Opening Routes to Re-Employment Behaviour of Older Women: How do family-related Factors Affect?

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Abstract

The number of older workers in urban China who extend their working life after retirement has recently increased, and the proportion of those working older women remains low. This trend underscores the pressing need to address the challenges faced by older women who wish to extend their working lives after the compulsory retirement age. The present study, which focuses on factors impacting the re-employment of older women aged 55 to 70, family-related factors, in particular, is a crucial step towards understanding and addressing this issue. The study is based on pilot data collected from May 2022 to July 2022 among older women individuals in Fuzhou, China, using a self-designed questionnaire. The results reveal that most older women are temporary workers in less skilled sectors such as business and service, agriculture, forestry and fishing, and transport. Furthermore, it is found that re-employed and selfemployed women receive a relatively lower monthly pension income compared to fully-retired older women, highlighting the financial implications of their re-employment. Moreover, the research underscores the challenges faced by older women in their re-employment journey. It is found that selfemployed older women, despite their higher monthly incomes, still face significant hurdles. Social capital remains the most common avenue for older

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women to access re-employment after retirement, highlighting the need for stronger support networks. In terms of factors influencing re-employment behaviour, the study reveals that grandchildren care responsibilities, spousal employment, and marital status significantly influence older women's reemployment behaviour, further emphasizing the complex nature of their situation.

Keywords: Re-employment behaviour; older women; family-related factors; inter-generational caregiving; joint retirement

Introduction

Past decades have witnessed that global ageing has become an irreversible trend for most modern industrialised countries due to the improvements in living conditions, the increase in average life expectancy, and the gradual decline in fertility rate (United Nations (UN), 2019; Lin et al., 2020). Achieving sustainability in the face of labour shortage and financial expenditure pressure caused by demographic ageing has been the key driver for the majority of modern industrialised countries to address the waste of human resources of the elderly and maintain stable economic growth (Börsch-Supan et al., 2019; Geyer & Welteke, 2019; Kuitto & Helmdag, 2021).

The ageing of China's population is also gradually deepening (Ban & Liao, 2016). According to the latest national census survey, 42.55 per cent of the younger older population rely on labour rewards as their income, 23.82 per cent rely on pension income, 28.75 per cent rely on family members' support as well as the rest, 2.1 per cent rely on private property, and other sources (Bulletin of China's 7th National Census, 2021). This data reflects the great potential of older adult human resources to develop in China. However, previous studies on extending older people's working lives in China are more likely to concentrate on delayed retirement influencing factors or post-retirement re-employment behaviour in older age groups from a multitude of micro- and macro-level perspectives from both older women and men, older men particularly (Ran & Lu, 2020; Yu et al., 2016; Yu, 2017; Zheng & Huang, 2018).

However, due to gender differences in the household division of labour, social roles, national compulsory retirement age, and pension income, older women's retirement behaviour and post-retirement re-employment patterns vary from older men's. In this paper, the authors analysed how family-oriented factors, including intergenerational support, household chores, caregiving, and spousal characteristics, affect the labour market participation of older women in urban China. Additionally, this paper contributes to filling the research gap on older women in urban China by exploring retirement and re-employment patterns and influencing factors from a gender difference perspective. This study hopes not only to change the disadvantaged position of older women in the labour market and make full use of their human resources but also to make substantial proposals for reforming the relevant national systems and regulatory policies.

Literature Review

Older women

Older adults aged 60 to 70 years are defined in the pre-elderly stage (p. 558) according to the latest age group classification of the elderly (New Dictionary of Gerontology, 2016), most of whom are relatively healthy, have extensive productivity and work experience and have a strong desire to be employed. However, due to the compulsory retirement age of women in China, this study defines women aged 55 to 70 years old as older women. Meanwhile, older women in rural areas were excluded as they needed to follow a fixed retirement age since they had been working in agriculture for many years for a living. Finally, older women interviewed should have a paid job before retirement age.

Re-employment

Based on the explanation in the New Dictionary of Gerontology (2016), re-employment of older people refers to the economic behaviour of retired persons who have reached the legal age and are employed by enterprises and institutions to re-serve society, establish social welfare undertakings, participate in the development and application of science and technology, set up economic entities and provide professional consulting services, and obtain specific financial remuneration or self-employment income (p.180). Thus, based on this definition, this paper defines older women's labour market participation in temporary, part-time, full-time, and self-employment as reemployment behaviour.

Family determinants and re-employment among older women

The international literature generally shows that the most frequently studied family-oriented determinants include marital status and intergenerational support responsibilities. Most studies (i.e., Eismann et al., 2019; d' Albis et al., 2021; Zanasi et al., 2020; Florida, 2022) in different countries reported that being married, having informal grandchildren, and elderly parents' caregiving as crucial barriers to extending working lives for older women. Numerous relevant quantitative studies in European countries (i.e., van Der Horst et al., 2017; Eismann et al., 2019) have proved that older married

women with spouses are reported to have significantly lower employment rates.

In contrast, older women who are divorced or widowed are more likely to exit the labour market later for financial considerations such as the higher cost of retirement (; Majeed et al., 2017). Other studies have analysed older women's re-employment behaviour and decision-making from the perspective of spousal employment status, known as joint retirement (Prattley & Chandola, 2021; Lin & Bai, 2017). Studies in China suggest a relatively lower probability of workforce withdrawal for older urban women with spouses than unmarried women because of the gender gap in compulsory retirement age in China (Lin & Bai, 2017; Xu, 2021).

In terms of informal intergenerational responsibilities, several studies suggest that the birth of grandchildren and grandchildren's caring responsibilities increase the probability of labour force market withdrawal for grandparents, especially for grandmothers with continuous careers (Floridi, 2022; Zanasi et al., 2020; Kelle, 2020; Wang & Zhang, 2017). However, no specific academic literature in China examines the impact of older women's grandchild care responsibilities and elderly parents' and parents' in-law care responsibilities on their re-employment behaviour and decision-making from a gender difference perspective.

