Population Aging: On the Effectiveness Analysis of Social Policy under Maslow's Hierarchy of Needs Theory

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ABSTRACT: Global population aging is deepening, and how to reduce the proportion of aging population is an issue of importance for every country. This paper uses literature research method to combine Maslow's hierarchy of needs theory and current policies by searching literature with theoretical works on coping with population aging, followed by analysis and research. The analysis and comparison reveals that Maslow's hierarchy of needs theory and current policies on population aging match, as well as the longer the course of population aging, the higher the hierarchy of needs, but most countries are currently at the third level of the theory, with few policies at higher levels.

KEYWORDS: Population aging, social policy, Elderly people, Maslow's hierarchy of needs theory.

I. INTRODUCTION
A. Overview
In recent years, population aging has been spreading around the world, involving many countries, some countries have reacted quickly with introduced a some of relevant regulations to solve a problem of population aging, some countries have reacted more slowly, population aging has occurred, but the policies have not kept up with the development of new trends, Maslow's hierarchy of needs theory can show the degree of a person's needs, through Maslow's hierarchy of needs the theory of Maslow's hierarchy of needs can show a extent of a person's required. It is an exploratory and scientific process to analyze and consider whether social policies on population aging are effective. It is of practical value to combine theory and real policy to study the effectiveness of policy, and it also provides value for policy makers in other countries to consider.

B. Aging of the population
Population aging, also known as population aging and aging society, it is about the trend of falling birth rates or older people being healthier and extending to rising median age. Generally developed regions experience more older age groups. In recent decades, developing countries have also seen a rise in the elderly population. (Sokolovsky, J, 2009)

For example, after more than 40 years of development, Japan has become the country with the fastest aging trend in the world according to the United Nations' World Population Prospects, with the proportion of people over 65 years old having increased to 23% in 2010. It is expected that by 2060 the number of people over 65 will be close to 40% of the country's total population. China, on the other hand, is significantly increasing the rate of population aging. According to relevant statistics, between 2016 and 2022, the birth rate in the country of China has been declining at a more block rate year after year, and by 2022, it will already be a negative population growth with a natural growth rate of only -0.6%. The aging rate is very fast, especially in recent years.

According to the United Nations, by 2050, the world population will reach 9-10 billion, of which 2 billion will be over 60 years old and 1.5 billion will be over 65 years old by 2050, which will soon exceed the number of people under 5 years old. On the other hand, with the advancement of science and technology and the improvement of medical treatment, the life expectancy of the world population is increasing, so it is urgent to control the growth of the population and manage the aging of the population. At present, the countries with deeper population aging in the world are Japan, Italy, Germany, etc., which are up to 25% or more. In every country, the problem of reducing the aging population has become an inevitable trend, and solving this problem has a constructive effect on both social development and economic development.

C. Social Policy
Social policy is the general term for a set of policies, action guidelines and regulations that address social problems, promote social security, improve the social environment and enhance social welfare through national legislation and government administrative intervention. Its core is to solve the social risks of citizens in a market economy. The areas of social policy include social assistance, social insurance, health care, education, housing, and social welfare services for special groups of people. The
functions of social policy include safeguarding and improving people's livelihood, promoting social equity, maintaining social order, and promoting social solidarity. (Deacon, B, 1997)

D. Maslow's Hierarchy of Needs Theory

Maslow's hierarchy of needs theory was proposed by American psychologist Abraham Maslow, which emphasizes that human motivation is determined by human needs. And that in every period of time, a person has one need that dominates, while other needs are in a subordinate position. (Maslow, A., & Lewis, K. J, 1987) Maslow divided human needs into five levels: physiological needs, security needs, social needs, respect needs, and self-actualization needs. These needs rise gradually according to priority, and when one level of needs is satisfied, the next level of needs becomes dominant.

