ることで、子ども達も安全で、気持ちのよいスタートがされているのだと思いました





米寿会ニュース

『スマホ基本講座』

一緒に覚えませんか？

皆さん スマホをおもちですか。「私 持っているけどいつも“不携帯”……」？
国のデジタル活用支援として 八千代市長寿支援課からの要請で八千代市長寿会連合会ではシニアに寄り添った内容で 講習会を開催します。

- ① スマホの持ち方、指の動かし方、かけ方から始まり、スマホの基本、LINE(ライン)体験、キャッシュレス決済など、約120分を予定しています。
- ② 日時については未定ですが決まりましたら お知らせいたします。
- ③ 参加費は無料。教材のスマホは 主催者が用意します。
- ④ 携帯会社に関係なく誰でも参加できます。



*参加をご希望される方、関心やご質問のある方は
米寿会責任者 山野:Tel 047-488-0292までご連絡下さい。
「ほっこり」のTel 047-406-4606 でも受け付けます。 (Y)

Figure 3.13 Community newspaper

not show them. Instead, the authors recorded takeaways from the user interviews after each was completed, and these takeaways and findings will be discussed in 3.1.3.

3.1.3 Findings From Ethnography

Findings from environment

External transportation

Yonamoto housing complex has become a relatively closed community due to the inconvenience of transportation. Although the location of the community is close to NO.16 National Highway, which makes it easy to go out and embark on roads leading to destinations such as station by driving, the highway is not so friendly to residents who do not have a car or do not know how to drive, especially to the elderly. On the contrary, the trucks or cars that pass on the national highway are dangerous for elderly people with mobility problems and reduce the number of times they go out; the ability to travel only by transit is also not friendly for the elderly to a certain extent, older people are significantly sensitive to the availability of transit facilities, such as the number of bus stops, and distance to the nearest rail transport station. The single mode of transportation has made the Yonamoto residential complex become relatively isolated from the “outside world”.

Internal transportation

In contrast to the transportation to the outside community, the access to the site is much more convenient and friendly. When I visited Yonamoto, the first thing I noticed was the walkway located in the center of the site. On both sides of the trail, there are many shared gardens with flowers that grow in different seasons, and the gardens have distinctive scenery throughout the year. The trail is very gentle and is mostly only passed by walkers and bicyclists. The trail is definitely the best place for the elderly to walk around the housing complex. There are many public facilities such as benches on both sides of the trail, which are friendly enough for seniors to rest when their strength is low. In addition, because there are many senior citizens living there, many gentle slopes are set up at the stairs within the group site, which also achieves the goal of inclusiveness.

Facilities outside Yonamoto

Basically, the environment and facilities in the community can meet the basic needs of residents for socializing, exercising, and living. For the facilities outside the community, considering the mobility ability of the elderly group, there is only an agricultural exchange center, Michinoeki and some restaurants within 1-2km of the neighborhood. At the agricultural center, there are regular agriculture-related activities such as strawberry picking, common gardening activities, and communal kitchens, but these activities are also open to visitors, so they are not free and require a fee to participate. This is not an activity that could be participated in the long term for the residents. Therefore, for the surrounding facilities, it does not serve well to enrich the lives of the residents in the community.

Facilities in Yonamoto

The facilities in the community are undoubtedly the most accessible resources for seniors. Both open-air (e.g., walking trails, benches along walking trails, etc.) and several activity centers that are relatively spatially enclosed provide a good level of enrichment for seniors' leisure life. The community center provides an excellent opportunity for community residents to communicate. The walls full of artwork and posters reflect the love of the residents, the abundance of leisure time activities, and the dedication of the staff to the community. Every time I come to the community center, I feel at ease. Looking at the newly updated artwork on the walls, I can imagine that the seniors in the community are having a great time here. However, at the same time, the closed indoor environment can create a sense of "distance" compared to the outdoor environment, not for everyone, but for people who are more internal and have never participated in or visited the community center. According to our observations and interviews in the user research, we found that there are fewer men than women and that men usually sit close to the sidelines and do not participate in the discussions;

Findings from the activity in community

There are many activities in the community that are successful, and I think a lot of that is due to the hard work and understanding that the community staff has put into the community over the years. They are creative and inclusive, open to new ideas, and willing to contribute ideas that can be improved and implemented

in the community context.

In addition, as described in 3.1.2, the happy card and community newspaper provide motivation and a positive environment for older residents in the community to participate in community activities.

When older adults participate in community activities, they are more interested in health-related activities, and whenever such activities are held, the residents are willing to participate, whether male or female. However, activities such as those that are just conversational have a smaller percentage of male participation. By and large, men consider more topics related to their interests and health when participating in social events. Therefore, in the future, we can consider how to engage more male seniors in the event setting from a male perspective.

Findings from the preliminary user study

1. Impact of Covid-19

From several conversations with the local elderly residents, Covid-19 has significantly impacted them. Although they live in the suburbs and the surrounding amenities are not very abundant, the impact of being closed is not as strong, but for some residents, conversations with people were largely cut off. They are used to regular contact with their previous friends, but the pandemic has made this communication less frequent or difficult. They now have to rely on a few friends in the community to talk to them. Therefore, it is necessary to rebuild this communication or expand whom residents can talk to.

2. Hard to start a conversation

According to some of the residents, they talked about the fact that in the community, the residents' identities and backgrounds are very different, so topics of conversation are only at the superficial level (ex. "How are you today?") and it is difficult to become "bosom friends", and there are not so many common topics. Common topics and interests will be the opportunity to build long-term relationships.

3. Community center is a acquaintance group

For some introverted residents, participating in community activities is difficult and not something they are willing to do. The reason for this is that the relatively closed environment of the community center is a "familiar environment" for them,

which means only if those who have the invitation from their acquaintance or friends who has already participated in the community activities are more welcome to join in, which can be a difficult start for newcomers.

4. “Going out is better”

Although there are a group of people are reluctant to communicate or participate in community activities, they still believe it is better to stay out than stay at home. Older people’s lives are affected by many factors, such as the death of relatives, friends, and neighbors, which can create a negative attitude toward life. The interviewees often mentioned that staying at home makes them start to think about bad things, and instead of staying at home, they prefer to get out and walk, feel nature or even have a simple conversation with others, which will allow them to spend less time thinking about negative things. So for the elderly living in the community, whatever introvert or extrovert, getting out is better than staying at home.

5. “Passive talker”

It is easy to find that many elderly people are very talkative in their conversations with us. When we tried to talk with them, they were delighted to share their story. One possibly potential reason that we are younger to them, but it is easy to see that many people are passive talkers; they can and are eager to talk to people but just lack the opportunity.

3.2. Design concept

According to the findings before, I found that community residents still have some misunderstandings about community activities, which causes some of them are unwilling to participate in. For example, they think that community activities are only suitable for those familiar with each other, and they do not get a sense of belonging from some activities.

However, almost all the older adults mentioned the importance of health, whether getting out or going to the community center and thought this was good. From the perspective of the community workers, they are also keen to see the well-being of the people in the community improve, and they hope that more people will come out. The gap is that the events in the complex are held indoors, which may create

pressure on people who have not participated before.

So I want to build a stronger connection and network between the elderly residents in the community, find tickets and familiar topics for them to communicate, open up their conversation, enhance their community participation, and get rid of the loneliness and the negative feeling of life due to aging. Furthermore, I hope that this positive energy can be amplified and spread through the participation activities to influence and infect other residents so that those residents can feel the energetic atmosphere and social support in the community and arouse their interest to join, even the young residents. In addition, we hope that the entire concept or design process (no matter the service or products) should focus on some criteria. 1. Sustainability. 2. Consider combining some of the characteristics of the group's own and existing activities, let the users can participate in it better and faster. 3. Friendly to the elderly.

3.3. Design method

The design thinking methodology is the primary method used throughout the design process ⁴. Design thinking methodology can be divided into five stages: empathize, define, ideation, prototype, and test (figure 3.14).

In addition, the design process and the output of this study were discussed with the community work staff, and we explored the value of each in the process, so the methodology of co-creation design was also adopted. In each phase of projects, the inclusion of relevant stakeholders can be highly beneficial, for example: improving design process speed and efficiency, getting more support for design decisions, and more creative ideas⁵

3.4. Initial concept design: plant distribution map

Based on the design concept and findings in 3.1.3, I chose the diverse and widespread plants in the community as a medium to achieve the design goal through plant-

4 <https://designthinking.ideo.com/>

5 <https://www.nngroup.com/articles/how-to-get-stakeholders-to-sketch/>

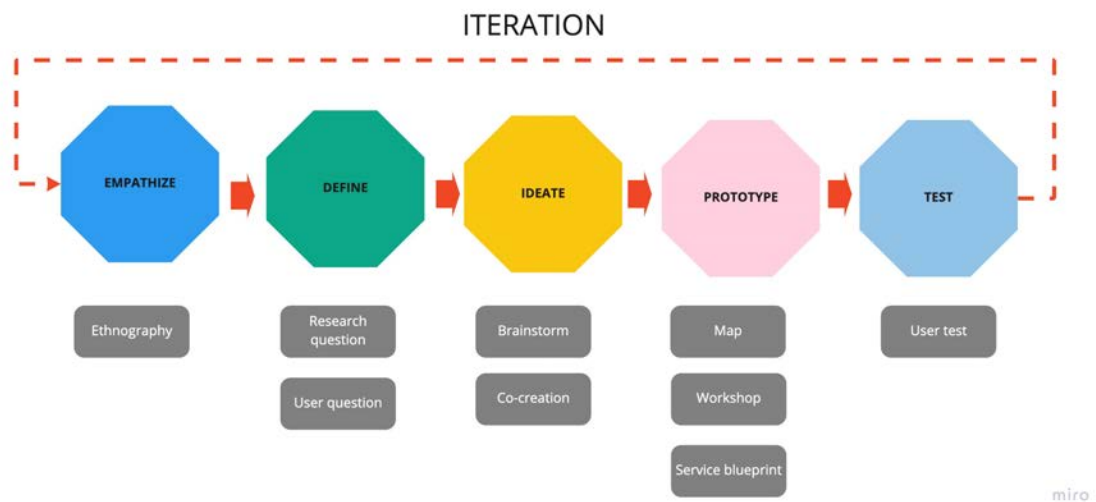


Figure 3.14 Design process of this research

related activities.

1. There are abundant plant-related resources in the community: in front of each residential building, there is a shared garden where residents can grow their favorite plants according to their interests and preferences.

2. Plants in the community can be used as a common topic of conversation: older people are interested in gardening/plant/nature-related topics. As previously described, a common topic is vital in human interaction, as it opens up conversation and facilitates establishing long-term communication relationships. At the Yonamoto residential complex, plants change with the seasons and are a frequent topic of discussion among older people due to the many plant-related facilities around and within the complex area (e.g., farmland, shared gardens, walking trails, cherry blossom paths, etc.). During the preliminary research, it was common to see older adults sitting on chairs along the walkways enjoying the flowers, some elderly residents planting and watering flowers in their yards, and, especially in spring, when the cherry blossoms are in full bloom, were frequent topics of conversation among the elderly. Also, as a popular activity in the elderly community, contact with nature and the plants during the walk is an important part of the walk.

3. plant-related activities are highly enriching and expandable: according to horticulture therapy [44], horticultural activities can be adapted to different contexts, and the user needs to fulfill the appropriate purpose. The book also introduces many different kinds of activities based on horticulture activities, such as planting, watering, pruning, and also some creative work with plants. Each of these stages can correspond to the different abilities of older people, and people of all abilities can find their stage in the gardening process.

Design process

The design process is according to the following steps: after determining our design theme as plants, I first established a persona, determined the characteristics and mental model of the target users, after that, I started to find the relevant suitable touch-point and design point to carry out the design.

3.4.1 Persona design

Based on our user research during the ethnography phase, I have designed several personas of the main types of residents in the community. Among them, there are two types worth noting:

1. Type1: Introvert. This type of resident they do not refuse to communicate; on the contrary, they are eager to share and have their own very talkative areas; they just haven't found the right people to talk to. These people are passive and have a vague perception of what is happening in the community, believing that community activities are only for people they know and that it is difficult for them to be part of them and fit in if they do not know someone. They do not have a clear idea of what community activities are about, and over time, their sense of community empathy disappears, they do not begin to ignore community activities, and their prejudice against them deepens. They are waiting for the opportunity that will open up their community activities.

2. Type 2: Extrovert. This type of residents are active in the community, actively participate in a wide range of activities, and try to play their part in them and create value for others. They are curious enough to try it out whatever the community activity. They are not afraid to interact with others and can have a simple conversation with everyone.

