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Evaluation of Common Meal Activities of Collective Housing in Sweden

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Abstract

Collaborative housing in Sweden, kollektivhus in Swedish, are noteworthy examples that have proven to establish mutual cooperation in multi-family housing, mainly through common meal activities. My society, in Japan, we have also introduced collaborative housing based on Swedish style since 2000, however I have heard that some of them have faced difficulties to manage common meal activities, because of difference of lifestyle between Japan and Sweden. This study aims to find out the way how Swedish collaborative houses run their common meal activities and how residents value these activities

Keywords: Collective housing, Common meal, Management, Evaluation, senior style, multi-generation style

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Introduction

Collaborative housing in Sweden, kollektivhus in Swedish, are noteworthy examples that have proven to establish mutual cooperation in multi-family housing, mainly through common meal activities. My society, in Japan, we have also introduced collaborative housing based on Swedish style since 2000, however I have heard that some of them have faced difficulties to manage common meal activities, because of difference of lifestyle between Japan and Sweden. This study aims to find out the way how Swedish collaborative houses run their common meal activities and how residents value these activities. This study is composed of 2 methods; questionnaires and case studies. 2 multi-generation style and 1 senior style collaborative houses in Stockholm will be chosen as the subjects of this study.

Senior style house is for residents over 40 without children and multi-generation house is open for all type of household. Questionnaires aim to gain an insight of the current situation and will enable the residents to evaluate common meals. Case studies will be undertaken to record the situation of common kitchens and dining areas as well as to understand the organization and management of the common meals.

Aims

Methods

The questionnaire survey was conducted during the researches on 7 November 2019 at Tullstugen, on 12 November at Sodra Staion, and on 14 November at Fardknappen, by leaving a questionnaire at the door of each local residence as well as entreating them to cooperate in completing the survey. The questionnaires were collected a week later by the residents, and dispatched to Japan after being translated into Japanese. The number of the respondents in each house counted 45 in Fardknappen, 11 in Tullstugen, and 25 in Sodera Station. The result of the survey is demonstrated by the tables of each resident's response and the graphs that illustrate the figures of the collective house for seniors (Fardknappen) and the collective houses for multi-generational households (the sum total of Tullstugen and Sodera) without the number of the non-responses, in order to clarify the tendencies at the two types of collective house.

Results

1. The Characteristic of the Respondents

1) Gender

The gender of each respondent is indicated in Table 1. Additionally, the numbers of each gender at the collective house for seniors and the collective houses for multi-generational citizen are shown in Graph 1. In each residence, the proportion of female resident is regularly higher. Particularly, the collective house for seniors where many single residents live, has a high percentage of female resident, while the collective houses for multi-generational households where

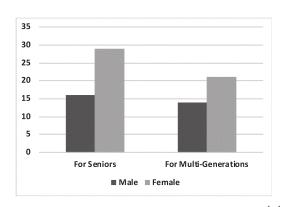
the residents largely live with their family, has a certain percentage of male resident as well 2) Age

The age distribution of the respondents is referred in Table 2, and the age distribution of each collective house for seniors and the collective houses for multi-generational households is separately indicated in Graph 2. As a requirement for moving in a collective house for seniors, its applicants should be aged above 40 years. Hence, the respondents at Fardknappen, a collective house for seniors, are all over 50 years old as the majority of them are in the seventies, followed by the sixties. The residents aged over 90 or older only appear at the collective house for seniors.

On the other hand, the majority of the respondents at the collective houses for multi-generational households are in the forties, followed by the seventies. As its title suggests, each generation from the twenties to the eighties appears at the collective houses and a wide age group is living there.

Table 1 The Gender of the Respondents (n)

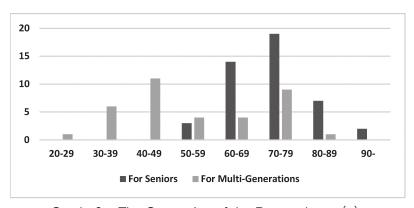
	Male	Female	Non-Response	Total
Fardknappen	16	29	0	45
Tullstugen	4	7	0	11
Sodra Station	10	14	1	24
Non-Response	2	3	0	5
Total	32	53	1	86



Graph 1 The Gender of the Respondents (n)

Table 2 The Age of the Respondents (n)

	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-	Total
Fardknappen	0	0	0	3	14	19	7	2	45
Tullstugen	0	3	0	0	2	5	1	0	11
Sodra Station	1	3	11	4	2	4	0	0	25
Non-Response	0	0	0	2	1	2	0	0	5
Total	1	6	11	9	19	30	8	2	86



Graph 2 The Generation of the Respondents (n)

3) The Number of People per Household

Table 3 and Graph 3 reveals the number of household members of each respondent. The single-households are the most numerous, followed by the two-person households.

As a precondition, the collective house for seniors is only available for single households or husband-wife households. Furthermore, the collective houses for multi-generational households, possess a high proportion of single households and two-person households as well as a certain proportion of four-person and more-than-five-person households.

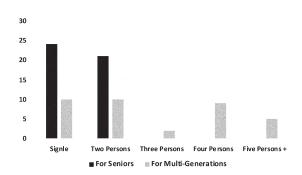
4) The Duration of Residence

The durations of residence of the residents are shown in Table 4 and Graph 4. The most numerous responses are "25 years or plus long residence", followed by "10-15 years long" and "3-5 years long".

