The Availability of social space in the urban Yogyakarta, The case study of Umbulharjo district

D Widiyastuti1* and H Ermawati1

1Department of Development Geography, Faculty of Geography, Universitas Gadjah Mada, Indonesia.

*Corresponding author : dwidiyastuti@gmail.com

Abstract. Social interaction for the elders is one of the important activities as self-actualization in the community which can be done by involving themselves in various activities in the neighbourhood. The phenomenon of increasing elderly living in urban areas requires cities to be able to provide an environment which accommodates the physical limitations of the elderly. Yogyakarta City, which has an elderly population of 12.87% of its total, needed to provide comfortable facilities for the elderly as an effort to improve their quality of life. This study aimed to describe the elders’ social activities in Yogyakarta City and identify the facilities provided by the government to meet the needs of elderly activities. This study used primary data obtained through structured interview to the elderly and field observation. The results showed that most of the elderly's social activities in Yogyakarta were carried out near their homes due to physical limitations. Most of the locations are public places within the housing area provided by the government such as the local citizen hall and public open space. The Yogyakarta city government needs to improve infrastructure to facilitate the elders’ activities, especially in certain area like river bank.

1. Introduction
The Law of the Republic of Indonesia Number 13 of 1998 explains that elderly is someone who has reached the age of 60 years and over [1]. The human growth will cause an impact on their physical condition. As the people get older a person will experience a decline in physical, social and economic conditions [2]. The decline in physical condition is assessed from the increasingly limited ability of elderly activities due to the aging process and the more vulnerable the elderly to disease. With these limitations, the elderly has obstacles to interact with the social environment and depend their lives on others, so many people consider the elderly as a burden. From an economic perspective, most of the elderly are no longer working, so their income is more limited. The degradation from various aspects has made the elderly classified as a group of people who need special attention in their neighbourhood. The increasing number of elderlies is a global phenomenon that occurs in urban areas of the world, including in Yogyakarta City. Based on population data in 2018, the percentage of elderly people in Yogyakarta was 12.87% of the total population [3]. This number is the biggest percentage compared to other cities in Indonesia. This fact makes Yogyakarta has to give more attention to this age group in order their rights to get a comfortable life can be fulfilled. The government need to provide the basic facilities needed including for elders’ social activities.
Social activities are important for the psychological condition of the elders in order they do not close themselves off from society. With social interaction they will feel cared for and exist in the community. The elderly will not feel lonely especially for the elderly who live alone. They will still be able to actualize themselves in society through these social activities [4]. Thus, traveling activities for social activities are the Life necessities of the elderly which if it is properly fulfilled, will improve the quality of life of the elderly.

Facilitation of the needs of elders’ social activities can be implemented through the provision of public space in accordance with the conditions of the elderly. These spaces can be in the form of access facilities to the location of activities to the condition of the elderly’s activity room. Spaces that are in accordance with the physical and psychological conditions of the elderly are needed to prevent the elderly from discomfort so that the elderly will feel happy in their life [5]. Thus, “space for all” will be realized. Based on the explanation above, this study aimed to identify the characteristics of the elderly in Yogyakarta City, identify the characteristics of elderly social activities, and identify public spaces for elderly activities in the City of Yogyakarta.

2. Methodology
This research was conducted with a quantitative approach using primary data. Structured interview was addressed to the elderly to get information about their social activities. The respondens were chosen using stratified random sampling based on 4 (four) age groups of elders (60-64 years old, 65-69 years old, 70-74 years old, and 75-90 years old). Besides, observation was also done to collect the information about social space provided by the government.

3. Results and Discussion
3.1 Characteristics of elderly in Yogyakarta City
3.1.1 Socio-demographic profile. The elderly of Yogyakarta City is dominated by women (66.8%). Women’s life expectancy is higher than the man where women life expectancy were approximately 10% longer than the man [6]. The education background of elderly age group 60-64 years old is dominated by elementary school (41.7%). There is a trend that older people who only get elementary school education are increasing by 58%. Around 75 to 90 years ago Indonesia was still colonized with limited education facilities. A number of 8.8% of the elderly in Yogyakarta City live alone while 91.2% of elders live with their families. The highest percentage of elderly people living with family is the age group 75-90 years old (92%). Meanwhile, the elderly group that has the lowest percentage is aged 65-69 years old. Elderly people aged 75-90 years old have bigger possibility of physical degradation. They will tend to need the help of others to support their activities. In this case, the family plays an important role to help the life of the elderly including living with them.