Our goal is to provide an activity for extroverts and try to create a way for

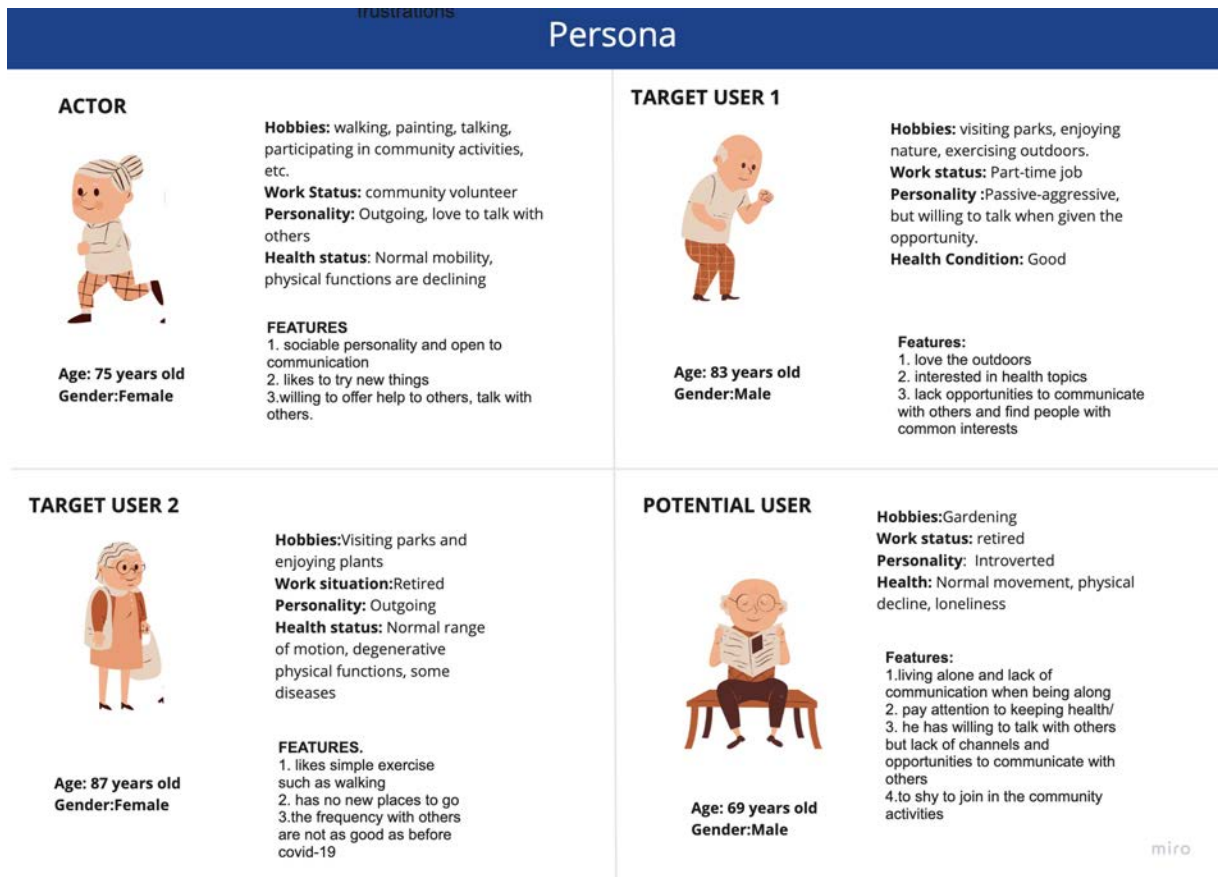


Figure 3.15 Persona Design

introverts to increase their community involvement.

3.4.2 Map of plant distribution in community design

Background

Based on the evidence, insights, persona, and our goal, I tried to find some touch-point that could be used as a medium to establish a connection between residents in the community. In the end, I chose a community map as the medium. The main reasons for choosing a map are

1. Residents are familiar with the map: it can be found in several places in the Yonamoto residential complex. The map is a familiar touch-point for the residents, as we wanted a simple way to get into their lives. It is also easier to reach and less burdensome for the people involved than an indoor location, as the map is outdoors.

2. The function of carrying information: A map's essential function is carrying much local information. It can provide the distribution of buildings in the community. and the map was used to build a platform for sharing information within the community, which seemed to be a good vehicle at the time.

Prototype of map of plant distribution in community

For the prototype, we set up the map as a blank, line-only map of the interior of the complex area (figure3.16). This purpose was to allow residents to record the colors on the map with the corresponding color pencil at the appropriate location based on some of the plants and scenery they see in the community when they walk around the group site. This way, users can record the four seasons they see in the housing complex, as the plants change seasonally. At the same time, based on the results of the user's drawing, a route of colors is displayed on the map according to the distribution of the plants, which guides the user on walks and sightseeing in the community with the density of the color dots also representing the density of the plants in bloom.

In addition, the map is designed in different sizes so that it can be done in cooperation or by the user alone. The different sizes of the map can be placed in different locations within the community, the booklet size can be used as the user's collection, and the larger maps can be placed in the community center, in public communication areas within the community such as parks or on community

notice boards, so it can be used both indoors and outdoors, reducing stress for users who do not want to visit to the community center.

I hope that the map will inspire older residents to be more aware of the plants around them and that by stopping to admire them, taking photos, or recording them on the map, they will be able to show their love of plants and that this love of plants may be an opportunity to start a conversation with plant lovers and enthusiasts in the community. We also hope that the map will provide residents with a sense of achievement by providing them with a ‘souvenir’ of their walks and recording the changes of the seasons.

The scenario I envisage for the map is that when a resident walks around the community with the map in hand and stops at a flower garden, the map becomes a symbol of the resident’s status as a ‘plant lover.’, and the map could trigger some simple conversations such as: “Did you plant this flower?” “This is a beautiful flower.”

3.4.3 User test

The test is divided into two parts: in the first part, we asked for the advice about the map from the social welfare worker (Ms.H). And in the second part, because one of the design goal is to invite the elderly to go out, we asked an expert (Ms.M) in the community with extensive knowledge of plants to follow her route for a walk around the community.

Map test

When H first saw the map (figure 3.17), she did not understand how to use it. She seemed to understand how to use it only after we explained it. Then, we invited her to try to color on the map with colored pencils, based on her memory of the distribution of plants in the community, but this seemed difficult for her, and she thought long and hard before sketching a few strokes in the corners of the map and later changing the colors and sketching a few more around the same corners. Finally, we asked her if it was because she was familiar with the area, and she said that she was impressed because she had often passed by there and there were some beautiful flowers. In the end, H only managed to complete the coloring of this area and told us that she was not sure if she remembered it clearly. After doing this test, H gave her opinion on the map:

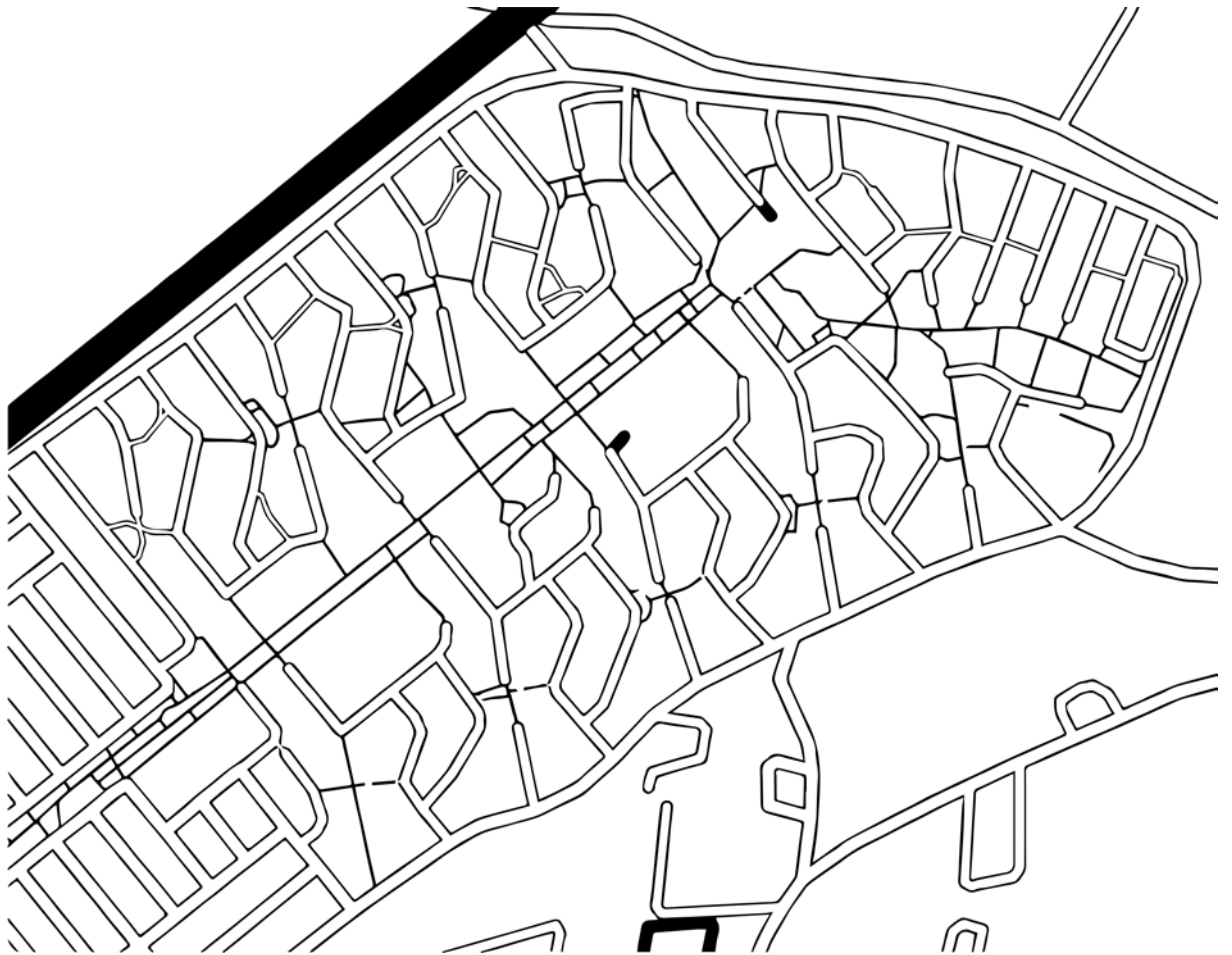


Figure 3.16 Prototype of map of plant distribution



Figure 3.17 Map user test

“It is actually a great idea, but from an older person’s point of view, they would want the whole process and steps to be made simpler, as older people have a limited level and speed of acceptance of new things, so overly complicated rules would be a burden for them.”

“Who should update this map with this information if it is to share the distribution of plants in the community? Maybe it could be made in a larger size so that it would be better to have everyone update it together.”

“The funds for activities in our community is rather limited, and there may not be a way to print out a lot. And if we (senior workers) are required to update the information on it, we may not be able to do it with our limited editing skills.”

“The beautiful flowers are a good way of attracting our attention, but there is a risk that people do not mark the location correctly or that when residents follow the map, the plants disappear, which will be disappointing. ”

Walking with the plant expert Map test

The initial plan of the walking is: M took us on one of her most frequent walking routes to see the surrounding scenery and explain the plants we encountered. The route was not within the complex but rather a route around it. The walk took us past farmland, roads, riverside walkways, and roadside rest stops.

Along the way, M introduced us to some more striking flowers, such as the



Figure 3.18 Walking with the elderly

large fields of canola bloom and the cherry blossoms that bloom in spring. When she heard birds singing on the road, she also imitated them and affectionately called the birds Mr birds. Throughout the trip, M acted as a guide, explained the species of plants, and shared her stories and thoughts. For example, she was envious when she saw people riding bicycles (remembering her bicycling days when she was young) and her experience of living in the community.

Overall she was relatively calm throughout the walk. The peak of her emotions came when she saw a rarely seen plant open on the road, and she said:

“I have never seen this here before. I never thought I’d come across it today. What’s the name of this one? Let me see. I can’t remember”,

So M took out her phone and started looking it up. She had downloaded an app that allowed her to identify plant species by taking photos, but this was the first time she had used it. When she opened it, she was bothered by the many ads and registration information. We helped her to set it up, and she took a picture of the plant and uploaded it to the app. After a while, she was delighted to see the plant information and said.

