

# Usage of Group Home of Composite Welfare Facility Converted a Closed School Case Study on 'HIDAMARI-NO-SATO' in Abu Town Yamaguchi Prefecture

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## Abstract

This paper aims at explaining the characteristics and validity of using closed school as the group home for elderly. Behavior patterns of residents are classified into four types, like as wandering type, acting wide zone type, spending much time in living room type and spending much time in private room type. Wandering type is that staying time in living and private room is short and the time in other place is long. Acting wide zone type is that staying time in their favorite place is long, for example living room, hall or outdoors. Spending much time in living room type is staying living room for all day time. Spending much time in private room type is staying private room expect for meal and this type has short time for speaking with other inhabitants. It is the good point that residents can be easily aware of each other, because private room, hall and living room are open.

**Keywords:** closed school, Group home, Usage of facility

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## 1. Introduction

Local governments have the subject of correspondence to the increase in the demand of medical welfare to support the old people's life and the maintenance improvement of service level in the depopulation area due to the simultaneous progress of the decrease in population and the aging. On the other hand, closed school facilities are on the increase caused by the decrease in number of schoolchild, and the cases to grapple with the activation of the area by making use of closed school are seen in recent years. To aim at the correspondence to the demand for welfare service and area activation, using closed schools as the old man welfare facilities in the depopulation area is an effective method.

There are researches on the occurrence factors of closed school, the diversion process of closed school and so on in the previous related researches. About the reuse of closed school as the old people's welfare facilities, generally research accumulation hasn't proceeded though there is a case research of improvement by the inhabitant. Especially, there are a little researches analyzed the use characteristics

and management forms of old people's welfare facilities reused a closed school in the depopulation village area and the space function evaluations of the facilities are a few too, so it is the a stage to put those results and subjects in order due to the accumulation of the use case investigation.

## 2. The purpose and method of research

For Abu town paid attention to as the advanced case that it proceeds with day service network construction of old people in the depopulation area, the usage of group home of "Hidamari-no-sato" converted a closed school for old people's compound welfare facilities is explained and the space function of the facilities is evaluated. About the investigation, firstly the building data collection and measurement of the facilities was done, secondly the facilities user registration data collection and the usage research were done in 10.24-30, 2011.

## 3. The conversion process of "Hidamari-no-sato" and repair contents

The conference of using method of facilities was made with administration and local residents after the closing of Uda elementary school, as the result, it was decided to make use of it as the old people's welfare facilities that the request was the most abundant. And it was decided to entrust a managed to the social welfare corporation managing the

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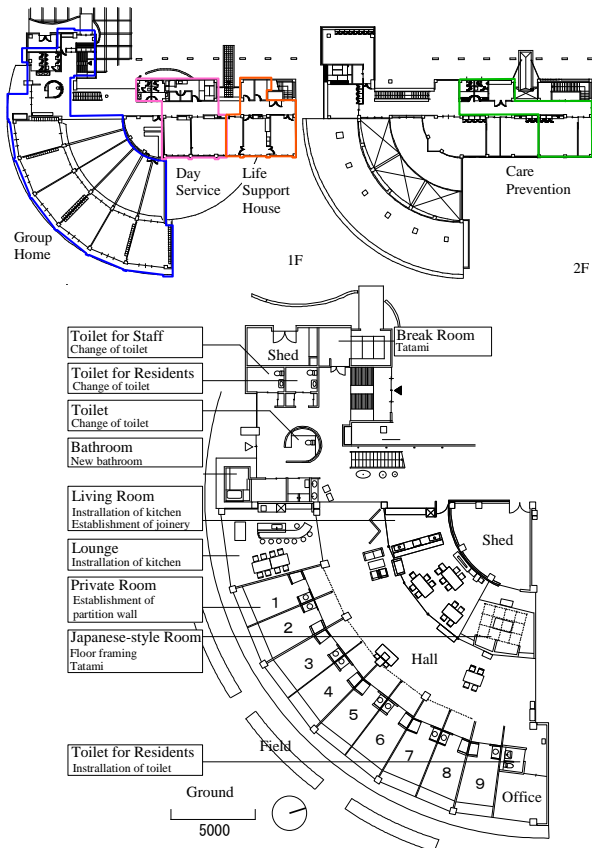


Fig. 1. Plan of group home part

nucleus facilities in October, 2009. "Hidamari" was established for day service facilities in center village of Uda area in 2008 by repairing a two storied wooden house, but the first floor space was small and the move to "Hidamari-no-sato" was decided. A move standing by person to home for the aged was held in many, and a group home had established in 2005 at the inside of the same site of nucleus facilities, but the demand had increased more so a new group home was decided to be established. Furthermore, a life support house with 4 rooms was installed together as the moment move house for the resident after the discharge from the hospital and the moment refuge facilities for the resident who lives in the area where snowfall of winter is large.