II. ARTICLE REVIEW

A. Population Aging Policy

In response to population aging, authors have made policy recommendations in the past literature. The literature mentions the possibility of using social policies to change demographic behavior, and any full review of aging policies need consider the possibility of changing each demographic variable that straightforward affects the age profile. (Uhlenberg, P. 1992) In most developed countries, including the United States, raising the birth rate will slow the aging of the population in the future, and policy recommendations related to this approach must take into account both the effectiveness of policies to support childbirth and the desirability of raising the birth rate, but at the time this idea was only a theory. Other policies, such as those that create barriers to prevent childbirth, it may be useful in a temporary phase, but this can easily develop into the realm of ethical issues, which may not be useful in a permanent analysis, because of the restrictions that people will seek to circumvent. (Teitelbaum & Winter 1985) It is therefore a challenge to develop effective fertility policies that reduce the occurrence of other problems. This is about the impact of birth rates on population aging. On the other hand, mortality also has an impact on population aging. And mortality patterns may be influenced by social policies. Policies that reduce the resources available to extend life expectancy may reduce the increase in the number of elderly people. Who would want to comply with a policy that reduces life expectancy in order to control population aging? Who will comply with the policy if it is enacted? There are also humanistic and ethical issues involved.

Other policies such as those that increase productivity or reduce the dependence of old age. The reason for this policy is that young people become obsolete, unproductive, and socially marginalized. Through tax credits, training subsidies, and other incentive programs, government policies can encourage and facilitate investment in human capital formation throughout the life course. But the problem is that age discrimination remains, and the policy can only be implemented if senior citizens are motivated to work, and if they are physically unable to do so, then the policy has no meaningful effect on reducing population aging.

How can social policies enhance the productivity of older adults and/or reduce the burden of supporting an increasing number of dependent older adults? The literature also suggests three main types of social policies to address the challenges of aging of the population, one is policies that attempt to change the age structure - that is, to reduce the proportion of the population that is old. The second is policies that are reconstructing the meaning of ageing, where the understanding of old age is different in each period, keeping up with the times, re-judging old age, looking at it with new eyes, and innovating policies related to the field of old age. Third, the policy involves the relative roles that the list, families and individuals should play in supporting old age. For the elderly, the support of families and individuals as well as society is important. Good policies to deal with the aging population should include love, care, and responsibility. This links to the next part of Maslow's Hierarchy of Needs.

B. Maslow's Hierarchy of Needs Theory

Maslow's Hierarchy of Needs was proposed by American psychologist Abraham Maslow in 1943 in his book "A Theory of Human Motivation". He divided human needs into five categories, and applied them in reality. Although some experts have criticized this hierarchical arrangement of needs (e.g. self-actualization as the highest need) has become a manifestation of racial superiority. Maslow's hierarchy of needs cannot further describe whether social and ideological needs are differentiated in individualistic versus collectivist societies. (King-Hill, S, 2015)

Similar to the development of needs theory in the field of management, a focus on employee satisfaction is a central premise of using needs theory to inspire employees. In all types of companies, the needs of employees at each stage and the needs of different types of employees in the company are variable and can change from time to time. All in all, leaders are well positioned to use needs theory to complete employee research and surveys in their organizations.

Although a field of management or insurance has been practiced, integrated and enacted a series of measures or regulations under Maslow's Hierarchy of Needs theory, there is little literature that combines and analyzes policies related to population aging with Maslow's Hierarchy of Needs theory. As a result, a series of brainstorming sessions will take place, whether the current population aging policies can be integrated with Maslow's hierarchy of needs theory, how well they fit, what new ideas and useful
values can be generated by analyzing the policies under the theory, etc. The next section will analyze and discuss in detail the population aging policies of each country under the theory.

III. VALIDITY COMPARISON AND ANALYSIS
A. Physiological Needs and Population Aging Policies
In Maslow's hierarchy of needs theory, physiological needs are the lowest as well as the basic level of needs, and its level mainly refers to meeting the basic needs of human beings, maintaining individual survival, and needing to provide human beings with basic conditions such as water, food, and sleep. Based on this meaning, throughout the world, the length of aging process varies from country to country, among which the countries that have entered the short period of population aging, such as China. China's population aging has continued to deepen since it entered an aging society in 2000. By about 2022, China's population over 65 years old will account for 14% of the total population and will have transformed into an aging society. Therefore, China pays much attention to the clothing, food, housing and transportation of the elderly. Satisfying the clothing, food, housing and transportation of the elderly is basic and important.