In comparison with the collective houses for multi-generational households, the collective house for seniors has a high proportion of "25 years or plus long residence". Although, it is followed by "3-5 years long residence". On the other hand, at the collective houses for multi-generational households, the proportions widely distribute to each different residence period.

Single Two Persons Three Persons Four Persons Five Persons or More Total 24 21 0 0 45 Fardknappen Tullstugen 5 5 0 0 1 11 Sodra Station 5 5 2 9 4 25 Non-Response 2 2 1 0 0 5 3 5 Total 36 33 9 86

Table 3 The Number of the Respondents per Each Type of Household (n)



14
12
10
8
6
4
2
0
Less than 1-3 years 3-5 years 5-10 years years years years

#For Senior Citizens
For Multi-Generations

Graph 3 The Number of the Respondents per Each Type of Household (n)

Graph 4 The Durations of Residence of the Residents (n)

Table 4 The Durations of Residence of the Residents (n)

	Less than a year	1-3 years	3-5 years	5-10 years	10-15 years	15-20 years	20-25 years	More than 25 years	Non-Response	Total
Fardknappen	0	2	9	6	8	3	4	13	0	45
Tullstugen	0	1	3	0	1	2	1	2	1	11
Sodra Station	6	6	1	4	3	2	2	1	0	25
Non-Response	1	0	0	2	2	0	0	0	0	5
Total	7	9	13	12	14	7	7	16	1	86

5) The Relation between the Communal Dining Activity (Common Meal) and the Motives for Moving in a collective house

Table 5 illustrates the result of questioning whether or not conducting the communal dining activity (common meal) has affected their motives for moving in the collective houses. Most common responses that are from nearly half of the overall respondents, mention the communal dining activity as their motives for moving in.

The difference between the responses at the collective house for seniors and the responses at the collective houses for multi-generational households is indicated in Graph 5 which denotes a similar tendency of the responses. The proportion of the respondents who identified the communal dining activity as their motives for moving in the collective house, reach just under 50 percent. In the other words, it is confirmed that a little above 50 percent of the responded who answered either "no" or "either", did not emphasize the activity as their motive for moving in.

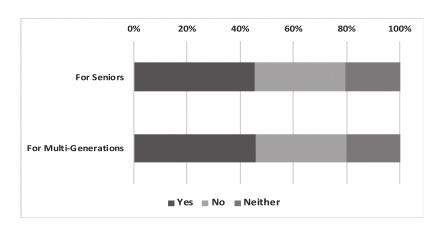
2. Participation in the Cooking Activities

1) Participation in Each Cooking Activity

Table 6 reveals the result of each experienced cooking activity in the communal dining activity (common meal), and Graph 6 shows the percentage of each cooking activity answered as

Yes No N/A Non-Response Total 9 Fardknappen 20 15 1 45 5 4 1 1 11 Tullstugen 8 6 0 25 Sodra Station 11 Non-Response 5 0 0 0 5 27 16 2 41 Total 86

Table 5 The Respondents' motives for moving in the collective house (n)

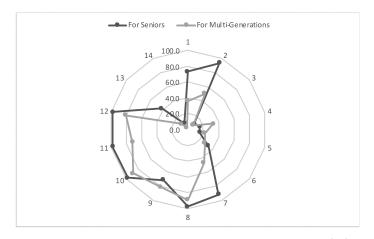


Graph 5 The Respondents' motives for moving in the collective house (n)

experienced by the respondents at the collective houses for seniors and multi-generational households. In Graph 6, a common tendency seemingly exists between the results at the collective house for seniors and multi-generational households. Many residents have generally experienced "8 cooking", "9 serving", "10 dishwashing", "11 table setting", and "12 cleaning". In contrast, "4 ordering the ordinary ingredients", "6 payment of purchasing the ingredients", "and "13 accounting" have been dependent on the particular residents. "14 others" includes responses like "no participation in the cooking activities", "disposing of the leftovers", "repairing kitchen/dining rooms, and installing food shelves in the room", and "renewing some regular menus".

	rable () Partici	рацоп п	Each Coc	King Activ	vity (11)		
	1	2	3	4	5	6	7	
	Schedule Creation	Menu Creation	Cultivating Vegitables and Herbs	Ordering the Ordinary Ingredients	Ordering the Ecologocal Ingredients	Payment of Purchasing the Ingredients	Shoppinng the Ingredients and Recievinng the Ordered Ingredients	
Fardknappen	33	42	5	7	7	15	41	
Tullstugen	7	11	0	6	2	4	8	
Sodra Station	6	7	3	6	6	6	9	
Non-Response	4	5	1	2	1	1	3	
Total	50	65	9	21	16	26	61	
	8	9	10	11	12	13	14	
	Cooking	Serving	Dishwash- ing	Table Setting at the Dining Room	Dining Room and Kitchen Cleaning	Collecting and Paying the Bill	Others	Total
Fardknappen	44	32	44	44	44	19		45
Tullstugen	11	11	11	9	10	0	0	11
Sodra Station	21	18	21	17	19	4	1	25
Non-Response	5	4	5	4	5	1	0	5
Total	81	65	81	74	78	24	1	86

Table 6 Participation in Each Cooking Activity (n)



Graph 6 Participation in Each Cooking Activity (%)

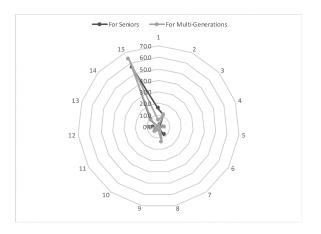
2) Difficulties/Burdens in Each Cooking Activity

The result of researching the activities that the residents found some difficulties and burdens in, when they participated in it, is indicated in Table 7, and each percentage of it depending on the collective houses for seniors and the multi-generational households is displayed in Graph 7.