One classroom was divided into two rooms, and it was repaired in 9 residence rooms, the multipurpose space in front of the classroom was repaired in the living room, hall, Japanese-style room and kitchen was set up in the living room. A lounge is set up in a part of the group home; it was planned as tea room and exhibition space for old people and local residents. At present, it is using as a place of the interchange with the women's society and a place of the staff member's conference or training.

#### 4. Resident attributes and staff's business

Table 1. Resident attributes

Resident	Sex Age	How to move	Degree of care	Degree of recognition	Portable toilets
A	F91	Silver car	Occasion 3	III b	Have
B	F78	Wheelchair, Get around by the help	Occasion 3	II b	Have
C	F86	Wheelchair, Get around by the help	Occasion 2	II a	Have
D	F70	Stand on their own feet	Occasion 1	II a	Not
E	M82	Stand on their own feet	Occasion 3	III a	Not
F	F86	Stand on their own feet	Occasion 1	I	Not
G	F90	Stand on their own feet	Occasion 2	II b	Have
H	F86	Stand on their own feet	Occasion 1	II a	Not
I	F90	Silver car	Occasion 3	II b	Not
J	M87	Stand on their own feet	Occasion 1	III a	Not

All users are whole Abu town residents. Each two persons came from Uda, Fusago area where is close to the facilities, two persons came from Nago area in the central part of the town, three people came from Fukuga area of the long distance in the place among the mountains, and it complies with the demand from the whole area of the town. Resident basic attributes are shown in table 1. There are many women with eight people, and ages are the 70's-90's. Four persons of the care occasion 3 are contained in the degree of care though all members are included in the range of care occasion 1-3. Including the silver car use, the people who stand on their own feet and can get around are seven and two people get around by the help of staff and wheelchair. As for the degree of recognition, recognition occasion is in the range of II a-III b and II a, b occupy over the half with six people.

Though staff member's welfare experience years are varying, the staff member of about half has worked since facilities opening. Four people come from Hagi City and other staff members come from the street. The working style is constructed by the change system with morning shift (at 7:00-16:00), day duty (at 9:00-18:00), late shift (at 10:00-19:00), night duty (at 17:30-9:30), and there are many working night duties with 5-6 times a month. Care business is unstable, and a charge staff member is decided as every one person fundamentally, and business sharing is equal to the care though cooking, office work is fixed.

#### 5. The life style on one day of group home

##### 5.1 Life program on one day

Life program on one day is composed by 1) getting up, wash 2) breakfast 3) free time 4) lunch 5) free time, snack 6) bathing 7) dinner 8) free time 9) going to bed. Breakfast is started at 8:00, lunchtime is at 12:00, supper begins at 18:00, and tea and snack are taken out at 10:00 and 15:00, and getting up, going to bed time is free, and how to spend free time varies in each resident. Resident's and staff member's behavioral pattern on one day is shown in figure 2 and 3. Though generally stay time

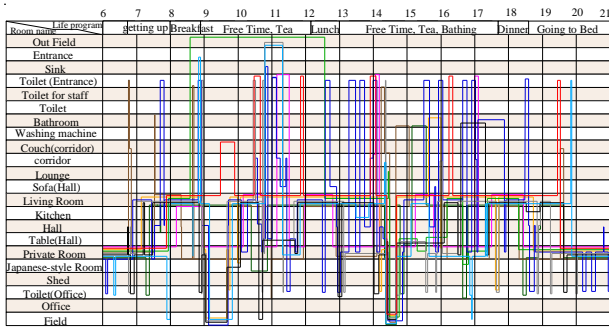


Fig.2. Behavior path of residents (October 26)

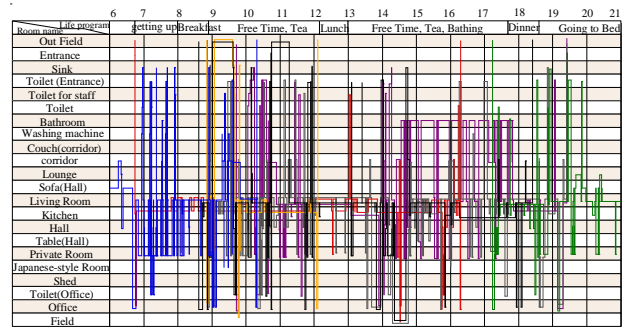


Fig.3. Behavior path of staffs (October 26)