Table 1. Socio-demographic characteristics of elderly in Yogyakarta City.

| Indicators                  | Age group | Total  |
|-----------------------------|-----------|--------|
|                             | 60-64     | 65-69  | 70-74  | 75-90  |        |
| Gender                      |           |        |        |        |        |
| Male                        | 25%       | 35.6%  | 33.3%  | 40%    | 33.2%  |
| Female                      | 75%       | 64.4%  | 67.7%  | 60%    | 66.8%  |
| Education Background        |           |        |        |        |        |
| Less than elementary school | 5%        | 5.1%   | 8.3%   | 14%    | 7.8%   |
| Elementary school           | 41.7%     | 35.6%  | 44.4%  | 58%    | 44.4%  |
| Junior high school          | 21.7%     | 20.3%  | 30.6%  | 12%    | 20.5%  |
| Senior high school          | 28.3%     | 22%    | 8.3%   | 4%     | 17.1%  |
| College/university          | 3.3%      | 16.9%  | 8.3%   | 12%    | 10.32% |

Living Companion
### 3.1.2 Economic Characteristics

Economic characteristics were identified from labour status and the monthly expense. Those two aspects explain how many assets belong to the elder supporting their life. Based on the interview, 64.4% of elder people in Yogyakarta City don’t have status as workers. There is a scheme which show that there is an influence of age to the job status. The elder of the age group, the smaller number of workers. In age group 75-90 years old, only 20% of elder who is still working while in age group 60-64 years old is 58.3%. Working is an activity that requires energy in accordance with the type of work the work. Physically, the elder the elderly, the more limited their physical abilities. Therefore, their working abilities are also decreasing the decided not to take a job. The result shows that the monthly expense in each group is dominated by <1 million rupiah/month. But the highest one is age group 75-90 (64%) and the lowest is age group 60-64 years old (41.7%).

**Table 2. Economic characteristics of elderly in Yogyakarta City.**

| Indicators          | Age Group       | Total |
|---------------------|-----------------|-------|
|                     | 60-64 | 65-69 | 70-74 | 75-90 |       |
| Labour status       |       |       |       |       |       |
| Labour              | 58.3% | 33.9% | 22.2% | 20%   | 35.5% |
| Unlabour            | 41.7% | 66.1% | 77.8% | 80%   | 64.4% |
| Annual monthly expense |     |       |       |       |       |
| <1 million rupiah   | 41.7% | 50.8% | 63.9% | 64%   | 53.7% |
| 1-2 million rupiah  | 43.3% | 32.2% | 36.1% | 24%   | 34.1% |
| 2-3 million rupiah  | 11.7% | 13.6% | 0%    | 6%    | 8.8%  |
| >3 million rupiah   | 3.3%  | 3.4%  | 0%    | 6%    | 3.4%  |
| Total               | 100%  | 100%  | 100%  | 100%  | 100%  |
| N                   | 60    | 59    | 36    | 50    | 205   |

### 3.1.3 Health Characteristics of Elderly in Yogyakarta City

The result shows that as many as 49.8% of elderly people in Yogyakarta City experience health problems. Health problems referred to in this study are types of disease that are classified as degenerative. Health problems experienced by the elderly including gout, diabetes, heart disease, vertigo, asthma, high cholesterol, hypertension, stroke, chronic ulcers, prostate, hypothermia, rheumatism, hearing disorders, and vision problems. This condition is in accordance with the signs of aging revealed by Nugroho (2006) that among the signs of aging include decreased function of vision, hearing and susceptibility to other chronic and degenerative diseases [7]. This condition disrupts the activities and independence of the elderly.

### 3.2 The Social Activity of Elderly in Yogyakarta City

Elderly is a social creature who needs to interact with other people who live around them. By being active in socializing or interacting with others, a person will feel more exist in social Life and feel unisolated. There are various forms of social activities undertaken by the elderly of Yogyakarta City. It can be carried out by actively participating in various environmental activities such as social gathering, visiting neighbours and family, and participating in various community gatherings. Variations in these activities will affect the location of activities and the distance that must be taken by the elderly to reach the location.
Social activities carried out by the elderly of Yogyakarta City are mostly carried out in relatively shorter distances. The elderly of Yogyakarta City often conducts social activities within <1 km from their houses. The location of the activity visited was moved from one member's house to another member in the citizen’s hall, as well as the village field if in the area it was in a densely populated settlement and settlement. In a relatively close range to socialize with friends / neighbours the elderly prefer to do it on foot either alone or with family or friends. In addition, the elderly travel more often on their own because they feel they are still within safe reach. In addition, the roads that the elderly travel through to socialize with neighbours are village roads that are relatively quieter and safer for the elderly.

