

A Care Needs Assessment of Elderlies in Empty Nest Families: The Case of Wenzhou, China

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Abstract: China's rapid modernization has resulted to significant shifts in its social, cultural, and economic makeup. Specifically, its population is ageing that threatens their economic growth trajectories. Because the tradition of "raise children against ageing" still has influence in Chinese society, the country is facing the issue of covering elderly care costs while ensuring continued support for everyone. Given China's economic growth, we explore on how the needs of the elderly in empty nest families be fulfilled, particularly in Wenzhou where elderly population in empty nest families has been increasing. While both government and families demonstrate the need to care for the elderly by providing both tangible and intangible needs, survey results revealed that most elderlies in empty nest families in Wenzhou are satisfied living at home in their old age as long as they can still attend to themselves and can still find ways to satisfy their needs despite their age. These needs include continuing education, health consultations and assistance, and outpatient treatment. Knowing the specific needs of the elderlies in empty nest families allows government and families to direct resources on their actual needs that matter most rather than on perceived needs.

Keywords: China, Elderly, Elderly care, Empty nest family, Wenzhou.

1. Introduction

Economic development must be pursued alongside protecting the environment and improving people's livelihood. This is one of the most important conclusions of the 19th National Congress of the ruling Communist Party of China (CPC) (Price warehouse Coopers China [PwCCN], 2017) that will allow China to position itself as a "great modern socialist country" by 2049, to play a larger role in shaping global future by sharing the "China solution", to facilitate their economic and social development in the succeeding years, and to generate significant contributions to the world given their increasing influence. According to the State Council Information Office of the People's Republic of China (PRC), as reported by Xinhua (2021a), to achieve the said goals, China is incessantly making "steady progress towards overcoming poverty and realizing common prosperity" (para. 5) by providing education for the youth, income through employment for the labor force, medical care for the sick, support for the elderly, housing for the homeless, and support for the weak. This is to ensure that their citizens are contributing to development (United Nations Department of Economic and Social Affairs [UNDESA], n.d.).

As China's economic growth and development continues in a post-coronavirus (COVID-19) pandemic scenario, China would have to focus attention on addressing a demographic problem – "a declining and ageing population" (Kemp, 2021, para. 1). That is, China's population has been posting declining growth rates since the 1950s (Tan, 2021) resulting to "rising ranks of the elderly" that creates an imbalance in the ratio of young to old "putting unprecedented weight on the ties that hold society together" (Campbell, 2019, para. 5). Such also threatens their economic growth paths (Campbell, 2019; Kemp, 2021; Tan, 2021).

Given the results of latest (seventh) census in China that the population is ageing, it has made more pronounced the issue of covering the cost of elderly care while ensuring

continued support for the rest of the population (VOA News, 2021). As reported by Meng et al. (2020), China has the largest number of elderlies in the world. From latest statistics from the National Bureau of Statistics of China[http://www.stats.gov.cn/english/PressRelease/202105/t20210510_1817185.html.] (i.e., Seventh National Population Census of 2020), the number of elderlies beyond the age of 60 has been rising. In 2013, it exceeded 200 million (14.9% of the population) then reached 240.9 million in 2017 (17%) and 249.49 million in 2018 (17.9%), of which 166.58 million (11.9%) are of age 65 and above. From the Sixth National Census of 2010, the proportion of people aged 65 and above has increased by 4.09 percentage points. Data predicts that China's elderly population will reach 487 million in 2050, accounting for a quarter of the global elderly population (Fung, 2019). Moreover, the Office of the China Senior Citizens Work Management Committee also shows that the degree of China's ageing continues to deepen with time and the overall pension market is expected to expand to USD 1.2 trillion (Leng et al., 2021). That is, the needs of the elderlies and the accompanying expenditures for elderly care has been escalating. Meeting their multi-level, multi-faceted, and diversified needs has become an important decision for households, government, and society (Bunn et al., 2018).

As such, as the ageing population persists, empty nest families will become the main form of elderly families in China (Liu et al., 2015; Wei, 2010; Zhang, 2020). Empty nest family is defined by Preedy and Watson (2010) as "a kind of family in which the children are not living close to the elderly and they are left living alone in the family home" (https://link.springer.com/referenceworkentry/10.1007%2F978-0-387-78665-0_5581). It was estimated that the proportion of empty nest elderly families in China will reach 90 percent in 2030 (Su et al., 2021; Yao et al., 2019; Zhang et al., 2020a). Meanwhile, in Wenzhou[Located almost at the midpoint of China's eastern coast, Wenzhou consists of an urbanized area (488 square kilometers) and a large rural

region, divided into eight counties. The topography is rugged where 78 percent of the territory is mountainous with three ranges, all in northeast to southwest alignment, forming the northeastern, western, and southwestern borders and effectively isolating the municipality from the rest of the Chinese mainland (Liu, 1992). In past three decades, Wenzhou is the star in China import and export business, there have first oversea products transport market and most of Wenzhou people go abroad extend they business. Until now, Wenzhou business group is the business one in China oversea business groups (Wu & Yang, 2016).], as of 2020, it has a population of 9.57 million, of which 1,121,085 people are 65 and over (11.71% of the population).