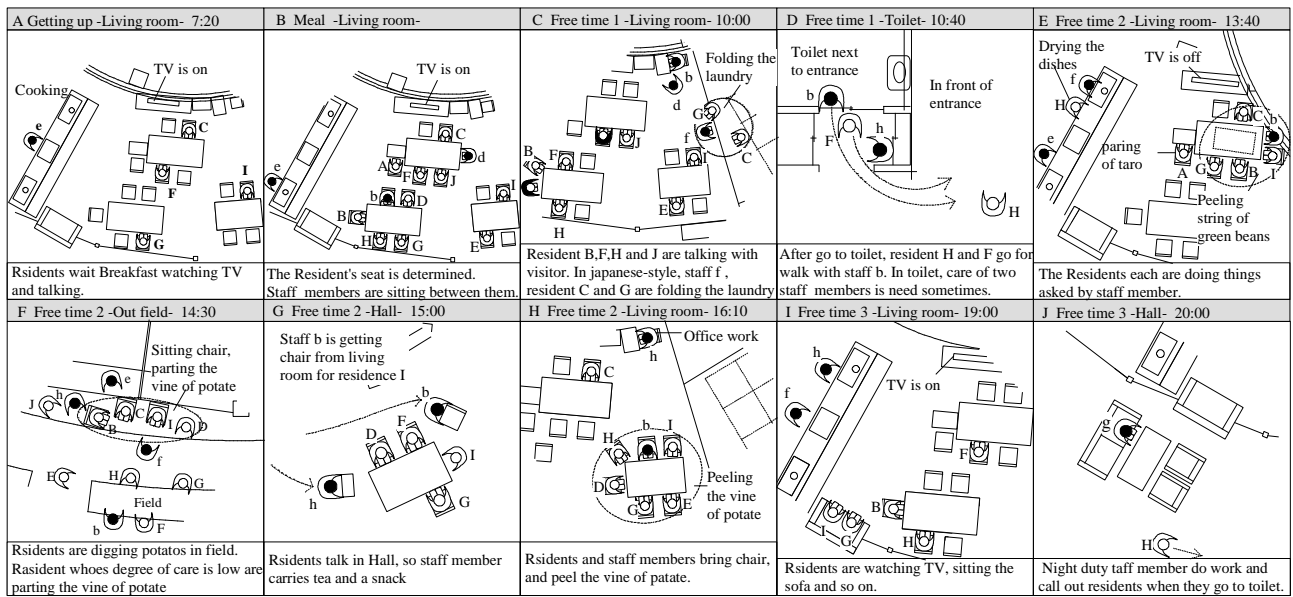


Fig.4. Life scenes of residents

of the living room is longest, there are some residents whose time to be in private room is comparatively long. And, the number of rooms that it stays by the resident is different. The fewest residents are only in three of living room, private room and rest room. On the other hand, the resident whom the number of stay rooms is large spreads more than ten rooms. The difference is seen by a resident by the place of rest room and use number of times. There are a few stays of one person at the table of hall and when several people gather, it is used well.

### 5.2 Life time on one day and place of behavior

**Getting up and face washes:** Though the resident who gets up early starts behavior outside the private room at about 6:30, there is a resident who is in the room just before breakfast, and comes to the living room by the staff member's call, too. There are many residents who get along in the living room with television enjoyment or conversation, and wait for breakfast. All the meals of group home are staff member's handmade stuff so nutrition and calorie

counting are being done. **Breakfast:** Breakfast is taken at the decided seat in living room. Though staff cooks all meals, residents help preparation in such cases as table cleaning (F, G and H). It begins to eat in order from the resident whom breakfast is distributed to, and the staff member of the morning shift puts away cooking utensils in the kitchen. Another staff has a meal with sitting on the vacant seat and seeing a resident's state. When breakfast is finished, the medicine delivered to the resident is taken.

**Morning free time:** How to spend free time varies in the residents. There are residents who enjoy television or conversation in living room and there are residents who come back to private room after evacuation, otherwise there are residents who get along in the favorite place like as hall, outdoors and so on. Tea time is had at 10:00, the residents who are in private room gather in the living room by the staff member's call. Tea is served to the resident who came to the living room in turn. The acts to go shopping or take a walk with staff and some residents were seen frequently in the morning free time.