The Chinese government has enacted policies in terms of funding and food. In terms of funding, in order to maintain basic food and housing, the Chinese government has set a minimum wage of 2,000 yuan, and in terms of subsidies related to the elderly, insured elderly people can receive a pension after retirement, and senior citizens can apply for a senior citizen allowance of up to 1,000 yuan per month to find the clothing, food, and housing needs of the older. In terms of housing, the Chinese government has implemented the construction of senior-friendly communities and senior-friendly cities, renovated age-appropriate facilities in communities and homes, and given priority to supporting the retrofitting of elevators in residences with a high proportion of elderly residents. China has invested 2.8 billion yuan in its budget to support the construction of elderl service facilities, such as facilities for feeding special hardship cases. (Lu, J., & Liu, Q, 2019)

Through the above policies enacted by the Chinese government, it is known that the Chinese government has focused on implementing priorities such as providing money for the elderly and building special houses for the elderly. According to the demand theory, physiological needs are focused on food and housing. In the context of China's policy, instead of providing food directly to the elderly, money is provided indirectly, and the prerequisites for providing money are participation in insurance and retirement, and claiming benefits. In terms of housing policy, which is partly based on older people having a place to live, China does not have food or housing aid stations similar to those in other countries for the time being. The aging of China's population is characterized by a large scale, fast pace and the fact that it is aging before it is rich. When more elderly people appear, it is necessary to arrange for food and housing for the elderly as quickly as possible, and the way and speed of the solution can also assess the level of economic development and comprehensive strength of a country. China is in a relatively short aging process, so there is room for improvement and development.

In contrast, countries that have been aging for a long time, such as the United States, have been stepping into the ranks of older countries for 70 years. As early as the 1940s, the United States entered an aging population, and now 17.4% of the total population is over 65 years old, which is typical of an aging society.

The United States has established a relatively developed social insurance system and has the legal support of the Social Security Act. After half a century of improvement, the current U.S. pension insurance system is a universal universal mandatory pension plan, and all pension insurance policies are organized and implemented in a unified manner throughout the country, which guarantees that the entire population of the United States will be in the pension plan and that citizens will definitely receive pensions in their old age, and with funds that will guarantee basic living issues, such as the payment of food and the payment of housing. There is also a Supplemental Nutrition Assistance Program (SNAP) in each U.S. state to help low-income people who lack food, face financial difficulties, and elderly people who lack nutritious food, all of whom can go on to receive it. (Binstock, R. H, 2020) Commodity Supplemental Food Program (CSFP). This is a food and nutrition program offered by the U.S. Department of Agriculture for seniors 60 years of age and older with incomes below 130% of the federal poverty level. Each month, 600,000 people benefit from this program. The USDA is responsible for distributing food or funds to participating states and Indian tribes. In the area of housing, the Community Services Block Grant (CSBG) was created by the U.S. Department of Health and Human Services. The mission of this program is to reduce poverty and provide shelter and health care assistance to the elderly.

The U.S. pension insurance system is compulsory by law and brings more effective results. This compulsion ensures the basic living conditions of every citizen and there is a lot of food and housing assistance for the elderly, and the compulsion of the law and direct assistance produces more effective results, thus maximizing the protection of the physical needs of the elderly in their old age.

Although the U.S. social insurance system is very well developed, the U.S. social insurance system is also facing the great challenge of increasing aging, especially the “baby boomers” born after the end of World War II will reach retirement age in 2011, and will continue until 2029, which will pose a great challenge to the current social insurance system. If the U.S. government does not do anything, the Social Security pension fund will be depleted by 2041. (Binstock, R. H, 2020)
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Regarding the effectiveness of policies in both countries, China's policies need to keep pace with social development and population aging, enact more effective and comprehensive policies, or more direct policies, and guarantee the universality and continuity of policy implementation. Regarding the U.S. policy, the U.S. is a combination of state-led and social participation, based on the formulation of laws and design of policies, the preparation of funds and the construction of institutions, so that the policy can be effective. In addition, market mechanisms are combined with equity. The United States is a highly developed market country, and the shadow of market mechanism is everywhere in dealing with the aging problem and the aging industry. In the enactment and implementation of the aging policy, it also reflects the nature of fairness and coverage for citizens, which makes the policy effective. However, full participation in the policy cannot avoid the problem of social insurance pension fund facing depletion.