Consequently, the CPC has paid greater emphasis on the development of their old-age industry by issuing a series of policy support that vigorously improved social security for the elderly, and actively promoted the development of the aged care service market, the old consumer market, the community-based in-home elderly care, and the combination of medical care and elderly care, among others (Meng et al., 2020). At the household level, family care for the elderly, widely known as “raise children against ageing” is used to describe the most desirable life arrangement for Chinese elderly people, as it reflects the core idea of filial piety that lies near the heart of the Confucian doctrine regulating society (Peng & She, 2018). In Chinese culture, it embodies the family's retirement protection function (Fan, 2007) because “traditional Chinese culture emphasizes the importance and value of older people” (Xie & Xia, 2005, p. 145).

However, as China undergo rapid modernization and reforms, it resulted to significant changes in its social, cultural, and economic circumstances that also affected the lives of the Chinese population (Sun & Ryder, 2016). In Wenzhou, with the acceleration of globalization, the number of empty nest elderly people in Wenzhou continues to increase (Zhou et al., 2015). Some areas in Wenzhou have evolved into villages for the elderly, and the Chinese tradition of "raising children against ageing" has been slowly weakening (Fulgini & Zhang, 2004). While in other areas, particularly rural, there is low inclination to send elderly parents to elderly care institutions because of the strong influence of the tradition “raise children against ageing” resulting to vacancy and oversupply (Luo, 2021). This contrast makes Wenzhou an interesting research locale other than being a relatively developed area in China (Liang & Wu, 2014; Zhou et al., 2015).

Given the above backdrop, we pose the research question how can the needs of the elderly in empty nest families be fulfilled? In addressing this, we pose the following objectives:

- 1.To understand the elderly situation in empty nest families in China and Wenzhou;
- 2.To identify specific needs of elderlies in empty nest families; and
- 3.To derive implications, from the Chinese context, on how the needs of the elderlies in empty next families can be addressed.

The value of pursuing this study is anchored on reinforcing policy attention on the needs of the elderlies in empty nest families. As emphasized by Zhang et al. (2021), the rising elderly population in China has brought a series of problems and challenges to the country's social and economic development. This warrants more attention for empty nest elderlies. Identifying and understanding their needs would facilitate care, support, and protection for them in their old age consistent with Chinese traditions, habits, and concepts.

2. Literature Review

2.1. Development in China's Healthcare Industry

2.1.1. The COVID-19 Pandemic and China's Healthcare Industry

The impact of the COVID-19 pandemic on China's economy is also noteworthy. As reported by Vaswani (2021), while China's economy grew at the slowest pace in more than four decades in 2020, it remained on track to be one, if not the only one of the major economies to have still expanded in 2020. In fact, China's economy grew 2.3% in 2020 despite lockdowns, community closures, restrictions on the movement of people, among others pandemic response measures, causing output to slump in early 2020.

The extremely fluid pandemic situation all over the world has also pushed healthcare systems to the limits, even in China, that exacerbated manpower and resource costs leading to rising infections (Sun et al., 2021). Likewise, the policies to curb the spread of the virus also challenged empty nesters in elderly care institutions as they were left unable to secure their daily necessities and required interventions, mostly from volunteers, to assist (Yau et al., 2020).

The pandemic also accelerated the promotion of health awareness, cognizance of increased ageing in the population, and food safety (Wang et al., 2021). These have made consumers' attention to healthy diet and healthy lifestyle increase unprecedentedly. Given the mechanisms to contain the pandemic, it resulted to preference for online medical transactions and consultations.

Given these challenges, it compelled the Chinese healthcare sector to usher in industrial adjustment, upgrading and transformation (Wang & Wang, 2020). Specifically, as underscored by Sun et al. (2021), “the Chinese government adopted innovative, specialized, and advanced systems, including empowered Fangcang and Internet hospitals, as well as high technologies such as 5G, big data analysis, cloud computing, and artificial intelligence” (p. 1). By incorporating these advancements, it facilitated China's effective management of the pandemic. Similarly, Sun et al. (2021) argued that by integrating these technological innovation into the global healthcare system, the world would be in a better position to contain COVID-19 as well as any diseases that may emerge in the future.