“Yes, yes, yes, that is it, the wild lily.”

During the walk, M also picked some wildflowers that had opened up a lot on the side of the road and showed them to us. It was new and exciting to hear more about these plants, as I had seen them often before but didn’t know their names. At the end of our trip, we took a group photo as a souvenir. When we got back to the community center, M was happy to take the group photo and share the walk with her friends.

3.4.4 Findings

Findings from map test

For the first prototype, although only one user was tested, it was very representative of the testers because she is an older person and has many years of experience working and living in the elderly community. From her feedback, it seems that some mistakes were made during the design process. I have summarised some Findings from the first test.

1. Inlusiveness and elderly-friendly: From H's feedback, it seems that this design is not elderly-friendly. The simplicity of the design and the lack of explanations make it difficult for older people to understand what the map is for. For older people, simple graphical information is not as intuitive as textual information. It is still difficult to navigate when the user is physically fit. The method of punctuation is also too abstract.

2. Systematic thinking: In the initial design phase, I was largely thinking from the perspective of the older participants, but neglected to consider that if the design was to be sustainable and develop in the community in the long term, there was a need to think from the perspective of other actors. –who will update the information and whether they can see the value of this design, which is key to sustainability.

3. Beautiful and rare things are the key to attracting older users: When it comes to accomplishing the goal of attracting residents to go out, this design only considers adding interest, but ignores some basic mental model of the user. When there are beautiful flowers and noteworthy plants in season, such as cherry blossoms in full bloom, it makes people more natural to go out.

Findings from walking with the plant expert

The walk with M helped me to have a better understanding of walking for older people and the contact with plants during the walk. From this walk I got some findings as follow:

1. The interaction between people and plants when they walking: Older people may appreciate and pick flowers when they walk, and they may also want to know the names of flowers and information about them. When encountering a plant they like, it brings a lot of novelty to know the name of the flower and some information about it. She will also try to imagine what the flower looks like:

“This flower looks like the lotus flower on which the Buddha sat”.

2. Mental model of the elderly regard to walking: For the walkers, the motivation is to exercise, and all other factors are secondary, the walkers put their health first and do not care much about other rewards. For the walker, the plants, the nature, the animals are like the songs we listen to when we exercise, they relax us, immerse us in the experience, enhance the fun and reduce our fatigue.

3. Walking is a very common exercise: Especially in Yonamoto residential complex, where people have their own customary walking routes, methods and times. They are familiar with the surrounding area and they take as little or as little as possible things with them during their walks. The role of a map as a guide is not as important as it should be and, as mentioned in H’s talk, only the distribution of beautiful flowers can surprise people, however, this design did not catch and achieve this function well.

4. People talk from small to large: Throughout the walk, the direction of our conversation with M changed a lot. From the initial focus on flowers, and the route of the walk, frequency and other common topics, H talked to us about different things as we encountered bicycles riding by on the road, birds singing in the distant fields and cherry trees by the river.

On encountering the bicycles, the conversation with us became.

“Ah, this reminds me of when I was younger and used to ride my bike like this to and from”

When we came across birds chirping in the distance, M started to imitate them.

“Chirp, chirp, chirp, it is so cute, right? MR. bird”

When we reached the cherry trees, she told us about the history of the trees and started asking us questions: “This tree is in plant by our community” “Does China has cherry trees” “What is the national flower of China?”

It was definite that when we are engaged into the nature environments, the natural stuff could be a friendly ticket for opening conversation, especially when the group of people have a specific goal or attend the same activities. No matter it is a flower or singing of birds, they will cause people’s curiosity and unconsciously the topic would change, from the topic related to the natural stuff to some experiences of their own, as Mehl, Matthias R., et al. describes in the article, such conversations are conducive to the strengthening of people’s relationships [45].

3.5. Second round design: Updated map and plant-printing workshop

Based on the investigation of the initial concept, I identified several mental models for the interaction of older people with plants and also identified the role plants could play in enhancing communication in the community. I iterated the previous design. In the second round of design, we considered the following points.

1. Simplifying the rules of the map. This time, I wanted to simplify the use of the map and its rules, make it more accessible to the elderly, and communicate our ideas to them in a way that was more in line with their mental model and behavior.
2. Thinking from the perspective of the stakeholders: when thinking about the problem, it is not only related to our users but also the community workers who can make the activity sustainable and what value they care about.

In addition to these, after observing the older people's walks, I felt that there was a need to expand on the content of the activities. Walking in the community has become the most common form of activity for older people, whether it is walking on their own or participating in a community health walking session. Therefore, the design of the map or the design of the walk can be just one part of the design series.

3.5.1 Plant-printing workshop design

Background

I have planned a plant-related workshop in the housing complex, which will focus on the creation of crafts from plants, based on the following objectives.

- Increase the volume of activities. In our previous activities, I found that although the elderly were interested in plants, the design of map was not new to the elderly in the community who walk as their most common hobby. So I wanted to increase the abundance of plant-related activities and try something new that the seniors in the community had not experienced before, something more to their liking.
- For sustainability: From the perspective of the community workers, they

are better able to understand the activities that are being held in this way. Because such activities are similar to those that existed in the community, they have more control over workshops or session-like activities.

- Findings based on walks: During the walks, I found that seniors have a special feeling for flowers in season, they take pictures and pick flowers to keep the memory of the moment, and they were willing to share this memory with others through a specific stuff, for example the photos or the flowers they picked up. I also learned from our interview with H that people are more motivated to see only beautiful and rare flowers. Therefore, I wanted to run the campaign utilizing something they like.

Based on these considerations, I set the theme of the workshop using plant printing and dyeing, and the specific setting will be introduced in follow section.

Botanical dyeing is a very traditional dyeing process using pigments from plants, and has been used since long ago. The principle of botanical dyeing is simple, i.e., the pigments in plants are allowed to penetrate into the target object by squeezing and tapping. Botanical dyeing can maintain the original shape of the plant, but the color may be less changed, and the resulting pattern is often artistic. Many horticulture therapists use this method as a way to treat patients and groom them, and many communities have made it a permanent activity in the community to enhance communication and enrich community activities.

The botanical dying approach is illustrated below (figure 3.19).

Internal skit and review

After having a specific idea, I invited several students within our school to conduct a skit simulation on March 29th to test the fluency and feasibility of the activity and to investigate and observe the participants' behavior and thoughts during the participation process.

The specific arrangements are as follows:

The participants were comes from Keio University and Yokohama National University, including the organizer, there were five people in total, and the gender structure of the participants was four women and one man. The workshop was expected to be set for 1h30 minutes and was divided into three parts, the first

植物プリント の作り方6ステップ

原理：
ハンマーやスプーンを使って花を強く押すと、花から出た色が布やキャンバスに滲れ出て、まるで絵画のような仕上がりになります。

ステップ0
まず、数歩や庭に出かけて、草や花を探すことから始めましょう。鮮やかな色で、乾燥しすぎず、ジューシーすぎないものがおすすです。試行錯誤しながら、いろいろな植物を探してみてください。

ステップ1：準備
-花や葉っぱを印刷する（薄いほうがいい）。
-木づち
-水彩紙、布（古着・ハンカチ）、キャンバス地
-色止め剤
-テープ
-はさみ

ステップ2：花や葉を切りそろえる。
植物のかたまりやふにふにやした部分を切り落とし、紙の上に並べます。レイアウトから作品がどのようなものになるかをイメージしてください。
それから、花をテープで止めるという方法もありますが、紙の上でやる場合はやめておいた方がいいでしょう。
20-25分

Step3：粉碎開始です。
木槌や小さなハンマーで、叩き始めます。
花の色素で紙が濡れるまで叩きます。思ったより強く叩く必要があります。
35-45分

ステップ4：アンカバー
思い通りのデザインになったことを確認したら、叩いた素材からテープや花を丁寧に剥がす。
15分

Step5：プリントを保存する
水彩画用紙の場合は、好みの色に仕上がったところで、紫外線防止用のアクリルスプレーをかけると、色が鮮やかに保たれます。風通しの良い場所で行ってください。
布にプリントした場合は、色止め剤と一緒に水に浸けて20分ほど持った後、取り出して乾燥させます。
5分～20分



Figure 3.19 Process of the flower printing

part was the introduction of the principle of plant dyeing by the organizer; the second part was the attempt making by the participants; the third part was the collaboration of a pair of dyeing works by everyone.

The venue for the organization was placed indoors, and I set up the venue before the members arrived (figure3.20): I placed flowers where they were more easily accessible to the participants and prepared tools such as tape, scissors, and hammers. Several different flowers were placed before the event started, as well as some wildflowers and weeds that the organizers had collected that day. Finally, I set up a camera to record the whole process and the conversations among the participants.



Figure 3.20 setting of the workshop

Process of skit

Stage1

When the participants walked in and sat down, they first noticed the flowers in the center and began to ask, “Is this the flower I am going to use today?” “How am I going to use it later? What is the name of this flower?” “I think I

have seen it in front of the station before,” and other simple conversations. Then, when I handed out the flyers, they understood how the flower would be used in the workshop.

When the organizer was demonstrating, I chose a relatively common leaf and topped it on a piece of white paper. Next, I placed flowers on the white paper, a soft napkin on top of the flowers, and then began to hit the leaf with a hammer to imprint it onto the white paper. However, since the whole venue was set up on the third floor, I was afraid of worrying about disturbing the neighbors downstairs, and I was not skilled in this process, which led to the final result not coming out well, which led to a decline in the participants’ trust in me, so the demonstration, which was intended to last about 15 minutes, ended early and went to the second stage.

Stage2

In the second stage, everyone took out a piece of paper and chose their favorite flower to try it on, and because everyone was in the exploratory stage of the botanical printing technique, many exciting conversations arose.

“I think it is better to use darker flowers. It should be more obvious (be printing on the paper)”, “I feel that leaves are better than flowers because they are flatter,” “If I combine these flowers and grasses, it will feel very Artistic sense,” “Wow, you did a good job eh, so beautiful!”

Participants tried and shared their skills, and their skills were greatly improved throughout the process. There were also some discussions about the production methods.

“This tapping is noisy, and the neighbors will complain about us if they hear it, right?”, “Trying to print and dye the flowers on the paper is more effort than I thought. Isn’t this too difficult for the elderly?”, “Yes, when I saw the poster, I thought it would be easy, but I did not expect it to be so hard.”

After participants completed their attempts on the white paper, the time spent was about 20 minutes longer than I expected. Some participants only completed the initial attempt, while others were already proficient and had made several copies of the material, and those who mastered the method quickly were able to help other slower participants by showing them the techniques.

Stage3



Figure 3.21 The works by the participants in stage 2

In the final phase of the workshop, the plan was for the group to design a canvas bag using the plant printing method, with the theme being a gift for the community center in the Yonamoto complex.

Everyone had many ideas on how to design the bag and finally decided that one person would be responsible for designing one corner of the bag. In the process of making it, everyone mastered the skills of printing and dyeing. So the conversation turned more into a discussion about the design.

“I put a big chrysanthemum here and some grass. I feel I can combine it into a real flower shape” “I will make some graphics with grass,” “I feel I do not look pretty in this. How should I place it? ”

Throughout the process, when the participants are proficient in the skills, the design purpose was clear, and only manual work was required. Then, the participants started to discuss other topics, such as the study and life situations. Eventually, when all the work was done, everyone looked at the work they had designed together and shared their opinions.

“I think it is perfect, eh, very artistic” “You did a beautiful job with this piece”, “The word in the middle of this does not look like that at all. How did you do it” and other discussions.



Figure 3.22 The process of the 3rd stage

Findings from skit

Positive

1. Communication: The participants engaged in a variety of conversations throughout the workshop, including discussions about flowers at the beginning, about production techniques, and finally about life. The development of these discussions changed according to the workshop scenario, showing a phase and adaptability to the conversation environment. For example, in the first stage, I just exchanged pleasantries and praised the beauty of the flowers; in the second stage, the discussion started to focus on the production techniques and design methods; in the last stage, when I became familiar with the production techniques, when I relaxed and calm, and only needed to do manual work, the conversation started to change to the discussion of life. The discussion of things in life.
2. The role of plants: Plants play a role of ticket of talking in the whole workshop. It can be the ticket of all conversations, i.e. it is easy to find common topics or open up topics to eliminate some "atmospheric gaps", which I think is also very relevant to the theme of the workshop. Because it was about plants, it was natural to talk about plants without context. Also, the



Figure 3.23 Final work of stage 3

presence of a physical plant made the whole conversation natural.