B. Security Needs and Population Aging Policies

At the level of security needs, it mainly refers to guaranteeing security and stability from the threat of fear. It mainly includes security, employment, resources, health and property needs. Related to this is the aging policy such as Japan. The Japanese government relied on the welfare system in the 1980s and 1990s to provide free shelter and care for the disabled elderly with no income and low income, while other disabled elderly people have to pay for their own expenses to stay in an institution or hire someone to take care of them. However, Japan's health insurance provides free hospitalization for the elderly over 60 years of age, which has resulted in a large number of elderly people staying in the hospital for a long time and a sharp increase in medical costs, bringing health insurance to the brink of collapse. (Muramatsu, N., & Akiyama, H, 2011)

In contemporary times, one of Japan's important policies to deal with aging is its nursing care insurance policy support. Japan's nursing care insurance premiums are shared by the government, the employer and the participant. The policy has been in effect since 2000, and there are two categories of participants, with the government and individuals each paying 50% of the premiums for the first category. For the second category, the government pays 50% of the premiums, and the remaining part is shared by the employer and the individual. Poor people who are covered by the insurance are exempted from paying the premiums borne by individuals. (Yong, V., & Saito, Y, 2012)

But according to the Japanese Cabinet Office released the "Order and 3-year version of the White Paper on Ageing Society" data show that, with the aging and childlessness (aging of the accompanying problems) is intensifying, Japan is expected to face the danger of the population falling below 100 million in 2053. Therefore, Japan is entering not only an "aging society" but a "super-aging society. The first and most obvious impact of a super-aging society is the problems faced by the medical system and the welfare system, and the same problem is faced by the supporting elderly care system. It is not difficult to imagine that if the aging of the population does not slow down, in a few decades Japan will have a large number of people over 65 years old taking care of centenarians. This is not a joke; a number of super-aged prefectures in Japan are already in this state.

One of the potential crises of a super-aging society is the impact on Japan's social security system and its budget. Japan's national pensions have been in deficit for a long time, so the Japanese government has had to borrow other parts of the money to fill the pensions (that need to be paid to the elderly) and even try to squeeze more out of the young people through tax hikes and other means. As a result, the current environment is very unfavorable to young people.

In Denmark, the Danish policy on aging is to make aging in place the first choice. As we all know, Denmark is a typical high-tax, high-welfare country, where more than half of the residents' income is spent on taxes, so all the expenses of old age are borne by the government, and 17% of the GDP is spent on old age every year. Even though there are more than 1,300 nursing homes in a country with a total population of just over 5 million people, Danish seniors do not consider living in a nursing home as their first choice. Danish seniors can be equally well served by living at home. (Stuart, M., & Hansen, E. B, 2006)

To make home care services more responsive to the needs of the elderly, starting in 2015, the Danish government has decentralized to individual municipalities, using a model where the state pays for community implementation. In Denmark, each community has many public or private senior care services, large or small, and any senior care-related needs, including home care, are handled at the community building, where services include housework and personal care. Housekeeping refers to cleaning or grocery shopping, while personal care refers to toileting and bathing, as well as home visits by nurses, including treating wounds and helping the elderly determine the dosage of medication.

In Denmark, there are currently 155,000 elderly people living at home, accounting for about 15% of the elderly population, and only about 40,000 elderly people living in nursing homes, with an average age of over 82. The home care model is highly respected not only in Denmark, but also in other European countries, mainly because the cost of home care is much lower than institutional care, and it also increases the sense of security for the elderly. But the latest Danish demographic data show that the working age population will be less than 60% of the total population in 2036. The number of older people will be more than twice as large as the number of teenagers in 2082. The total population will reach a peak of 7,099,698 in 2101, and in 2045 the elderly population will make up 24.62% of the Danish population, so the problem of an aging population is still very serious.