Table 7 and Graph 7 disclose that the residents do seemingly not feel any difficulty or burden in any activity as most respondents answered "15 nothing". Whereas, it is confirmed that there is a certain amount of the residents who have found some difficulties and burdens in "1 schedule creation", "2 Menu creation". Additionally, eight respondents indicated "14 others" where its contents were like "it is hard to employ the ecological ingredients", "it is hard to serve vegetarian

	1	2	3	4	5	6	7	8
	Schedule Creation	Menu Creation	Cultivating Vegetables and Herbs	Ordering the Ordinary Ingredients	Ordering the Ecologocal Ingredients	Payment of Purchasing the Ingredients	Shoppinng the Ingredients and Recievinng the Ordered Ingredients	Cooking
Fardknappen	7	5	1	0	2	0	4	1
Tullstugen	0	2	0	0	1	0	0	1
Sodra Station	2	2	0	0	1	0	1	4
Non-Response	0	1	0	1	0	0	0	0
Total	9	10	1	1	4	0	5	6
	9	10	11	12	13	14	15	
	Serving	Dishwash- ing	Table Setting at the Dining Room	Dining Room and Kitchen Cleaning	Collecting and Paying the Bill	Others	Nothing	Total
Fardknappen		2	0	2	0	4	25	45
Tullstugen	1	1	0	1	0	0	8	11
Sodra Station	0	1	0	2	0	3	15	25
Non-Response	0	0	0	0	0	1	2	5
Total	1	4	0	5	0	8	50	86

Table 7 Difficulties/Burdens in Each Cooking Activity (n)



Graph 7 Difficulties/Burdens in Each Cooking Activity (%)

dishes with a high nutritional balance", "it is a waste of water and hot water", "worrying about a sufficiency of each meal for everyone while cooking", "it is difficult to cope when there is a difference in opinions over the menu".

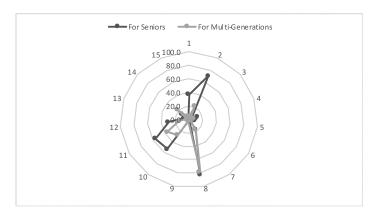
3) Worthwhile Cooking Activities

The result of summering up all the cooking activities answered as worthwhile by the respondents is shown in Table 8, and each percentage of them depending on the collective houses for seniors and the multi-generational households are indicated in Graph 8.

The respondents either at the collective houses for seniors and multi-generational households have mutually found some enjoyments and satisfactions in "8 cooking". On the other hand, "1 schedule creation" and "2 menu creation" were highly evaluated by the residents at the collective

	1	2	3	4	5	6	7	8
	Schedule Creation	Menu Creation	Cultivating Vegetables and Herbs	Ordering the Ordinary Ingredients	Ordering the Ecological Ingredients	Payments of Purchasing the Ingredients	Shopping the Ingredients and Receiving the Ordered Ingredients	Cooking
Fardknappen	17	32	3	6	4	2	8	37
Tullstugen	0	3	0	0	0	0	3	11
Sodra Station	2	5	1	3	2	1	3	17
Non-Response	1	4	0	2	0	1	2	5
Total	20	44	4	11	6	4	16	70
	9	10	11	12	13	14	15	
	Serving	Dishwash- ing	Table Setting at the Dining Room	Dining Room and Kitchen Clearning	Collecting Expenses and Accounting	Others	Nothing	Total
Fardknappen	0	24	25	13	3	6	1	45
Tullstugen	1	2	5	3	0	2	0	11
Sodra Station	0	8	8	2	1	6	2	25
Non-Response	0	2	0	1	0	0	0	5
Total	1	36	38	19	4	14	3	86

Table 8 Worthwhile Cooking Activities (n)



Graph 8 Worthwhile Cooking Activities (%)

house for seniors though, they were barely seen to be enjoyable at the collective houses for multigenerational households. Some contents of "14 others" could be categorized into some other choices, but they generally were the following opinions: "conversations and groupworks while cooking", "conversations with friends", "being with others, and working on multiple tasks with others.", "eating and drinking", "first, it is a joy to participate in cooking, being amused by working with others, and all the tasks are interesting", "when someone compliments dishes", "dining with others", and "interacting with internal and external people including the guests from outside".

3. Participation in the Common Dinners

The numbers of common dinners taking place per week at the surveyed facilities in this research were 5 times from Monday to Friday at Fardknappen, the collective houses for seniors, and 4 times from Tuesday to Friday at Tullstugen and Sodra Station, the collective houses for multigenerational households. The following data are the result of its participation.

