

Master Thesis U.S.E.

What Determines Senior Post-Career Entrepreneurship:

An Exploration From Individual and Environmental Perspectives¹

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Abstract

Many efforts to deal with the active aging population have been attempted in various countries, both academically and practically. However, how to help the elderly with sufficient time and accumulated skills to engage in entrepreneurial ventures is an underexploited and neglected area. In this way, if we can gain a comprehensive understanding of the factors that influence the participation of this group in entrepreneurial activities, we can not only continue to improve the research on the entrepreneurial system of older people from a theoretical point of view but also effectively pool more resources in society to help improve the entrepreneurial performance. At this point, the central research question of this paper is what the individual and environmental determinants of senior post-career entrepreneurship (SPE) are in China. To respond to this question, this paper focuses on Jiangsu Province, China, and examines the determinants of SPE in a specific environmental context using a qualitative method with data from archival research plus 10 semi-structured in-depth interviews on the development of SPE in the region. In the end, we find that starting from the end of occupational maturity and the self-discovery of opportunities and the self-perception of being at the threshold of pre-work stress (self-perception) up to the limit of average life expectancy for any health-permitting range of conditions, should be a relatively scientific range for SPE research. Furthermore, age and former career, when viewed separately, have different implications for entrepreneurial decisions. Age tends not to have a direct impact on entrepreneurial behavior unless it is linked to factors such as health, whereas a former career has a very direct impact on entrepreneurial motivation, but not always in the same direction in different situations. At the same time, these two factors act as a joint label and are an important marker of the life stage. Personality traits and self-need satisfaction can influence the decision to SPE on a psychological level, while considerations of opportunity costs and contextual factors such as education and professionalism can have an impact on SPE on a non-psychological level. It must not be overlooked that macroeconomic trends and social policy orientations, as well as socio-cultural systems, are the most influential factors in the external environment for SPE.

Keywords: senior post-career, entrepreneurship, individual determinants, environmental determinants, country-specific, qualitative

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1. Introduction

Authorities, municipalities, and both regional and (inter)national governments struggle to find solutions to the social crisis caused by the growing aging population, the transformation of the socially skilled and life-experienced middle-aged and elderly population into active entrepreneurs seems to be a good remedy (Kautonen, 2012; Lévesque & Minniti, 2006). Prescribed by existing academic research (e.g., studies on entrepreneurial success rates (Zhao et al., 2021) and entrepreneurial motivations (Harms et al., 2014a)), we have found that a period of pioneering thinking, with certain time invested in iterative experimentation and refinement, is an important prerequisite for the start of entrepreneurial behavior (Douglas et al., 2021). At the same time, a unique cumulative experience gained from a wealth of life knowledge and a background of expertise in the industry is relevant to entrepreneurial performance (Singh et al., 2003). Putting these elements together, we can see that those in the older age groups, especially at the end of their careers, have not only accumulated a great deal of industry expertise but also have an increasing amount of free time in the foreseeable future and are particularly suited to innovative entrepreneurial activities. To date, however, the related research on senior post-career entrepreneurship (SPE) is mostly overlooked and neglected. If the residual power of this group of people can be harnessed through an in-depth exploration of the mechanisms by which their entrepreneurial decisions are influenced, it will contribute greatly to the study of the entrepreneurship system and to the development of socio-economic and social stability.

Up to now, the research on SPE has been missing and confusing in terms of the clarification of basic concepts and the construction of decision-making mechanisms. Firstly, most academic studies tend to use only age as a criterion for classifying entrepreneurs, leaving aside the fact that the basis for age classification is unclear and unscientific, and ignoring the joint role of professional experience and age (Gracia & Rebeca, 2018). That is, there is no clear definition of the meaning and boundaries of SPE in academic circles. Secondly, the current body of research also tends to focus on a particular characteristic of the senior entrepreneur group to study the interrelationship between the group and this one factor, not only does it fail to clarify the exact genus of the characteristic, but it also lacks a holistic system construction (Freeman, 1979; Otani, 1996; Willis et al., 2019). Namely, we also lack an analytical framework that can integrate the internal and external environment to deconstruct the system of factors driving SPE. The consequence of this is that we cannot agree on even many basic concepts in the first place, which may adversely affect the deepening of the subsequent research. Secondly, we cannot provide a solid theoretical basis for assigning weights to subsequent studies if we do not first have a comprehensive overview collation of a specific group. By this token, the issue this article aims to address is:

Central research question: What are the individual and environmental determinants of senior post-career entrepreneurship in China?

To explore the answers to this research question, the research will try to achieve several objectives:

1. To provide a reasonable consensus on the connotation and definition of the term senior post-career entrepreneurs.

- 2. To identify the mechanism of age and former career on senior post-career entrepreneurship.
- 3. To clarify the relationship between other individual characters with the determinants of senior post-career entrepreneurs.
- 4. To clarify the relationship between the environmental dimensions with the determinants of senior post-career entrepreneurs.

This study aims to fill a gap in the SPE research by focusing on the determinants of entrepreneurship for a segment of the population with certain life experiences (age condition) as well as a professional skill threshold (occupational condition). For reasons of comprehensiveness in the construction of a coherent system, the determinants of the study include both psychological and non-psychological individual aspects, as well as economic and institutional environmental aspects (Cuervo, 2005; Gartner, 2016). We believe that only by including both endogenous and exogenous factors in the system of influencing factors, and by distinguishing between psychological and non-psychological characteristics (Shane et al., 2003), can we help to increase the initiative to enhance entrepreneurial awareness development among older people, so that we know when and by what means interventions can help more people who have the time and energy and accumulated skills to engage in entrepreneurial activities and, if they have the opportunity, to improve their entrepreneurial performance.

This study adopts a country-specific, explorative qualitative research approach, placing our research question in the specific context of China, taking the development of innovation and entrepreneurship among senior people in Jiangsu Province, China, to explore what factors influence the entrepreneurial decision-making in their later stages of careers in the specific economic and institutional context. We drew on the findings of the research project "Investigating Jiangsu: Research on the role of elderly experts in innovation and entrepreneurship" led by the Chinese Academy of Personnel Science from 2012 to 2016, and on this basis, we reached out to 10 senior entrepreneurs with different identity labels to conduct semi-structured interviews, lasting on average more than one hour each. The data was then reorganized and analyzed, together with the coding process of the individual interview transcripts, to arrive at a methodology for the delineation of SPE and a framework for the determinants of their entrepreneurial behavior.

The contribution we aim to make to the academic study of entrepreneurship is not only to define the concept and connotation of SPE scientifically and prudently but also to build a reasonable theoretical framework for the decision-making mechanism of SPE by considering the individual and environmental determinants. With the conceptualization of the foundation and the study of the determinants of entrepreneurial behavior of the labeled groups as the starting point, we have reasons to believe that this study can lay a good foundation for the construction of the entire senior post-career entrepreneurial system in the future (Cuervo, 2005).