Lunch: one staff member cooks lunch mainly in the kitchen, the work to serve food in the tableware is sometimes done with two staffs. Staff member calls the resident in private room because there are many cases that all of the members don't gather in the living room before lunch. Resident helps table setting too and when a meal is served to all of the members, staffs sit between the residents and the lunch time is started.

Afternoon free time: residents stay mainly in living room, hall and private room. Staff member sometimes suggests participation in the work to the resident who is in the living room in such cases as tableware cleaning or peeling of bean. There are going out and behavior in the outdoors as well in the morning, and this day is doing potato digging in the field. Afternoon free time is the time zone when much talk in the hall is seen, in that case staff member carries tea and a snack to the table in the hall. Bathing: As for the bathing, an every other day is the basis and five people take a bath in the day when the use number is large. Residents take a bath with the staff member's lead and care in turn from about 14:30, and one staff take care for bathing, and one resident takes time for 20-40 minutes. Bathing tool is put on the private room to every individual, so resident or staff drops in the room before and after the bathing, and the tool is prepared and kept. Attendance is not given from beginning to end to the resident whose degree of care is low and staff sees a state sometimes.

Dinner: The position of the seat in dinner and the form of meal are the same as breakfast and lunch, staff member does other work during the resident's meal as well not to have a meal except for the staff of night duty. Free time after dinner: There are many acts of rare movement like as television enjoyment, reading, conversation and so on before going to bed and there is resident G who helps tableware cleaning in the kitchen, too. About one hour later after dinner, residents in the living room are decreasing gradually, and after going to the rest room they come back to the private room. When all of the members come back to the room, the lights at the hall are turned off. There is no resident who gets out of the room except for the evacuation at night and residents who have portable toilet stool inside the room never gets out of the room. A night duty staff member does work at the living room or sofa in the hall which space is easy to grasp the movement of residents and the staff patrols a resident's state in every constant time.

## 6. Classification of resident's life pattern

### 6.1 Life pattern classification

For 6 days except for the going out day (29 day), by the cluster analysis with the indexes. of the stay time ( for the time zone of 6:00 - 21:00 ) of living

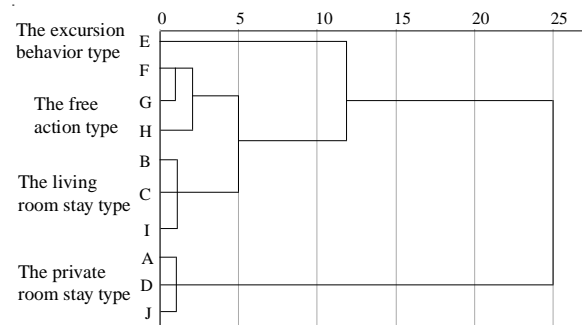


Fig.5. Distance of cluster (word method)

Table3. Average of staying time and movement number by cluster type

Resident (AVE)	Stay time(Average of 6days)							Movement number(Average of 6days)			
	Private room	Living room	Hall	out field	Other places	Toilet	Bath room	Private and Living room	All include toilet	Other places	Total
E	220.7	358.2	105.5	29.5	65.3	94.7	26.2	5.8	25.5	28.5	59.8
FGH	271.6	470.3	59.8	26.1	26.0	34.3	11.9	5.6	16.3	9.4	31.3
BCI	317.1	499.2	27.4	5.2	11.1	30.1	9.9	2.6	8.7	2.7	13.9
ADJ	506.1	315.6	19.1	2.5	23.1	25.4	8.2	6.9	9.7	3.1	19.7

room, private room and others (except for going out, bathroom, rest room) and the movement number, Behavior type of residents were classified into four types of the excursion behavior type (E), the free action type (FGH), the living room stay type (BCI) and the private room stay type (ADJ). The results are shown in Figure 5 and Table 2 and the mean of each resident's room stay time on one day and the movement number is shown in Figure 6.

There is a little stay time both in private room and living room, and there are many acts in other places in excursion behavior type (E), the evacuation and movement number is large, and because the movement takes time, much in a stay in hall walks.

There are many acts in the place where each person likes it like as living room, hall, out field and so on with the free action type (FGH) and the movement number of times is comparatively large, and the behavior range is wide, too. Because they are cheerful active residents, many scenes helping staff members are seen. Resident H is classified into free action type because the movement number of times is large though the stay time of living room and private room is close to the living room stay type.