In addition, some participants also mentioned that the process of making the flowers in this way (hitting them with a hammer) made them feel relieved of stress and that it was healing to observe the flowers.

3. Skill enhancement: Making handicrafts is a gradual and cumulative process of improvement, and it was clear that this was verified in the overall workshop. The participants are all new to this activity. At the beginning, they thought it was easy to print and dye with plants, but when they actually did it, they found out the difficulty points. After several attempts, they gradually became proficient, and when they could learn more, they even helped others to complete the task, which definitely strengthened the bond between participants. During the whole crafting process, as the participants' understanding of the production method deepened, they began to seek more innovative ways to produce, such as new designs, new patterns, using flower petals to make specific shapes, etc. The conversation topic of the participants in this process also changed from pleasantries to technical discussions, how to innovate and how to design, and the depth of the conversation was improved along with the technical progress. The depth of the conversation was enhanced along with the technological advancement. These situations occurred naturally, reflecting the role of the participants' initiative in the process of participation, and confirming that this workshop, using plants as a medium for creation, left a lot of space for the participants to do their own DIY and bring out their own creativity.

Negative

The participants have most complain about the method of making botanical prints. Even I, as the organizer, felt that the noise generated during the production would disturb the neighbors, which caused a lot of anxiety among the participants. Secondly, the participants thought that it took a lot of effort and time to make a good pattern, which was also a problem for them. Finally, the frustration of making mistakes and the anxiety of not having inspiration when designing are also mentioned by the participants.

3.5.2 Updated map



Figure 3.24 Updated map

The second time I proposed a map (figure 3.24), I presented it at the locally regular meeting of the Yonamoto community, with participants from different organizations. I wanted to show our stakeholders the potential value of using this map.

In this interview, I again introduced the use of the updated map and explained in more detail the intention, background, and other information about the design of this map. I also explained that I had narrowed the range of use scenarios in which the map could be used, i.e., it could be placed in a community newspaper as a board. Unfortunately, although the participants appreciated the map and agreed on its value, their expressions showed that they were still not sure about the map and were not very willing to follow up. Surprisingly, it was the canvas bags (figure 3.25) I made that aroused their great interest, especially the grannies: “How is this made?” “This color is very nice” “Is this the four words of Yonamoto,

is it written wrong? it really doesn't look like it". Seeing that they were interested in our design, I shared how I made the canvas bag and said that if they were interested in it, I could also conduct an activity like this in the group. H from the community said that if it was possible, she would put what I made in the community center to see how the people who came to the community center would react to it. I also accepted this offer.



Figure 3.25 Discussion with the stakeholders about the workshop

Findings from Map

In this round of testing, the plant workshop was generally well received by the community of stakeholders and showed great interest. For us, I realized at this stage that people in the community would prefer to develop activities that fit their usual work patterns, and the challenge for us was how to make the whole activity more senior-friendly.

3.6. Third round design: pressed-flower workshop

3.6.1 Design opportunities

From the previous findings and conversations with stakeholders, I saw that the community stakeholders were interested in the crafts produced by the plant-printing workshop and still showed meager interest in the design of the map, so in this round of design, I wanted to focus on the design of the workshop. The

first thing I wanted to address was the problems I encountered in the skit: noise, physical effort to make, etc.

I participated in another meeting on 2022.4.4, conducted by the stakeholders, which focused on issues such as the development of the community. At this meeting, one of the issues raised by the participants was :the low utilization of the shared gardens and the need for long-term maintenance of the shared gardens.

Currently, the maintenance of the community gardens is carried out by two staff of the council, and they recruit some residents to help. However, the residents involved are usually elderly, and the watering bottle is a 2l water bottle, which is too heavy for the elderly residents involved in the maintenance work, the long-term watering and maintenance work is becoming a burden and overwhelmed for them. Therefore, the staff wanted to recruit more seniors or people of other ages to participate in the maintenance of the community shared garden to meet the long-term development of the community.

In response to this issue, I proposed the idea of decorating the watering bottles with plants ornaments. The experience in the previous round of workshops verified that making artistic decorations and handicrafts through the use of plants can induce a sense of accomplishment in the participants, and that the process of creation allows the participants to develop communication with each other and promotes communication. Therefore, I wanted to utilize the findings of the previous round of experiments in this development. The idea was to use the flowers in the community as materials and let the residents make a handicraft similar to the workshop in second round design. By decorating the watering bottles with handicrafts made by the participants, we hope to:

1. Make the bottles different and more like a watering bottle rather than a wine bottle in order to induce a change in the residents' attitude towards watering work.

2. If the residents could participate in a plant-making workshop, making their unique decorations and decorating a specific watering bottle, they might experience a sense of responsibility and have fun. And first develop a connection to the bottle or shared garden, and then deepen the participants' sense of community contribution and connection to the community.

Our proposal was well received by the stakeholders in the community, who

thought it was meaningful and fun and seemed to attract a younger generation to join in, which would be great. With the community workers' approval, the next challenge was to solve the previous problems and change the workshop format so it could be successful.



Figure 3.26 The watering bottles in shared garden

3.6.2 Pressed-flower workshop

Background

I changed the theme of the previous workshop to make pressed-flower. The reasons are:

1. Making pressed-flower is more labor-saving and simple
2. The pressed-flower products can be used as decoration in different places and are more versatile.

I intend to use the plants as the raw material to make the pressed flowers and then further process them with tape, colored cardboard, etc., to make them stronger, so they can be used in more places.

The method of making pressed-flower decoration

I designed a method to use cardboard and tape to turn the pressed dried flowers into a flower decoration by taping them with the cardboard and then cutting them along the shape of the flowers with scissors. Using this method, participants can effectively prevent the dried flowers from being eroded by moisture and therefore from decaying.(figure4.6)



Figure 3.27 Method of making pressed-flower decoration



Figure 3.28 The pressed-flower decoration prototype

Setting of the pressed-flower workshop

The Pressed-flower workshop was started on 2022.4.28. It held in Yonamoto Local government association, I set up the workshop as shown in the (picture3.29), and placed materials for the workshop, such as scissors, tweezers, tape, etc., on each table, the trash bags was set up next to the seats so that participants could dispose of unwanted items during the process. The instructor's table was set up in the middle so that participants could clearly see the instructor's explanation of the process. The whole process was recorded with a video camera.

Process of the pressed-flower

The workshop is split into three sections as picture3.30: The first step is to teach the flower3.31. Then, a lecturer familiar with flower making will demonstrate how to make the flower to the participants, and the participants can try to make the flower and learn how to make the flower.

The second part is the decoration making(figure3.32). In this part, considering that the moisture in flower will take time to dry (usually 3-7 days), the organizer prepared some dried flowers in advance so that the participants can learn how to make the decoration. The third part is decorating the bottles(figure3.33). Participants can use the decorations they made in the second part to decorate the



Figure 3.29 The workshop setting

large water bottles, making them their customized water bottles. And finally, all the participants will get their own designed bottles(figure3.34), and the bottles will be placed into the field, as their contribution to the community.

3.6.3 Evaluation

Method

the main method of evaluating the results was through a questionnaire completed by the participants afterwards and interview method. For the interview, the author invited two participants to discuss briefly after the workshop, and we interviewed them again two weeks after the workshop, hoping to investigate the after-effects of several participants in the days after the workshop.

Result of the questionnaire

The questionnaire is set up with 15 questions, of which 3 were open-ended, 8 were semi-open-ended, and 4 were closed-ended questions. The total number of participants was 10, of which three were male, and seven were female. The participants were from different backgrounds. Two were from community self-governance associations, two were from NPO organizations, four were community residents,



**押し花手作り
ワークショップ**

◆ 春色満開の米本団地共同花壇で、水汲み用のペットボトルと一緒に飾り付けましょう！
是非花の飾り付けの楽しさを一緒に体験しましょう！

■ **主な活動内容**

- 1 押し花の作り**
押し花の作り方を紹介します。
約20分
- 2 押し花の保存方法の紹介**
押し花の簡単な保存方法を紹介します。
約30分
- 3 ペットボトルの飾り付け**
みんなで一緒に米本団地の共同花壇の水汲み用ペットボトルを飾り付けましょう！
約40分

**時間：令和4年4月28日(木)
午前10:00 - 12:00**
場所：米本団地自治会

Figure 3.30 The workshop process



Figure 3.31 Stage 1: the participants are learning how to make pressed-flower

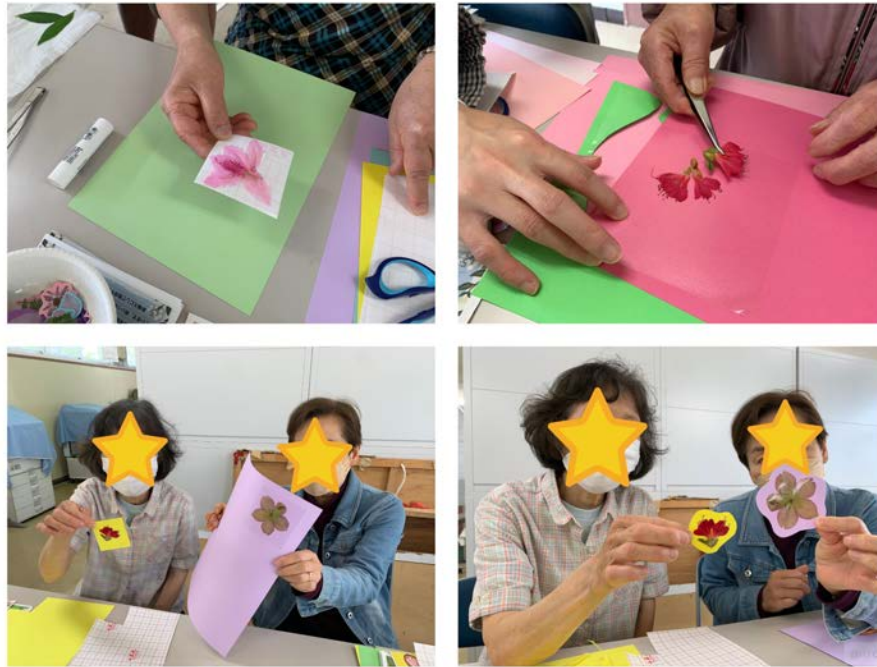


Figure 3.32 Stage 2: the participants are trying to make flower decoration



Figure 3.33 Stage 3: the participants are decorating the bottles



Figure 3.34 The decoration bottles made by participants

and two were community workers. The main contents of this questionnaire were: 1.evaluation of the workshop. 2.basic demographic questions such as age and gender of the participants 3.previous plant-related experiences of the participants, and 4.the participants' satisfaction with the workshop and future expectations. One of the questionnaires was considered invalid because of the low number of responses (number of questions answered: 2/15).

From the overall results of the questionnaire, two participants were over 80 years old, four were between 70 and 80 years old, one was between 50 and 60 years old, and the remaining three were between 30 and 40 years old. Most participants had previous experience participating in plant-related activities (8/9). The responses regarding the frequency of participation in plant-related activities (Q4) show that the frequency of participation varies for each individual and ranges from daily participation to once a month. Most participants chose to participate in plant-related activities because of interest and health (frequencies 4 and 5, respectively).

In Q7(figure3.35) and Q8(figure3.36) we asked about what participants felt was the most complex and most accessible part of the activity, respectively. From the participants' answers, decorating bottles and conversations with people around

them were the most interesting for participants (frequency: 7). In the responses to Q8, the part that participants found the most difficult, decorating bottles, was also seen as the part that participants found the most difficult. In both questions, an open-ended option was set in which participants could write down their feelings. In Q7, participants most often mentioned: “thank you,” “it is fascinating,” and “it is great to communicate with others.” In Q8, the most frequently mentioned questions were “it(decorating bottles) require a sense of art” and “the tape was difficult to deal with”. Notably, one participant responded in Q8. “I had much fun with your help today, but on my own, I felt like I couldn’t do it by myself.”