There are broader societal implications to building a relatively complete consensus base for the study of SPE systems. For employers, identifying and encouraging entrepreneurial decisions by those in the late stage of careers who are inclined to become self-employed will greatly increase the proportion of intrapreneurship, revitalize organizational productivity, reduce the burden on business owners, and contribute to the long-term health of the enterprise (Weber & Schaper, 2004). Secondly, for policymakers, if senior people at the end of their careers can be guided to shift from a state of "waiting for retirement", where they stop creating in society, to a state where they actively play an accumulative and skilled role in life, will not only ease the pressure on the social pension system but also contribute directly to the economic development, wealth creation and well-being of society (Drăgușin et al., 2017). It can also have an indirect effect in providing good role models and leadership for young people, facilitating the transformation and spread of higher-level entrepreneurial behavior (Tornikoski & Kautonen, 2009).

The remainder of this paper is therefore structured as follows. In the next section, we detail the review of research on the concept of SPE and the theoretical context in which we have attempted to give sound boundaries to SPE and summarize recent scholarly efforts to examine the personal and environmental determinants of SPE, as well as the theoretical framework of this paper. In the third section, we elaborate on the qualitative methodology of this study, outlining the survey data and interview data respectively, and summarizing our findings. Next, the results of this study were then further combined with previous studies to further refine the answers to the current research question. In the conclusion section, we have reviewed the entire research process and summarized the theoretical and social-practical implications that this study can bring. At last, the limitations of this paper and future research directions are also presented.

2. Senior Post-career Entrepreneurship

2.1 Senior segment and post-career stage

As far as the overarching theory guiding our discussion is concerned, research has not yet arrived at a clear, coherent definition or theoretical approach to explain the phenomenon of self-employment among seniors, which is as vague, diverse, and disparate as the concepts involved. First of all, there is a wide range of opinions on the age category covered by the term *Senior*. Lorrain & Raymond (1991) defined seniors as those aged 30 and over. Hart et al., (2004) have used the term *Third Age* entrepreneurs to describe people between 50-64 at the time of registering the business, which has been regarded interchangeably with the term *Older* entrepreneurs (Kautonen, 2008). Most scholars, represented by Wainwright & Kibler (2013), would use age 50 as the starting point for seniors. Such studies do not devote much space to explaining the rationale for the age range, but rather use it as a natural contextual framework. The rationale for this is mostly derived from several sources: official documents of certain national and regional coalitions such as OECD (2013) or The American Association of Retired Persons (AARP), which approach to the definition primarily weighs up the retirement systems between different countries (Fachinger, 2019), and the division is also based on social public perceptions in unique regional and contemporary contexts (Drăquṣin et al., 2017).

The fact is, if we do not have a relatively rational and scientifically sound definition of the *Age* of seniors before studying this area, we will be left with a lot of questions and problems for the subsequent research. First, as can be seen from the above list of scholarships from different periods, the age threshold for seniors has increased over the years as life expectancy is being stretched forward. This reminds us of the importance of having a perspective of the times that integrates multiple pieces of information when studying the characteristics of the current segment of the population (Lévesque & Minniti, 2006). In addition, the interchangeable and confusing use of the word senior with older and mature (Gielnik et al., 2018; Ratten, 2019), which has been a common occurrence in the literature, also calls for further clarification of the connotations and outreach beyond the biological age in which the term senior appears. This is compounded by the fact that different countries and regions have different levels of social development and different social cultures, which can result in very different perceptions of age among the public and individuals (Cuervo, 2005; Kenny & Rossiter, 2018). Therefore, adding regional factors to the consideration of the definition adds more legitimacy to it.

In contrast, *Post-career* as a distinct life stage marker has struggled to enter the mainstream of research (Kautonen et al., 2010). Given that we have already found in the extensive literature that age has a significant impact on entrepreneurial intentions and performance, it would be confusing to ignore the consideration of the career stage for the entire body of research on senior entrepreneurship. The problem lies first in the fact that it is difficult to find a clear definition of post-career in the literature, and even the description of career status as "pre-retirement" or "later in career" is often a confusing concept (Baucus & Human, 1995; Parker & Rougier, 2009). There is prior experimental data that demonstrates that the career stage has a rising and then falling curve on entrepreneurship: the probability of self-employed increases with the number of hours worked, peaking in the early stages of a career and decreasing as one approaches retirement age (Parker & Rougier, 2009). Lévesque et al., (2002) have used the model of employment choice to explain

this effect to some extent. Unlike wages that are realizable in the present, the rewards of entrepreneurship are realized in the future over time, so the opportunity cost of entrepreneurship depends on the career stage. Those approaching retirement ages have less time to reap the rewards of their entrepreneurial endeavors. However, this theory only considers the monetary opportunity cost and ignores other non-monetary gains such as psychological satisfaction (Douglas et al., 2021).

Thus, combining the need for a scientific definition of senior with the rigor of defining postcareer, we draw on the theoretical framework used by Laslett (1994) in exploring the meaning of third age, taking into account both functionalist theory (Cumming & Henry, 1961; Tibbits, 1960) and structural dependency theory (Olson, 1982; Townsend, 1980) to delineate the group of senior post-career entrepreneurs (SPErs). It is important to consider the relationship between biological age and the relationship between years of schooling, years of retirement, and average life expectancy in the context of a unique environment, and to consider which career stage would be more beneficial to this group in terms of class advancement and social benefit creation and economic and social development. Specifically, in this study, we want to examine SPE as a multisystem concept in a comprehensive manner. If the life span of an individual is roughly divided into the growth stage, the work stage, and the retirement stage, according to the traditional entry and exit from the labor market, the senior post-career population should cover those who start from the middle and end of the work stage and extend to the retirement stage. The specific considerations involved in this classification should include the length of the formative years as influenced by national education policies, the retirement age as influenced by national retirement policies, and life expectancy is influenced by technological and social developments. It is only in this way that the meaning and definition of SPE can be interpreted appropriately.

2.2 Individual determinants

In the past literature, various theories and methods have been used to explore the determinants of senior entrepreneurship. If we were to encapsulate the various aspects summarized in the previous literature at a very simple level, then the first point would be to link the emergence of SPE to the characteristics of individuals. To further categorize individual determinants, we build on previous research and add further to the ideas of classic determinants of successful entrepreneurs by Van Praag (1999) and grouped them into psychological² and non-psychological³ factors (Table 1).

Table 1 Summary Of Individual Determinants In Previous Literatur

| Authors | Individual determinants | | |
|-----------------|---------------------------|-------------------|--|
| | Psychological | Non-psychological | |
| Kautonen (2008) | Perceived social pressure | Freedom | |

² This mainly refers to the inner personality traits of the person, including subconscious elements such as will, intuition, and aspirations.