The living stay type (BCI) spends in living room most of a day including the meal. Resident B, C need staff member's care on the whole of life including a walk, so the stay time in living room where the staff member's eye reaches easy is long. Resident I often enjoy a conversation in the living room, and a scene to talk by the table of the hall is seen. Care is necessary for a walk with resident BC and though care is unnecessary, resident I uses a

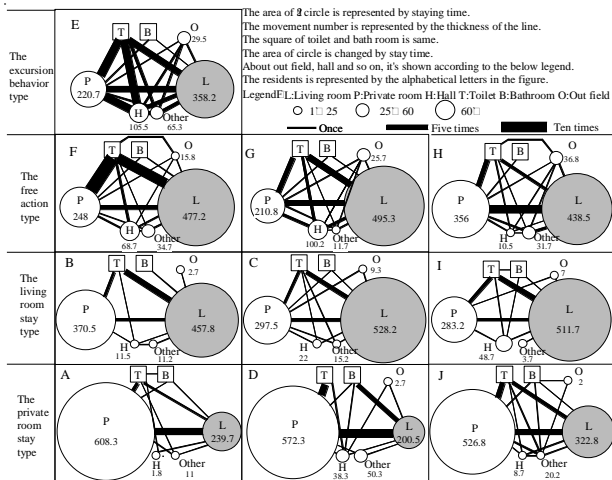


Fig.6. Average of staying time and movement number

handcart, so it is the characteristics of the living stay type that the movement number of times is small in comparison with other resident's type.

The private room stay type (ADJ) often gets along in the private room except for the meal, and the relations with other residents aren't seen much. Though resident D may stay at hall, the day when an act in other places isn't seen at all is existed in resident A, J.

### 6.2 Case study on the life behavioral pattern

A live activities line of residents of every life pattern is shown in figure 7-10.

The excursion behavior type (E): Getting up time is early, and behavior is begun from 6:00 outside the private room, he goes to the kitchen and talks with staffs who prepare breakfast. Sometimes he has morning tea made by the staff. After breakfast, he gets out of living room and walks around the hall or corridor, and often drops in at the rest room on the way, he likes a walk and staff takes him in case of going out. He is looking forward to a meal and it grows before the lunch, he walks in the hall, and waits for the time of lunch, in the afternoon free time he spends in living room, corridor and hall. in the time of tea break he enjoys a conversation with other residents at the living room. Though he returns to the room at 19:00 after dinner, he drops in the living room where a staff is working on the way to go to the rest room at 20:45.

The free action type (F): All the tables of living room are wiped before breakfast, table wiping before the meal is a habit of her, and it may be done from the case that staff member asks for help, and herself. After breakfast, the laundry which staff brings in tatami-space is folded and next she starts the table wiping again. She talks with resident G at the table of hall before lunch and goes to living room after calling by staff, and looks after the field

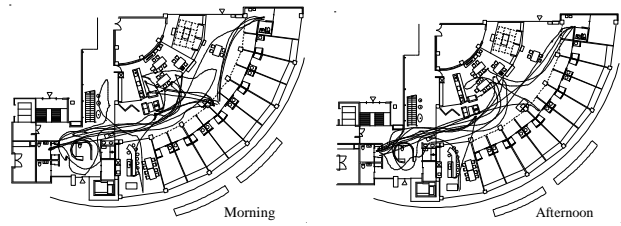


Fig.7. Behavior path line of resident E

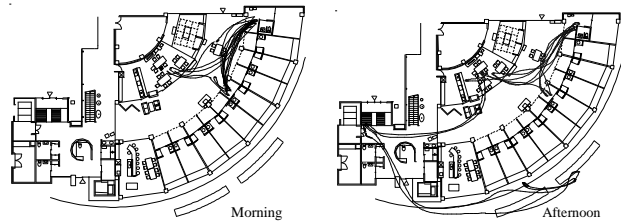


Fig.8. Behavior path line of resident F

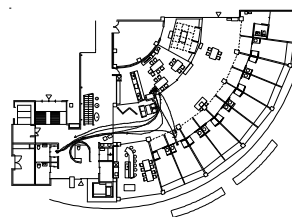


Fig.9. Behavior path line of resident B

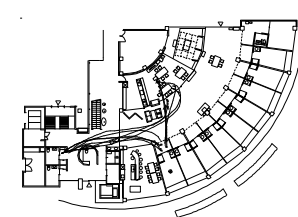


Fig.10. Behavior path line of resident A

in the afternoon free time. She often gets along in living room, and enjoys television or conversation from the supper to going to bed, and returns to the room more lately than other residents, and she is in the living room more frequently to the end than others.