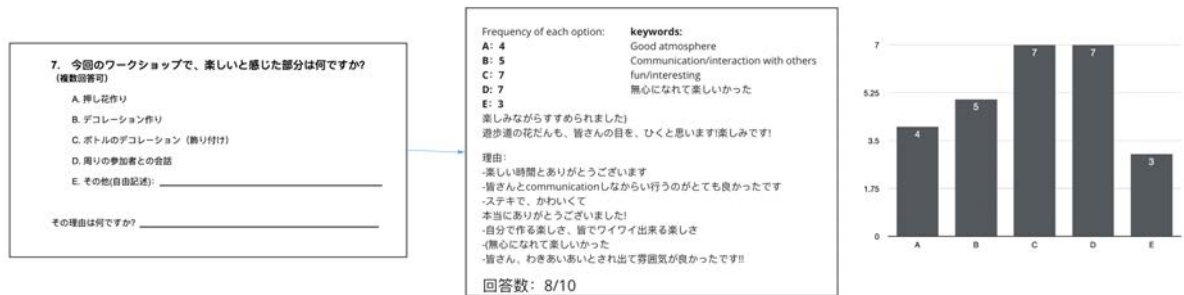


Figure 3.35 Analysis of question 7

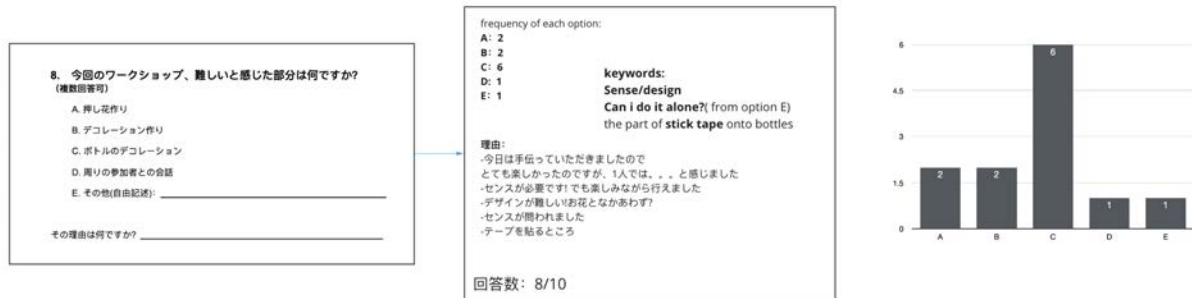


Figure 3.36 Analysis of question 8

For Q9(figure3.37) and Q10 (figure3.38), the two questions were whether they would recommend the workshop to their friends and whether they would try the workshop’s content at home. These two questions were set to give indirect

feedback on the participants' satisfaction with the workshop. According to the data analysis, the average recommendation score of the event was 4.44, with the highest score being 5 (from participants aged 30-40, 50-60, and 70-80) and the lowest score being 3 (from participants aged 80 and above). It is also clear that satisfaction with the activity decreases from 30-40 years old to 80+ years old (average score from 5 to 3).

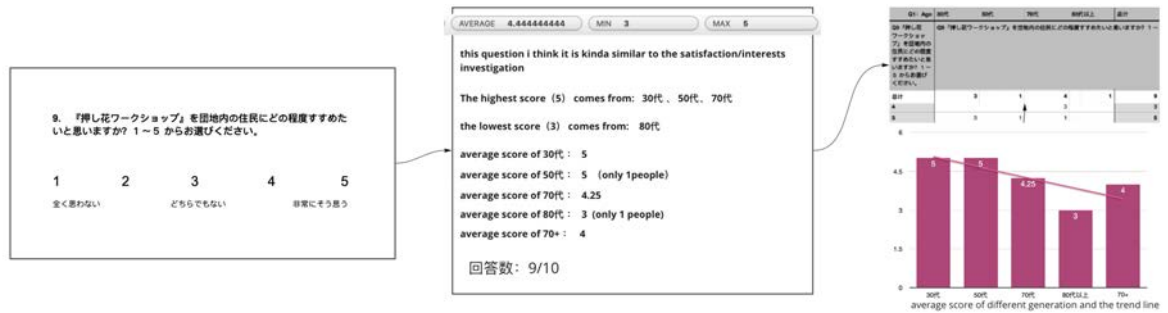


Figure 3.37 Analysis of question 9

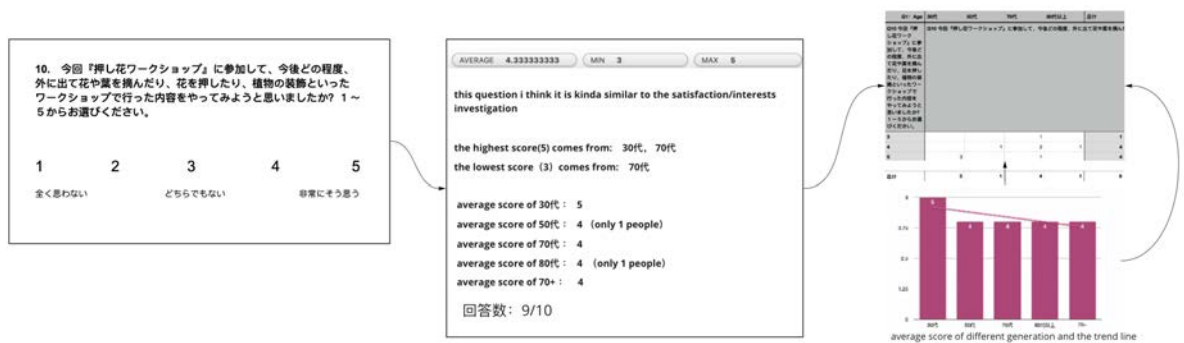


Figure 3.38 Analysis of question 10

Result of interview

In an interview after the workshop, some feedback was collected from persons who were both a workshop participant and a staff member in the community

In an interview after the workshop, some feedback was collected from persons who were both a workshop participant and a staff member in the community

1. The decoration bottles were very popular: all the bottles made in this round have been put into the community's shared flower gardens(3.39). Many people came to ask Ms.I, "Did you make this bottle?" "Is this bottle a gift from someone?" "Did you also make the flowers on the bottle?" "It's so pretty." When Ms.I was asked these questions, she answered, "Yes, I made it myself", and in her conversation with us, she said she felt proud of it.

2. Workshop format: When we talked to I about our opinions about the workshop, she thought it was enjoyable to make the bottle with everyone, especially to discuss and help each other. "For some of the older participants, they needed help in order to proceed smoothly". And "this format also provided an opportunity for everyone to communicate with each other".

In the process of talking to us, Ms.I took out her cell phone and showed us a picture of the bottle she made being placed in a community shared garden, and it was clear that she was very proud of her work. At the end, Ms.I told us that many people would like to participate in the pressed-flower workshop, and she hopes that this activity can be started in the community in the long run.



Figure 3.39 The decoration bottles in field

3.6.4 Findings

1. Basis for the activity development

The staff had good feedback about the activity and were willing to implement the activity for a long time, and hoped that through this small decoration and the bottles, people in the whole community who were interested in plants could join in and link more people through their interest. What was evident in the discussions with the community workers was that the community workers saw value in this activity. They felt that certain stages of the program, such as designing, making, and learning techniques, could be used as a means of preventing dementia in older adults. Also, they believe that the participation of older participants in group discussions during the activity can also be effective in building a network among them to enhance communication among them. Therefore, from the perspective of the long-term development of this activity, it is a great to have the support and understanding of the local community workers.

2. Promotion method

After the first time, we had some water bottles made with the participation of users within the community and they were placed in a shared garden within the community. This gave us a good opportunity to promote the project. According to the AIDA model⁶, the first step to make the audience feel informed about something is to attract their interest. The bottles that were placed within the shared garden that were labeled with flowers largely turned out to be one of the most direct ways to promote. When people in the community saw the bottles in this form, they were intrigued and motivated to join the activity.

An effective method of promotion about the event in the community, whether through word-of-mouth or by seeing the the bottles placed in the shared garden, was proven.

However, further consideration needs to be given to the promotion work. For example, many people who are interested in making the bottles need to ask experienced people to get the information, and when they cannot meet the people

6 AIDA Model.

[https://corporatefinanceinstitute.com/resources/knowledge/other/aida-model-marketing/f\(2022,7,30 checked\)](https://corporatefinanceinstitute.com/resources/knowledge/other/aida-model-marketing/f(2022,7,30%20checked))

involved, they got confused, Therefore, for this group of people, the way of promotion needs to be improved.

3. Elderly-friendly

It is easy to see from the results of the questionnaire that the recommendation for the activity decreases with the participants' age grows. two 80+ seniors scored 3 out of 5 (the lowest rating of all results). Probably the reason is because some parts of the activity are not friendly enough for seniors, such as putting the flowers on the tape. This is a test of seniors' hands-on skills and patience. Moreover, during the workshop we found that many elderly people had shaky hands and their eyesight was not very good, so they often had trouble tearing the tape and took a lot of time, and they often needed the assistance of volunteers. This makes it a bad experience for them as they can only finish a small number of decorations in 40 minutes.

3.7. Final design: updated workshop

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3.7.1 Final concept

In response to feedback from participants and stakeholders in 3.6.2 and 3.6.3, as well as our observations of several issues, I will be making improvements to the workshop:

1. Promotion method: For those who arouse interests in seeing Yonamoto bottles in the garden but do not know how to make Yonamoto bottles, there is a need for a guide to tell them about the existence of this activity.
2. Consideration of mobility issues for the elderly: For older adults with different physical abilities, more professional and patient volunteer support is needed. So we recruited more seniors who had participated in the first round in the hope that they would become volunteers and help others.
3. Increase the richness of the activity: For residents with higher levels of production skills and mobile ability, activities that correspond to their abilities

are needed to keep their interest.

Therefore, under the condition that the workshop content and production method remain the same, the whole workshop process will be executed according to the 3.7.2 service blueprint (figure 3.42).

There are two things designed as touch-points during the whole process of the workshop:

1. Activity information card (figure 3.40): This card will be placed next to the Yonamoto bottles to inform residents who are attracted to the bottles but are unaware of the existence of the workshop.
2. Plant information card (figure 3.41): This card will be used during residents' walks and workshops, and is designed to enhance the participants' enjoyment and enable them to learn more information and knowledge related to plants.



Figure 3.40 Activity information card



Figure 3.41 Plant information card

3.7.2 Service blueprint map

The service blueprint of the final design is as figure3.42

3.7.3 Eco-system map

The eco-system map of the final design is as figure3.43 showed. In the eco-system map, a new place of community engagement was generated in the outdoor environment based on the feedback from previous participants. And in this process, the red line represents the transformation of the participants' identity, from being curious at the beginning, experiencing multiple participation, and finally becoming experienced or volunteers.

3.8. Summary

This chapter documents the process from the first time the author entered the Yonamoto housing complex, started ethnography and decided to use the rich local plant resources as the medium for the community activities, and made adjustments to the activities step by step according to the actual situation of the community and finally got the final design. In this process, the selection of plants and the decoration of watering bottles became two key points. The selection of plants was based on the use of local resources, and the selection of decorative water bottles was based on the need for sustainability and a solution to a community problem. Throughout the process, the design evolved step by step and relied heavily on the support and co-creation of the community staff. It was also because of the need for the water bottle design that local volunteers and organizers could see the value in it that the event was permitted and carried out.



Figure 3.42 Service blueprint

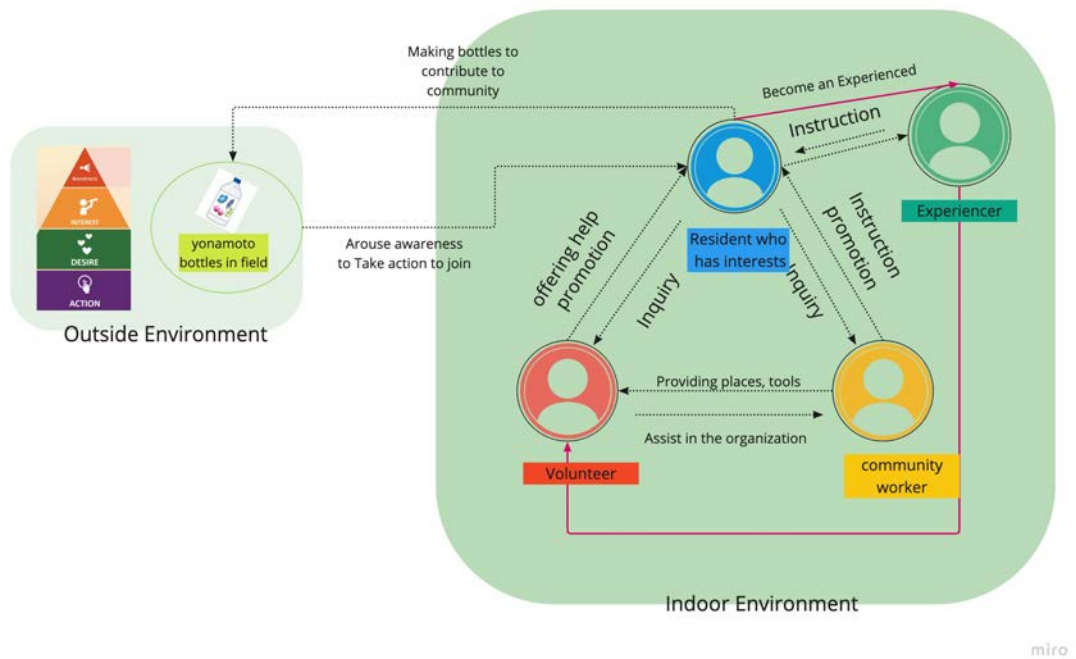


Figure 3.43 Eco-system map

Chapter 4

Prove of concept

4.1. Methodology

In the final design-pressed flower workshop, three main approaches to value verification are:

1. Observation: observing the participants during the workshop, using cameras, recording what people were doing, talking, and interacting.
2. Questionnaires and interviews: questionnaires and interviews were conducted with the participants and community workers involved in the workshop, which discussing with them questions about their satisfaction, advice with the workshop.
3. Focus group: After the workshop, a focus group consisting of the organizers, the researcher, the residents who participated in the event, and the community residential care workers, was held to discuss the possibility of developing the workshop, the long-term implementation plan, the participants' and other issues, and the value of the event.