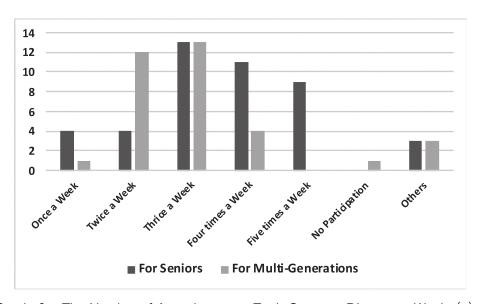
1) The Number of Attendances at Each Common Dinner per Week

Table 9 shows the result of the number of attendances in a week at each collective house, and Graph 9 reveals its result classified by the respondents at the collective houses for seniors and multi-generational households.

There is a difference of the number of common dinners in a week between the collective houses

	Once a week	Twice a week	Thrice a week	Four times a week	Five times a week	No Participation	Others	Non-Response	Total
Fardknappen	4	4	13	11	9	0	3	1	45
Tullstugen	0	5	4	1	0	0	1	0	11
Sodra Station	1	7	9	3	0	1	2	2	25
Non-Response	0	1	3	1	0	0	0	0	5
Total	5	17	29	16	9	1	6	3	86

Table 9 The Number of Attendances at Each Common Dinner per Week (n)



Graph 9 The Number of Attendances at Each Common Dinner per Week (n)

for seniors and multi-generational households which are 5 times and 4 times, however, the respondents at the both type of collective houses mostly attend 3 times each week. The overall tendency explicates that the residents at the collective house for senior frequently participate in it more than 3 times a week, whereas the residents at the collective houses for multi-generational households generally attend it less than 3 times a week. The reasons for a low participation rate at the collective houses for multi-generational households are as follows: "being busy with other events", "I cannot make it in time", "my husband has been staying in a nursing house and I normally have dinner there, and I am losing my appetite little by little", "my family have been living somewhere else and I need to go there", "as I suffer from diabetes, I do not eat it when a common dinner contains a lot of carbohydrate.

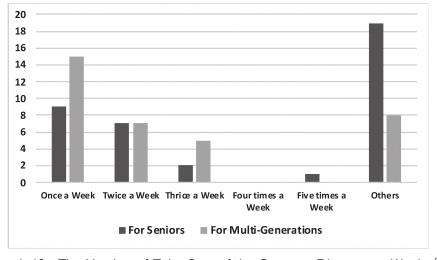
2) The Number of Take-Outs of the Common Dinners per Week

At all three collective houses, the left-over foods from common dinners are sold as take-out foods. The state of its service is indicated in Table 10 and Graph 10.

To this question, the most popular answer was "once in a week" though, it was followed by "others" whose content contains such opinions like "sometimes like once every three weeks", "I use its take-out when it has a really nice dish", and "I use it, when I am sick or my friend takes a dog with as a dog cannot enter the kitchen". Additionally, the reasons of purchasing a take-out food are such as "when I cannot come home by the dinner time", "for the tomorrow's lunch", "when I cannot

	Once a week	Twice a week	Thrice a week	Four times a week	Five times a week	Others	Non-Response	Total
Fardknappen	9	7	2	0	1	19	7	45
Tullstugen	4	4	1	0	0	2	0	11
Sodra Station	11	3	4	0	0	6	1	25
Non-Response	3	0	0	0	0	2	0	5
Total	27	14	7	0	1	29	8	86

Table 10 The Number of Take-Outs of the Common Dinners per Week (n)



Graph 10 The Number of Take-Outs of the Common Dinners per Week (n)

finish my own portion", "I do not like to waste food", "when I come home late after meeting someone, or when I am sick", and "in order to save time and money".

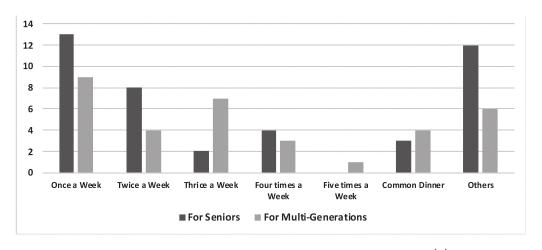
3) The Number of Dinners at Home in a Week

The number of the dinners people having at home instead of participating common dinners is indicated in Table 11, and its situation depending on the type of the collective houses for seniors and multi-generational households is illustrated in Graph 11.

"Once a week" was the most popular answer either at the collective houses for seniors and multi-generational households. Moreover, a certain amount of the respondents answered "others" whose contents were, for example, "sometimes, around twice or thrice a week", "I eat at home when I am sick", "I do not take a lot of meals at dinner as I eat a lunch properly", "when I am sick or I cannot go back home", "when my least favorite dish on the table". The respondents were also questioned about the reasons of having a dinner at home, and they answered as follows: "when I want to be on my own or having a guest at home", "when I do not like the menu", "I eat at home expect when the menu seems very nice and I can spare a time to have a dinner at the shared kitchen", "when there is a dish I prefer not to eat", "I am having more ecological vegetarian life, and the vegan dishes at the common dinner is not my taste", "I do not eat it there when there is a soup at a common dinner as I have a gluten allergy, thus I cannot finish whole meal", and "when I have a left-over from the weekend or it has a dish I prefer not to eat".

