

Getting to know japan: an age-friendly environment country

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Abstract. This paper describes the relationship between natural conditions in Japan with the high life expectancy of the elderly in Japan. The purpose of this study is to find out the influence of nature with the high life expectancy of the elderly. Data are collected through the library study method. The data will go through a process of text reading, reducing, and drawing conclusions. Based on this research, the results show that water, air, natural food, natural beauty, and environmental cleanliness are natural factors that influence the high life expectancy of the elderly in Japan.

1 Introduction

Japan is known as a country with a long-lived population. More than that, the Japanese population is even mostly elderly. This is certainly a demographic problem in Japan. Several factors cause the Japanese population to live long, one of which is the environment. Among European countries that dominate the most age-friendly countries in the world, Japan is the most age-friendly country in the Asian region. In 2010, Murata also stated that Japan is the fastest-growing elderly country in the world [1]. The World Health Organization (WHO) has prepared several indicators of checklists to measure an age-friendly city. Several items are on the list, including environment, transportation, housing, etc [2]. In the checklist, WHO places "environment" as the first criterion to emerge. Of course, it shows the importance of the environment for the life expectancy of a community.

Murata and Kadoya (2013) have written studies about the elderly in Japan. Murata researched the experience of elderly Japanese living in a city considered to be an age-friendly city [3]. Murata's research results show that several elements must be considered by a city to be an age-friendly city, including public transportation, communication tools, residential areas, etc. While Kadoya researched things that can limit the elderly in participating in community activities in the city of Akita, Japan. The difference between this research and previous research studies is its scope. Murata and Kadoya's research are about environmentally friendly cities, while this study is about Japan as an environmentally friendly country for the elderly.

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Various factors support why Japanese life expectancy is high. Apart from lifestyle and eating habits, we believe that environment also influences a lot. Surely, a clean and healthy environment cannot be granted without government support and public awareness. Based on the above description, we intend to examine the natural factors that make Japan an elderly environment-friendly country. In particular, this study will show the natural condition in Japan so that the elderly have a high life expectancy. Besides natural conditions, all elderly's outdoor activities and cultural activities related to nature will also describe in this paper. Through this research, we would like to outline how the environment in Japan related to the high life expectancy of Japanese.

2 Methods

This research is a descriptive study with a qualitative approach. Descriptive research is a research method that is used to describe or to analyse a research result but not used to make broader conclusions [4]. While the qualitative approach is an approach that is used to investigate, to discover, to describe, and to explain the quality or features of social influence that cannot be explained, measured, or illustrated by a quantitative approach [5]. Conducting this research, we use 3 steps of research, they are collecting data, analysing data, and making a conclusion. The following is a breakdown of each stage.

To collect data, we use a library research method. The library research method is used to collect relevant information from the object of the study. The library research method is a method of collecting data by conducting some text readings activities of books, literature, notes, and reports about problem formulation in this article [6]. In this research, we use journal articles and newspaper articles that discuss what makes Japan has an age-friendly environment. The collected paper will be analysed in a data analysis process. They are text reading, reduction, data display, and conclusion. In the reducing process, we discard data that has no relevance to this article.

Based on the data obtained, we describe the condition of Japan's natural environment as an age-friendly environment. Collected data will be described based on the latest survey or data. The description will later become a data display in this article and also play a role to conclude. By doing these steps, the problem in this article will go answered. This study will only describe the relationship between nature and the high life expectancy of the elderly in Japan. Other factors that influence will be used only as support, considering that several factors influence the high life expectancy of the elderly in Japan.

3 Result and Discussion

3.1 Age-friendly Environment Country

An age-friendly environment is a term that refers to a comfortable environment for the elderly to live in. Comfortable for the Elderly means good for their Health and has convenient facilities for the elderly. According to WHO, Age-friendly environments foster health and well-being and the participation of people as they age [2]. They are accessible, equitable, inclusive, safe, and secure, and supportive. They promote health and prevent or delay the onset of disease and the loss of bodily functions. The term "Age-Friendly Environment" means a friendly environment for a specific age group. In this case, it is understandable that this term does not only refer to the elderly, but also for a specific age group such as children. However, this term has been referred to as 60-year old above people [1].

By implementing an environment that is friendly to the elderly, a country can extend the life expectancy of its population. An age-friendly environment is one of the benchmarks of whether a comfortable environment to live in or not. In general, 2 factors cause the environment to be called the age-friendly environment, namely natural and human factors. The Elderly can live long and healthy because of the natural conditions that support but also supported by adequate government facilities in the place where he lives. This study only limits discussion on natural factors that make Japan one of the age-friendliest countries in the world.