Influenced by traditional attitudes and culture, women in many countries and regions have a social role as family caregivers, which profoundly limits their work positions, work experiences, and working lives (i.e., van der Horst et al., 2017; Sigurðardóttir & Snorradóttir, 2020). Additionally, in Asian countries, older people with higher educational backgrounds are less likely to be recruited by companies or employers because of the traditional culture of respect for the elderly (Lee, 2019; Seo et al., 2020). Therefore, although the traditional Chinese family structure has been changing, and older parents who received compulsory retirement age are gradually no longer dependent on financial support from their adult children (Yu et al., 2016), the level of reemployment of older women remains low because of intergenerational caregiving responsibilities (Liu, 2016; Wang & Zhang, 2017; Zhou & Wen & Peng, 2019).

On an objective level, national retirement pension systems, mandatory retirement age, and re-employment policies and regulations play a crucial role in retirement and re-employment decisions for older people. In order to ease the pressure on fiscal expenditure caused by ageing, many modern industrialised countries have introduced public pension reforms in the last decade to postpone retirement and extend working life (OECD, 2019; OECD, 2020). The latest public pension reform mainly focuses on the following aspects, including raising the statutory retirement age, restricting, or abandoning early retirement routes, and providing financial and policy incentives for older workers beyond compulsive retirement age but with a solid

willingness to re-enter the workforce (Madero-Cabib et al., 2020; Hofacker et al., 2016; Dingemans et al., 2016; McAllister et al., 2019; Axelrad et al., 2018; Kuitto & Helmdag, 2021).

It is worth noting that China has consistently implemented a differential statutory retirement age based on gender differences. Women's compulsory retirement age is five years earlier than men's, which inadvertently wastes female human resources and further increases the gender inequality in pension income after retirement (Wen & Wu, 2017; Wang & Chen, 2018). Although the Chinese government has also worked over the years to extend the working lives of the older workforce by implementing a gradually postponing retirement age policy for both men and women, there has been relatively little study in China on the practical effects of pension policies that gradually postpone retirement age on extending working life and improving employment rates for older workers.

In practice, the delayed retirement behaviour and re-employment patterns of older women are influenced and limited by various factors. Subjectively, they are influenced by traditional cultural attitudes and social norms (i.e., Mergenthaler & Cihlar, 2017; van der Horst et al., 2017; Sigurðardóttir & Snorradóttir, 2020). Objectively, they are associated with the current compulsory retirement age and pension security systems (i.e., Larsen & Pedersen, 2017; Zanasi et al., 2019; Geyer & Welteke, 2019; Lin et al., 2020; Kuitto & Helmdag, 2021).

Recently, most studies related to older women in China focused on factors contributing to the delayed retirement age of older women and its policy feasibility (i.e., Wang & Li, 2019; Ran & Lu, 2020), re-employment decision-making for retired older adults, older men in particular (i.e., Yu et al., 2016; Wang & Chen, 2018; Tu et al., 2021), or labour supply of older women by analysing the impact of individual characteristics and economic situation (i.e., Du & Lin, 2017; Xu, 2021). Nevertheless, less attention has been paid to analysing the re-employment patterns of China's urban older women group and placing their labour supply decision-making behaviour in the context of their families. Our study will contribute to filling this gap in re-employment research for older women in China.

Theoretical framework

This study analyses how family orientation culture affects the reemployment patterns of older women in urban China by using the Gender Differentiation Theory of the Intra-Household Division of Labour. The theory of household production suggests that labour supply decisions are made jointly by the husband, wife, and children, meaning that the work decisions of one household member are constrained by and affect the work decision behaviour of other household members (Becker, 1981). Based on household production theory, it can be seen that older women's labour supply decisions are made jointly with other household members to maximise their utility to benefit the whole family.

The intergenerational exchange behaviour within families is also a family labour supply behaviour (Bernheim, 1989). This transfer of intergenerational resources and intergenerational support between parents and children is mainly in the form of two-way support and exchange of financial or time support. Differences in the division of labour in households prompt men and women to devote their time and energy to the market and family, respectively. In contrast, this difference contributes to further gender differences at the institutional and cultural levels of the social division of labour. Further, it leads to differences in the remuneration of the male and female labour force (Xu, 2016). This process not only reinforces traditional gender concepts but also solidifies the subordinate position of women in the family (Wang & Wu, 2019).

Under the family-orientation cultural context, older Chinese women are economic and emotional dependents and providers of their family members. Moreover, the gender gap in labour and pension income between older workers further reinforces the role of older women as economic dependents in the family. Thus, we predict that older women are significantly less willing to re-enter the workforce and have lower re-employment opportunities than older men due to their roles as the primary providers of family care responsibilities.

Method

Approach and design of the study

This study employed the quantitative methodology to allow the researcher to make predictions and evaluate the impacts among independent and dependent variables. Based on the current China Health and Retirement Longitudinal Study (CHARLS), a series of survey research was designed to collect high-quality micro-data representative of Chinese households and individuals over the age of 45. This data was then used to analyse China's population and, importantly, to further promote interdisciplinary research on ageing in China. Therefore, this study drew on this representative research programme and used a survey as the quantitative approach to design research.

Study population and sample

The target sample group of this study is urban retired older women in Fujian province. Additionally, urban women aged 55 to 70 were chosen since the current retirement age of women in China is 50 or 55 years, based on their employment positions. Finally, this study's respondents should be formal employees or self-employed workers who contribute to the National Social Security Fund before retiring since farmers, freelancers, and the national compulsory retirement policy do not bind part-time workers.

The pilot survey was conducted in a local senior-citizen university and six local districts in Fuzhou City. Ninety questionnaires were distributed, 75 valid responses were retrieved, and the recovery rate was around 83%. The questionnaire comprised 28 fully-retired urban older women subjects, 37.3 per cent, and 47 re-employed and self-employed urban older women subjects, 62.7 per cent. Specific respondent demographic information is shown in the charts below (Figure 1 & Figure 2).