Always Going to Twice a week Five times a week Once a week Thrice a week Four times a week Others Non-Response Total 45 Fardknappen Tullstugen 11 Sodra Station 6 4 4 6 25 Non-Repsonse 15 18 Total 86

Table 11 The Number of Dinners at Home in a Week (n)



Graph 11 The Number of Dinners at Home in a Week (n)

4. The Evaluation of the Communal Dining Activity (the Common Meal)

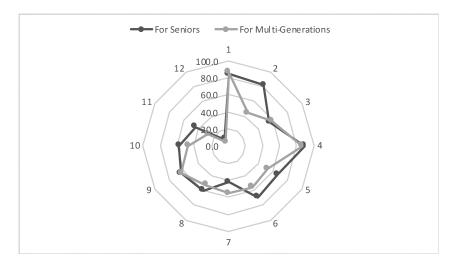
1) The Significance/ Effects of the Communal Dining Activity (the Common Meal)

The result of the survey regarding the significance and effects of the communal dining activity (the common meal) is illustrated in Table 12, and each proportion of the respondents in each answer category depending on the collective houses for seniors and multi-generational households is indicated in Graph 12.

As demonstrated in Graph 12, the significance and effects of the communal dining activity (the common meal) are assessed in the same way at either type of the collective houses. Particularly,

	1	2	3	4	5	6	
	Strengthening the bonds between the residents	Fulfilling the responsibilities as a resident	Participation in a social activity	Deepening understanding of each other	Enjoying cooking among friends	Eliminating Ioneliness	
Fardknappen	38	37	25	40	30	31	
Tullstugen	9	4	6	10	8	6	
Sodra Station	22	12	15	21	11	14	
Non-Response	5	4	3	4	5	2	
Total	74	57	49	75	54	53	
	7	8	9	10	11	12	
	Contributing to an environmenta I lifestyle	Reducing the housework	Saving money and good-quality meals	Learning new recipes	Having a well- balanced and good diet	Others	Total
Fardknappen	19	27	29	26	20	4	45
Tullstugen	6	4	7	9	6	0	11
Sodra Station	14	15	16	8	4	2	25
Non-Response	2	4	5	4	2	0	5
Total	41	50	57	47	32	6	86

Table 12 The Significance/ Effects of the Communal Dining Activity (the Common Meal) (n)



Graph 12 The Significance/ Effects of the Communal Dining Activity (the Common Meal) (%)

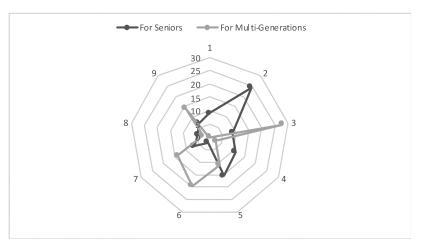
the entries "1 strengthening the bonds between the residents" and "4 deepening understanding of each other" are highly rated. Conversely, the entry "2 fulfilling the responsibilities as the residents" differentiates between the tendencies at the collective houses for seniors and multi-generational households as around 80 percent of the residents at the collective house for seniors seemingly took it seriously while only 40 percent of the residents at the collective houses for multi-generational households considered it important. Additionally, "5 enjoying cooking among friends", and "6 eliminating loneliness and feeling happiness by cooking with friends" were rated lower in the collective houses for multi-generational households than the collective house for seniors.

"12 others" contains the opinions like "it is a lot of fun to try new menus with friends", "I can learn and be inspired by other people while cooking with them", "according to the cooking rotation, I am in charge of cooking once every 6 weeks, thus, I can use the other 5 weeks freely and wisely", and "it is good that other people try and enjoy various types of menus and meals".

2) The Problems regarding the Communal Dining Activity (the Common Meal) that Must Be Solved The result of asking the respondent about the problems in the communal dining activities (the common meals) at each collective house that must be solved, is indicated in Table 13. Graph 13

Table 13 The Problems regarding the Communal Dining Activity (the Common Meal) that Must Be Solved (n)

	1	2	3	4	5	6	7	8	9	
	Insufficiency of the management structure	Establishing a mutual agreement	Filling a vacancy for a sick member	Reinforcing cooking teams	Balancing it with an individual life	Dealing with children and family	Hygiene Management	Size of the kitchen and equipments	Others	Total
Fardknappen	4	11	4	5	7	1	3	2	3	45
Tullstugen	0	0	2	1	1	2	0	1	1	11
Sodra Station	0	0	8	0	3	5	5	0	4	25
Non-Response	0	0	0	0	1	0	0	1	0	5
Total	4	11	14	6	12	8	8	4	8	86



Graph 13 The Problems regarding the Communal Dining Activity (the Common Meal) that Must Be Solved (%)

shows each proportion of the respondents at the collective houses for seniors and multigenerational households to each entry.

The result differentiates the tendency at the collective houses for seniors from the collective houses for multi-generational households. For example, the respondents at the collective house for seniors mostly mentioned "2 establishing a mutual agreement in a cooking team" in the questionnaire, whereas no one at the collective houses for multi-generational households, pointed it out. On the other hand, at the collective house for seniors, "3 filling a vacancy when someone in a cooking team is sick" was indicated the most, and followed by "6 dealing with children and family while washing plates and cleaning the kitchen" and "7 the hygiene management of the meals and serving the meals. The tendencies revealed in this result were presumably reflected by the differences between generations and household compositions.