The above mentioned innovations, accompanied by China's “people first” principle, where vulnerable groups (i.e., elderly, disabled, children) are provided special care to ensure that no one is left behind, became the core of their pandemic containment measures. Here, empty nesters benefitted from “massive nucleic acid testing, epidemiological investigations, closed-loop management, and travel restrictions” (Xinhua, 2021b, para. 3) with the assistance of community workers who “visit them regularly to carry out nucleic acid tests and bring free meals and daily necessities including milk, eggs and fruit and call them every day to check on their needs” (Xinhua, 2021b, para. 5). Moreover, according to China law info Database (2021), China also provided special services to enable new technologies be readily accessible for the seniors.

Such approaches addressed the needs of their elders by improving the quality of their life, preserving their dignity, and boosting healthy and stable socio-economic development. Hence, the empty nesters became confident of their country's

response to the pandemic.

2.1.2. Policy Dividends

In response to the needs for elderly care, the General Office of the State Council of China has successively issued 28 relevant policies to fully support the development of the elderly care service industry and protect the market cultivation and standard development of the elderly care industry (Xinhua, 2021c; Xu, 2021; Zhang et al., 2020b). Among these are the: Launch of the Fourth Batch of Pilot Demonstrations of Smart Health and Elderly Care Applications (Majumder et al., 2017) and Guangdong-Hong Kong-Macao Greater Bay Area Chinese Medicine Highland Construction Plan 2020-2025.

In 2020, the Chinese government successively issued various notices about paying greater attention to healthcare of elderlies. Specifically, it outlined measures to address the needs of the elderly in a coordinated manner, while tackling the issue of population ageing through joint efforts from the authorities and society in general. For instance, according to Xinhua (2021c), China will improve elderly care services at home and communities by prioritizing certain groups (i.e., incapacitated elderly individuals with financial difficulties, senior citizens with disabilities, and those who have made contributions to society).

As reported by Mang (2020), over the past decade, more than 100 incentive programs have been released. These programs have transformed the elderly care industry from the traditional government-led public health and elderly care service model to the self-service elderly care model dominated by private enterprises, and then to the now respected green lifestyle residence. Family care continues to progress in meeting the real needs of the elderly.

Hence, we can see from the trends and policy dividend that China employed both hardware and software to address their constraints with elderly needs amidst the pandemic. With strong policy support given the scale of market demand and consumer education, the pandemic has emphasized the importance of developing technology, strengthening online diagnosis and treatment services, harnessing the Internet of Things, innovating smart wearable devices for the elderly, among others. All of which have brought new development opportunities for the Chinese healthcare industry.

2.1.3. Needs of the Empty Nest Elderly

Empty nest elderlies refer to those parents whose children (i.e., all children) leave their household registration location for a long time, usually more than half a year, to work or live in other areas. Alternatively, as defined by Zhang et al. (2021), empty nesters are elderly, aged 60 years old and above, who live alone or with their spouse either because they have no children, or their children are already married or are working elsewhere for a long time.

With rapid urbanization, a greater proportion of the population are moving to central cities. According to the World Bank (2008), approximately half of China's population are residing in cities and China's phenomenal urbanization requires discussion in terms of coping mechanisms and the benefits and challenges the country has experienced given the situation. Issues include, urban air and water pollution, services to migrants, and safety nets for the poor and elderly.

Urbanization also worsened the the ageing of society in third-tier, fourth-tier, and fifth-tier cities, and the problem of elderly care for the elderly in empty nests has also attracted

greater attention from society (Zhai, 1997). The main dilemma faced by the empty-nest elderly in providing for the elderly includes the material level and the spiritual level (Gao et al., 2017; Xing, 2018; Zhang, 2020; Zhang et al., 2021). They need economic supply, children's companionship, spiritual and cultural life, and spiritual comfort – all of which can enhance their quality of life.

2.1.4. Insufficient Economic Supply

We refer to insufficient economic supply as the lack of material needs (e.g., food, clothing, medicine, funds, endowments, among others) for the elderly. It is a constraint faced by individuals, households, and institutions providing for the elderly. This is because the financial capabilities of providers are critical. As of 2020, reports from the Ministry of Human Resources and Social Security of the People's Republic of China, the number of people receiving employee pensions in China was 130 million, and the number of people receiving pensions for urban and rural residents was 160 million. Moreover, per capita pension for urban and rural residents is CNY 2,088.00[<http://www.caoss.org.cn/sbzl.asp?id=18> and <http://www.caoss.org.cn/UploadFile/pic/20216413372045904.pdf>]. This income is deemed inadequate for the elderly; hence, they primarily depend on the economic productivity of their families, particularly their children.