³ This mainly refers to conditions related to external objective facts, including the economic and environmental conditions faced by the individual.

| - | | |
|--------------------|----------------------------------|--|
| | Desire to fulfilling job | |
| | Autonomy | |
| | Self-efficacy | |
| Cantillon (1979) | Alertness and foresight | |
| | Bear risk | |
| Marshall (1930) | Leadership | Family background |
| | | Education experience |
| | | Knowledge of trade |
| | | Good fortune |
| | | Father entrepreneur |
| Say (1971) | Judgment | Knowledge of world |
| | Perseverance | |
| Knight (1971) | Ability to deal with uncertainty | Good luck |
| | Foresight | Intellectual capacity |
| | Confidence | |
| Kirzner (1973) | Creativeness | Profit opportunity |
| Ziegler (2011) | | The role of co-workers |
| Wood & Bandura | | Vicarious learning |
| (1989) | | |
| Platman (2004) | | Foundation of personal and work skills |
| Hart et al. (2004) | | Capital and assets |
| Barclays (2000) | | Greater preparation |
| Forbes (2005) | Less prone to over-confidence | |
| Cannon & | | Extensive networks |
| Kurowska (2013) | | |
| | | |

Psychological factors

We first approach the study of the psychological determinants of SPE by looking at the personality traits of people themselves. Many longitudinal studies have concluded that adult personality traits hardly change after the age of 30 (McCrae et al., 1999). The implication of this finding is that many of the personal determinants of entrepreneurship for younger people are likely to hold true for older people as well. People with an outgoing personality tend to make bold moves in the face of risk and are more likely to be part of the group for SPE (Alsos & Kolvereid, 1998). Also, the presence of a strong quest for achievement will guide a particular group of people to conquer one mountain after another (Bernstein et al., 2022). Values, too, are an important aspect of the factors examined (Kurek & Rachwał, 2011). This is because many theories show that people who aspire to independence, who are efficient, who are committed to self-control, and who take responsibility are more likely to want to reinforce the difference in their image among their peers as they get older (Pilkova et al., 2014; Stypińska et al., 2019; Van Solinge, 2014).

In addition to the attributes of the population - which we prefer to treat as a "default state", i.e. we do not focus on the search for factors that shape the personality of the person before the age of 30 - their personality or psychological tendencies later in life are thought to influence the

retirement transition through links with emotional assessment and coping strategies (Löckenhoff et al., 2009). Individuals who are in the later stage of their career and are experiencing physical decline may experience adverse psychological consequences if they lose valuable work and a career-specific identity. To avoid this and prevent sudden role loss, exploring new life career adventures will improve this state of affairs (Wang et al., 2015).

According to Halvorsen & Morrow-Howell (2017), an often-studied psychological theory that helps explain why some older adults tend to become self-employed and what type of work they engage in is the theory of socio-emotional selectivity. The theory proposes that as individuals age, they begin to understand that they have less time left on this planet (perceived future time remaining) and they will focus less on developing peripheral relationships and instead focus on rich, emotionally satisfying interactions (Carstensen, 1995). The untapped potential in the older population and the possibility of transferring pressure from social and retirement funds are just some of the reasons for this (OECD, 2013; Wainwright & Kibler, 2013). Moreover, most SPErs are mired in multiple intergenerational dilemmas that make them more likely than younger people to consider the consequences of an action as worthwhile or not and to constantly weigh the possibility of crossing the age gap (Ruiu & Breschi, 2019). At the same time, SPErs are also sensitive to social pressures that they receive from a variety of stakeholders in society, such as the national cultural climate, regional roles, family roles, and, especially, the evaluation of colleagues in the work environment, which can directly stimulate or inhibit SPErs' intentions to start their own business (Weber & Schaper, 2004).

Non-psychological factors

It is worth noting that if we consider timing in life as an objective personal factor, then SPErs tend to have characteristics associated with both push and pull factors of self-employment (Kautonen, 2012). Push factors such as having a poor working environment and no hope of progression, and the lack of flexibility in a wage-and-salary job can make self-employment a better option. Pull factors, on the other hand, can be seen as the best work-life situation an individual can find, such as gaining more power, earning more money, achieving higher social status, etc. Put another way, the push and pull factors again work simultaneously (Kautonen et al., 2017; Weber & Schaper, 2004).

One reason why SPErs are self-employed is that the experience they have gained over the years in the industry increases their likelihood of success, but also increases the opportunity cost of starting a business if the former career has a good pension or compensation. SPErs are more likely to start their own business when the job market is bleak, but if they have young children at home to support and their own or their spouse's health is in the red, the act of starting their own business can cost them the insurance cover of their previous job (Forlani & Mullins, 2000; Kautonen et al., 2008). As discussed in Parker & Rougier's (2009) theoretical model, the choice of opportunity for self-employment is a mechanism for measuring the usefulness of wage-and-salary job with a relatively stable income versus entrepreneurial behavior full of unknowns.

On this basis, many empirical studies have also proven that demographic characteristics are very important influencing factors. Minority groups and women, for example, are more pronounced in terms of push factors. This is because they are more likely to fall into difficulties such as inflexibility, low wages, and difficulty in promotion in their previous jobs than the great

opportunities for improving their work situation that self-employment offers them (Gurley-Calvez et al., 2009; Hundley, 2001).

At another level, an individual's family background and educational experience also play a significant role in the entrepreneurial propensity (Alsos & Kolvereid, 1998). Empirical studies generally find that married individuals are more likely to join the ranks of entrepreneurship than single individuals (McKay Ruth, 2001). And the economic status of the family of origin can form a spindle-shaped distribution with the number of people who choose to start their own business. That is, people from poorer and wealthier families are more likely to start a business (Gimmon et al., 2018). A further important determinant identified was the presence of a self-employed parent. In this case, children of business owners are much more likely to start their own businesses than children of non-business owners (Fairlie & Robb, 2007).

2.3 Environmental determinants

Another perspective to explain the determinants of senior post-career entrepreneurial behavior is the environment in which the individual lives and works (Cuervo, 2005). Stinchcombe (1965), in his seminal work on the origins and role of new organizations in the changing structure of society, argues that the limited ability of start-up organizations to access capital, materials, and labor makes it more difficult for them to acquire wealth, power and legitimacy resources. The ease of access to wealth, the abundance of linked resources and their inherent reproducibility, and the size of the labor market are all related to the current economic development, the policies and institutions in place, and the cultural mores that have been developed over time (Valdez & Richardson, 2013). When the macro-economy is doing well, it will provide more resource availability, which will not only create a thriving labor force but also allow for a healthy cycle of resource production and economic development through the expansion of the labor market, while the government will be able to provide realistic and feasible policy prescriptions and guidelines based on a sufficient sample of the market. In the process, start-ups are given a higher chance of survival than they would have been in an economic downturn, struggling to survive or even failing to survive (Cuervo, 2005).

Economic environment

The possibility of a nascent business surviving comes together from a market where there is untapped demand and a market where there is not sufficient competition so that a nascent business can still have access to resources (Rotefoss & Kolvereid, 2005). Brittain & Freeman (1980) define this condition as the excess carrying capacity of the environment. From experience, the excess demand of the environment is the basis for attracting a variety of nascent organizations to access key resources. Thus, excess demand seems likely to enhance the survival rate of entrepreneurial firms. But the ability of young firms to exploit resources effectively also depends on the strength of market competitiveness. In general, however, if we analyze the current socioeconomic situation in terms of the state of demand and competitiveness of the market, they play a crucial role in the survival and continued development of new businesses.