**Table 3.** Types of Activities Based on the Purpose of Traveling Elderly in the City of Yogyakarta

| Types of Social Activities                  | Location                                      | The distance                                      |
|--------------------------------------------|-----------------------------------------------|--------------------------------------------------|
| Social gathering (neighbourhood association - village office) | Citizens' halls, village halls, residents' houses | Around home, village office                       |
| Certain communities social gathering       | Member's house, meeting halls                  | Around Home, Across subdistrict, Across Regency   |
| Visiting family                            | Neighbour’s house                             | Around home                                      |
| Visiting neighborhood                      | Family house                                  | Across regency And province                      |
| Elders community meeting                   | Citizens' halls, village halls                 | Around Home, in village office                   |
| Family Affairs                             | Family house                                  | Across District and Across Regency               |
| Community empowerment activities            | Citizens' halls, Community health Center, Village Hall, District Office, City Government Office | Across village and across district               |
| Others                                     | Family house                                  | Across regency                                   |

Based on the table, it is known that the elderly of Yogyakarta City who are actively socializing and carrying out social activities are at a younger age. Activities often carried out are social gathering from the local citizenship level to village and visiting family. Social gathering as social activities are generally carried out every month with intensities reaching 1-2 times. This social gathering, in addition to be an activity that can give benefit participants in financial matters, also has a beneficial impact on participants, including the elderly to socialize and interact with each other. In these activities, the elderly also can share their stories with friends and various other information.

Meanwhile, many elderly social activities are realized through involvement as community cadres, both elderly cadres, Family Welfare Development (PKK) cadres, Integrated Health Service Center for Children (Posyandu) cadres, family planning cadres, etc. These activities makes the elderly has to travel at least one time in a month to coordinate with related institutions at the city level. The aim is to attending training, updating data related to the field of cadres, reporting to the community health center and others. As seen in the table, the elderly who is active as cadres, in general, is the elderly who is relatively younger. It is because their physical conditions tend to be better than the older ones. In general, the elderly has been active as cadres for more than 10 years since they have not yet entered the age of the elderly. The long time is due to the difficulty of regenerating the next generation who spend more time for working, the involvement of the elderly that is still expected by the community and the desire of the elderly to remain involved in social activities in their environment. Meanwhile, the age group that dominates family visits compared to other activities is the elderly 75-90 years old.

The intensity of social activities carried out by the elderly in Yogyakarta City is variative. These variations depend on the type of activity carried out by the elders. If socializing activities is visiting the neighbours, the intensity can reach 1 time/day. However, if the social activity is a routine agenda such as social gathering, it will be carried out once a month. The monthly activities have been agreed for the schedule, so it would be easier for elderly to allocate their time participating in these activities.
The activities which often done ±1 time in 1 week generally are visiting family outside the city of Yogyakarta. But, in some cases, the intensity of the elderly visiting the family is only 1-2 times in a year. The increasingly rare intensity is caused by the increasing of the distance, the presence of traveling partner and the cost factor. This condition is in accordance with the condition of the elderly of Yogyakarta City which is dominated by the elderly with expenses < 1 million rupiah per month. The small expenditure indicates the possibility of the smaller allocation of funds used for social activities/socialization in a relatively longer distance.

| Types of Activities | Age Group |
|---------------------|-----------|
|                     | 60-64     | 65-69 | 70-74 | 75-90 |
| Social gathering (neighborhood association - village office) | 41.35% | 32.77% | 18.49% | 32.35% |
| Certain communities social gathering | 5.77% | 11.76% | 3.36% | 13.24% |
| Visiting family | 25% | 27.73% | 15.13% | 27.94% |
| Visiting neighborhood | 0.96% | 4.20% | 2.52% | 1.47% |
| Elders community meeting | 8.65% | 8.40% | 5.04% | 8.82% |
| Family Affairs | 0.96% | 1.68% | 4.20% | 5.88% |
| Community empowerment activities | 14.42% | 11.76% | 0% | 7.35% |
| Others | 2.88% | 1.68% | 1.68% | 2.94% |

| Intensity |
|-----------|
| Daily |
| Weekly |
| Monthly |
| Yearly |

| Travel Partner |
|----------------|
| Alone | 73.26% | 66.32% | 66.07% | 66.18% |
| With family | 19.77% | 29.47% | 23.21% | 25% |
| With friends /neighbour | 6.98% | 4.21% | 10.71% | 8.82% |

### 3.3 Facilities for Social Activities of the Elderly

#### 3.3.1 Regional Accessibility

The proper space accessibility will make it easier for the elderly to do social activities in their environment. As an effort to facilitate regional accessibility, the government provides the road network to connect one location to another. The local roads that meet the needs of the elderly are the relatively flat ones. In some villages of Yogyakarta City, the road conditions are flat and easy to be passed. However, in certain locations there are still uncomfortable roads. As in the densely populated riverbanks, there are many steep and unsafe roads that will make the elders feel discomfort. In addition, the potholes road will cause the elderly feel unsafe, especially in the rainy season. When the rainy season, it would be puddles which caused the road users feel comfort, including the elderly.