2.1.5. Lack of Comfort

Other than material life satisfaction, spiritual life also needs to be satisfied. The biggest spiritual need of the empty-nest elderly is to resolve loneliness and boredom. Most empty-nest elderlies simply communicate with their children through telephone, WeChat voice, and video calls, among others but are unable to conduct more physical and emotional exchanges. This is compensated by community activities such as Tai Chi for the elderly, physical activities, household chores and errands, and other hobbies are more apparent. In a survey conducted by the China Aging Science Research Center, results revealed that 10.2 percent of the elderly in China feel unhappy; 35.1 percent often feel lonely; and 69 percent both feel unhappy and lonely” (Zhu, 2011).

In a report by CCTN News Official Account (2021), with about 254 million elderly people in the country and about 40 million disabled and semi-disabled elderly people, the demand for elderly care workers reaches more than 6 million. However, there are currently only more than 500,000 service personnel engaged in elderly care, which is far from meeting the needs. These figures alone highlight that the issue of elderly care for the empty-nest elderly has become one of the issues that need urgent attention and resolution in the social and people's livelihood issues.

2.1.6. Research Gap

We have seen that the issue of attending to the rising needs of empty-nest elderly has created pressure and unprecedented challenge to China's state pension funds as the country continues to face an aging population (Lee, 2021). The literature concurs that the aging of the Chinese population highlights the unstoppable rise in the number of elderlies that warrants urgent response from government to cater to their needs consistent with Chinese traditions of high regard for the elderly. Attending to the elderly as a form of respect is deemed the basis of how Chinese society is organized and has been at the foundation of Chinese culture and morality. In fact, older people are respected for their wisdom and most important decisions have traditionally made through consultations with

them. They play a critical role in Chinese society.

However, with limited and scarce resources and the faster rate at which the elderly population is increasing, community and home care for the elderly have always been economically challenging. Moreover, there is still a lack of adequate elderly care institutions and health care institutions that provide door-to-door services. Likewise, elderly medicines, elderly health care products, and various other elderly necessities are in a relatively scarce state.

More importantly, we have also seen from the literature that the issue is exacerbated by the lack of discussions and studies to address the problem. Existing studies are towards rural empty-nest elderly but very few on urban empty-nest elderly. Through this study, we fill in this gap by explicating the current degree of satisfaction of the empty-nest elderly with their own elderly care situation; and understand the kind of service that can better meet the elderly needs of empty nesters, specifically in Wenzhou.

3. Methodology

3.1. Research Design

Our research design follows the principles proposed by Podsakoff and Organ (1986), which guarantees the following: (1) the interviewee is anonymous, (2) uses clear terminology, (3) constructs interpretable questions, and (4) uses Reverse language to ensure qualitative thinking. All of this is to minimize defective responses.

Using the questionnaire survey method, the research content includes: (1) demographics that comprise gender, age, ethnicity, marital status, education level, occupation before retirement, degree of loneliness, chronic disease, and other basic information; (2) analysis of current needs, which used a five-level Likert scale for measurement, with 1 indicating “very unnecessary” and 5 indicating “very necessary”; or 1 means “very dissatisfied” and 5 means “very satisfied”.

3.2. Sample Selection Method

The elderlies comprising the sample were selected using a multi-stage stratified random sampling method. This is also known as multistage sampling and multistage cluster sampling where a sample is drawn from a population using smaller and smaller groups at each stage. In selecting the sample, we randomly identified 1 street and then a 1 nursing home in that street. The following inclusion criteria were used: formal household registration in Wenzhou, more than one year, and more than age 65 years old; living alone or with a spouse. Meanwhile, exclusion criteria include persons with severe physical illness or mental retardation and persons who refuse to accept the survey or go out during the survey. The sampling locales are Ouhai, District of Wenzhou City and

Ruian City (county-level city). The survey period was conducted from July 2021 to August in 2021. Because the survey was conducted amid the COVID-19 pandemic, safety standards were observed such as wearing of medical-grade mask, physical distancing, disinfection of materials used, and minimized time of interaction.

3.3. Survey Process

The survey was divided into two stages. In the first stage, random interviews were conducted in two selected areas to ask them what their needs for family care for the elderly are. A total of 23 elders’ responses were collected and pre-investigation was conducted on the replies given by the elderly. After fine-tuning the current questionnaire, combined with the corresponding literature and teacher suggestions, finally sorted out 19 questions.