Institutional environment

Scott's (1995) sociological neo-institutionalism theoretical framework, which uses the regulative, normative, and cultural-cognitive dimensions (i.e. "pillars") of a country's institutional

environment, provides an appropriate perspective for understanding the multiple aspects of the entrepreneurial milieu in a given society. This new institutionalist theory looks at how institutions that influence economic transactions are created, maintained, and transformed. The institution itself is no longer considered as a variable, but rather as a resilient social arrangement that has achieved a high degree of adaptability to social change. Spencer & Gomez (2011) use this theoretical framework as a basis for defining the *Regulative* dimension as tax breaks, loan guarantees, and other regulatory programs; the *Normative* dimension is society's view of entrepreneurs and entrepreneurial activities, and the *Cognitive* dimension includes management and training programs, and the availability of resources. They also combine Busenitz et al.'s (2000) findings with an empirical analysis designed to find that the normative dimension is borderline related to self-employment, the cognitive dimension is positively related to the presence of small businesses, and the regulatory dimension is significantly related to initial share offerings by startups. (Table 2)

Table 2 Characteristics Of The Three Pillars Of The Institution, Adapted From Scott (1995,P52)

| Pillar | Characteristic | aracteristic | | | |
|---------------------|--------------------|----------------------|---------------------------|--|--|
| | Regulative | Normative | Cultural-cognitive | | |
| Basis of compliance | Expedience | Social obligation | Taken for grandness | | |
| Basis of order | Regulative rules | Binding expectations | Constitutive schema | | |
| Basis of legitimacy | Legally sanctioned | Morally governed | Cultural supported | | |
| Indicators | Rules | Certification | Common beliefs | | |
| | Sanctions | accreditation | Historical traditions | | |
| | Laws | | Shared logic of actions | | |

Overall, the findings of these previous studies are important for today's research. We integrate Shane's (2003) theoretical model for studying entrepreneurship to take a relatively holistic view of the entrepreneurial activity of people with specific identities in specific contexts, i.e. at the individual level and at the environmental level. The theory of planned behavior (Ajzen, 1991) can largely explain the psychological determinants of SPE, but demographic and other characteristics related to the individual's background and surroundings are not directly addressed in the theory of planned behavior. Push and pull factor analysis is a good means of incorporating career experience into the analysis of non-psychological determinants (Weber & Schaper, 2004). Entrepreneurial activity, in turn, does not only derive from the characteristics of individual entrepreneurs, but also depends on the environmental factors in which individuals conduct their activities: policy norms, market growth, the endowment of production factors and natural resources, and the availability of human and technological capital, as well as the cultural orientation of the region (Cuervo, 2005; Löckenhoff et al., 2009; Valdez & Richardson, 2013). In this way, it is important to highlight the analysis of the combined factors.

2.4 Senior post-career entrepreneurship in China

By 2020, China's proportion of elderly people has reached 17.17% (Chen & Chan, 2011).

Hidden within this large elderly population is the ever-impressive group of elderly talent. Due to China's current retirement policy, which requires men to retire at 60 and women at 55, and the fact that the average life expectancy of the Chinese population has reached 77.3 years old (Chen & Chan, 2011), there are indeed many high-quality social human resources within the large retired population. This group of people is often described as having three main strengths: an excellent grasp of the political situation and the ability to interpret policies, the interpersonal skills built up through a wealth of life experience, and the life experience and wisdom capital gained through the refinement of life (JASW, 2016). In addition, from the perspective of social governance, SPE in China has created a phenomenon of "two highs and two lows": low human capital input and low risk as well as high human capital output and high benefit (*Outline of the Medium and Long-Term Talent Development Plan for Jiangsu Province*, 2010). It is clear that the additional human capital investment in SPE activities is relatively low, nonetheless, the knowledge, experience, and contacts of the senior group are themselves a wealth, which means stimulating potential human capital with fewer additional inputs can yield significant input-output returns (JASW, 2016).

The current reality in China, on the other hand, reveals that China's SPE are lagging relatively behind in global development. According to the survey report on the Living Conditions of the Elderly in Urban and Rural China (2018), the current employment/entrepreneurship rate for people aged 60-64 in China is 26.9%, compared to 18.1% for those aged 65 and above, while regarding the former, the figures are 60.3% in Germany, 70.2% in Sweden and 68.8% in Japan.

In fact, a significant proportion of the Chinese retired population has a desire to re-enter the workforce/entrepreneurship, especially among the younger age groups (Junwu et al., 2018). Depending on their income status, education level, and other characteristics, their drivers for reemployment/entrepreneurship also vary greatly. One is financial willingness. Related research found that the largest number of older people with post-retirement income levels between \$2,001 and \$4,000 had the highest willingness to continue working after retirement. The second is mental and social needs. Increasingly, older people who are physically healthy, better educated, and have a skill set do not consider income as their priority, but rather value meaningful things such as spiritual gain and continued social involvement (JASW, 2016). Overall, entrepreneurship among middle-aged and older people in China is still an unexplored area. Not only is there a lack of policy support for the entrepreneurial activities of middle-aged and older people, but society can also generally blur the awareness and motivation of middle-aged and older people to start their own businesses, and the willingness of middle-aged and older people to start their own businesses is fragmented (Chen & Chan, 2011), thus resulting in a very immature social support system for middle-aged and older people's employment.

3. Methodology

Although some quantitative results on SPE are available, research on SPE is often cited as lacking in studies that explore the rich experiences of seniors through an in-depth qualitative-oriented explorative methodology that combines semi-structured interviews and archival data as data collection with thematic coding as data analysis (Kautonen, 2008). In order to respond to this lack, we hope to adopt a composite research approach that seeks to obtain a relatively objective and comprehensive overview through the corroboration of empirical data, as well as focal perceptions to emphasize narrative and privileged perceptions, rather than merely pursuing a generalized, verifiable "truth" (Rubin & Rubin, 2005).

To this point, we apply an explorative research strategy where we combine empirical data from archival documents with a series of semi-structured in-depth interviews (N=10), to examine the determinants of SPE development in a specific region, typically Jiangsu Province, China.

The region is used as the focus of the study because it occupies an extremely important position in China's economic development process which will not only have a sufficient illustrative effect in describing the development of the Chinese region but will also provide a sample to help future SPE exploration in other regions (JASW, 2016). The area is situated on the eastern coast of China, one of the oldest and most economically developed provinces in the country. It is a prosperous region with a healthy small and medium-sized enterprise population and benefits from political and economic stability. The region has a high industrial density and is also known for its high level of innovation and dynamic market. Also as a province with a strong government policy implementation (the highest proportion of large state-owned economic enterprises in the country and the most comprehensive government policies), local policy guidance is significantly more efficient than in other Chinese regions (Yang & Ding, 2018).

To frame the study, it is also necessary to define the concept of entrepreneur. As older people differ from younger entrepreneurs both physically and psychologically, we prefer to include all older people who are not employed and are willing to participate in socio-economic activities (Curran & Blackburn, 2001). In this context, the concept of entrepreneurship may be interchangeable with self-employment (Singh & DeNoble, 2003; Van Solinge, 2014). That is, it includes, consulting, small business owners, and social entrepreneurs. The latter includes one that focuses on creating social value - for example, solving social problems - rather than focusing purely on accumulating wealth (Biehl et al., 2014). As a result, the post-career ventures discussed in this study tend to focus on working for oneself and creating well-being for others (Bygrave & Hofer, 1992; Wang et al., 2015).