3) The Significance/ Effects of having meals at the Common Dinners

The result of the questionnaire questioning about the significance and effects of having meals at the common dinners are shown in Table 14, and each proportion of the respondents at the collective houses for seniors and multi-generational households to each entry is disclosed in Graph 14.

Graph 14 reveals that the significance and effects of having meals at the common dinners, were similarly evaluated either at the collective houses for seniors and multi-generational households. Particularly, "1 strengthening the bonds between the residents", "6 no need to cook by myself", "2 enjoying chats with the others at a meal", "3 a good opportunity to socialize with the others" were highly evaluated. Conversely, a small number of the respondents at the collective houses chose "5 eliminating loneliness" for its significance and effects.

5. The Analysis of the Survey Results

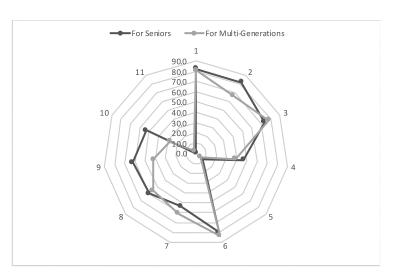
1) The Management of the Communal Dining Activity (the Common Meal)

The management situations of each three collective house are summarized in Table 15 and Table 16. The summary of the management of the communal dining activity (the common meal) is as follows: each type of collective house employs a common method which is that the residents take part in cooking dinner on weekdays, and they mostly eat it at the dining room called common dining. However, the specific details of the management are distinct in order for each collective house to respond flexibly based on its situation.

First, regarding the number of common meals, it took place at the collective house for seniors 5 times a week and at the collective houses for multi-generational household 4 times a week. The number of cooking teams and its members varies depending on the collective house. The budget of common meals is also different at each type of the collective houses though, the collective house for seniors has a smaller budget which was 3000SKE, compared to the budgets at the two collective houses for multi-generational households which are 4700SKE and 6500 to 7000SKE. As a reason for that, some growing children with a healthy appetite living in the collective houses for

	1	2	3	4	5	6
	Strengthening the bonds between the resident	Enjoying meals and conversations at dinner	A opportunity to be sociable	Gaining a sense of supporting each other	Eliminating loneliness	No need to cook on my own
Fardknappen	37	37	33	21	4	36
Tullstugen	9	9	8	5	0	10
Sodra Station	20	15	20	9	2	20
Non-Response	4	4	2	2	0	5
Total	70	65	63	37	6	71
	7	8	9	10	11	
	Saving money and good- quality meals	Eating uncooked foods	Tasting new meals	Actualization of healthy, balanced diet	Other	Total
Fardknappen	24	27	28	24	0	45
Tullstugen	8	6	8	2	0	11
Sodra Station	14	14	7	8	1	25
Non-Response	4	4	3	2	0	5
Total	50	51	46	36	1	86

Table 14 The Significance/ Effects of having meals at the Common Dinners (n)



Graph 14 The Significance/ Effects of having meals at the Common Dinners (%)

seniors could supposedly be cited. Additionally, the collective houses for seniors employs a prebooking and voucher system, whereas the collective houses for seniors only require the users to enter their names and some personal information on a note after a dinner, and to pay the bill by the end of month which is assumedly a measure for the households which have children and difficulties in meal planning.

As demonstrated above, the framework of the activity at the three collective houses are in common, although, the specific forms of management are organized and conducted based on the generations of the residents, and the lifestyles at each collective house within a reasonable range.

Table 15 The Management Situation of the Communal Dining Activity at the Surveyed Collective Houses 1

Name of House	Fardknappen	Tullstugen	Sodra Station
T	F Ci	For Multi-Generational	For Multi-Generational
Туре	For Seniors	Households	Households
Ownership Form	Public Rental	Corporative Ownership	Corporative Ownership
Residents/Households	47 households, 57 residents	Around 70 residents	63 households
	From 56 years old to 94	Under 0 year old to 85	From households with small
Generations	years old	years old	children to senior citizens
Number of Common	5 times a week (Monday -	4 times a week (Tuesday	4 times a week (Tuesday to
Meals	Friday)	to Friday)	Friday)
Number of Cooking	Tilday)	torriday)	T Hady)
Teams	6 teams	5 teams	4 teams
			15 and Carloding 2
Number of People in	From 8 to 11 people	From 9 to 10 people	15 people (including 2
a Cooking Team			responsible persons)
	Obtaining the support members depending on the situation of	Some people who have resided	2 to 4 from each group participate in
Support Members	each time. Its extent is between 2	in the collective house join in as	as the support members.
	and 8 people.	guests.	as the support members.
	Planing the contents of meals,	Manualanian manana	Manualarias suranu altantias
Tasks in Charge	grocery shopping, preparing the	Menu planing, grocery shopping, cooking, dishwashing,	Menu planing, grocery shopping, cooking, dishwashing, and kitchen
rasks iii Charge	ingredients, table setting, cooking,	and kitchen cleaning.	cleaning.
	and dishwashing.	and kitchen cleaning.	<u> </u>
			· A day before the cooking day, one of
			the members makes preparations in
	· A cooking team is separated		advance.
	into 2 groups for the tasks.		· 2 members are in charge of cooking.
	The first group works on		One of them could join in it later on and work on table setting and
Cooking Schedule	cooking, table setting, and	No specific response	replenishing seasonings.
Cooking Schedule	preparation of dinner. The second	ivo specific response	The third member takes a role in
	group is in charge of dishwashing		confirming attendences and
	and cleaning the dinning room		dishwashing.
	after a dinner.		· The other 2 members are
			responsible for dishwashing and
			cleaning.
Budget for a Week	3000SEK	4700SEK	6500~7000SEK
	· Basic price is 27SEK (45SEK	· Basic price is 30SEK (40SEK	
	on Friday).	on Friday).	· Basic price is 36SEK
	• Each guest charged at the basic	• Free for children under 6	· 13SEK for children under 12 years
	price.	years old, and 20SEK for	old, and 22SEK for anyone between 13
Expense per Meal	· Free for children under 7 years	children between 6 and 12	and 19 years old.
	old, 18SEK for children between 7	years old.	· 40SEK for each guest.
	and 12 years old, and the basic	· Each guest charged at the	· 28SEK for a take-out.
	price for anyone over 12 years old.	basic Price+10SEK.	
		Pre-booking unrequired.	Dec harding areas in L.D.
Booking/Payment	Pre-booking required (by 9 am on	Recording a participation of	Pre-booking unrequired. Recording a
	the day), Voucher (9SEK per	each resident in a note, and	participation of each resident in a note, and each payment are made by
Methods	ticket)	each payment are made by the	the end of month.
		end of month.	Line end of month.