In the second stage, a closed questionnaire (including the demographic characteristics of the interviewees, the number of children, exercise status, interests, and chronic diseases, etc.) is used alongside the five-level Likert scale mentioned earlier.

4. Results and Discussion

4.1. Descriptive Analysis

After the survey period, a total of 1,304 responses were collected. Among these, only 1,189 responses were considered valid. Because our focus is on empty-nest elderly. Therefore, after filtering the valid responses using Question 11 (i.e., data screening of elderly people living in the same city with their children), the actual number of responses is 429.

We present in Table 1 the distribution of responses for each of the survey question. We can see that the male and female respondents were nearly equally distributed (i.e., female respondents were slightly more than 3%). In terms of age, bulk of the respondents are 60 to 70 years old (accounting for 48%), and the proportion of 70 to 80 years old and over 80 years old is relatively equal.

The local people over 80 years old in Wenzhou account for 25 percent of random samples. Likewise, the proportion of long-lived elderly is relatively high. In terms of education level, 69.2 percent of the population have an education level of elementary school and below, and only 13 percent have a college degree or above, which proves that the elderly generally did not have a high level of education. In terms of pre-retirement occupations, farmers accounted for the highest proportion of 32.4 percent, which is fully in line with the location characteristics of the selected sample areas, followed by enterprise personnel with 25.9 percent of enterprise employees, and the proportion of workers with 12.1 percent is in line with the law of economic development in China after economic reforms.

Table 1. Survey tabulations: Demographics

1.1. Sex	Frequency	%	Cumulative
Male	209	48.7	48.7
Female	220	51.3	100.0
TOTAL	429	100.0	

1.2. Age	Frequency	%	Cumulative
60-70 years old	206	48.0	48.0
70-80years old	125	29.1	77.2
More than 80 years old	98	22.8	100.0
TOTAL	429	100.0	

1.3. Education	Frequency	%	Cumulative
Elementary school and below	153	35.7	35.7
Junior high school	144	33.6	69.2
High school (secondary school)	76	17.7	86.9
College	31	7.2	94.2
Bachelor degree and above	25	5.8	100.0
TOTAL	429	100.0	

1.4. Pre-retirement occupation	Frequency	%	Cumulative
Institutional personnel	99	23.1	23.1
Corporate personnel	111	25.9	49.0
Farmer	139	32.4	81.4
Worker	52	12.1	93.5
Other	28	6.5	100.0
TOTAL	429	100.0	

1.5. Hobby	Frequency	%	Cumulative
Have hobbies	175	40.8	40.8
No hobbies	254	59.2	100.0
TOTAL	429	100.0	

1.6. Marital status	Frequency	%	Cumulative
Married	243	56.6	56.6
Divorced	44	10.3	66.9
Widowed	68	15.9	82.8
Single	74	17.2	100.0
TOTAL	429	100.0	

1.7. How is your physical condition?	Frequency	%	Cumulative
Very healthy	119	27.7	27.7
Good	160	37.3	65.0
Generally healthy	99	23.1	88.1
Bad	33	7.7	95.8
Very Bad	18	4.2	100.0
TOTAL	429	100.0	

1.8. Do you exercise weekly?	Frequency	%	Cumulative
Yes	235	54.8	54.8
No	194	45.2	100.0
TOTAL	429	100.0	

1.9. Do you have chronic disease?	Frequency	%	Cumulative
Have	154	35.9	35.9
None	275	64.1	100.0
TOTAL	429	100.0	

1.10. How many kids do you have?	Frequency	%	Cumulative
None	10	2.3	2.3
1	102	23.8	26.1
2	147	34.3	60.4
3	104	24.2	84.6
4	66	15.4	100.0
TOTAL	429	100.0	

1.11. How's your economic status?	Frequency	%	Cumulative
Have balance	109	25.4	25.4
Enough	166	38.7	64.1
Generally okay	83	19.3	83.4
Relatively tight	45	10.5	93.9
Struggling	26	6.1	100.0
TOTAL	429	100.0	

1.12. Which main source of your monthly income?	Frequency	%	Cumulative
Retirement or basic pension	420	97.9	97.9
Child assistance	0	0	97.9
Continuing work	9	2.1	100.0
Subsistence allowance	0	0	100.0
Other	0	0	100.0
TOTAL	429	100.0	

1.13. Do you live alone?	Frequency	%	Cumulative
Yes	186	43.4	43.4
No	243	56.6	100.0
TOTAL	429	100.0	

1.14. Do you have ability take care of yourself?	Frequency	%	Cumulative
Yes	321	74.8	74.8
No	108	25.2	100.0
TOTAL	429	100.0	