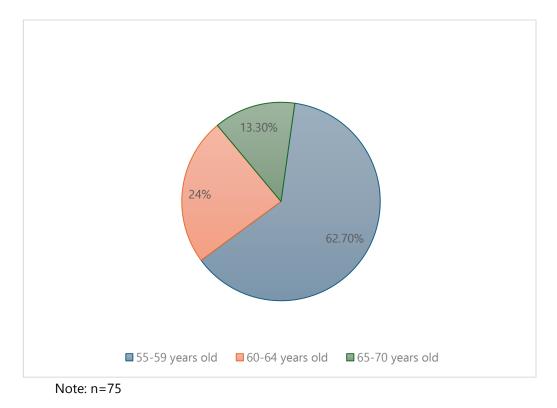
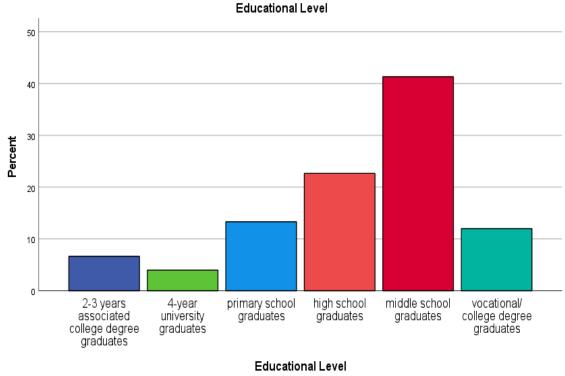




Figure 2 Proportion of Educational Level



Note: n=75

Sampling procedure

The pilot test for this study was conducted at the Fuzhou Senior-Citizen University. The researcher contacted the staff of Fuzhou Senior-Citizen University to conduct face-to-face interviews within the university campus, and 60 questionnaires were distributed. The pilot test at Fuzhou Senior-Citizen University aimed to test the feasibility of the questionnaire questions based on face-to-face interviews and further refine the questionnaire's content based on the respondents' feedback.

Data gathering technique

The primary data of this pilot study were collected using a face-to-face interview technique. In addition, the interviews were conducted using a closed-ended questionnaire. The researcher explained the questions in detail during the interviews to ensure valid and accurate answers. The whole face-to-face interview lasted 45 to 60 minutes.

Research instrument

A closed-ended questionnaire was used to collect data. The questionnaire consists of three main sections. The first section collects basic information about the sample participants, including their age, physical health condition, pension incomes, educational level, and marital status. The second section investigates the spouse characteristics, the number and gender

composition of the children, whether they live with children, children's marital and work status, and specific information about whether the children are provided with time or financial inter-generational support. Finally, the third section of the questionnaire deals with the social networks and social capital reserves of the respondent group, whether social networks and social capital are used to obtain re-employment positions, whether other official channels are used to obtain re-employment information, the type of the re-employment and the salary and benefits of re-employment positions. Most questionnaire items for this study used Likert-like items based on a scale from "a minimal extent" to "a very great extent." Most of the questions were based on the existing sections of the China Health and Retirement Longitudinal Study (CHARLS) in 2018, particularly data on basic family information, child information, health status, and work and retirement. Other questions asked for factual information, such as pension income, monthly salary, spouse ages, children's numbers, and educational level.

Analysis technique

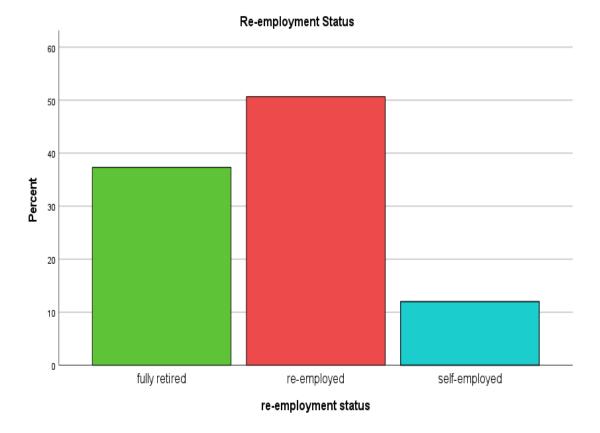
This study used the SPSS 22.0 statistical analysis software to construct a combination of the multiple linear regression analysis and binary Logistic regression model to analyse the data.

Results

Re-employment status

According to the results presented in Figure 3, the re-employment status of older women participants can be divided into three types: fully retired, re-employed, and self-employed. Thirty-eight participants reported being re-employed among the three re-employment statuses, at 50.7%. Additionally, 28 participants reported being fully retired, at 37.3%, and only nine reported being self-employed, at 12%.

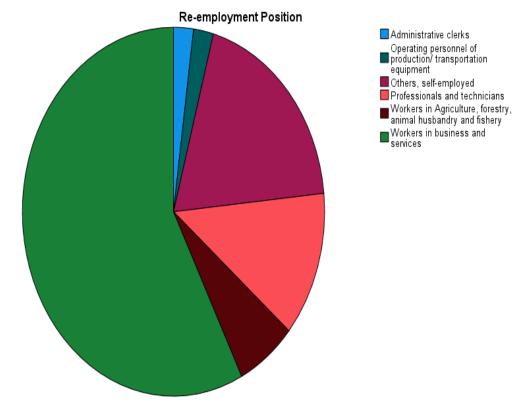
Figure 3 Re-employment Status of Urban Older Women, Fujian



When we delve into the re-employment industries and positions (as detailed in Figure 4), we find that, excluding self-employed older women (n=9), the majority of re-employment positions and industries of older women (n=38) are in business and service industries. This sector, which requires fewer professional skills, accounts for a significant 57.4 per cent. The second largest share, at 12.8 per cent, is in professional and technical jobs, including roles such as teachers, nurses, and accountants. The remaining respondents are employed in a variety of sectors, including agriculture, forestry, fishery and water resources, transport, and administration, each accounting for 6.4 per cent, 2.1 per cent, and 2.1 per cent, respectively.