The social policies of the above two countries are in line with the physiological needs of Maslow's Hierarchy of Needs theory, but the problem of aging population is still very serious in reality. Both Japan's care insurance policy and policies related to
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elderly care institutions, and Denmark's home policy are effective and implementable, but the effect is still not able to catch up with the speed of population aging.

C. Love and Belonging and Population Aging Policies

At the level of love and belonging, the main focus is on building emotional connections, and emotion, belonging, and friendship form the center of the construction of this level.

The Danish constitution explicitly states that society has a duty to provide for the elderly. In Denmark, most elderly people do not want to leave their homes and familiar living environment, so they choose to age at home. In fact, the Danish government also supports home care by helping the elderly retirees to adapt their homes so that they can enjoy their old age. The government provides that if an elderly person wishes to continue living in their own home after retirement, but the existing facilities do not meet their needs, they can apply to the local government for home modification. Denmark has a special housing bill for the elderly - "Housing for the Elderly and Incapacitated", which strictly stipulates that each unit should generally be 60 square meters or more, and that housing for the elderly should have a bedroom, living room, kitchen and toilet, and should not be built for office use; the interior design should be based on the living habits of the elderly. The government tries its best to provide fine and quality services for the living and living of the elderly.

The Danish government not only helps the elderly materially, but also has enacted laws to maintain the living environment of the elderly, which is supported by law, thus providing a strong and stable security for the elderly. What do some scholars think is a good social policy? A good social policy should care about people and serve them, it should cover all members of the society as the responsibility of the state, and its value purpose is to meet the basic needs of people's livelihood. The Danish government's policy on housing for the elderly is in line with this, and therefore the policy is effective. (Stuart, M., & Hansen, E. B. 2012)

Japan has continued to develop the field of national health campaigns in enacting its aging policy. Japan has completed four campaign programs since the postwar period. 1978, Japan conducted the first campaign program (1978–1987), which was mainly aimed at increasing the health of the elderly, promoting health knowledge, improving the equipment of a village health clinic, vigorously raising the disciplines of nurses and diet mixers, and securing various conditions conducive to the development of the campaign. 1988. The second campaign (1988-1999) was carried out in Japan, which focused on helping the elderly to develop a mindset for maintaining good health, and developing and improving the field of medical checkup and health counseling for the elderly. 2000-2010, the third campaign was carried out in Japan. The third program, also called the "Healthy Japan 21” program, was implemented by each Japanese ministry and continued to focus on "healthy lifespan” of the people. In 2013, Japan launched the second "Healthy Japan 21” program, also known as the Fourth Campaign Program (2013-2022), which focuses on topics such as mental and physical health of the elderly, intergenerational health, diseases of the elderly, and disease prevention, in order to maintain and improve the quality of life of its citizens.

The National Health Campaign is a plan that focuses on the physical and mental health of the elderly, and is adjusted and updated each time to keep up with the times, thus achieving the goal of improving the quality of life of the elderly and caring for them. It is also clear from the policy planning that Japan attaches great importance to the elderly population, and because of this importance, all policies are more relevant to the actual situation, thus producing effective results.

D. Respect for needs, self-realization and population aging policies

On the respect needs level and the self-actualization level, it is difficult to do in reality. This is because the respect needs level is about the recognition of the intrinsic value of older people and their external achievements. Self-actualization, on the other hand, is about realizing one's full potential and aspirations. Not every young person has these two levels of thinking, let alone this for the elderly. Furthermore, due to the age and physical limitations of the elderly, all organs of the body are not as light and healthy as when one is young. Globally, as the developed countries with the fastest aging population, the closest to these two levels of needs but still not reached.

