

A research map analysis of methods to improve the happiness of Japanese older adults based on the context of big data

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1 Introduction

(1) Well-being is defined in Christiansen and Baum's glossary as "a subjective sense of overall satisfaction, thought to be defined by emotional states and life satisfaction" [1]. Well-being in older people includes several aspects such as behavioural competence, perceived quality of life, psychological well-being, and objective environment [2]. Generally, well-being is closely linked to mental health issues, but in this paper, we focus only on the emotional aspects of well-being and life satisfaction, rather than on how sport can address complex mental health issues such as dementia or schizophrenia in older people.

(2) Sport as one of the key activities in human society has been confirmed by numerous studies to have a positive association with subjective well-being [3,4]. There is evidence that recreational physical activity may have additional benefits over other physical activities [5]. Similarly, participation in sports can have unique benefits compared to other forms of recreational physical activity [6].

(3) Aging, which is, in part, a determinant of the lifespan of a human, can be defined simplistically as the continuing loss of physiological integrity and subsequent impaired function leading to death [7]. By 2022, Japan will have the highest number of people aged 65 and over in the world at 29.9%. As shown in figure 1.

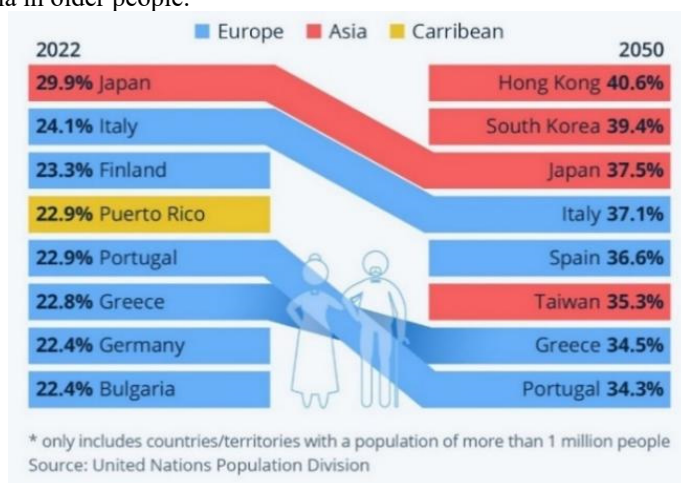


Fig. 1. The World's Oldest Populations [8]

(4) Most of these older people experienced the bubble crisis of 1986 to 1991 and are heavily in debt. As a result, even those Japanese seniors over 65 still have to work to pay off their debts. Whereas in the UK less than 20% of

people over 65 are working, as many as 34.9% of Japanese men over 65 are working, which can, to some extent, lead to anxiety and depression to the Japanese older people. As shown in figure 2&3.

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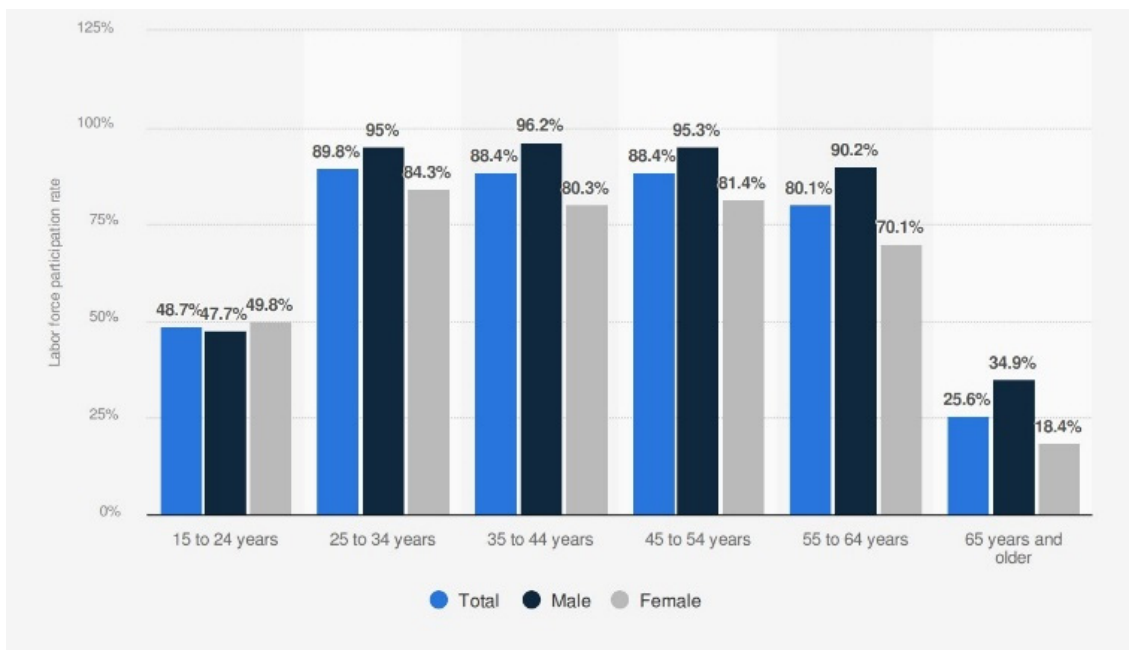