Figure 4 Re-employment Positions of Urban Older Women, Fujian

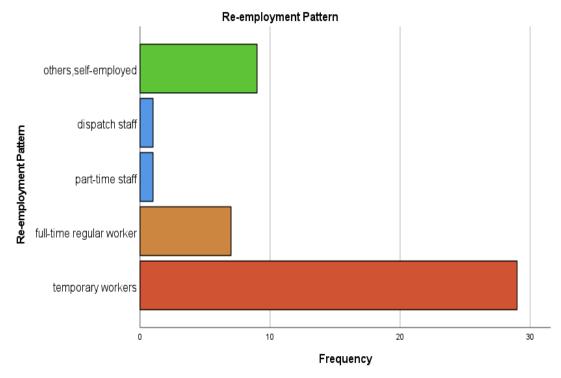
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Note: re-employed & self-employed older women (n=47)

Among re-employed and self-employed older women (n=47), only 14.9 per cent of older women re-entering the labour market are full-time contract workers, meaning they have an employment contract and labour agreement with employers and companies. Instead, 61.7 per cent of older women are temporary workers without any employment contract or labour agreement. The remaining older women are employed as part-time workers without any employment contract or labour agreement, and dispatch staff with an employment contract, at 2.1 per cent and 2.1 per cent, respectively (Figure 5).

Figure 5 Re-employment Pattern of Urban Older Women, Fujian



Note: re-employed older women (n=47)

Working hours

Compared to self-employed older women, re-employed older women have lower average weekly working hours in terms of re-employment working hours and monthly salary. However, the average monthly income of selfemployed older women is higher than that of re-employed older women (Table 1). The largest share of re-employed older women works more than 8 hours daily, at 39.6 per cent. In addition, 31.6 per cent of re-employed older women work less than 8 hours a day, while only 28.9 per cent of older women follow an 8-hour work schedule. On the other hand, self-employed older women generally work longer hours, up to 105 hours per week. Of these, 77.8 per cent of self-employed older women work more than 8 hours a day, while only 11.1 per cent follow an 8-hour work schedule. Besides, compared to re-employed older women, self-employed older women have a higher monthly salary.

Variables	Full Sample n=75 (Re-employed n=38; Self-employed n=9)	Mean	Std. Deviation	Minimu m	Maximu m
Re-employment	Re-employed	42.63	11.61	25	70
Weekly Working	Self-employed	56.78	20.32	36	105
Hours					

Table 1 Average of Re-Employment Income & Working Hours

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	Issue on Susta:	inable Hu	ıman Servi	lces), 1-	-30
Re-employment	Re-employed	3554.7	1058.46	1500	6500
Monthly Salary	1 5	4			
))	Self-employed	4611.1	2246.91	2000	10000
		1			

Notes: Based on self-administrated questionnaire. This group excludes fully-retired older women, n=28

Re-employment job satisfaction

Finally, according to results presented in Table 2, re-employment job satisfaction has been split into five aspects: income satisfaction, professional reputation, benefit satisfaction, work intensity, and workload pressure. There are three significant differences between re-employed older women and self-employed older women regarding job satisfaction with benefits, work intensity, and workload pressure. The overall mean score for job satisfaction of re-employed older women was 2.71, which fell between dissatisfaction and average, indicating an overall low-to-medium level of job satisfaction. However, the overall mean score for job satisfaction of self-employed older women was 3.11, which fell between average and satisfied, indicating an overall medium-to-high level of job satisfaction. For re-employed and self-employed older women, they scored the lowest on the item of professional reputation and the highest on the item of work intensity.

Variables	Full Sample n	=75 (Re-emplo	yed n=38; Self-er	nployed n=9)
	Mean		Std. Deviation	
	Re-employed	Self-	Re-employed	Self-
		employed		employed
Overall Satisfaction	2.71	3.11	0.73	0.78
Income Satisfaction	2.71	2.89	0.77	0.78
Professional Reputation	2.63	2.67	0.82	1.00
Benefit Satisfaction	2.71	3.44	0.61	0.88
Work Intensity	2.84	3.56	0.68	0.73

Table 2 Current Re-Employment Job Satisfaction of Older Women

Workload Pressure	2.66	3.00	0.78	0.50		
Notes: Based on self-administrated questionnaire						

This group excludes fully-retired older women, n=28

Family-dominant factors

As shown in Table 3, chi-square tests were used to explore the differences in the re-employment of older women due to spouse's employment status, spouse's pension status, and spousal health conditions. A more extensive index of Pearson chi-square value indicates a more considerable difference in the control groups. The significance value of p<0.05 is marked as a significant difference. By cross-tabulation with chi-square testing, only two independent variables, spouse's employment status (p=0.001) and spouse's pension income status (p=0.018), have shown significant differences in the re-employment status of older women. However, the significance value of the spouse's health conditions (p=0.768 >0.05) shows no significant difference.

Table 3 Cross-tabulation Analysis for Spouse Factors (Chi-Square Test)

Variables	Pearson Value	Asymptotic Sig. (p)
Spouse's Employment Status	14.820ª	0.001
Spouse's Pension Income	5.585 ^b	0.018
Status		
Spouse's Health Conditions	2.557 ^c	0.768

Note: a. 1 cells (16.7%) have expected count less than 5. The minimum expected count is 4.85.

b. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 9.33.

c. 7 cells (58.3%) have expected count less than 5. The minimum expected count is 1.12.

An independent t-test was applied to analyse differences in the reemployment status of older women based on the amount of monthly spousal income. The significance level is determined by p-value, with p< 0.05, indicating significance at *; with p< 0.01, indicating significance at **; with p< 0.001, indicating significance. The result showed no significant differences in the re-employment status of older women based on the amount of monthly spousal income (P= 0.086 > 0.05, p = 0.132 > 0.05). Details can be seen in Table 4 as follows.