4.2. Day1: Picking flowers & Pressed-flower Making

Stage 1 of the final design was started in 2022. 5. 28. Unlike the previous round, stage 1 was set up and executed by community workers and volunteers. For the execution of the event, the community workers contacted a resident with much experience in making pressed-flower in the community to teach other participants

how to make pressed-flower. The staff of the Autonomy Committee set up the venue. Our job was to record and video the whole event and help the participants with difficulties.

4.2.1 Process

There were 8 participants in total on the day. The event did not have a set time for each step as in the first workshop, and there was no fixed seat for the participants. The table near the entrance was set up with flowers collected from the community flowerbeds in the early morning and the tools needed to make the flowers, such as tweezers, scissors, newspaper, and paper towels. Since there was no fixed location, participants could go to the table near the door to pick up the needed materials and choose their favorite flowers to make.



Figure 4.1 Stage 1 of the workshop set-up

Throughout the activity, the expert in charge of teaching started with a demonstration, while the other participants gathered around her to observe. The expert was responsible for teaching and guiding the other residents through the process. Once the participants felt they comprehended enough about the process, they could choose to start making pressed-flower by themselves. If they did not understand something during the process, they could return to the main table and continue to observe how the expert was making it. In addition, they could also

ask other participants for help.

In addition, the way of making the flower was also very different from the first round. This time, the workshop focused on a method introduced by the experts, which was to use newspaper instead of wooden boards. After all the participants had finished making the flower, the staff of the homemade workshop collected all the finished materials and stored them under heavy weight.



Figure 4.2 The participants help each other in stage 1

At the end of the stage 1, there were many unused flowers, which were tied into a bouquet by the members of the autonomy club and given to the participants of this event. In general, the workshop was a lot different than the first workshop. The whole process was guided and organized by the community workers and volunteers. The improved process, based on the understanding of the community workers, made the whole event more relaxed, and it was evident that there was a lot more conversation during the workshop, there was also more interaction between the participants.

4.2.2 Focus group

Background

A focus group was conducted after the stage 1 of the workshop, it lasted 30 min, two resident participants and two working staff were invited. The topic of the focus

group is to discuss about their feedback of participating in this round workshop, and their thoughts about the adjustment of the workshop process. **Process**

During the focus group, several major discussion points were mentioned.

1. Perceptions of process change.

The community workers thought it was pretty good to divide the overall workshop into two phases, which increased the learning time for the seniors and made it easier for them to keep up without having to concentrate very hard. In addition, the workshop allowed participants to choose their favorite flowers to make pressed-flower while walking in the park. The combination of walking and picking flowers and making pressed-flower made the experience much more enjoyable, and the participants had fun conversations and discussions during the walk. The community workers also felt that this way of organizing the event would significantly reduce their workload. If they had to prepare a lot of materials, it would be a burden for them as they are usually busy with work. In that case, it would be challenging to implement the event in the long term.

2. Discussion of future activities.

In this workshop, one of the community workers proposed many activity plans based on the production of flower decorations. He thought he saw the potential of using the interest of the elderly in the community in plants to enhance the connection between residents. He thought there could be more plant-related activities in the community in the future, such as using plants in combination with music and plants in combination with exercise. Another community worker also expressed great interest in this proposal.

4.2.3 Findings

From the observations of stage 1 and the subsequent focus group discussions, several findings were recorded.

From the observations of stage 1 and the subsequent focus group discussions, several findings were recorded.

1. The activities became more localized.

The community workers rearranged and reorganized stage 1 according to the plan we proposed in 3.7.2 so that the whole stage 1 was developed in a very different way from the first round pressed-flower workshop. In this process, our

role became that of solution initiators, and the community members became the implementer. This made the whole activity more localized and adapted to the residents while maintaining the original value. Based on the adjustments made by the community workers, it was evident that the participants were more relaxed, talked more to each other, and interacted more during the workshop. This also confirmed the importance of co-creation in the execution of community events.

2. Interaction of participants

In stage 1 of the workshop, we found that the participants interacted more and became more "intimate." This can be attributed to the change in the environment, the organizers, and the way of organizing. Compared to the first workshop, there were no fixed seats for the participants, and no materials were assigned to them, which inadvertently created a sense of "relaxation" for the participants and made the event less formal. This allowed us to see a different interaction between the participants than in the first workshop. In the first round, the interaction between participants was more about communication and how to keep up with the progress of the workshop. This time, however, there were more ways to interact, such as helping each other and talking about their morning flower picking experience. In addition, there were a few experienced participants who had participated in the first workshop, and they were responsible for helping the new participants, sharing their skills, and explaining to them, which definitely increased the interaction between the participants.

3. Value in the context

The activities in the senior community require much help from community volunteers and community workers. After experiencing the first round of workshops, the community workers were interested in the value and potential of this activity. This allowed the community workers to become more involved in the development and construction of the event, which contributed significantly to the long-term development and sustainability of the event. When the value of the event can be perceived by the community workers and the people in the community at the same time, the community event can create more value and continue to be held.

4.3. Stage 2: Making pressed-flower & decorating Yonamoto bottles.

4.3.1 Background

In stage 2 was held on 6, 3, 2022, and we continued to be in charge of guiding participants in making pressed-flower decorations and decorating Yonamoto bottles. Unlike the previous event, this time it was held in the activity center near the community autonomy association, which has a wider space. There were 11 participants in stage 2, and three of them participated in the first round of workshops.



Figure 4.3 Stage 2 of the workshop

4.3.2 Process

This time the participants were assigned fixed seats as the same as in the first round workshop. The dried flowers made in stage 1 were placed on a table in the middle and participants could choose their favorite flowers as materials before and during the event.

The event started at 10:00 am and almost all participants arrived before that. At the beginning of the event, participants can choose the pressed-flowers they had made in Stage 1. Everyone gathered around the table and started talking

about the flowers they had made: “Wow, it’s so beautiful”, “This is so cute”. Others would ask their friends around them, “Do you know what kind of flower this is?” . One of the participants had extensive knowledge about plants, and when she encountered such a question, she would explain the varieties of flowers to the people around him. When the participants finished choosing the materials, they returned to their positions and started to follow the instructor to make the pressed-flower decoration. During this process, volunteers would go to help the participants in need, while the experienced ones would also offer their help. Many participants still felt difficulties, for example, some participants had difficulty in tearing the tape and some had difficulty in using tweezers precisely. There were also more skilled participants who were thinking about how they could combine different kinds of flowers to achieve a better design. Finally, The last step was to put the flower decoration on the Yonamoto bottle.



Figure 4.4 The final work participants made

4.3.3 Focus group

Process



Figure 4.5 The process participants put the bottles in field



Figure 4.6 Final works in field

A focus group was conducted after the stage 1 of the workshop, it lasted 30 min, with 1 resident participant and four working staff was invited. The topics included: 1. the stakeholders' attitude towards the activity. 2. The value created by the activity. 3. The participants' feelings towards the activity.

4.3.4 Findings

1. The participants' feeling towards the activity

When talking about the participants' feelings towards the activity, the most frequently comments were: "It was enjoyable and interesting."

A comment from all the stakeholders and one of the residents who participated in the meeting said that: "whether it was picking the flowers, making the pressed-flowers or finally decorating the bottles, they all felt that the process was much fun."

The role of plants in the whole workshop cannot be ignored. When the participants saw their picked flowers turned into pressed-flowers after a week of drying, most of them exclaimed, "they are look adorable" and "the flower is so We could hear this in the whole process of the workshop. Through these simple conversations, the residents were able to open up the conversation and to some extent create an emotional resonance in the process of participation.

2. Self-improvements

From the focus group discussions, one of the autonomy staff said: "It's different when people are interested in it, they start working hard to create new ways to decorate the bottle and make it look good" "Compared to the first time, this time the skills have improved and people are starting to focus on how to make the bottles look good". "The people who were interested in the project had a high level of awareness, so they wanted to make it beautifully "The participants have already done it once, so they are more willing to make it carefully, and as time goes by, they are more inclined to make it beautiful." The improvement of the participants' skills in making pressed-flower decorations was also evident from the process they went through. More people started to try new ways of designing and making new items, as shown in the picture 4.7. They also started to discuss with people around them on how to make the process easier and more effective. One community worker also mentioned in the focus group. "When I was looking at

this (bottles), various ideas emerged in my mind”.

It can be seen that, because of interest, participants are highly motivated to improve and explore themselves, and discuss with others. People gather together because of interests, explore and communicate, achieve deeper communication with others, and strengthen connections.



Figure 4.7 The bookmarks with pressed-flower decoration created by the participants

3. The activity builds the network in the community

At the focus group, various stakeholders and participants shared their views on the workshop's function of strengthen the network in the community. Mr.W, one of the working staff from the social welfare association state that: “The decorated Yonamoto bottles became a medium that was placed quietly in the shared garden but invited all those in the community who were interested in plants.” “It is very rare that people from the detached home in the south of the community who are

also very interested in this activity. The number of bottles in the garden is few, but many people are already interested in making them”. Ms.I, a working staff from the autonomous association of the community state “I was really happy. I was so happy to see people who were not from the housing complex(participate). Various networks were connected. I thought the power of people is amazing.”

The fact that people from different backgrounds are attracted to this activity shows the attraction of plants as a medium for the people of the Yonamoto community, and this attraction is effectively translated into a medium for building community networks.

At the same time, they mentioned the bottles placed outside successfully provide an ticket of talk in outdoor place for social participation, which provides an opportunity for those who are not used to participating in indoor activities to communicate.

4. Benefit for the elderly

During the focus group discussion, several community workers also said that by participating in the event, it helped the development of physical and mental health of the elderly, and had a significant effect on dementia prevention in particular. W, a community welfare worker, talked about, “I was really surprised that Yonamoto bottles connected people to each other and prevented care and dementia.” “This workshop has been told to people with dementia who have been denied access to day services. They were very willing to participate. A patient of also participated this workshop this time.” “(This event) it has been successful in bringing together older people with dementia and people who have an interest in plants. We have seen people with dementia participate in flower pressing and making yonamoto bottles. While there is no clear evidence that participation in this activity relieves dementia, we have confirmed that they (people with dementia) are willing to participate, which is to be expected.” “A friend of a person with dementia told us that although it was not the Western-style dressmaking or tea ceremony he had interested, he was more excited to join the activity with his friend and talk with them” Staff also reflected that participation in this event would enhance the activity level of residents. “Participants tell us that activity has increased because the process of picking and collecting flowers now begins with an early morning radio exercise ”

What can be seen is that by rationalizing the whole process and enriching the participation experience, residents can gain physical and psychological benefits during their participation, which is very much in line with the value of elderly residents' participation - to improve their health.

4.4. Feedback from questionnaires and interview

For the final design, two different questionnaires were set up depending on the number of times of participation, one for residents who had only participated in one round and the other for residents who had participated twice. In addition, interviews about the workshop were conducted among the participants. Several main points that were discussed are summarized as follows:

1. Participants' feedback: When asked about the participants' participation in the activity and the vases they made, the most frequent answer was "feeling moved and proud". Also, in the questionnaire, residents who participated twice said that they felt a sense of contribution and pride in the community when they saw their vases placed in the garden and as a "part" of the community. "I tried to make more beautiful bottles" "When I was looking at this, various ideas emerge in my I thought I would get better at it(the workshop) as I practice more" "It was difficult, but I enjoyed it. Through these participants' feedback, we found that this is in line with the SDT narrative that participants are more inclined to engage in and work towards an activity when they feel the value of the activity and are internally motivated.