Fig. 2. Percentage of people in the labour force among the total population in Japan in 2022 [9]

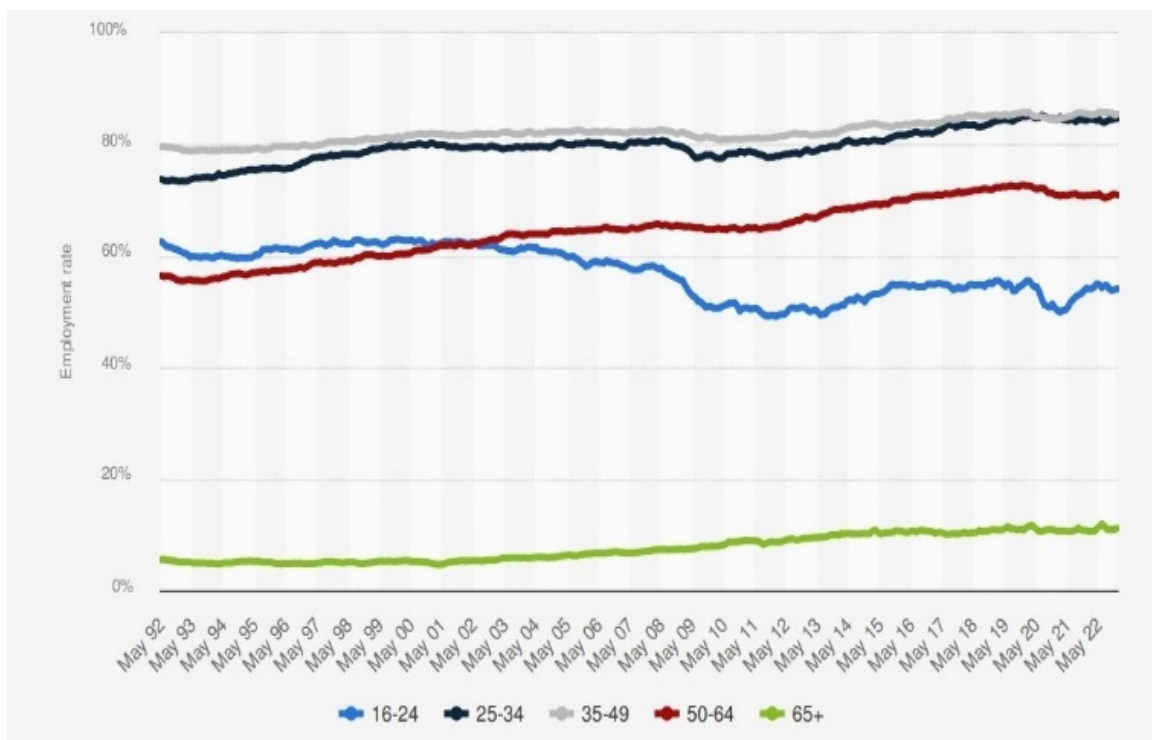


Fig. 3. The employment rate in the United Kingdom from May 1992 to December 2022 [10]