3.1 Data collection

Archival documents

The data included in this study are extracted from a research project led by the Chinese Academy of Personnel Science from 2012 to 2016 entitled "Research Jiangsu: Study on the Role of Geriatric Experts in Innovation and Entrepreneurship", which is part of the National Publication Fund Project "Research and Publication Project on Talent Power - Talent System and Mechanism Reform". The survey is one of the "Talent System Reform Series" of the National Publication Fund. The research was carried out by the Jiangsu Association of Senior Workers. The questionnaire was

collected from Jiangsu Province, China, and was directly focused on the motivation and role of retired elderly people in the process of innovation and entrepreneurship.

The questionnaire was designed to distinguish between two types of respondents: a unit questionnaire for the organizational level and an individual questionnaire for the elderly. The unit questionnaire pays attention to the situation of older people in the unit, the situation of institutional entrepreneurship, and the main practices and experiences of the unit in encouraging innovation and entrepreneurship among older people in the organization. The survey was conducted by filling in a form and answering specified questions. The individual questionnaire was designed as a real name questionnaire and included two parts, a short personal profile form, and survey questions, to ensure the authenticity, credibility, and traceability of the questionnaire. The personal profile short form was used to collect information on the respondents' basic information, work experience, innovation and entrepreneurial achievements, and the reasons why they are willing to join the industry after retirement. The survey questions were asked in a selective manner, using questions of degree and suggestions. The selective questions focus on the judgment of the role of seniors, the perception of the human resources of seniors, and the channels of the role of seniors' talents. The degree questions are the focus of the survey, covering the factors that influence seniors' participation in innovation and entrepreneurship activities, the main difficulties they encounter, and their evaluation of the external environment. The questions on opinions and suggestions were given to respondents to express themselves in an open-ended manner.

The sample for this research (Table 3) was selected from units and individuals in Jiangsu Province who have thought about, practiced, and achieved results in the work of innovation and entrepreneurship for senior citizens. The target population of the research includes members of relevant elderly innovation and entrepreneurship associations in various cities in Jiangsu Province who have gone through retirement or retired procedures. The senior innovation and senior entrepreneurial activities mentioned in this research mainly refer to the behavior of retired senior citizens who have set up enterprises on their own or led them or have carried out important innovation and exploration projects or important academic research in their professional fields. In the end, individuals from 13 cities in Jiangsu Province and 11 enterprise organizations in Nanjing participated in the survey, and a total of 8 unit questionnaires and 227 individual questionnaires were returned.

Table 3 Basic Information Statistics Of The Questionnaire

| Category | Description | Amount | |
|---------------|-------------------|-----------|--|
| | | (Ratio) % | |
| Gender | Male | 218 | |
| | | (96.04) | |
| | Female | 9 | |
| | | (3.96) | |
| Post-position | Senior management | 110 | |
| | | (48.5) | |

| Middle level | 67 |
|----------------|-----------------------------------|
| | (29.5) |
| Non-management | 50 |
| | (22) |
| 50-60 | 24 |
| | (10.59) |
| 61-70 | 69 |
| | (30.4) |
| 71-80 | 114 |
| | (50.2) |
| > 80 | 20 |
| | (8.81) |
| | Non-management 50-60 61-70 71-80 |

Semi-structured interviews

Another source of data collection was semi-structured interviews with 10 senior entrepreneurs from Jiangsu province (Table 4). The criteria for selecting the sample were to cover as many entrepreneurs as possible from different genders, industries, and entrepreneurial fields in Jiangsu province, but they all needed to be of an age to reach the Chinese retirement standard and who were or had been involved in entrepreneurial activities. This was done to fully integrate the fact that the archival data was based on a survey in Jiangsu province, and the issues that the research data responded to allowed us to gain more insight through further interviews. The sample was selected by means of contacts made directly from personal social networks as well as public information collected from the internet, and by snowballing through further contact referrals from the interviewees.

The interviews are designed into four main parts (the *Interview Guide* see Appendix I), the first being basic descriptive information about the individuals, such as family background, education experience, personality traits (self-assessment), daily hobbies, etc. It should be added here that in order to focus more on the communication of entrepreneurial determinants, for this part of the interview, we mainly used a questionnaire (see Appendix II) distributed in advance for the interviewees to fill in themselves, supplemented by observations made during the interviews. With this part of the questions, we will directly gather non-psychological factors such as background information about the respondent and psychological factors such as (self-rated) personality traits.

The second part focuses on their entrepreneurial experiences and feelings. The questions asked will relate to the area of entrepreneurship, the times, the objective conditions, and the inner feelings when making entrepreneurial decisions in order to access the non-psychological push and pull factors and the psychological aspects of the emotional situation.

The third part focuses on their perceptions of their age and former career. The questions designed for this section included the interviewees' evaluation of the different age groups as well as their evaluation of their previous work status. The aim was to obtain the respondents' evaluation of the status of SPE.

And the fourth part on their perceptions of the external environment. The questions in this section focus on asking about the counterpart's perception of the socio-economic and institutional environment. This is used to obtain information about the contextual factors affecting the SPE.

As a result, the age range of the selected interviewees was between 50 and 69 years old, the average number of years of entrepreneurship was 12.8 and the average length of chat for the interviews was 1.05 hours. This approach allows us to gain a more tangible and precise sense of perception, which provides insight into the "why" and "what" questions (Harms et al., 2014b; Weber & Schaper, 2004).

Qualitative content analysis is based on the guidelines of Mayring (2010), who proposes an initially non-theoretically guided approach to content analysis. The reason for structuring the interviews in this way was to first increase familiarity with each other by learning basic information to enhance trust, then to focus the chat on the description of the entrepreneurial process, followed by digging deeper into the interviewees' perceptions of a combination of factors such as age and former career, and finally to close with their perceptions of the objective environment. In this way, the study is interested in how seniors who have formally ended a job themselves perceive those age norms and career paths that define the social appropriateness of entrepreneurship at a mature age (Tornikoski & Kautonen, 2009).

Table 4 Basic Statistics Of Interviewees

| Name | Gender | Age | Former-career (field/position) | S1 | S2 | Field of entrepreneurship |
|------|--------|-----|--------------------------------|----|-----|---------------------------|
| Xu | М | 69 | Media/Journalist | 49 | 65 | Catering/Apparel |
| Wang | М | 55 | Financial/Fund manager | 45 | 54 | Photographer/Catering |
| Le | М | 58 | Medical/Doctor | 55 | N/A | Travel Agent |
| Li | М | 59 | FMCG/Sales Manager | 40 | 58 | Energy/Renovation |
| Wan | М | 53 | Papermaking/Sales Manager | 35 | 50 | Papermaking |
| Zhou | М | 55 | FMCG/Sales Manager | 40 | 54 | Catering/FMCG |
| Wei | F | 50 | FMCG/Sales Manager | 35 | 50 | Marketing/Training |
| Ying | F | 52 | Medical/Doctor | 50 | N/A | Education |
| Wu | F | 65 | FMCG/Marketing | 50 | N/A | Marketing consultant |
| Zhu | F | 66 | Internet/Sales | 55 | 65 | Wine sales/Healthcare |

Note: S1 refers to the age of their first start-up; S2 refers to the age of their last start-up

3.2 Data analysis

When analyzing the data, the grounded theory was the most appropriate method to explain the motivations of elderly entrepreneurs compared to young entrepreneurs in this study and then codes were inductively developed in relation to themes (Braun, 2006), and analysis was performed in several steps as suggested by Cassell (2015) and GMA (2004) which will be mainly comprised in following steps.