Japan is constantly looking for new and effective ways to develop human resources for the elderly, thereby alleviating the labor market shortage, even in the face of a serious aging population.In addition to introducing policies to support policies related to medical care, elderly care, nursing care and housing directly related to the elderly, Japan has also introduced policies to encourage companies and social capital to participate in the elderly business and other related policies. Japan's initiatives related to the development of the senior market such as:One, to postpone the retirement age by amending the Act on Employment of the Elderly; the amendment to the Act on Employment Security of the Elderly in 2006 requires companies to implement at least one of the following three systems: (i) a system to postpone the retirement age, (ii) a system to adopt continued employment, or (iii) a system to abolish the retirement age; in 2013, the Act was amended again to require companies to fulfill their obligation to employ the elderly. In 2013, it was revised again to require companies to fulfill their obligation to hire older people, to encourage and promote companies to extend the retirement age, and to abolish the age limit for hiring, especially for older people who have reached the age of 60 and are willing to work, so that they are guaranteed to work until the age of 65. Two, we should increase the number of
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senior employment offices or workshops to ensure that work opportunities are available for seniors who are physically fit and willing to work, to help older people acquire more vocational skills.

The policy is not only an effective role in addressing the challenge of an aging population, but it also does not neglect the physical and mental health dimensions and care dimensions of the elderly population. The use of the older workforce and the development of the older market is also a recognition of the value of the older population, thus increasing the confidence of the elderly and helping and restoring the pursuit of their own value.

However, the effectiveness of Japan's policy will slowly lose its effect with the passage of time. As mentioned earlier, Japan has entered a super-aging society not only because of the overly serious trend of population aging, but also because of the aggravation of the trend of fewer children. No matter how much the Japanese government enacts and encourages citizens to have children, citizens are still reluctant to have children, and even modern Japanese young people are reluctant to get married. For young people, it is not only because of career issues, Japan works too long hours and has absolutely no time to get married or even have children at the stage of striving for career, but also the influence of social environment and the evolution of ideology and culture, which all have an impact and eventually lead to the aggravation of population aging and childlessness. (Laceulle, H, 2018)

IV. RESULT

Using Maslow's Hierarchy of Needs theory and the social policies of each country, it is concluded that the longer the development of population aging, the better the fit with Maslow's Hierarchy of Needs theory and the better the match between theory and policy, and vice versa. The more developed countries are, the better the policy on population aging is, the better it matches with Maslow's hierarchy of needs theory. In the theory, the higher the level, the less social policies reach the respect needs and self-actualization level.

V. CONCLUSION

Compared with the results analyzed in this article, previous past literature has combined theory and management field and got effective practice. In contrast, this article combines the theory with the population aging policy, although the field is different, the results are still valid. Through the analysis, the article still gets a high match between theory and policy, and it also proves from the side that Maslow's hierarchy of needs theory has theoretical value for use. When Maslow's Hierarchy of Needs theory was proposed, it was opposed by some scholars, but many theories are often proposed that do not match the reality, and how to apply and innovate the use on the existing theory is the most important thing. As mentioned in the second part, some experts criticize that Maslow's hierarchy of needs theory is not in line with the social nature of today's population is growing too fast, the elderly group is increasing, many countries and cities can be called "elderly society", when an individual need develops to a group of needs and then to a social need, in this changing It is not impossible to appear in these changing times.

This article in Maslow's theory of needs to analyze and demonstrate the effectiveness of contemporary population aging policies, combining theoretical and practical policies into one discussion to demonstrate whether there is a fit between Maslow's Hierarchy of Needs theory and realistic policies, and obtains significant results. The results of this paper provide theoretical and practical support and reference value for every country with a serious population aging, as this dimension has rarely been combined in the past literature.

Countries can focus on and develop the first three levels of needs in Maslow's hierarchy of needs, because according to the requirements of the reality, few groups of elderly people will pursue the realization of self-worth at this stage of old age, that is, the pursuit of the last two levels, therefore, population aging policies reaching the third level of the hierarchy of needs theory is already a very sound and effective policy. (Laceulle, H, 2018)

This analysis unfolds with policies in countries with severe population aging on a global scale. The past literature is less likely to use Maslow's hierarchy of needs theory as a basis for practice, so the analysis in this paper enables readers to understand and feel whether population aging policies are effective at an innovative level. In terms of future research, it is possible to consider how to innovate and develop a more suitable population aging policy based on theory, and both theory and policy can be innovated to fit with a country's national conditions. At the same time, the focus should be on population aging and the accompanying phenomenon of under-ageing.

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