Table 16 The Management Situation of the Communal Dining Activity at the Surveyed Collective Houses 2

Name of House	Fardknappen	Tullstugen	Sodra Station
Туре	For Seniors	For Multi-Generational Households	For Multi-Generational Households
Ownership Form	Public Rental	Corporative Ownership	Corporative Ownership
Dissemination of the menu	On Facebook, the website, and the notice boards.	On Facebook, the notice boards in the elevators.	On Facebook, the notice boards in the elevators.
Portion of meal	If there is a significant change, it should be informed to the cooking team during the day.	Flexibly dealing with it.	Always cooking just the right portion or slightly more.
Leftover Foods	Being sold for take-out. Before 9pm, three vouchers for each meal, and after 9pm, two vouchers for each meal.	• Being sold in lunchboxs	The leftover foods keep frozen for anyone who wants take it home. In the case of taking it home, an user is asked to enter the name in a note and the invoice will be issed later. If there is a lot of leftover, they keep frozen for the next cooking.
For Allergic Foods and Vegetarian Foods	 Allergy countermeasures for gluten intolerance are always available. At every meal, a vegitarian food is offered as a meal opition. 	Allergy countermeasures for actose intolerance and nut allergies are always available. It is also offered for other allergies if requested. At every meal, a vegitarian food is offered as a meal opition.	Allergy countermeasures for lactose intolerance and gluten intolerance are always available. At every meal, a vegitarian food and a vegetarian food are offered as a meal opition.
Hygiene Management	Cleaning the kitchen and discarding all the leftover foods on every Friday night or every Saturday. Carefully cleaning the facilities relating to the common kitchen once every 7 week.	The hygiene management is performed within reason.	Washing hands before cooking.
For Food Poisoning	No occurrence so far.	No occurrence so far.	No occurrence so far.

In addition, for example, any cooking member could have been flexibly replaced in the event of an emergency or sudden illness, and the elderly members have been assigned to share the work with less physical burden.

The research clarified that clear management frameworks exist at the three collective houses and their flexible managements bring sustainability to the activities.

2) Participation in the Cooking Activities

Concerning the cooking activity, the respondents were questioned about the experienced cooking activities, and the enjoyable and worthwhile cooking activities with multiple choices from the following 15 options.

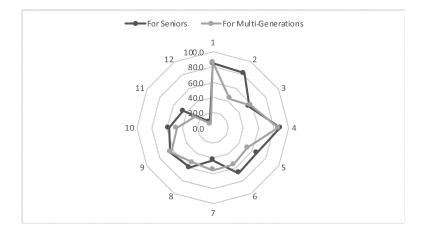
(The 15 options for the significances of the cooking activities)

- 1 Schedule creation and adjustment of the cooking Activities
- 2 Menu creation

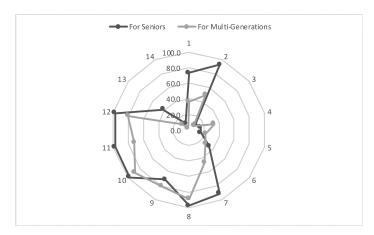
- 3 Cultivating vegetables and herbs
- 4 Ordering the ordinary ingredients
- 5 Ordering the ecological ingredients
- 6 Payment for ingredients purchases
- 7 Grocery shopping and receiving the ordered ingredients
- 8 Cooking
- 9 Serving
- 10 Dishwashing
- 11 Table setting at the dining room
- 12 Dining room and kitchen cleaning
- 13 Collecting expenses, and accounting
- 14 Others
- 15 Nothing (*Except the experienced cooking activities)

As written above, Graph 15, Graph 16, and Graph 17 show the responses to the questions from the collective houses for seniors and multi-generational households. The same tendencies could be seen at the both types of collective house as it especially revealed that many residents participated in the activities such as cooking, serving, and dishwashing. Also, a large proportion of the respondents answered "nothing" either at the collective houses for seniors and multi-generational households.