Archival data

We first examined the descriptive statistics of the archival data and aggregated the results of these data into two areas, the perceptions of senior entrepreneurial behavior as mapped from the perspective of the public (Table 5) and the senior post-career group's own understanding and evaluation of entrepreneurial behavior (Table 6&7).

Table 5 Public Awareness Of SPE At The Societal Level

| Perception | Identification | | | |
|-----------------|------------------|--------------------------|------------------|--------------|
| The senior | Some | High level of unity and | Unable to | Some |
| post-career | awareness, no | deep awareness | judge | people have |
| group is a | society-wide | 6% | 3% | some |
| valuable talent | consensus | | | awareness |
| resource | 67% | | | 24% |
| SPE can crowd | Agree | Disagree | No simple | |
| out | 1% | 83% | judgement | |
| employment | | | 16% | |
| opportunities | | | | |
| for young and | | | | |
| middle-aged | | | | |
| people | | | | |
| The overall | It is a big risk | Although | It is beneficial | Senior post- |
| attitude of | and retirees | it would be beneficial | to society and | career |
| society | should rest and | to society | individual , | group is a |
| towards SPE | retire well, it | and individual, it has a | should be | valuable |
| | should not be | limited role to play and | understood | talent pool |
| | encouraged and | can be understood and | and | that should |
| | supported | supported. | supported | be highly |
| | 4% | 13% | 51% | recognized |
| | | | | and strongly |
| | | | | supported |
| | | | | 32% |
| Sessions for | The senior post- | Senior post-career | Others | |
| SPE to focus | career group | groups should focus | 6% | |
| on | should choose | on building on the | | |
| | entrepreneurial | strengths of their | | |
| | behavior within | former careers and | | |
| | their reach, | showcasing their | | |
| | while leaving | expertise and | | |
| | room for it | experience | | |
| | 72% | 22% | | |

There are two main ways in which the self-perceptions of the senior post-career community

were obtained from the research project questionnaire. The *Importance* of the factors influencing SPE can be verified by looking at the determinants underlying SPE (Table 6), while an examination of *Adaptability* can provide insight into the direction of SPE (Table 7).

Table 6 Senior Post-Career Group' S Perception And Evaluation Of Entrepreneurial Behavior

| Perception | Identification | | | |
|---|----------------|-----------|-----------|-------------|
| | Very | Important | Not so | Totally |
| | important | | important | unimportant |
| Importance of previous work | 72% | 27% | 1% | 0% |
| experience to SPE | | | | |
| Importance of age factor to SPE | 12% | 42% | 31% | 3% |
| Importance of the desire to contribute | 43% | 37% | 13% | 2% |
| the society to SPE | | | | |
| Importance of networking gained | 24% | 36% | 21% | 5% |
| from former career to SPE | | | | |
| Importance of embodying the values | 50% | 42% | 2% | 0% |
| of life to SPE | | | | |
| Importance of former working style to | 41% | 37% | 14% | 1% |
| SPE | | | | |
| Importance of time guarantee to SPE | 24% | 46% | 14% | 3% |
| Importance of health to SPE | 44% | 39% | 14% | 1% |
| Importance of family to SPE | 7% | 33% | 40% | 2% |
| Importance of platform to SPE | 42% | 41% | 5% | 1% |
| Importance of policy to SPE | 35% | 45% | 4% | 0 |
| Importance of financial security to SPE | 28% | 41% | 8% | 1% |
| Importance of social opinion to SPE | 24% | 51% | 23% | 2% |
| Importance of flexible retirement | 28% | 60% | 11% | 1% |
| systems in promoting SPE | | | | |
| Importance of registration system | 27% | 64% | 8% | 1% |
| optimisation and tax system | | | | |
| incentives in promoting SPE | | | | |
| Importance of loan support in | 47% | 47% | 3% | 3% |
| promoting SPE | | | | |
| Importance of social rewards in | 36% | 43% | 9% | 1% |
| promoting SPE | | | | |
| Importance of having a dedicated | 19% | 47% | 22% | 2% |
| government service in promoting SPE | | | | |
| Importance of strengthening senior | 47% | 41% | 2% | 1% |
| entrepreneurship associations in | | | | |
| promoting SPE | | | | |

Table 7 Self-Perceptions Of Entrepreneurial Behavior Among Senior Post-Career Groups

| Perception | Identification | | | |
|--|------------------|----------------------|---------------|---------------------|
| | Perfectly suited | Comparatively suited | Not so suited | Totally unsuited |
| Suitability of entrepreneurial behavior for seniors | 14% | 32% | 32% | 3% |
| Suitability of engaging in the same industry as former career | 21% | 23% | 3% | 1% |
| Suitability of training for SPE | 23% | 41% | 4% | 1% |
| Suitability of starting a high-risk business for seniors | 1% | 7% | 46% | 42% |
| Suitability of accepting employment as a manager or consultant for seniors | 21% | 23% | 3% | 1% |
| Suitability of leading riskier projects for seniors | 1% | 9% | 35% | 49% |
| Suitability of Public campaign to encourage SPE | 30% | 46% | 17% | 6% |

Semi-structured interview

The interviews were recorded with their consent and their answers were transcribed verbatim from the interview outline. Based on these translations, the interviews were compiled according to the following rules, using the coding framework path proposed by Gioia et al. (2013). Here, the focus of our information gathering is on highlighting the specific point in time when the interviewees have resigned or are at the end of their career when they made the decision that they wanted to start their own business or get involved in another project outside of work, and what the most immediate starting point for this decision was (Charmaz, 2014; Patton, 2002; Shah & Corley, 2006). (Table 8)

- 1. First-order description: The first step consists of extracting and grouping key information. It provides the basis for the next step of summarizing and comparing differences.
- 2. Second-order themes: The second step begins to summarize the commonalities in the original message in order to distil the themes at a broader level.
- 3. Third-order themes: The third part includes the linking of the summarized common themes to the framework of the determinants' perspective, which thus provides a clear framework for the systemic perspective.