It is essential to become an age-friendly country because it's like declaring that a country has a healthy and clean environment. The role of government in a country to provide facilities to the elderly such as health facilities, pension, transportation, etc are supporting the high life expectancy. Other than that, the relationship between the high life expectancy of the elderly with natural environment shows how people could live in harmony with nature. Maintaining the beauty of nature may provide various benefits for humans. The following will explain how the relation of nature (water, sun, air, etc.) to the high life expectancy of Japanese.

3.2 Elements of Nature

1. Water

Water in Japan is so clean, even tap water in Japan is also safe for direct consumption. Ditches and rivers in Japan are so clean that fish can live in it. Clean water in Japan is inseparable from the role of the Japanese government in the water sanitation process. The Japanese government is very concerned about the disposal of waste. They regulated the people to dispose of rubbish with a strict system. Japanese also not allowed to drain wastewater into sewers. Water is also essential for health. Japan is a nation that loves to bath to refresh the body. Soaking their body to warm water inside a bathtub at home, at a public bath, or a hot spring has been a habit for Japanese for a long time ago. Japanese believe that A hot spring could ward off various diseases.

2. Air

Based on the Air Quality Index (AQI), Tokyo- the most populous city in Japan, averagely has air quality "moderate level" and "good level" [7]. Based on the ranking of air quality and city pollution published on the iqair.com, Tokyo ranks 73 out of 97 cities. Followed by Osaka at number 86, Kobe at number 94, and Kyoto at number 96 (Updated 9 June 2020). It means that some big cities in Japan have good air quality and low city pollution. It certainly influenced the health of the Japanese people, especially the elderly. The air in Japan is less polluted because Japanese people always use public transportation.

3. Natural Foods

Japanese people like consuming natural foods such as seafood, rice, beans, and vegetables. The Japanese have started eating fish from the Jomon era. This habit also continues to this day. Japanese usually consume raw fish or undercooked. Also, natural food that is often consumed by the Japanese is fermented soybean foods, such as miso and natto. Researchers have even proven that the intake of soy fermentation decreases blood pressure, reducing blood cholesterol levels, inhibiting osteoporosis, etc [8]. As mentioned by Trahutami (2019) that, the basic ingredients of Japanese cuisine made from natural sugar, salt, vinegar, *shouyu*, and

miso affect the high life expectancy of Japanese people [9]. The order of adding the spices and the habit of eating miso soup at breakfast made from soy fermentation greatly influence on the health of Japanese.

4. Natural Beauty

Japan is famous for its high level of stress. This can be proved by the high number of suicides. On the other hand, the Japanese have a high life expectancy. The number of Japanese people who live longer is inseparable from how they manage stress. In this case, Japanese people do a lot of natural activities to reduce stress, such as *hanami*, *tsukimi*, *shinrinyoku*, etc. Japanese have the culture to enjoy the beauty of nature. They enjoy the beauty of nature for relaxation and as a form of appreciation of nature. With activities related to nature, the Japanese will always remember to appreciate nature and give thanks for what nature has provided in life.

5. Environment

In 2020, according to the Environmental Performance Index (EPI), Japan was ranked the 12th cleanest country in the world [10]. Other cleanest countries are dominated by European countries. Japan is the only Asian representative country that has the highest rank. Environmental cleanliness has a great influence on Japanese health, especially in maintaining the life expectancy of the elderly. From a long time ago, Japan has been adopting natural cleanliness from Shintoism and Buddhism, which both teach harmonious life with nature. Shinto existed in Japan before the Buddha. The principle taught by Shinto is purity. In this case, cleanliness is a concept of divinity. The concept of Shinto is in harmony with Buddha. It makes Buddha quickly accepted in Japan. Just like Shinto, Buddha also emphasized the teachings of harmony in life with nature. One of Buddha's concepts is harmonious life with nature that could run by maintaining the cleanliness and beauty of nature.

3.3 Environment for The Elderly

Hanibuchi (2011) researched the relationship between the environment and the physical activity of the elderly in Japan [11]. The results of the research stated that there are sports activities such as jogging and walking in leisure time is greatly affect in improving the quality of life of the elderly. Also, the village of Ogimi in Okinawa prefecture is known as 'Long-Life Village' [12]. The nickname arises because the elderly in the village utilizing sea, mountains, rivers, etc to support their healthy and clean lifestyle. They tend to consume natural resources into nutritious food. Japanese generally believe that what is provided by nature is the best consumption for the body. A combination of consuming natural foods and doing physical activities is trusted could maintain health [13]. In Japan, after retirement, the elderly will try to find other activities to fill his time. For the elderly retiring does not mean resting at home, but rather a challenge for themselves how to stay productive in the golden age.