2. Changes to lifestyle In the questionnaire, when participants were asked if their lifestyle had changed after the first round of workshops, they responded, "They increases interest in plants". (I) make a special effort to look at flowers on the roadside/pay more attention to the flowers around me" "Become more fun when going out"

In a later conversation with the participants, Participant A from outside the community also said, "I thought it was wonderful to see the experience of the decorations and the variety of bottles made by various residents using their own creativity. Also, the plastic vase idea was great. I would like to expand it with everyone and expand this activity to involve more people. We're older people and

we don't get outside as often as we'd like, so we're trying to do things like that and encourage people to get outside. So we start by doing exercise, and then we go on a little walk and pick some flowers and learn the names of the flowers and make some bottles, and I think that's a way to encourage people to get out. I have a lot of little health problems, so it's hard to get around. But when I saw the flowers and after participating in the event, I was more motivated to get out there. If I can go out and meet people, if I can meet them and do these activities with people. I think that might be a good idea. Yes, thank you very much.

From these responses: by participating in this event, the generation and strengthening of interests, and the development of a sense of value have a positive and sustainable impact on the lifestyle of participants.

Chapter 5

Discussion

5.1. Conclusion

This study aims to reduce loneliness in the post Covid-19 period by establishing and enhancing community activities for older adults living in the community to improve their social participation and QoL. This study confirmed that community activities based on local characteristics could effectively and widely engage more senior people in the community, increase their community involvement, create a sense of belonging to the area, a sense of pride in their work, and help them find connections with people who share their interests. In addition, by co-designing with community workers, the activity can effectively combine creativity and practicality to make it more suitable for the local community.

The main findings discussed on this study are summarized as follow:

Development of community activities

The role of community activities in enhancing social participation has been widely demonstrated, but the challenge is to find a format and method of organisation that is relatively appropriate for the local community, and for the participants and organisers to find value in participating. In this study, we organised the workshop through ethnography, using the rich resource of plants in the Yonamoto residential complex as the medium, and co-design with community to develop the workshop. According to the feedback from the participants, According to the feedback from the participants, this event effectively enhanced the richness of community activities, increased the enthusiasm of residents to participate in community activities, and made community workers feel the value and long-term development potential of organizing this event. Thus, the development of an event based on local characteristics and resources will greatly enhance the perceived value of the event to residents and local community workers, and en-

courage them to join the event.

Another key point is to organize the activity combine with creativity. In this study, the activity is a creative combination of handicraft making and gardening activities, with a specific goal of solving basic issue of maintenance the shared garden in the community as the starting point. Taking this as an opportunity, we set the activities with the goal of enhancing communication and social participation. By allowing residents to feel the joy of design and contribute to the community at the end, the residents felt valued and validated from the outside, and this successfully stimulated their intrinsic motivation. While solving community problems, using such creative, integrated solutions to community development needs brings additional benefits.

Co-creation

The significance of co-creation in the community is evident: we validated the role of design thinking theory in the coordination of stakeholders and the importance of co-creation in the development of communities. The inclusion of multiple group of people in the co-creation process allows the proposal to be more practical and relevant to the development of the community. In this study, the process in co-creation was to allow the community workers to perceive the value of the activity. Once community workers are able to perceive the value of the proposal, this can motivate them to contribute to community activities and greatly increase efficiency.

Sustainability of the community activities This study went through four stages from the initial design to the final design, going through the process from a design that was initially unacceptable to one that eventually became a community activity that had the potential to be long-lasting and valuable to the community. During this process, some of the key point for holding a sustainable community activity was discussed, and the authors summarize the following key points from the entire process of activity development.

1. Meeting the needs of community development: The main content of this activity are making pressed-flowers, making pressed-flower decoration and decorating watering bottles in the community, in which decorating watering bottles plays a key role in sublimating the meaning of the activity and making it more valuable to community workers and residents. The reason for decorating the

community watering bottles was based on the need for community development: shared gardens in the community require long-term maintenance, and for the elderly there is a need for more motivation to keep this maintenance activity. By decorating watering bottles, residents can feel a sense of contribution to the community, a sense of accomplishment from designing and making crafts, and thus increase their interest in participating in the maintenance of the shared gardens. Therefore, the sustainability of community activities can be greatly enhanced if the goals are set and organized in a way that meets the development needs of the community and makes it part of the building and development of the community.

2. Value creation: For this case, the reason why the activity can continue to be held comes largely from the fact that different actors can feel the value of the activity. For the community workers, they felt that the activity could promote the residents' network in the community, had the potential to prevent dementia in the elderly, and made effective use of the plant resources in the community. Also, for them, the workshop was a familiar way to organize (which decrease the learning cost for them) and it can solve the problem of maintenance of shared garden in the community. Therefore, they are willing to support the development of this activity.

For the elderly residents, their main concern is their health. By participating in the activity, they can exchange their interests with each other, establish connections with others, enhance communication, develop interests, and improve their sense of contribution and accomplishment. The diverse forms of experience also allow them to exercise their bodies and improve their mental health in the process of participation, so they are also happy to participate in this activity.

3. Use of the local resources: This activity co-created with community worker and used the rich plant resources in the local community as a medium to hold the community activities. The use of operant and operand resources made the activity more sustainable and feasible. Therefore, the proper use of these two resources can enhance sustainability for community activities. In addition, based on the preliminary observations, we found that the elderly in the community are fond of plants and handicraft making. Therefore, developing community activities in conjunction with the cultural background and habits of local residents can also facilitate the development of community activities.

4. Sustainability of community activities requires continuous iteration: The development of this design shows that the long-term sustainability of community activities requires continuous iteration. Both the development of the overall format and the adjustment of the details of the activities require a process of development. The iterative process requires consideration of the community's resources, the interests of the different actors, and the feasibility of the activity. By continuously summarizing, analyzing, and iterating, we can make the event better fit the needs of the community and the local residents.

5.2. Limitation

While the workshop was a success from the feedback analysis and the evaluation of the results also confirmed that the participants felt that their participation in the event had increased their connection with the community. However, there are still many limitations:

1. This pressed-flower workshop was only held in the Yonamoto residential complex, and the number of participants recruited was around 20 on two rounds, so quantitative data is relatively not enough, which may not be representative .

2. There were a few participants from the younger generation, which may be different from our target population, and therefore the data from the first participant does not give a good representation of the views of older people.

3. During the course of the activity, three of the ten participants in the first workshop were male; one of the ten participants in the second round workshop was male. This is a relatively small number compared to the number of women who participated in the event. Although the men who participated gave us the best feedback, we still need to examine the impact of the event on men.

5.3. Future work

For the community activities, we can also develop communication between people of different generations.

Currently, we are only experimenting with the Yonamoto community, but we have not tested our model in other communities. In the future, we hope to test

our model in places other than Yonamoto. Service is an organic combination of environment, people, and events; all services will be contextualized. Therefore, Therefore, it would be more convincing if the results of this study could be validated in other communities

We would also like to do things in the community that we have not yet done. For example, we need to have a broader range of activities related to pressed-flower for older people with different skills and abilities.

This activity is not yet friendly enough to some older people with poor ability. For example, we currently have to rely on volunteers to assist in the taping part, and we need to improve this in future iterations.

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Appendices

- A. Flyers designed for the first round workshop
- B. Discussion materials
- C. Poster designed for 2nd & 3rd round workshop
- D. Questionnaire analysis
- E. Feedback from social welfare working staff

押し花手作り ワークショップ

春色満開の米本団地共同花壇で、水汲み用のペットボトルを一緒に飾り付けましょう！
是非花の飾り付けの楽しさを一緒に体験しましょう！

■ 主な活動内容

- 

1 押し花の作り
押し花の作り方を紹介します。
約20分
- 

2 押し花の保存方法の紹介
押し花の簡単な保存方法を紹介します。
約30分
- 

3 ペットボトルの飾り付け
みんなで一緒に米本団地の共同花壇の水汲み用ペットボトルを飾り付けましょう！
約40分

Figure A.1 Flyers designed for the first round workshop: page 1

押し花の作り方6ステップ

目的
押し花を作るためには、花に含まれる水分を乾燥させ、花の色の持ちをよくする必要があります。また、短時間で仕上げるため、書籍のような重石を用意してください。

用意するもの

- 板 X 2 (段ボールの板でも可)
- キッチンペーパー (湿気を吸収することのできる普通の紙や新聞紙でも可)
- ティッシュ X 2 (花を守る)
- 重石になるもの (乾燥の促進)
- ピンセット (花形の調整)

ステップ1
板の上にキッチンペーパーを置く、その上に、もう1枚のティッシュを被せる。

ステップ2
花をティッシュの上に並べる。その際、なるべく平らになるよう気をつける。

ステップ3
その上に、もう1枚のティッシュとキッチンペーパーを被せ、もう1枚の板で挟むように置く。

ステップ4
さらに、その上に重石を乗せる。

ステップ5
2~4日待つ (通常、水分の多い花は4日、普通の花は2日为好)。ティッシュの上から触って湿っているようなら、引き続き乾燥させましょう。花びらの厚さによって乾燥にかかる時間は異なりますので、花の様子を見て判断しましょう。

ステップ6
完成!
お好みに装飾としてご利用ください。

Figure A.2 Flyers designed for the first round workshop: page 2



Figure A.3 Flyers designed for the first round workshop: page 3

押し花の保存方法

出来上がったドライフラワーは壊れやすく、湿気に弱いので、以下の方法で保存します。



1.密封できる袋で保存
ピンセットで紙から優しく剥がして密封できる袋に入れ、日の当たらない場所で保管しましょう。押し花は湿気に弱いので、保管袋の中に乾燥剤を入れておくと良い状態のまま長く保存することができます。



2.乾燥に使う紙類はこまめに取り替えよう
新聞紙をこまめに替えることで、きれいな色をキープすることができます。

ドライフラワーを他のものに飾る場合は、空気と接触しないようにテープで止めることもできます。



用意するもの
テープ、ハサミ、
ドライフラワー



葉の大きさに合わせて
テープを2枚カットする



テープの上に葉っぱを
平らに置く



別のテープを貼り
余分な空気を抜く



余分な部分を
切り落とす

Figure A.4 Flyers designed for the first round workshop: page 4

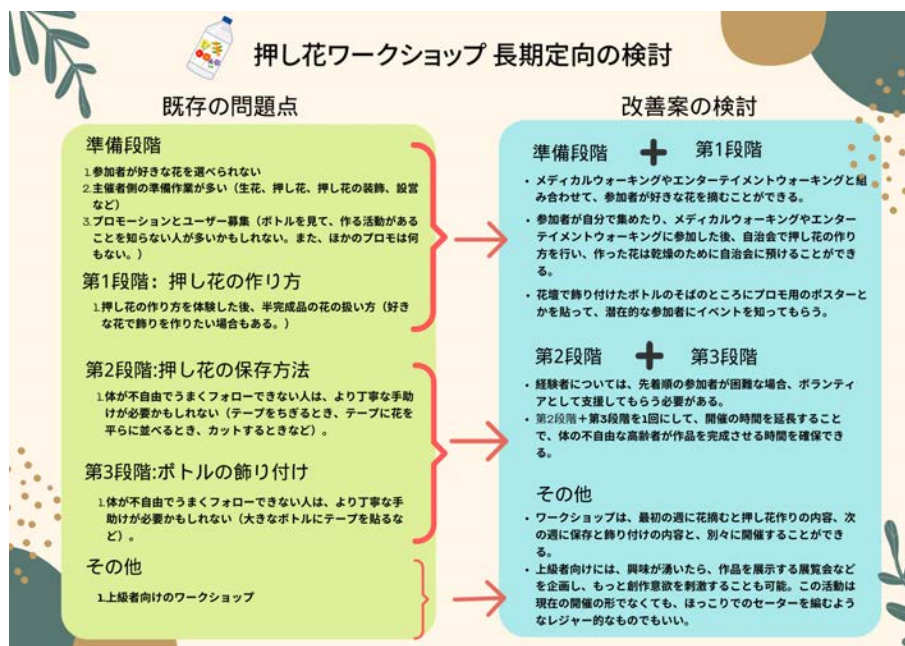


Figure B.1 Discussion materials

**押し花手作り
ワークショップ**

押し花手作りワークショップ第二弾開催！
今回の主題は「初夏の花」です～
米本団地共同花壇で、水汲み用のペットボトルと一緒に飾り付けましょう！
是非花の飾り付けの楽しさを一緒に体験しましょう！
経験なしの方も大歓迎！