(5) In addition, an important aspect that affects the well-being of older people in Japan is loneliness. As Japanese society places great importance on social connection, personal connection with others and society has become very important to Japanese people. However, according to the Japanese birth rate between 2010 and 2020, the birth rate is decreasing year on year, which is leading to changes

in the social structure of Japan. This trend is reflected in the decline of traditional individual families, which has led to a gradual loss of family support and an increased sense of isolation among older Japanese. The rapid development of modern technology has also made it difficult for older people to keep up with the pace of modern society, not only because they have difficulty understanding and using

modern technology, but also because modern technology has reduced the opportunities for face-to-face interaction, thus increasing the sense of loneliness among older people in Japan.

(6) This report will draw lessons based on the analysis of two cases from other regions where the sport has been

used to improve the well-being of older people and use these lessons to make recommendations to improve the emotional well-being and life satisfaction of older people in Japanese society. As show in figure 4.

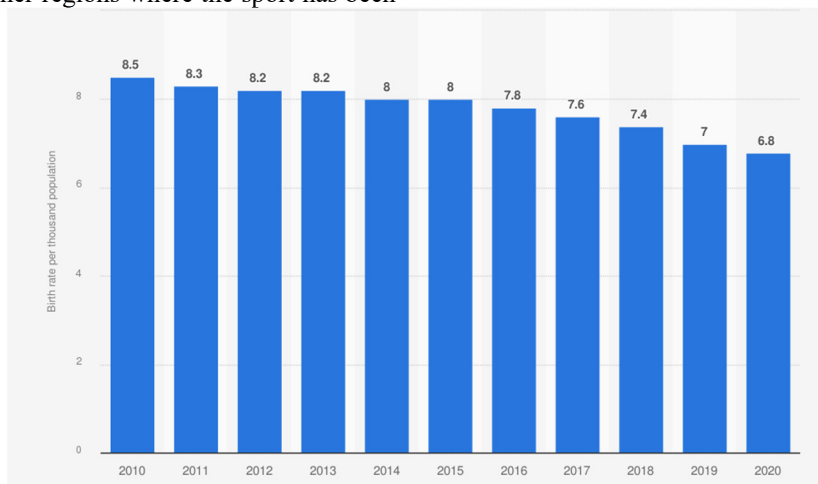


Fig. 4. Japan: Birth rate from 2010 to 2020

2 Ageing body and self-satisfaction

As mentioned above, the well-being of older people includes psychological well-being. At the same time, Self-satisfaction is an important component of subjective psychological well-being and it is related to factors such as self-esteem, self-worth, and self-confidence. It has been shown that ongoing changes in the peripheral body actively contribute to the creation of emotional experiences. And physical activity is arguably the most direct way to induce change in the body and improve psychological status indirectly.

Improving psychological well-being is one of the reasons why older people engage in physical activity, and in addition to improving psychological status, older people engage in physical activity for reasons such as enjoyment, desire for personal achievement and winning social affiliation and recognition, and health. According to Dionigi's qualitative study of older people who participate in sports, older people who participate in sports distinguish themselves from 'other' inactive older people and take pride in their abilities. And it is believed that they were different to the 'stereotypical' older person (i.e., someone who is frail, dependent, lonely, ill, and most likely living in an aged care facility). For the majority of older participants, "the satisfaction of knowing that [they were] not losing it" was extremely important.

However, according to a study by Linda Nicholson on older people's participation in sports, for those who do not participate regularly, psychological and practical barriers pose significant challenges to older people's participation in sports, and fear of health issues such as causing sports injuries is a significant barrier for older people to regular participation in sport.

First launched in the UK in 2011, the Walking Football programme is a modified version of traditional football

that protects older people by simplifying and restricting the rules of the game, including reducing the size of the pitch, banning running and allowing only walking and brisk walking, giving the opposing team a free kick if a player runs, no physical contact, limiting the height of the ball and even specifying what players can wear. In recent years, the popularity of walking football has increased and it has become very popular in countries such as Canada and Australia, with over 1,000 football clubs and over 35,000 players in the UK alone. The sport has been recognised by football associations around the world and walking football leagues are held regularly.