1.15. Whether life incidents occurred during the year need to be asked for help?	Frequency	%	Cumulative
Yes	397	92.5	92.5
No	32	7.5	100.0
TOTAL	429	100.0	

1.16. Are you satisfied with the current state of life?	Frequency	%	Cumulative
Very satisfied	103	24.0	24.0
Satisfied	182	42.4	66.4
Generally satisfied	71	16.6	83.0
Not so satisfied	56	13.1	96.0
Very dissatisfied	17	4.0	100.0
TOTAL	429	100.0	

In terms of hobbies, 59.2 percent of the elderly have no hobbies, indicating that most of the elderly lack additional activities that caters to their interests. In terms of marital status, the proportion of married persons is 56.6 percent, and the cumulative proportion of widowed and single persons is 33.1 percent. This data is higher than the result of the seventh census and can be studied in a targeted manner. In terms of physical health, most of the elderly are in good health, and only 11.9 elderly people feel that their health is not very good. In terms of fitness, most elderly people have fitness habits, accounting for 54.8 percent, but some of this proportion is continuous farming.

In terms of chronic diseases, 64.1 percent of the elderly said they have chronic diseases. In terms of the number of children, as the population is mainly concentrated in the elderly 60 to 70 years old, affected by family planning, most of the children have 1 to 2. In terms of sources of economic income, the national universal basic pension is very effective. A sample survey shows that 97.9 percent of the elderly have pensions or basic pensions, and 2.1 percent of the elderly continue to

work to maintain their current lives. Almost no elderly chooses to support their children. The elderly in the 1950s and 1960s were very independent and had their own independent thoughts and concepts.

In terms of self-care ability, most of the elderly who participated in the questionnaire had the ability to take care of themselves, accounting for 74.8 percent. The questionnaire did not mention the situation that they could not take care of themselves at all. Therefore, in the remaining 25.2 percent, except for the elderly who need the care of nursing homes, most of them still in a partially self-care situation. In a year, 92.5 percent of the elderly said they need help from neighbors or people around, which is in line with the living conditions of the elderly.

In terms of satisfaction with living conditions, 83 percent of the elderly said it was okay, and 17 percent said they were not satisfied or very dissatisfied.

We also present in Table 2 the results if the survey questions focusing on what items empty-nest elderlies need to enhance their life.

Table 2. Survey tabulations

II. Perceptions

2.1. Do you need Convenient maintenance?	Frequency	%	Cumulative
Very necessary	208	48.5	48.5
Need	85	19.8	68.3
Generally needed	86	20.0	88.3
Unnecessary	30	7.0	95.3
Very unnecessary	20	4.7	100.0
TOTAL	429	100.0	

2.2. Do you need Housekeeping?	Frequency	%	Cumulative
Very necessary	161	37.5	37.5
Need	117	27.3	64.8
Generally needed	96	22.4	87.2
Unnecessary	32	7.5	94.6
Very unnecessary	23	5.4	100.0
TOTAL	429	100.0	

2.3. Do you need community canteen?	Frequency	%	Cumulative
Very necessary	123	28.7	28.7
Need	114	26.6	55.2
Generally needed	104	24.2	79.5
Unnecessary	44	10.3	89.7
Very unnecessary	44	10.3	100.0
TOTAL	429	100.0	

2.4. Do you need take care of go out?	Frequency	%	Cumulative
Very necessary	147	34.3	34.3
Need	122	28.4	62.7
Generally needed	91	21.2	83.9
Unnecessary	39	9.1	93.0
Very unnecessary	30	7.0	100.0
TOTAL	429	100.0	

2.5. Do you need make friends?	Frequency	%	Cumulative
Very necessary	189	44.1	44.1
Need	95	22.1	66.2
Generally	86	20.0	86.2
Unnecessary	29	6.8	93.0
Very unnecessary	30	7.0	100.0
TOTAL	429	100.0	

2.6. Do you need emotional escort?	Frequency	%	Cumulative
Very necessary	161	37.5	37.5
Need	114	26.6	64.1
Generally	89	20.7	84.8
Unnecessary	38	8.9	93.7
Very unnecessary	27	6.3	100.0
TOTAL	429	100.0	

2.7. Do you need consult about assist?	Frequency	%	Cumulative
Very necessary	141	32.9	32.9
Need	127	29.6	62.5
Generally	92	21.4	83.9
Unnecessary	34	7.9	91.8
Very unnecessary	35	8.2	100.0
TOTAL	429	100.0	