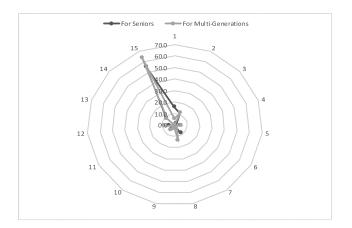
In addition, many residents mentioned "cooking" in terms of enjoyable and worthwhile activity. Whereas, a certain amount of the residents at the collective house for seniors answered that they found a rewarding sense of satisfaction in "menu creation". Moreover, in the open-ended questions, there were many responses illustrating the splendor of the activities, such as "I moved in here, because I liked the concept of collective house more than anything. As I started cooking with the others, we try to invent new menus and new tastes".



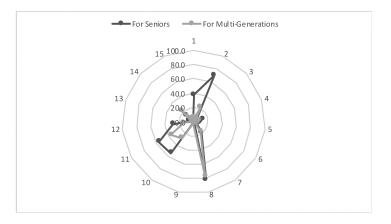
Graph 18 The Significances of the Communal Dining Activity (the Common Meal) (%) (Identical to Graph 12)



Graph 15 Experienced Cooking Activities (%) (Identical to Graph 6)



Graph 16 Difficult and Burdensome Cooking Activities (%) (Identical to Graph 7)



Graph 17 Worthwhile Activities (%) (Identical to Graph 8)

3) The Evaluation of the Communal Dining Activity (the Common Meal)

Graph 18 shows the result of the significances of the communal dining activity (the common meal) selected from 1 to 12 options for with multiple responses.

(The options for the significances of the communal dining activities)

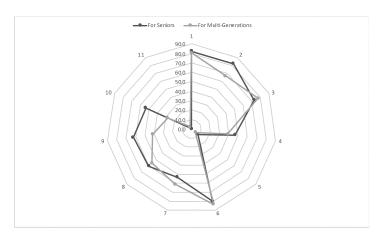
- 1 Strengthening the bonds between the residents
- 2 Fulfilling responsibilities as a resident
- 3 To participate in a social activity
- 4 Deepening understanding of each other
- 5 Enjoying cooking among friends
- 6 Eliminating loneliness and enjoy working with others
- 7 Contributing to an environmental lifestyle
- 8 Reducing the housework
- 9 Saving money and cook good-quality foods
- 10 Learning new recipes
- 11 Having a well-balanced and good diet
- 12 Others

Graph 19 indicates the result of questioning the significances of the common dinners by the same method.

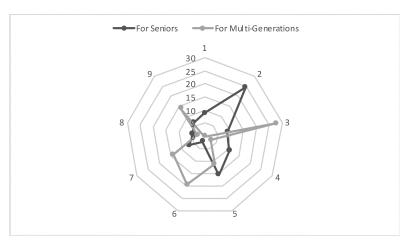
(The options for the significances of the common dinners)

- 1 Strengthening the bonds between the residents
- 2 Enjoying conversations with others during dinner
- 3 A good opportunity to be sociable
- 4 Gaining a sense of helping each other
- 5 Eliminating loneliness
- 6 Do not have to cook on my own
- 7 Saving money and having good-quality foods
- 8 To eat fresh-cooked meals
- 9 To try new tastes/foods
- 10 Having a well-balanced and good diet
- 11 Others

Regarding the significances of the communal dining activities as well as the common dinner, although there were some small differences between the collective houses for seniors and multigenerational households, almost the same evaluation tendency was observed. Cooking and eating a meal together is evaluated as having an effect to strengthen the bonds between the residents. Moreover, it is highly assessed to save money and reduce the housework. On the other hand, concerning whether these activities relate to eliminating loneliness, the communal dining activities gained a slightly high evaluation at the collective house for seniors though, the common meals



Graph 19 The Significances of the Common Dinners (%) (Identical to Graph 14)



Graph 20 The Problems Relating to the Communal Dining Activities that Must Be Solved (%) (Identical to Graph 13)

appeared with a low evaluation at either the collective houses for seniors and multi-generational households. Additionally, as illustrated in Graph 20, the respondents were also inquired about the problems relating to the communal dining activities, that must be solved at each collective house.

(The options for the problems that must be solved)

- 1 Insufficiency of the management structure
- 2 Establishing a mutual agreement in a cooking team
- 3 Vacancy filling for sick members
- 4 Reinforcing the cooking teams
- 5 Balancing the communal activities with each individual life
- 6 Looking after children and families which working on tasks
- 7 Hygiene management
- 8 Size of the common kitchen
- 9 Others

The evaluation tendencies towards the significances and the effect at the collective houses for seniors and multi-generational households are in common though, the responses to the questions hugely differ. A large proportion of the respondents at the collective house for seniors mentioned it with the difficulty in establishing a mutual agreement, whereas the people at the collective houses for multi-generational households highly referred to how difficult it is to look after children and family while participating in an activity. This difference in the tendencies of the responses is supposedly caused by the contrast of the generations of the residents and the family structures between the types of the collective houses.

Conclusion

From the results of those studies, following 2 points become clear. Firstly each houses introduced common framework to manage common meal activities, however there were many variations to deal with detailed works. Secondly evaluations of residents living in 3 houses were generally high, on the other hand agendas of activities were differ from senior style and multi-generation style houses.

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