Table 8 Aggregate Dimensions Of Determinants Of SPE

| 1st order description | 2 nd order themes | 3 rd order themes |
|-----------------------|------------------------------|------------------------------|
| | | |

| Experiencing life and death, a change in outlook on life | Desire aroused | individual |
|--|-----------------|---------------|
| Want more power and advancement in society | - | |
| Want to explore a new direction in life | • | |
| A desire to contribute to society | • | |
| Just finished a previous business venture and didn't | • | |
| want to stop | | |
| Wanting to do something truly enjoy | | |
| Support other family members | | |
| Disliked / bored / intolerant of previous working | Under pressure | _ |
| environment | | |
| Tired of life being the same | | |
| Under a lot of financial pressure during the epidemic | | |
| and wanted to take a chance | _ | |
| Career has reached a bottleneck and there is no hope | | |
| of promotion | | _ |
| Met a good opportunity and accepted someone else's | Ripe conditions | _ |
| invitation | _ | |
| Always had a dream of starting a business, and when | | |
| the condition finally fits, just wanted to put it into | | |
| practice | | |
| Very positive about the future economic situation | Social trends | environmental |
| - | | |

3.3 Robustness and validity

Maxwell (1992) has proposed a 5-point framework logic to verify the validity of the qualitative analysis, and we can also use this approach to examine ourselves. This includes descriptive validity, interpretive validity, theoretical validity, generalizability, and evaluative validity. In general, the combination of survey data and in-depth interviews, as well as the high quality of the interviewees, has gone a long way towards improving these validities.

But the paper also faces many limitations and challenges. One of the most unavoidable is researcher bias. In order to weaken this problem, we have tried to bring a broader perspective by adding a third-person expert to the discussion. To increase the credibility of the data and reduce bias as much as possible, we have conducted multiple iterations of pattern matching between emerging conceptual categories and the literature to identify theoretical dimensions. Also, by adding breadth to the data through archival analysis and depth to our interviews, we hope to increase the justification of the analytical data. Additionally, we also ensure credibility by setting the same question conditions, and uniform questioning techniques; and test external validity by continually validating and adding comparisons with other cases during the data collection process. subsequently, we can raise the level of completion of each data, and strictly follow the program design to increase objectivity.

3.4 Findings

Overall public perception

The results of the survey data show that the public basically has an understanding and supportive attitude towards SPE but does not yet have a clear perception of the value that SPErs can create. Examining the public's perception of the value of the senior post-career group shows that only about 30% have a positive attitude towards the unique value of the group, and on another level, 17% of respondents are concerned that the re-entry of the group into the economic market will have a negative impact on the career development of young and middle-aged people. While the social identification of talent resources may represent certain social inertia, the conservative resistance to older talent is another indicator of the recognition of the social value of seniors, especially in terms of their economic development role. In terms of overall societal attitudes towards SPE, 96% of respondents were at least supportive of the encouragement and understanding of SPE, whether they agreed with the value of the senior post-career community to socio-economic development. This bodes well for the optimistic environment in which SPE development now finds itself, and the scope for future development is anticipated by the public.

Overall self-perceptions from senior post-career group

The self-perception perspective of the senior post-career group (Table 6&7), as addressed in the archival data, shows that previous work experience and age, the desire to contribute to society again, the contacts, wealth and working style accumulated in previous careers, the pursuit of life values, as well as time, health, support platforms, policy, and even social group factors, all of which have a significant impact on SPE. However, there can be significant differences in the degree of influence of different factors. It appears that factors related to previous careers and their associated factors are almost the most important determinants affecting SPE. Policy support plays a role, but not nearly as much as the personal factors of the SPE in inducing entrepreneurial behavior. Another very important broad category that influences SPE is those reasons that reflect personal spiritual pursuits.

Former career

Although in the research data we got the fact that previous work experience was a significant influencing factor for SPE, it was during the personality interviews that we realized that a previous career is often not a positive determinant. Some people expressed that they started their business later in life because they had built up various aspects of their previous career and wanted to continue the same track, but a significant number of people said that they were formally motivated to try to gain experience in another field because they had already spent a considerable amount of time in their previous field of work. Interviewee Ying had been a doctor throughout her career and had chosen to start her own business only after she had officially retired. She made it clear that while she had acquired a high level of expertise and made many professional contacts in the process, she had also felt a complete loss of passion for the profession and had a strong desire to venture into other areas of her life.

In terms of career fields, seniors who have had experience in autonomous, responsible, and performance-oriented jobs (e.g., sales) are more likely to start a business. Also, it is easier to start a business in a position that involves contact with people than in a position that just sits in an office. The interviewee Wei once said:

In my previous company, almost all those who came from sales now have their own companies, and even when they are old, they don't want to stay at home alone. Those in the human resources and finance department were not very mobile during their careers, and after retirement, they prefer to enjoy life devotedly, such as raising flowers and pets and traveling, rather than going back into the workplace.

Another thing we found in our examination of previous career states is that those who have had entrepreneurial experience are more likely to start successive or parallel businesses at an older age. Interviewee Lee had said that he had taken the initiative to quit his job and start his own business at the age of 40. Although he had successes and failures, entrepreneurship was like a seed that once planted, he would want to carry on. He has now reached the official retirement age, but he feels that entrepreneurship is something that should not be stopped. His entrepreneurial pace is now increasing as he frees up more time and energy, and he is now even working on two startups in different fields at the same time.

Age

From the above analysis and in-depth interviews, we found that even at the senior stage, different age groups are associated with SPE in different ways. Interviewee Wang said that when he first started his own business at the age of 45, his primary motivation was to make more money and want to live a materially better life. Wang also said that in his earlier years, he would choose risky industries and be very ambitious, but now that he is starting up again, he will consider more other factors, such as durability over scale and stability over volatility. One of the observations made by the interviewees, which was shared by almost all of them, was that the best time to start a business was from the late 40s to the age of 60.

When it comes to self-perception of age, almost every interviewee said that they hardly ever consider the influence of age when making entrepreneurial decisions. Starting a business at an older age would not only command more respect but would also put one's lifelong accumulation to work again and greatly increase the sense of fulfillment in life. Everyone also agrees that age alone brings few disadvantages, but rather all advantages. According to interviewee Wang, the act of starting a business makes "50 a new 30 in life".

Besides, the physical decline of entering an advanced age is much less of an impact on entrepreneurs than the learning effect of more time invested. That is, although physical ability declines as they age, the increased personal time and the concomitant reduced psychological burden allow them to be more engaged in learning new things and taking stock of past lessons, constantly distilling life lessons to help them make smarter future decisions. Interviewee Wu also said:

Although I could not keep focus for two hours as I was in my 20s, the efficiency of learning and my sense of self-improvement is much higher now than when I was younger. Even if I can only concentrate for one hour at most at a time, the older I get, the more productive this efficiency becomes. They will then have different entrepreneurial intentions at different ages due to different levels of acceptance of new knowledge and different levels of re-appreciation of historical knowledge.

Psychological factors

During the interviews, the most common responses to the question "How would you describe your personality" included strong, tough, and positive. Firstly, they are bold in expressing their own opinions and do not like to follow the crowd. They are also very tough at heart, i.e. they are able to endure hardships in life and work hard, do not give up easily, and take great pride in this. Also, they tend to find positive opportunities in negative phenomena and emotions more than others around them and are good at picking themselves up. The interviews revealed that most of these senior entrepreneurs have experienced major ups and downs in their lives, which may have included life and death trials and faced major life crises, but without exception, they have not been defeated by negativity and have dealt with life's challenges in a positive way.