Research on the Walking Football project has demonstrated the feasibility of walking football for sustained participation in sport among older people, with participation rates of 90% after eight weeks among participants recruited over the age of 50. The psychological and social health benefits of participating in walking football have also been shown in Taylor's study to have a positive impact on the wellbeing and lives of older people. Therefore, the programme not only improves the physical health of older people in a safe manner, and increases the sustainability of their participation in sport, but also, because of the strict rules of the sport, ensures that older people are safe and to a certain extent It also reduces the fear of injury among older people who are not yet involved in sport and gives pride and self-satisfaction to those who are already involved in sport.

3 Loneliness and social isolation - a well-being killer for older people

Social isolation is defined as a measurable lack of social relationships. loneliness, on the other hand, refers to a person's subjective experience of a lack of satisfactory interpersonal relationships. Research has shown that an increasing number of older people are at risk of loneliness

and Social isolation, and often both tend to co-exist. And loneliness and Social isolation have been identified not only as indicators of risk for well-being but also as one indicators of mortality in older people. One study has shown that in older age groups "not lonely nor socially isolated nor inactive has a mortality rate of 29.9%, while lonely, socially isolated and inactive can have a mortality rate of up to 52.9%". And these two factors are often associated with a variety of health-hazardous behaviours such as physical inactivity.

Social connection is an encompassing term that refers to the ways in which a person is physically, behaviourally, cognitively and emotionally connected to others. As humans have an innate need to fit into different groups, individuals can gain a variety of benefits from physical and mental well-being by creating and maintaining connections with others. However, any discussion of well-being must ultimately focus on leisure, and physical activity is one of the forms of leisure activity that enhances social connection and creates a community of shared purpose. Furthermore, physical activity is often considered a core element of both physical and mental health. As negative psychological feelings such as social isolation and loneliness are prevalent in the older population, participation in physical activity can be used to enhance social connection and therefore reduce feelings of loneliness, which can affect physical and mental health, and thus enhance the well-being of older people.

According to the World Health Organisation, Active ageing itself emerges as a concept that reflects the importance of psychological, psychosocial and social factors

when devising interventions to foster adaptation to ageing. A growing number of countries are now using the concept as a name for projects to help older people.

Active Ageing UK is supported by Sport England as part of the Active Nation programme. The programme invests £10 million a year from the National Lottery into 20 projects across England to reduce the number of inactive older people and to help tackle issues such as poor mental health or loneliness caused by bereavement. The projects chosen for investment are those that support inactive older people to engage in at least 30 minutes of moderate physical activity per week, thereby improving their health and reducing their isolation.

Sporting Memories is one of the projects sponsored by Active Ageing, which was established in 2010. The project aims to reduce social isolation and loneliness among older people by encouraging them to participate in group meetings for sporting reminiscence and group sporting activities, thereby strengthening their social connections and improving their physical and mental health.

4 Recommendations

When using sport to improve the well-being of older people in Japanese society we need to consider the local sports situation in Japan and select the most popular sports in the country. According to some data, the most popular sport in Japan is baseball, so it is possible to create a large scale baseball sport for the elderly based on the idea of walking football. As show in figure 5.