Table 4 Correlation based on Amount of Spouse's Monthly Income(Independent t-test)

Variables	Mean	Fully-retired (n=28)	Re-employed & Self- employed (n=47)	Sig. (p)	t
Amount of Spousal Monthly Income	3679.44	4053.57 <u>+</u> 2253.307	3305.32 <u>+</u> 1933.156	0.086	1.523

Regarding adult children's characteristics, we have concluded the employment status of adult children and the number of adult children in our hypothesis. An Independent t-test was applied to analyse the correlation between adult children's number and older women's re-employment status (detailed data in Table 5). Additionally, the chi-square test was applied to explore the relationship between adult children's employment status and older women's re-employment status (detailed data shown in Table 6). According to the data presented in Table 5 and Table 6, both the significance value of several adult children (p=0.759 > 0.05) and the significance value of the employment status of adult children (p=0.407 > 0.05) have shown that there are no significant differences on re-employment status of adult children.

Table 5 Differences based on Number of Adult Children(Independent T-test)

			9	
	(n=28)	employed (n=47)	(p)	
1.45	1.32 <u>+</u> 0.945	1.57 <u>+</u> 0.715	0.759	-
				1.313
			1.45 1.32 <u>+</u> 0.945 1.57 <u>+</u> 0.715	1.45 1.32 <u>+</u> 0.945 1.57 <u>+</u> 0.715 0.759

Note: *** p<0.001; ** p<0.01; * p<0.05

Table 6 Cross-tabulation Analysis based on Employment Status of Adult
Children (Chi-Square Test)

Variables	Pearson Value	Asymptotic Sig. (p)
Employment Status of Adult	0.688ª	0.407
Children		

Note:2 cells (50.0%) have expected count less than 5. The minimum expected count is 1.87.

From the perspective of intergenerational support, our hypothesis tested the following independent variables, including the number of grandchildren, frequency of grandchildren caregiving, frequency of elderly parents or parents-in-law caregiving, frequency of household chores caregiving, receipt of financial support from family members, and provision of financial support to family members. Table 7 demonstrates the differences in the re-employment status of older women based on the number of

grandchildren using an independent t-test. The data has shown that the significance value (P= 0.284 greater than 0.05, p= 0.572 > 0.05) implies no significant differences.

Table 7 Differences based on the number of grandchildren(Independent t-test)

Variables	Mean	Fully-retired (n=28)	Re-employed & Self-employed	Sig. (p)	t	
			(n=47)			
Number of	1.47	1.36 <u>+</u> 1.496	1.57 <u>+</u> 1.665	0.284	-	
Grandchildren					0.567	
Note: *** p<0.001; ** p<0.01; * p<0.05						

Additionally, we hypothesised that the re-employment status of older women might be connected with frequencies of grandchildren caregiving, elderly parents or parents-in-law caregiving, and household chores caregiving. Thus, an independent t-test was applied to explore the differences. According to the data presented in Table 8, both frequencies of grandchildren caregiving (p=0.000> 0.001) and household chores caregiving (p= 0.000> 0.001) were significantly different in the control groups, indicating that the differences in the frequency of caring for grandchildren and caring for household chores cause differences in the re-employment status of older women. However, the frequencies of caring for elderly parents or in-laws (p= 0.927 >0.05) make no difference.

Table 8 Differences based on Frequencies of Intergenerational Support &Household Caregiving (Independent T-test)

Variables	Mean	Fully-retired	Re-employed & Self-	Sig.	t
		(n=28)	employed (n=47)	(p)	
Frequencies of	2.85	3.96 <u>+</u> 0.693	1.74 <u>+</u> 0.570	0.077	15.039***
Grandchildren Care					
Frequencies of	1.93	1.93 <u>+</u> 1.152	1.93 <u>+</u> 0.734	0.000	-0.35
Elderly parents or in-					
law Care					

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Frequencies of	3.13	3.89 <u>+</u> 0.875	2.36 <u>+</u> 0.605	0.928	8.945***
Household Chores					
Care					

Note: *** p<0.001; ** p<0.01; * p<0.05

Finally, the chi-square test was applied to analyse the differences in the re-employment status of older women based on different types of intergenerational financial behaviour. Table 9 presents the results of the chi-square analysis. According to the data in Table 9, providing financial support for elderly parents and in-laws or adult children significantly affects the re-employment status of older women (p=0.039<0.05), implying that offering financial support is associated with the re-employment status of older women. However, getting financial support from other family members, such as elderly parents and in-laws or adult children, makes no difference in the re-employment status of older women (p=0.105>0.05), meaning that receiving financial support has no impact on the re-employment of older women.

Table 9 Cross-tabulation Analysis based on Financial IntergenerationalBehaviour (Chi-Square Test)

Pearson Value	Asymptotic Sig. (p)
9.099ª	0.105
11.710 ^b	0.039
	9.099ª

Note: a. 8 cells (66.7%) have expected count less than 5. The minimum expected count is 0.16; b. 8 cells (66.7%) have expected count less than 5. The minimum expected count is 0.43.

Discussion

Labour market participation of Fujian urban older women

According to this field survey, more than half of older women, approximately 62.67 per cent, choose to re-enter the labour workforce after retirement, which means that older urban women are more willing to do so. Additionally, only 19 per cent of older women who re-entered the workforce chose to be self-employed, while 81 per cent chose to be re-employed.

Importantly, the educational levels of older women significantly influence their re-employment opportunities. The data reveals that 54.6 percent of women have lower secondary education or less, while only 10.7 percent of older women hold a bachelor's degree or higher. This disparity in educational attainment results in over 70 per cent of urban older women being re-employed in less skill-demanding industries, such as business and services. The second largest proportion of re-employed jobs is professionals and technicians, indicating that older women with professional skills and abilities are more likely to be re-employed after retirement.