The living room stay type (B): in the breakfast time she goes to living room by the staff member's help and staff lets her take medicine after the meal. In the morning free time, she has put on the wheelchair by staff member's care, and goes to hall to go for a walk. Until going out of other residents can be prepared, she stands by in the hall, and when preparation has been ready, they go to the cosmos field, and after return to the facilities, she goes to rest room, and staff lets her sit on the sofa of living room. Before lunch, she goes to rest room by the staff member's care, and after lunch, she goes to rest room again by the staff's care, and rests in the private room, and takes a bath for about thirty minutes from 17:00. After dinner, she goes to the private room by staff's care, and goes to bed.

The private room stay type (A): It comes from private room to living room just before breakfast, and after the meal, she returns to the private room soon. In the morning free time, she goes to the town by car to buy fishes for lunch with a staff, after coming back from shopping, she goes to rest room and a little time sits on the sofa of the hall. At the time of lunch, she reaches the seat of herself in the living room, after the meal is finished, she returns

Table 4. Evaluation of space function

Room name	Evaluation of space function
Entrance	Independent entrance is secured It is easy to go to the field because of entrance in back
Living room	Residents and staff members are easy to contact because of locating in the center The kitchen is continued, so residents help staff members. The room is small, so it is short of the space to make them at home.
Tatami	Use frequency is low, because it is difficult for residents to stand and sit down.
Hall	The hall part connects the private room with living room. It is enough space and placed table and chair. It is a stairwell, so it is cold in winter.
Private room	They can bend their eyes on living room because the rooms are near. The rooms needed are gathered, so movement distance is short.
Toilet	It is ensured both ends of group home. The toilet for staff members is far, because it is used by residents. It can't see from living room because of optic angle.
Bathroom	It is enough space to take a bath.

to the room soon. At the afternoon free time, she takes a bath, and coffee is drunk in the living room after bathing. It is in the room just before dinner, and after dinner she returns to the private room, and goes to bed as it is. A portable toilet stool in the room is used at night.

### 6.3 Evaluation of space composition

Because the facilities space is large, the behavior range is wide of the excursion behavior type, and the living room located in the center of the facilities, so there are many opportunities to talk with staff members and other residents. The free action type spends not only a living room and private room but also a Japanese-style room, hall, field, terrace in the favorite place and because the kitchen continues with the living room, the preparation for the meal are carried out actively for the staff member's help.

The degree of care of the living room stay type is high, and they often move to it by the staff member's care. The living room located in the central part of the facilities, and the surrounding state can be seen, so the living room doesn't give them a feeling of isolation, but the living space is narrow, and short of the space that sofa set is put on in the room though sofa and tables are being used to make itself at home. Movements among the private room, living room, rest rooms are most with the private room stay type. Generally there is comfortableness in the space, and living room is the central as the space composition, so the residents associate with other residents and staff member easily, and the movement distance is short.

### 7. Conclusions

1) All meals are held in the decided seat in living room, it is enough space so that residents and staff members may have meal together. In the free time, residents get along mainly in living room, hall and private room and the tables for meal in the living room is used too to make them at home. Though a Japanese-style room which tatami is laid on had

been set up adjoining the living room, use frequency is low and it is short of the space provided the sofa.

2) Because this facility had been repaired and extended the classrooms, multipurpose space and existent equipments, there is comfortableness in the space, and resident's behavior range is wide. And, the rooms to spend one day had been collected around the living room, living room is the space where residents' and staff member's interchange is often held. But, though the hall part (the multipurpose space) to connect the private room with living room is excellent in a release of the space for the well space, to enhance the effect on heating of living room, fittings between living room and hall are closed in winter so the point that the room temperature of the hall lowers relatively is the subject.

3) A resident's behavioral pattern was classified in four types. The behavior range of the excursion behavior type is wide, and the number of times to go to rest room is large, too, and the free action type spends in its favorite places, and the movement number of times is large. Because school had been repaired, the space composition including the part of the hall and the passage and so on of the facilities with comfortableness is evaluated as a factor that the variety of the life behavior can be secured. On the other hand, as for the living room stay type, because staff member's care is necessary for the movement, the time to get along in the living room that is the staff member's care foothold is long, and as for the private room stay type, most of the time except for meal, they get along in the private room, so the interchange with other residents isn't seen very much. If the space provided with the sofa in the living room can be secured, it can think that the interchange acts with residents and staff member is induced more.

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