2.8. Do you need speech for learning?	Frequency	%	Cumulative
Very necessary	140	32.6	32.6
Need	108	25.2	57.8
Generally	96	22.4	80.2
Unnecessary	44	10.3	90.4
Very unnecessary	41	9.6	100.0
TOTAL	429	100.0	

2.9. Do you need health test per year?	Frequency	%	Cumulative
Very necessary	239	55.7	55.7
Need	86	20.0	75.8
Generally	72	16.8	92.5
Unnecessary	21	4.9	97.4
Very unnecessary	11	2.6	100.0
TOTAL	429	100.0	

2.10. Do you need treatment in your house?	Frequency	%	Cumulative
Very necessary	210	49.0	49.0
Need	93	21.7	70.6
Generally	87	20.3	90.9
Unnecessary	21	4.9	95.8
Very unnecessary	18	4.2	100.0
TOTAL	429	100.0	

2.11. Do you need file management for your healthy?	Frequency	%	Cumulative
Very necessary	207	48.3	48.3
Need	94	21.9	70.2
Generally	86	20.0	90.2
Unnecessary	25	5.8	96.0
Very unnecessary	17	4.0	100.0
TOTAL	429	100.0	

2.12. Do you need escort when you in medical treatment?	Frequency	%	Cumulative
Very necessary	201	46.9	46.9
Need	96	22.4	69.2
Generally	79	18.4	87.6
Unnecessary	29	6.8	94.4
Very unnecessary	24	5.6	100.0
TOTAL	429	100.0	

It can be seen that most elderly people still need life and emotional health services. Among them, the current maintenance needs for the convenience of the people account for 68.3%; the domestic service needs 64.8%; the canteen takeaway service needs 55.2%; the out-of-home care needs 62.7%. It can be seen that the current community and street care for the elderly The care situation needs to be improved. Even if the elderly can take care of themselves, they still have a need for life service items.

In terms of emotional services, the elderly needs to make friends accounted for 66.2 percent, emotional escort accounted for 64.1 percent, consultation assistance accounted for 62.5 percent, and learning lectures accounted for 57.8 percent. Most of the elderly are keen on learning and making friends, and certain communication and learning can better enjoy the elderly life.

In terms of health services, 75.8 percent are required for health checkups, 70.6 percent are required for on-site treatment, 70.2 percent are required for health records, and 69.2 percent are required for medical attendants. The proportion of this category is significantly higher than the other two. The elderly pays the most attention to their health and medical conditions.

Based on descriptive statistics, we conduct correlation analysis for other factors except gender and age. See Appendix 3 for the correlation matrix.

Among them, the correlation between education level and life events is 0.589, the correlation between marital status and self-care ability is 0.902, which has a strong correlation; physical condition and life state satisfaction, economic status and physical condition and life satisfaction have weak correlation.

The correlation is not large, but through the significance test between various aspects, the interviewee's education level is significantly related to the interviewee's pre-retirement occupation, hobbies, physical condition, number of children, economic status, and life events Sex $p < 0.01$, which is also significantly related to whether the respondent exercises regularly, $p < 0.05$.

There is a significant correlation between the interviewee's

pre-retirement occupation and the interviewee's hobbies, the economic status of the interviewee, and the life events of the interviewee, $p < 0.01$. There is also a significant correlation with the interviewee's physical condition and whether they exercise regularly, $p < 0.05$.

Respondents' interests and hobbies are significantly correlated with the respondent's physical condition, whether they exercise regularly, the number of children, financial status, self-care ability, and life events $p < 0.01$, and are also significantly correlated with whether the respondent has chronic diseases $p < 0.05$

Respondents' marital status is significantly correlated with the respondent's economic status, whether they live alone, and their self-care ability $p < 0.01$, and there is also a significant correlation with the respondent's physical condition $p < 0.05$.

There is a significant correlation between the physical condition of the respondent and whether the respondent does exercise, whether they have chronic diseases, the number of children, economic status, whether they live alone, their ability to take care of themselves, and whether life events occur, $p < 0.01$.

Whether the respondent exercises regularly is significantly correlated with chronic disease, economic status, living alone, and self-care ability $p < 0.01$, and it is also significantly correlated with the number of children and whether life events occur, $p < 0.05$.

Whether the respondent has a chronic disease is significantly correlated with the number of children of the respondent, whether they live alone, and their ability to take care of themselves, $p < 0.01$, and is also significantly correlated with the respondent's economic status and life events, $p < 0.05$.

The number of children of the respondent has a significant correlation with the economic status of the respondent $p < 0.05$.

There is a significant correlation between the economic status of the respondent and the source of income and self-care ability of the respondent, $p < 0.01$, and it is also significantly correlated with whether the respondent lives alone and whether life events occur or not, $p < 0.05$.