Disturbingly, the re-employment benefits and employment conditions for urban older women are found to be relatively poor. Employment contracts

and agreements fail to safeguard their legitimate labour rights and interests. The average re-employed older woman works more than eight hours a day, yet her average monthly salary, around RMB 3,555, falls below the per capita disposable income in urban China in 2022, around RMB 5,027 (National Bureau of Statistics, 2022).

Moreover, excluding older women who have been self-employed, only 14.9 percent of re-employed urban older women are full-time or dispatch employees with employment contracts and labour agreements. Shockingly, 63.8 percent of re-employed older women are temporary or part-time workers without any employment agreement, indicating a lack of protection under labour laws and contracts.

Finally, the self-evaluated job satisfaction levels of re-employed older urban women fall between dissatisfaction and average. In comparison, job satisfaction levels of self-employed older urban women are slightly higher, falling between average and satisfied. According to the results, both reemployed and self-employed older urban women have a low level of satisfaction with their professional reputations. In other words, they are generally unsatisfied with their occupational status and prestige. This dissatisfaction with their re-employment positions and jobs will negatively impact older women's future labour market participation and attachment.

Family influences on re-employment of Fujian urban older women

According to the different analyses, the re-employment status of 'urban older women' aged 55 and above varies based on family-oriented factors. Firstly, the re-employment status of older women differs according to employment status, which meets our hypothesis in this study. Furthermore, as China still has a gender-specific compulsory retirement age, most older women who participated in this study still have spouses who have yet to retire. Therefore, it has been proved that joint retirement behaviour exists in urban China. Besides, the study results also suggest that the re-employment status of older women does not differ depending on the health status of their spouses. This finding is consistent with an empirical study in England (Prattley & Chandola, 2021). No evidence was found to support the association between poor spousal health and the employment transition of older women.

While the pension status of spouses does impact the re-employment status of older women, the amount of spouses' monthly income does not. This suggests that pension income is indeed an effective form of old-age security for older couples. However, the absence of pension security can heighten older women's insecurity in old age, potentially driving them to re-enter the labour market. This finding underscores the importance of pension security in ensuring the financial well-being of older women, a topic that warrants further research. Future studies could delve into the broader household financial status and its potential impact on the re-employment status of urban older women, offering valuable insights for policymakers and researchers.

Our study also points to the need for further research in certain areas. For instance, the number of adult children and their employment status did not appear to influence the re-employment status of urban older women. However, this finding may be influenced by the One-Child Policy in China. Therefore, future studies could explore whether children's characteristics, such as gender and monthly income levels, impact the re-employment status and choices of older women. This could provide a more nuanced understanding of the factors influencing the employment decisions of older women in urban China.

Another factor analysed in this study that can significantly influence the re-employment status of older women and make a significant difference should be intergenerational behaviour. Considering the time commitment of intergenerational support of older women, the results show that differences in the frequencies of caring for grandchildren and those of caring for household chores among urban older women significantly impact their re-employment status. In other words, the more frequent the care of grandchildren and household chores of older women, the less likely they are to re-enter the labour market and participate in re-employment. However, although results have shown differences in re-employment status based on the frequency of grandchildren caring, there is no evidence proving that the number of grandchildren affects the re-employment of older women. Therefore, if we want to identify further how grandchildren care responsibilities influence the re-employment status and behaviour of older women, we need to specify grandchildren's characteristics, such as the age of grandchildren.

However, although the differences in the frequencies of care for elderly parents and in-laws were significant in the control group of older women with different re-employment statuses, these differences were not statistically significant, which is quite different from a study conducted in Europe. This suggests that caring responsibilities decreased the probability of employment for older women (Lee et al., 2015). This outcome might arise due to other blood capitals, such as the siblings of older women providing care for the elderly parents or in-laws.

As a push factor, intergenerational financial support also influences the re-employment status of older urban women. Based on the chi-square test results, providing financial support for family members, such as adult children and elderly parents, makes a significant difference in the re-employment status of older women, while receiving financial support does not. In other words, as the cost of living has increased recently, older women are taking on the responsibilities of time intergenerational support and intergenerational financial support to ease the burden of living on their adult children. Urban older women are, therefore, more likely to be able to support the daily lives of their family members, such as elderly parents or in-laws and adult children, by extending their working lives.

Policy Initiatives and Conclusion

This paper describes the re-employment patterns of older urban women in Fujian Province, specifically regarding re-employment status, positions and industries, benefits and incomes, re-employment working hours, and job satisfaction ratings. The results suggest that there is an uneven distribution of older women's human resources in the local labour market, which may be due to factors, including relatively lower educational levels of older women, lack of appropriate or professional job skills, the lack of supportive government of older women and the age and gender discrimination in the labour workforce.

The following suggestions are proposed regarding the above. First, the local authority should develop and improve re-employment skills training programmes and on-the-job training programmes for urban older women and strengthen cooperation with private education or training institutions to develop education courses for re-employment skills and on-the-job training for older women. Such training courses and interventions will improve older women's employability skills and increase employment opportunities in the re-employment market. Additionally, local government agencies should assist enterprises and other institutions in conducting on-the-job training for senior women employees to help them better adapt to the changing working environment, further improve their educational levels and professional skills, gain relevant licenses, and avoid unemployment risks. Finally, these educational courses and further improve their re-employment job satisfaction.

Furthermore, this study observed the participation patterns of older women in re-employment. Since most older women work as part-time or temporary workers without any employment contracts or agreements with their employers or enterprises, this further contributes to a lack of protection for the re-employment rights of older women workers. The following suggestions are proposed in this regard. First, state labour contract reforms should be introduced to protect older workers' full-time, part-time, or temporary employees. Additionally, the local government organisations should accompany private institutions to establish various official and formal channels to support or guide older women workers' access to re-employment positions with employment contracts protecting legal labour rights.