Also, the elderly in Japan often do physical activities such as gardening, farming, socializing activities, volunteering, etc [14]. Those activities are carried out with clean air and clear water, which makes their activities more comfortable and enjoyable. Japanese believe that water and air can be mentally healthy so that they are far from stress. In addition to factors from nature as described above, elderly Japanese also like to involve themselves in natural activities in groups. In Japan, many elderlies go with their groups to climb mountains together. Uniquely, the elderly group is always busy planning and doing activities together. It is common for an elderly in Japan to join several elderly groups at once to fill his spare time. The Elderly usually groups according to their interests. Some of them attend English

learning groups, weaving learning groups, elderly gymnastics groups, etc.

Besides, the elderly in Japan also love going abroad to enjoy nature and local cultural tourism. As tourists, places like seas, natural sceneries, and mountains become some favourite destinations for the Japanese elderly. The Japanese believe that back to nature will give all the benefits of the goodness of nature, thus making a healthy body and soul. Nature is the source of all the goodness of life that must always be preserved. The Japanese nation is a nation that embraces the philosophy of living side by side in harmony with nature [15]. So do not be surprised if their care for nature makes them healthy and Long life.

4 Conclusion

Based on the results of the analysis of this study it can be concluded that Japan has natural resources such as water, air, natural food, natural beauty, and environmental cleanliness that can support the lives of the Japanese to have a high life expectancy. The tendency of the independent life of the Japanese makes the elderly more actively think independently not to depend on the young generation and be smart in utilizing their natural environment. This can be proven by the lifestyle of the people in Ogimi village, Okinawa, which prioritizes healthy living by utilizing the surrounding natural environment. Moreover, the Japanese carry the philosophy of harmony or *wa* (和) to always remind them to live side by side with nature. Also, to continue to live in harmony with nature, the role of government is necessary.

References

1. H. Murata, "From "Age-Friendly" Cities to "Aging-Friendly" Cities: Japanese Experience," in *Age Friendly Cities With Cooperation and Participation Regional Conference*, Hong Kong, (2011)
2. World Health Organization, "Age-friendly environments," 15 June 2020. [Online]. Available: <https://www.who.int/ageing/projects/age-friendly-environments/en/#:~:text=Age%2Dfriendly%20World&text=Age%2Dfriendly%20environments%20foster%20health,of%20disease%20and%20functional%20decline>.
3. Y. Kadoya, "Towards an Age-Friendly City" The Constraints Preventing the Elderly's Participation in Community Programs in Akita City," *J.WWOP* 17, 101-108 (2013)
4. Sugiyono, *Metode Penelitian Kuantitatif Kualitatif dan R&D*, Bandung: Alfabeta, (2012).
5. Saryono, *Metode Penelitian Kualitatif*, Jakarta: Raja Grafindo Persada, (2010).
6. M. Nazir, *Metode Penelitian*, Bogor: Ghalia Indonesia, (2013).
7. Air, Index Quality, "Index Quality Air," 19 June 2020. [Online]. Available: <https://www.iqair.com/id/world-air-quality-ranking>.
8. M. Miller and K. Makise, "Natto and Its Active Ingredient Nattokinase: A Potent and Safe Thrombolytic Agent," *J.ACT* 8, 157-164 (2004)
9. S. I. Trahutami, "Choumiryou dan Harapan Hidup Orang Jepang," *J.EJKA* 2, 144-149, (2019)
10. Environmental Performance Index, "2020 EPI Results," 19 June 2020. [Online]. Available: <https://epi.yale.edu/epi-results/2020/component/epi>.
11. T. Hanibuchi, "Neighborhood Built Environment and Physical Activity of Japanese Older Adults: Results From the Aichi Gerontological Evaluation Study (AGES)," *J.BMCPH* 11, 657 (2011)

12. Visit Okinawa, "Secret of Long Life and Elderly Activity," 19 June 2020. [Online]. Available: <https://www.visitokinawa.jp/information/wisdom-of-long-life>.
13. S. Watanabe, S. Kodama and H. Hanabusa, "Longevity and Elderly Care: Lessons From Japan," *J.GH* 2, 5-10 (2018)
14. M. J. Koohsari, T. Nakaya and K. Oka, "Activity-Friendly built environments in a Super- Aged Society, Japan: current challenges and toward a research agenda," *J.ERPH* 15, 2054 (2018)
15. D. E. Shaner, Y. Yasuo and S. Nagamoto, *Science and Comparative Philosophy: Introducing Yuasa Yasuo*, New York: Brill Academic Publishers, (1989).