To ease the access related to the road network, street lighting is also an important aspect to create comfortable road use for the elderly. Elderly people who suffer from vision problems will be easier to travel at night if the street lighting is proper. Besides, to create comfortable access for elderly, Narrow
village roads in the densely populated settlements in Yogyakarta City caused limited viewing directions. To expand the user view, the government put a convex mirror at a local crossroads to create the safety route. This convex mirror is only found in densely populated residential areas.

The signage as a guide for road regulations is also available on the streets of Yogyakarta City. Signage is commonly available in large streets with more congested activities. In local roads, the signage is limited. There are only warnings that are written voluntarily by the local community, such as vehicle speed limits and time limits allowed to drive motorcycle on certain roads. The aim is to create comfortable activities of the surrounding community, including the elderly.

![Figure 1. The steep street near the riverbank](image1)

![Figure 2. The flat local street](image2)

| No | Infrastructure          | Spatial Range of Social activities                                                                 |
|----|-------------------------|------------------------------------------------------------------------------------------------------|
|    |                         | Around Home (in Kampong)  | Accross village  | Across district   |
| 1  | Street condition        | • Narrow road with conblock material                                                                  | • Wider road with asphalt material                                                                 | Wider road with asphalt material                                                |
|    |                         | • There are steep road especially around riverbank area                                               |                                                                                                    |                                                                                   |
| 2  | Street Lighting         | More limited lighting                                                                                   | Available                                                                                           | available                                                                         |
| 3  | Convex Security Mirror  | Available on local street bends                                                                          | Not available                                                                                       | Not available                                                                     |
| 4  | Sidewalk                | Not available in local street                                                                           | Available in the certain location around the Center of the city                                       | Available in the certain location around the Center of the city                     |
| 5  | Zebracross              | Not available                                                                                           | Available                                                                                            | available                                                                         |
| 6  | Signage                 | Not available                                                                                           | Available                                                                                            | available                                                                         |

### Social Activity Space for the Elderly

The space for elderly's social activities in the Yogyakarta City can be categorized into two places, namely private and public places. The location which categorized as a private place is in the form of a private house, a friend's house, a neighbor's house or family. Whereas public places are like community centers, village halls to public open spaces in elderly neighborhoods. Provision of private space depends on the preferences of the owner. However, with regard to public spaces that can be utilized by the public interest must be provided properly by the government.

Elderly social activities are mostly carried out in local citizen halls. Local citizen hall in Yogyakarta City is generally owned by a village, and its use is intended for all activities of villagers like social...
gathering, meetings to the socialization of activities. In terms of buildings, there are still aspects of the building that are unfriendly to the elderly. Ideally, an age-friendly building has facilities that can ease the needs of the elderly in the building. Ramps can be provided in front of the building to make it easier for elderly people in wheelchairs to enter the building. Wall holders will also help elderly who have difficulty in walking. The Provision of toilet seats for the elderly will ease their activities in the toilet, especially for those who experience physical disorders. At present there are still many local citizen hall buildings that do not yet provide these facilities.

In addition to the hall, the most widely used space for the elderly social activities of the Yogyakarta City is the public open space in the kampoong. This public open space is a field in the middle of a residential area. In some locations, these fields have been developed by the government into public open spaces that can be utilized by all community groups including the elderly. This open space, if used for the elderly social gathering activities, is less convenient because no canopy will prevent the elderly's activities from the heat of the sun or when it rains.

Based on the above spatial conditions, the government as a stakeholder is responsible for providing friendly space to the activities of the elderly so that they can interact and move more comfortably in the surrounding environment.

4. Conclusion

Elderly social activities are important for their psychological aspect, so they don't feel excluded from the community. The involvement of the elderly in community activities will make them feel more exist in their neighborhood. In Yogyakarta City, the social activities of elderly are carried out by participating in social gathering activities, social community and becoming volunteers. These activities are mostly carried out in the neighborhood around the residence, considering the physical limitations of the elderly. The locations also close to the residences, both private locations such as residents' homes and public facilities such as local citizen halls and public open spaces. Related to public open space facilities there are no adequate facilities that are in accordance with the conditions of the elderly such as the availability of ramps in buildings, holders on the walls and the closet. Therefore, the stakeholders need to work on this to facilitate elderly activities that indirectly affect elders' prosperity.

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