Considering the influencing family-oriented factors on the reemployment of older women, the results of the analyses demonstrate that the frequency of caring for grandchildren is directly associated with the reemployment status of older women, as our hypothesis. However, such an intergenerational caring responsibility largely depends on existing policies and regulations concerning early-age grandchildren. From international experience, many European countries, such as Sweden and Demark, have higher rates of re-employment in old age with a smaller gender gradient, which is the outcome attributed to the strong gender equality policies, early education systems, and robust health and social welfare to alleviate the family care obligations of older women (McAllister et al., 2019). Thus, promoting gender equality policies in the labour market, improving universal health care insurance and elderly welfare, and establishing and improving an affordable early education system are necessary to ease grandchildren care responsibilities and further support the re-employment of older women.

Contrary to the hypothesis of this study, older women's financial intergenerational support duties are equal to their temporal intergenerational support. In other words, urban older women invest time in responsibilities and provide financial intergenerational support. Financially, however, there are regional differences in this phenomenon. As the respondents in this pilot study were limited to the population of Fuzhou City, further research is needed in different cities to comprehensively analyse the association between older women's re-employment and intergenerational support behaviour.

References

Axelrad, H., & Mcnamara, T. K. (2018). Gates to retirement and gender differences: Macroeconomic conditions, job satisfaction, and age. *Journal of women & aging*, *30*(6), 503-519. https://doi.org/10.1080/08952841.2017.1358978

Bertogg, A., & Strauss, S. (2020). Spousal care-giving arrangements in Europe. The role of gender, socio-economic status, and the welfare state. *Ageing and Society, 40*(4), 735-758. https://doi.org/10.1017/S0144686X18001320

Becker, G. S. (1985). Human capital, effort, and the sexual division of labor. *Journal of labor economics*, *3*(1, Part 2), S33-S58. https://doi.org/10.1086/298075

Bernheim, B. D. (1989). Intergenerational altruism, dynastic equilibria, and social welfare. *The Review of Economic Studies, 56*(1), 119-1128. Börsch-Supan, A., Hanemann, F., Beach, B., Halimi, D., Harding, S., van der Waal, M., ... & Staudinger, U. M. (2021). Older adults' integration in the labour market: A global view. *Ageing & Society*, *41*(4), 917-935. https://doi.org/10.1017/S0144686X19001454

Ban, X. N. & Liao, Q. S. (2016). On human resources development of younger female elderly in China. *Journal of Shangdong Women's University. 130* (6), 29-33. (In Chinese)

d'Albis, H., Doorley, K., Stancanelli, E. (2022). Older Mothers' Employment and Marriage Stability When the Nest Is Empty. In: Molina, J.A. (eds) Mothers in the Labor Market (pp. 247-269). Springer, Cham. https://doi.org/10.1007/978-3-030-99780-9_10

Dingemans, E., Henkens, K., & Solinge, H. V. (2016). Access to bridge employment: Who finds and who does not find work after retirement? *The Gerontologist*, *56*(4), 630-640. https://doi.org/10.1093/geront/gnu182

Eismann, M. Henkens, K. & Kalmijn, M. (2019). Why singles prefer to retire later. *Research on Aging. 41*(10), 936-960. https://doi.org/10.1177/0164027519873537

Elsayed, A., de Grip, A., Fouarge, D., & Montizaan, R. (2018). Gradual retirement, financial incentives, and labour supply of older workers: Evidence from a stated preference analysis. *Journal of Economic Behavior & Organization*, *150*, 277-294. https://doi.org/10.1016/j.jebo.2018.01.012

Floridi, G. (2022). Daily grandchild care and grandparents' employment: a comparison of four European child-care policy regimes. *Ageing & Society*, *42*(2), 448-479. https://doi.org/10.1017/S0144686X20000987

Geyer, J., & Welteke, C. (2021). Closing Routes to Retirement for Women How Do They Respond? *Journal of Human Resources*, *56*(1), 311-341. https://doi.org/10.3368/jhr.56.1.0717-8947R2

Hofäcker, D., Schröder, H., Li, Y., & Flynn, M. (2016). Trends and determinants of work-retirement transitions under changing institutional conditions: Germany, England and Japan compared. *Journal of Social Policy*, *45*(1), 39-64. https://doi.org/10.1017/S004727941500046X

Kuitto, K., & Helmdag, J. (2021). Extending working lives: How policies shape retirement and labour market participation of older workers. *Social Policy & Administration*, *55*(3), 423-439. https://doi.org/10.1111/spol.12717

Larsen, M., & Pedersen, P. J. (2017). Labour force activity after 65: what explain recent trends in Denmark, Germany and Sweden? *Journal for labour market research*, *50*(1), 15-27. https://doi.org/10.1007/s112651-017-0223-7

Lee, Y. (2019). Determinants of employing older people: A comparative analysis from Asia. *Transylvanian Review of Administrative Sciences, 15*(57), 34-50. https://doi.org/10.24193/tras.57E.3

Li, X. C. & Liu, X. C. (2016). New Dictionary of Gerontology (2nd ed.). WH: Wuhan University Press.

Lin, S. T., Sun, J. H. & Chen, C. J. (2020). Re-enter the job market: job satisfaction and career transition competency among middle-aged and older adults. *Educational Gerontology, 46(*12*), 774-784.* https://doi.org/10.1080/03601277.2020.1824696.