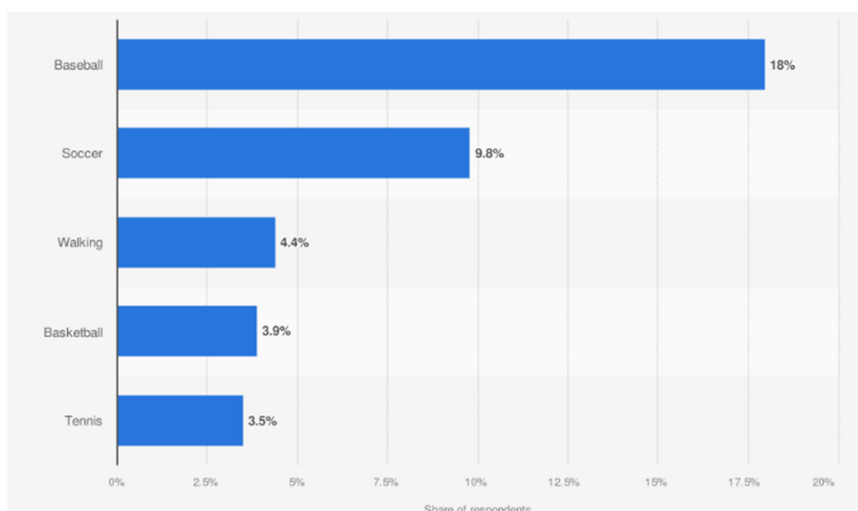


Fig. 5. Favourite sports among people in Japan

The sports chosen for older Japanese people do not necessarily have to be baseball, but group sports are best when possible. This is because participating in group sports improves the physical health of Japanese seniors as well as social bonding, and by organising a meal or tea party after each sport, we can increase the opportunities for face-to-face interaction within the senior community. This will both improve the health of Japanese seniors and reduce their own isolation.

When creating sports for Japanese seniors, it is important to take into account the physical condition of Japanese seniors and to protect their health by modifying the rules, reducing physical contact and reducing vigorous exercise. By specifying strict rules, it will also reduce the fear of sports injuries that may be caused by participation in sports activities.

In addition to considering the rules of the sport, due consideration must be given to the basic unit in which the sport is implemented, and the geographical location of the basic unit. Generally speaking, it is possible to organise

sports for the elderly in Japan through clubs, which can define themselves as social enterprises and receive sponsorship from the government, while maintaining their own profitability and investing in research to improve the well-being of the elderly population in Japan. In addition, as older people are less physically mobile than adults, it is important to consider the location of regional clubs in the relevant areas and to do a thorough statistical exercise before deciding on a location near areas where older people live.

The small size of Japan's land area it more likely that clubs will be located throughout the country. When the clubs reach a certain size, national senior leagues can be organised in different regions and, with the official authorisation and endorsement of the relevant sports associations, a major league can be organised to attract media attention and increase the exposure of the event. This would also give the elderly a sense of self-satisfaction and draw attention to the well-being of the elderly in Japanese society.

In addition to organising sports programmes for the elderly, the Japanese government should also pay attention to the well-being of the elderly. Funding for projects related to the well-being of older people should be provided through financial grants from sports-related departments, and should be preceded by funding for research by scholars into the Japanese older population to understand the current problems among older people and whether the sport has the capacity to address these problems. The research should then be used to target funding to sport-related projects that have the capacity to increase or improve the well-being of older people.

And the Japanese government can incentivise projects that enhance the well-being of older people through innovative sport-related approaches, for example through prize incentives. According to the Sporting Memories project in the UK, not all sport-related projects involve moderate-intensity sports. By attending meetings like conferences where older people can interact and discuss their past sporting experiences and give advice on current sporting developments, they can strengthen their self-identity and reduce the feeling of social isolation that comes from not having the opportunity to socialise.

It is also important to focus on specific groups, including Japanese older people who are widowed, have children who do not support them, are in debt and do not want to go out and socialise. Targeted sports programmes are created for different groups of older people to address specific older people's issues, and feedback surveys are actively conducted to find out the thoughts and opinions of specific groups of people who have participated in the programmes to improve them. Programmes can also be run and organised by older people themselves, with young people supporting them in their ideas. This will not only help to meet the cost of living for the older people who run the projects, or help to pay off debts but will also help to improve the well-being of older people in Japan, as the older people themselves are more aware of their own ideas and therefore organise activities that are more relevant to the realities of the older people in Japan.

5 Conclusion

In general, sport can be used in many ways to alleviate the social isolation and loneliness of older Japanese people, and thus improve their emotional well-being. To improve the well-being of the Japanese elderly community through sport requires not only charitable sporting organisations, but also the attention and financial support of the Japanese government. Only in this way can sport be used effectively as a tool to help improve the well-being of older people in Japan.

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