Whether the respondent lives alone has a significant correlation with the respondent's ability to take care of themselves, $p < 0.01$.

In summary, it can be seen that although most of the respondents' responses to the questionnaire are not very relevant, there are significant differences in relevance. The follow-up needs to be studied and the current data can be modeled and analyzed.

For the twelve aspects of the demand part, the respondents' responses are strongly relevant. It can be seen that the respondents' service needs in life, emotions, and medical care have little to do with basic information such as age, gender, education, and hobbies. According to Appendix 2, the correlation analysis shows that the twelve questions in the demand part are significantly related to hobbies, physical conditions, whether to exercise, economic status, and self-care ability.

5. Conclusion

The causes of the empty-nest elders are more complicated, mainly including the family planning policy of the 20th century and the acceleration of the modern cultural process, making it difficult to see the traditional three or four generations living together in the past. The empty-nest elderly is one of the relatively special groups among the elderly who need special attention (Ma & Fu, 2012). Most domestic researches on empty-nest elders focus on empty-nest elders in rural areas, focusing on the support of children and poor spiritual life, such as Wang (Shi & Tang, 2019) and Shi (Wang & Yuan, 2018). This survey focuses on the current situation of home care for the empty-nest elderly in Wenzhou City and conducts an excavating analysis of the functional needs of the elderly.

There is a positive correlation between the age of the empty-nest elderly and the needs of life care, that is, the older empty-nest elderly is more inclined to the needs of life care. With the increase of age, the physiological functions of the empty-nest elderly gradually decline, their dependence on other people's help becomes higher and higher, and their vulnerability becomes stronger and stronger (Zhang & Liu, 2006). Cross-analysis of the survey data shows that (for cross-analysis data, see Appendix 1): Among the people aged 60-70 with empty-nest elderly mostly like living at home, those who are married, accompanied by a partner and have a higher degree of physical health. They are born around in the 1960s, started the college entrance examination in 1978. After obtaining job opportunities through their own efforts, they have relatively surplus economic income and regular fitness exercises. This group has its own independent pension model, and they focus more on convenient maintenance and learning lectures. As well as health testing and outpatient treatment. However, the needs of people aged 80 and above are almost 80% or more in the last question. This conclusion can effectively verify Zhang's research (Zhang & Liu, 2006).

In the survey of empty nest elderly people's responses, another significant group is the elderly who choose farmers as their occupation. According to IP and paper questionnaire sources, most of the data in this response comes from Wenzhou Ouhai District, and the sampling location is for relocation. So the community belongs to a group with significant representativeness. It is worth mentioning that almost all local interviewees have basic pensions. During the communication during the questionnaire distribution process, the other party stated that their financial situation is relatively

tight, but because they still have some fields on Daluos Mountain that can subsidize their families, so most of the economic conditions in the questionnaire responses are adequate and fair. In addition, most of the kids of uncle farmers in the questionnaire work overseas all the year round, leaving they parents in China. Most of these interviewees can take care of themselves and express a certain degree of satisfaction with their current lives. Their needs focus on consultation and assistance, learning lectures, health testing, and outpatient treatment.

In summary, for the empty nest elderly who have a certain stable income and whose children are not in the city, they are subjectively eager to get the attention and help of the community. Hope, they are currently more satisfied with their old life, but if life services, emotional services and medical services can be added, they will be more supportive and welcome.

6. Recommendations

Focus on the life and medical conditions of the elderly empty-nest elderly group. The life of the elderly empty-nest elderly is generally taken care of by their partners or neighbors. Due to late marriage and late childbearing in China, the general partner's age difference is less than 3 years old. When one party becomes an elderly, the other party is most likely to be among the ranks of the elderly, so this causes a lack of convenience in life. If high-tech products such as smart wearable devices can monitor various indicators and living conditions of the elderly in real time through the Internet, and set up convenient monitoring and service points within 3 kilometers, this will effectively alleviate the living and medical conditions of the elderly demand. This also provides a reference basis for the needs of the future community and health care town construction.

7. Limitations

There are many problems encountered in this survey. For example, many data have significant characteristics, but the correlation is not high. What is the relationship between these problems? In the current demand analysis, how to truly, effectively and effectively meet the needs of empty-nest elderly families for the elderly needs further thinking? In the process of Wenzhou's urbanization, demolition and transformation of urban villages, the elderly have neither land nor access to support from their children. What is the ratio of living on a meager basic pension? After the elderly meet their basic needs in life, can their spiritual life choices be more colorful, such as green health care, forest health care, Chinese medicine health care.

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