Liu, W. R. (2016). Inter-generational emotions and solidarity in families in transition ---- A comparison of two types of "NEET group" families in Shanghai. *Sociological Studies*. 4, 145-168. (In Chinese)

Madero-Cabib, I., Corna, L., & Baumann, I. (2020). Aging in different welfare contexts: A comparative perspective on later-life employment and health. *The Journals of Gerontology: Series B*, *75*(7), 1515-1526. https://doi.org/10.1093/geronb/gbz037

Mergenthaler, A., & Cihlar, V. (2018). Bridge Employment and Marital Quality in Germany–Different Implications for Men and Women? *Ageing International*, *43*(3), 336-355. https://doi.org/10.1007/s12126-017-9281-y

McAllister, A., Bentley, L., Brønnum-Hansen, H., Jensen, N. K., Nylen, L., Andersen, I., & Burström, B. (2019). Inequalities in employment rates among older men and women in Canada, Denmark, Sweden, and the UK. *BMC public health*, *19*(1), 1-11. https://doi.org/10.1186/s12889-019-6594-7

National Bureau of Statistics, China. (2022). Per Capita Income of Urban Residents. https://data.stats.gov.cn/easyquery.htm?cn=B01

OECD. (2019). Ageing and employment policies-statistics on average effective age of retirement. https://www.oecd.org/els/emp/average-effective-age-of-retirement.htm

OECD. (2020). OECD employment protection legislation Database from http://oe.cd/epl.

Prattley, J., & Chandola, T. (2021). The Influence of Household Pension Wealth, Partner's Health, and Spousal Employment Status on Heterogeneous Early Retirement Transitions among Women in England. *Work, Employment and Society*, *35*(1), 57-77. https://doi.org/10.1177%2F0950017020906358

Radl, J., & Himmelreicher, R. K. (2015). The Influence of Marital Status and

Spousal Employment on Retirement Behavior in Germany and Spain. *Research on Aging*, *37*(4), 361–387. https://doi.org/10.1177/0164027514536403

Ran, D. F. & Lu, X. J. (2020). Research on the influencing factors of the reemployment decision of retirees: An empirical study based on CHARLS data. *Social Security Studies. 2*, 29-37. (In Chinese)

Riekhoff, A. J. & Janefelt, N. (2017). Gender differences in retirement in a welfare state with high female labour market participation and competing exit pathways. *European Sociological Review, 33*(6), 791-808. https://doi.org/10.1093/esr/jcx077

Seo, M. J., Lee, Y. M. & Park, H. R. (2020). Why do the late middle-aged choose self-employment? determinants of self-employment at older ages. International Journal of Economic Policy in Emerging Economies. 13(4), 365-372. https://doi.org/10.1504/IJEPEE.2020.109586

Sigurðardóttir, S. H. & Snorradóttir, A. (2020). Older women's experiences in the Icelandic workforce ---- Positive or negative? *Nordic journal of working life studies. 10*(4), 25-39. https://doi.org/10.18291/njwls.122142

Tu, Y. Q., Jin, Y. Z., Zhang, C., Liu, Q. Y, Chen, F. & Li, K. X. (2021). Study on Influencing factors and supply and demand matching in the development of urban young elderly human resources ---- Based on surveys on Beijing, Tianjin, and Jinan. *Creativity.* 1(15),9-23. (In Chinese)

van der Horst, M., Lain, D., Vickerstaff, S., Clark, C., & Baumberg Geiger, B. (2017). Gender Roles and Employment Pathways of Older Women and Men in England. *SAGE Open.* .https://doi.prg/10.1177/2158244017742690

United Nations (UN). (2019). World population age 2019. https://www.un.org/en/development/desa/population/publications/pdf/agei ng/WorldPopulationAgeing2019-Highlights.pdf

Wang, Y., & Zhang, C. (2018). Gender inequalities in labor market outcomes of informal caregivers near retirement age in urban China. *Feminist Economics*, *24*(2), 147-170. http://dx.doi.org/10.1080/13545701.2017.1383618.

Wang, Z. & Chen, P. J. (2018). An analysis of the factors that determine Chinese worker's willingness to postpone retirement ----- Based on an investigation of 28 provinces. *Journal of Jiangsu University (Social Science*

Edition). 20(6), 86-92. (In Chinese)

Wang, Y. F. & Zhang, C. C. (2018). Gender inequalities in labour market outcomes of informal caregivers near retirement age in urban China. *Feminist Economics, 24*(2), 147-170. https://doi.org/10.1080/13545701.2017.1383618

Wang, J. & Li, X. M. (2019). A study of the urban professional female's attitudes toward the policy of delayed retirement. *South China Population*. *34*(5), 15-23. (In Chinese)

Weber, J., de Lange, A. & Muller, A. (2018). Gender differences in paid employment after retirement--- Psychosocial working conditions and wellbeing. *Z Gerontol Geriat, 52*, 32-39. https://doi.org/10.1007/s00391-0180145301

Wen, F. X. & Wu, H. L. (2017). Exploring welfare provision based on the needs of elderly women in old age. *Journal of the Party School of Fujian Provincial Committee of the Communist Party of China. 1,* 91-98. (In Chinese)

Wen, F. X. & Wu, H. L. (2017). Exploring welfare provision based on the needs of elderly women in old age. *Journal of the Party School of Fujian Provincial Committee of the Communist Party of China. 1,* 91-98. (In Chinese)

Xu, J. (2021). Spouse effect: influencing factors of women's willingness to delay retirement. *Policy Study. 8*, 52-64. (In Chinese)

Yu, L., Ma L.Y., Yin, X. D. & Belton F. (2016). Supported or supporting? family structure and employment choice of the elderly in urban China. *Study of Labour Economics. 4*(5),24-54. (In Chinese)

Yu, S. H. (2017). Research on employment promotion of elderly workers under the background of ageing. *Wuhan University Journal (Social Science). 70*(5), 30-41. (In Chinese)

Zanasi, F., Sieben, I., & Uunk, W. (2020). Work history, economic resources, and women's labour market withdrawal after the birth of the first grandchild. *European Journal of Ageing*, *17*(1), 109-118. https://doi.org/10.1007/s10433-019-00525-x

Zheng, A. W. & Huang, Z. B. (2018). Analysis of the factors influencing the reemployment of older people based on both individual and social perspectives. *Social Sciences in Ningxia. 5*, 133-143. (In Chinese) Zhou, H., Wen, S. & Peng, Z. C. (2019). Grandparents' childcare and early retirement for middle-aged and older adults in China. *Population Journal. 41*, 57-71. (In Chinese)