主な活動内容

1 押し花の固定方法
壊れやすい押し花を長持ちさせ、
より多くの場所で使えるように
するための固定方法を紹介します。
約40分

2 ペットボトルの飾り付け
みんなで一緒に米本団地の共同
花壇の水汲み用ペットボトルを
飾り付けましょう！
約40分

3 共同花壇の完成品の姿
完成したペットボトルを団地
の共同花壇に置きましょう！

時間：令和4年6月3日(金)
午前10:00～
場所：自治会事務所

Figure C.1 Poster designed for 2nd round workshop

押し花手作り ワークショップ

押し花手作りワークショップ第三弾開催！

米本団地共同花壇で、水汲み用のペットボトルを一緒に飾り付けましょう！
是非花の飾り付けの楽しさを一緒に体験しましょう！
経験なしの方も大歓迎！

■ 主な活動内容

-  **1 押し花の固定方法**
壊れやすい押し花を長持ちさせ、
より多くの場所で使えるように
するための固定方法を紹介します。
約40分
-  **2 ペットボトルの飾り付け**
みんなで一緒に米本団地の共同
花壇の水汲み用ペットボトルを
飾り付けましょう！
約40分
-  **3 共同花壇の完成品の姿**
完成したペットボトルを団地
の共同花壇に置きましょう！
時間：令和4年8月2日(火)
午前10:00～
場所：自治会事務所

Figure C.2 Poster designed for 2nd round workshop

1st round workshop questionnaire

Participants: 10
Structure of the questionnaire (total 15)
 1. selective question
 2. Open-end question
 3. Half-open question
 4. enumerated question
 *non-required question

No.	Q1	Age	Sex	Gender	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
1	70代	男	男	男	(注) 経験者か未経験か 不明	E 過去5年以内 経験あり	F	B	E	E	4	4	F	F	F	F	F	F
2	60代以上	男	男	男	F	F	F	F	F	F	F	F	F	F	F	F	F	F
3	80代	男	男	男	経験者か未経験か 不明	E 10年以上 経験あり	F	F	F	F	F	F	F	F	F	F	F	F
4	70代	男	男	男	経験者か未経験か 不明	D	D	B	B	D	4	4	D	D	F	F	F	F
5	60代以上	男	男	男	F	F	F	F	F	F	F	F	F	F	F	F	F	F
6	80代	男	男	男	経験者か未経験か 不明	AD	AD	AD	AD	AD	4	4	D	D	F	F	F	F
7	80代	男	男	男	F	F	F	F	F	F	F	F	F	F	F	F	F	F
8	80代	男	男	男	経験者か未経験か 不明	AD	AD	AD	AD	AD	4	4	D	D	F	F	F	F
9	80代	男	男	男	経験者か未経験か 不明	AD	AD	AD	AD	AD	4	4	D	D	F	F	F	F
10	80代	男	男	男	経験者か未経験か 不明	AD	AD	AD	AD	AD	4	4	D	D	F	F	F	F

Figure D.1 Analysis of 1st round questionnaire

ID	Age	Sex	Residence	Occupation	Education	Marital Status	Children	Income	Health	Work	Life	Family	Society	Environment	Future	Other
1	70	M	...	...	...	...	...	...	...	...	...	...	...	...	...	...
2	70	M	...	...	...	...	...	...	...	...	...	...	...	...	...	...
3	60	M	...	...	...	...	...	...	...	...	...	...	...	...	...	...
4	70	M	...	...	...	...	...	...	...	...	...	...	...	...	...	...
5	70	M	...	...	...	...	...	...	...	...	...	...	...	...	...	...
6	60	M	...	...	...	...	...	...	...	...	...	...	...	...	...	...
7	70	M	...	...	...	...	...	...	...	...	...	...	...	...	...	...
8	60	M	...	...	...	...	...	...	...	...	...	...	...	...	...	...
9	70	M	...	...	...	...	...	...	...	...	...	...	...	...	...	...
10	70	M	...	...	...	...	...	...	...	...	...	...	...	...	...	...
11	70	M	...	...	...	...	...	...	...	...	...	...	...	...	...	...
12	70	M	...	...	...	...	...	...	...	...	...	...	...	...	...	...
13	70	M	...	...	...	...	...	...	...	...	...	...	...	...	...	...
14	70	M	...	...	...	...	...	...	...	...	...	...	...	...	...	...
15	70	M	...	...	...	...	...	...	...	...	...	...	...	...	...	...
16	70	M	...	...	...	...	...	...	...	...	...	...	...	...	...	...
17	70	M	...	...	...	...	...	...	...	...	...	...	...	...	...	...
18	70	M	...	...	...	...	...	...	...	...	...	...	...	...	...	...
19	70	M	...	...	...	...	...	...	...	...	...	...	...	...	...	...
20	70	M	...	...	...	...	...	...	...	...	...	...	...	...	...	...
21	70	M	...	...	...	...	...	...	...	...	...	...	...	...	...	...
22	70	M	...	...	...	...	...	...	...	...	...	...	...	...	...	...
23	70	M	...	...	...	...	...	...	...	...	...	...	...	...	...	...
24	70	M	...	...	...	...	...	...	...	...	...	...	...	...	...	...
25	70	M	...	...	...	...	...	...	...	...	...	...	...	...	...	...
26	70	M	...	...	...	...	...	...	...	...	...	...	...	...	...	...
27	70	M	...	...	...	...	...	...	...	...	...	...	...	...	...	...
28	70	M	...	...	...	...	...	...	...	...	...	...	...	...	...	...
29	70	M	...	...	...	...	...	...	...	...	...	...	...	...	...	...
30	70	M	...	...	...	...	...	...	...	...	...	...	...	...	...	...

Figure D.2 Analysis of 2nd round questionnaire

1) 【作品としての花ペット】自分で作り上げた花ペットボトルを見たとき、率直にどのような気持ちになりましたか？氏家さん自身の感情および、参加者の方の後日談などもし聞いているようであれば、それも合わせて教えてください。

個人の感想

目からウロコ！焼酎ペットボトルが、人と人をつなげ、介護予防や認知症予防になったことは本当にびっくりしています。また作品として楽しむこともできれば、作成後に米本団地自治会花の会さんが共同花壇の水汲み用ペットボトルで使用されていることで社会参加の場にもなっています。

認知症ケースの方でデイサービス利用拒否があった方にこの取り組みを周知しています。是非参加したいとのこと。またこのケースの友人も同じく参加したとのことでした。

実は、このケースの社会参加場の整備をするために、学生さんも参加されておりましたが、4月～5月にかけて、認知症サポーター養成講座、声掛け・外出支援担い手講座、趣味で繋がるネットワークづくりの講座を実施しています。認知症高齢者が活動する場所やそれをサポートする人たちを集めることに成功しています。押し花づくりや押し花ペットボトルでは、すでに認知症サポーターが参加されているのを確認しています。認知症ケースの方はまだこの活動に繋がっていませんが、参加の意向は確認できておりますので期待したところです。

参加者の声

押し花ペットボトル作成のために、5/27に押し花作りをしました。参加は12名です。認知症サポーターや担い手講座の参加者や米本団地自治会「花の会」さん、慶応義塾大学院生さんご協力いただきました。参加者からは、早朝ラジオ体操からの花摘み採取の流れになっているので活動量が増えていること、個別にお花を届けてくれる方もいました。当日の花採取の為、散歩に出かける方や花を選ぶこと、押し花作りでも手先を使うことで介護・認知症予防にも繋がると反応がありました。

6/3に押し花ペットボトルWSです。参加者は19名です。団地住民だけではなく米本1.2街区（戸建て）の方が参加をされ。コロナ禍ではありますが、地区を超えた交流会となりました。参加者からは押し花作りと同様の効果とお茶を飲みながら各作品を眺めて楽しんでいた。

ワークショップ後は、ペットボトルの作品を自宅付近の花壇で使用するために持ち帰る方や米本団地内の共同花壇の12か所へ設置しました。設置後は地域の方が共同花壇の水汲み用のペットボトルで使用されています。参加者の中では、各作品を見に花壇巡りしながら散歩している方もいた。

認知症ケースの友人からは、「本人の希望されている洋裁や茶道ではなかったが、本人が手先が器用なことでや仲間同士での活動を何よりも楽しみに待っている」とお話されていました。

Figure E.1 Feedback from Mr.U: page 1

2) 【他の人へのおすすめ】一連の花ペットボトル活動を、どのような住民におすすめしますか？あるいは住民以外の人で（他の地域の方など）おすすめすることはありますか？

勝手ながらすでに色んな所に周知しています（笑）

令和4年5月～7月4日の周知方法

- ・個別相談ケースや認知症高齢者やその家族へ周知しています。
- ・美香苑ブログ
- ・米本暮らし
- ・米本自治会便り
- ・八千代ケアマネネット（八千代市内のケアマネージャー80名に包括の活動紹介をしています）
- ・令和4年度生活支援体制整備事業 生活支援・介護予防マップ

令和4年7月4日～令和5年3月末

- ・第57回関東ブロック老人福祉施設研究総会（すでに事例資料提出しています。）
関東圏なので広範囲に周知されます。またZOOM配信は9月からです。
- ・令和4年度千葉県認知症コーディネーターフォローアップ事例提供（予定）

3) 【イベント後への影響】一連の花ペットボトル活動を終えたあと、なにかご自身への影響はあったでしょうか？（例えば、散歩中の道端に咲く野花に目が行くようになった、草花がもっと好きになった、など）

趣味でランニングをしていますが、よく花をみるようになりました。花をみると押し花作りや押し花ペットボトルに参加された方の笑顔を思い出します。

4) 【男女差】女性の参加者のほうが圧倒的に多いイベントですが、男性参加者としての視点を伺えれば嬉しいです。氏家さん+もし他の男性参加者からのご意見なども聞いているようでしたら、それも合わせて教えてくだされば嬉しいです。

男性でもお花が好きな方はいらっしゃいますので広く周知できればと思います。また米本団地の特徴としては、団地から少し離れた所に畑や花壇も借りている人がいますが、高齢になるにつれて目的地に行けなくなります。（病気・フレイル・認知症等を理由に）

ですが、本人が住んでいる生活圏域内で押し花ペットボトルが楽しみとなり、介護や認知症予防、社会参加の場になればと思います。

Figure E.2 Feedback from Mr.U: page2

行く上で、一つの足がかりとしては押し花が大成功だったと私は個人的に思いますね。今日、一人ですけど、次は何人かいらつしやると思う。デバイスで来ていただけて。

外来人：関心があつても、ここまで来るのが遠いと思いますねなりますよね。そういう意味でも難しいと思います。私好きですつとこういうのも興味があるし、ものづくりが好きだったら、今井さんに声をかけて初めて参加させて頂いたん？ やつぱりいいなと思う。本当に思いました。あの、特に手を使ってやるっていうことが、これからの高齢者にとってはね、大事なことですよね。ある意味では脳トレになるんでしょうね。

今井さん： 考えてね。楽しくなってるのかを使って、どうしようとかね。

外来人： だからそういう意味でもすごくいいなあと思います。それにやつぱり。織田とみ抱くリーダーシップのこといらつしやるからそんなことないですよ。自治体のは、ものづくりに関しては。

先生： でも皆さん、本当に、いかにその継続的に自分たちでその工夫なさってるっていうか、もうなんか私たちがやることはほとんど何もなくて、すごい今日は楽しいなあつて見ててね、良かったよね。

Boss： やつぱり発想が違いますよね。やつぱり仕様が私たちがちよつと広がった。たくさん学べたしね。

外来人：仕上がったできた作品を見ているけどね。反応するっていうか、それをやつぱりいいと思いますよね。こういう機会があれば、どんどん出していきたい。

Boss： これからまだありますよね。

今井さん： そう、これが続くことですね。景気継続ですね。そうですね。

Boss： 押し花が一週間でね、あれだけの方ができたっていうね。やつぱり私たち一番初めにやった時に、ちよつと入れつばなしだったんで、ちよつと色もちよつと悪くなったりとか。まあ、やつぱり2度目のときに綺麗に出来上がったので、あーと思つて、日々やつぱりいつまでもね、挟んでおけばいいつてもんじやないんだな一つっていうか、そういうのが学びましたよね。やつぱり団地の花つていうのがいいですよ。あつた花ではないという。それが一番だよね。

今井さん： 咲いている花が違う。

先生： ねもう紫陽花と金原とかね。いつの間にかそういう季節になつちやつて。ありがとうございます。

Figure E.6 recording of focus group: part 4