Another very important trait is the desire to learn and to keep learning. Here we have not classified "learning ability" as a non-psychological factor because it appears to be an objective "ability" that seems to be inherently different from one person to another, but here we can clearly perceive it through in-depth communication with each other that "learning" for the entrepreneurial community should be a subjective willingness, not about results or efficiency. The person who chooses to start a business is not necessarily the one who has had the best results, but he is the one who can remain curious about the world. The more this curiosity is, the more likely it is that SPErs will be triggered to make entrepreneurial moves, especially to make entrepreneurial decisions that span former career fields. Interviewee Le, who is currently working in a very different field of entrepreneurship to his former career, said that the biggest influence in between was his reading habit of at least five hours a day. Interviewee Li is not only a serial entrepreneur, but also currently a parallel entrepreneur, and both companies he is currently working on are unrelated to his previous career. He claims that he has always had mediocre grades since he was a kid, but he just has a thirst for the unknown. He has developed a habit since thirty years ago of making sure he reads for at least an hour every day and in a fairly wide range of fields, which he believes is what gives him the strength to choose to challenge different areas of entrepreneurship.

In addition to summing up the personality traits, the emotionally psychological factor shown by the participants in this study was the satisfaction with self-needs. The interviewees' motivations for starting a business can be broadly categorized into two main areas: "desire arousal" and "emotional repression" (Table 8). These two aspects are essentially explaining the satisfaction or otherwise of the self-needs. For example, interviewee Wan said that the decision point for him to start his own business was that he had received compliments from other people, which gave him a sense of confidence. Because of his increased self-satisfaction, he had a greater appetite for future risk and was more willing to explore. Another interviewee, Le, also said that he started his travel business because friends around him kept asking for someone who knew photography and geography to lead trips, so he was inspired to "help his friends with their needs". He then decided to start his own business after gaining self-satisfaction and a new value in life from the act of "helping others".

Non-psychological factors

Through the interviews, we found that the respondents were often pushed forward by external factors when making the decision to start a business, such as poor working conditions,

being in financial hardship, and lack of livelihood security. Wu, for example, mentioned that

I had voluntarily quit my job in my late-career and wanted to travel the world. But then I ran out of savings and was desperate for financial support. But I'm a flamboyant person and needed the freedom to develop my talents, so I didn't want to work for someone else. It was more comfortable to be my own boss.

Interestingly, we found no evidence of an inability to keep up with technological developments as a pushing motivation. Instead, SPErs realized that there were technological opportunities beyond their professional skills that led them to start their own businesses. Almost all respondents said that they actively embrace new technological innovations and are very willing to learn and try out new technologies. Interviewee Wan, for example, said that he just felt his old company was stuck with outdated equipment and technology, and he did not see the future of the business despite its large size and certain advantages. In order not to be left behind by society, he decided to start his own business before it was too late, taking advantage of the new technology to find a new way out.

Many also said that they were pulled by many external factors to set up a business after retirement. For example, the desire to enjoy a life of autonomy and flexibility and the emergence of better money-making opportunities. Interviewee Zhou said that although he was retired, he was in good health and did not want to spend his days doing nothing. When he wanted to enter the labor market again, he did not want to be subjected to as many rules and restrictions as he had in his previous job. When he didn't have a clear goal of what he wanted to do, a friend suddenly introduced him to an opportunity, and he decided to give it a try.

In terms of other non-psychological factors such as identity background information, people with better educational backgrounds and higher levels of professionalism will have more opportunities to start their own businesses after retirement. For example, interviewee Wu, who had been employed by Fortune 500 companies in her previous career, had been trained at a high level in the workplace to become a highly professional leader in her industry, and, having graduated with an MBA from Stanford herself, was invited by a fellow MBA student to start her own business.

Economic environment

The impact of the economic environment on SPE mainly depends on the extent to which SPErs perceive macro trends. For example, when asked in the interviews "what are the most important factors to consider when giving advice to other people of the same age when making business decisions", all but one mentioned that judging the overall economic situation should be a priority. Of those interviewed, the premise of the situations such as fewer obstacles, higher survival rate, and easier to make a profit has reached consensus on the market boom of China's economy during the 1990s. The respondents' assessment of the current economic situation in China all agree that the macro economy is already in a downward spiral, and thus very much discourages other people of their age from further entrepreneurial activities.

Even the socio-economic impact of the epidemic can directly or indirectly influence their decision to start a business. For example, one serial entrepreneur stated that he started and ended his entrepreneurial activities twice, once regarding the spread of the SARS virus in China and the

other time with the spread of the current new coronavirus. The criteria by which they judge the economic situation are mainly derived from the rise in prices, the activity of the FMCG market, and the consumption views of their friends around them. This shows that in China's unique economic system, where collectivism is prevalent, micro-individuals' judgment of the macroeconomic situation has a very important influence on the way they conduct their SPE activities.

Institutional environment

The feedback from the interviewees shows that the role of policy orientation on SPE development is mainly in that the government has created a platform for older entrepreneurs and helped the development of co-operatives for seniors to start their own businesses, which in turn can help individuals to make up their minds to start their own businesses. The majority of respondents still have a high level of perception of government policies. Many were able to name what policies are currently playing a positive role in the development of SPE. Interviewee Ying made it clear that she decided to start her own business when she had encounter some government organizations after her retirement and they had organized many forums, joint associations, and other activities that had made her aware of the policy benefits and support available to older people. She commented that the government's policy formulation was "very detailed and comprehensive, and made us feel the commitment and determination of the government's work to the business of entrepreneurship for the elderly."

Social perceptions of normativity towards aging, such as whether a person should become old as a proactive or a passive process, can influence seniors' entrepreneurial choices. The interviewee Wang referred to a saying that has a wide social basis in China, "thirty to fight, forty to stand, and fifty to accept", meaning that one should work hard when one is thirty, enjoy one's achievements when one is forty, and accept one's destiny when one is fifty and should not make any additional bold attempts. This negative perception of the 50-year-olds has largely influenced the perception of the Chinese public. For example, when asked about the biggest difficulties senior entrepreneurs encounter in the process of starting a business, they all mentioned, to varying degrees, "the disapproval of people around them". Wang thus explicitly states that he is now hesitating to try another new field of entrepreneurship. When almost everyone around him is against it, he can't help but feel hesitant about whether he should stop tossing his life around.

The regional cultural system, on the other way, has a deep-rooted influence on SPE in China, a country with a rich cultural and historical heritage. The primary concern is the role of older people in the family. Those who do not have family members have less of a mental burden than those who have younger and older generations. Those who have a family often hear from their family members that they wanted them to pursue "stability" in their later years rather than "adventure". The traditional division of labor between the professional arrangements and the raising of children of older couples also greatly influences the entrepreneurial decisions of SPErs, especially female SPErs. For example, of the four female interviewees surveyed during the process, apart from one who had remained single and said she could pioneer and start her own business without fear, the other three women who had started their own families at an early age have said that all their entrepreneurial decisions would have been closely related to their family roles. Ying, for example, decided to start her own business in the education industry because her family's

parent-child relationship was in crisis, and she developed the idea of starting a business while addressing her children's education. Another woman, Wei, ended her first business, not because of the development of the project itself, but because the act of starting a business increased her family role conflict, and she decided to choose the role of "wife" in the family over that of a female entrepreneur. When she started her second marriage, her family role improved so as the family conflict reduced, she went back to her new venture.

4. Discussion

4.1 Who is the senior post-career entrepreneur?

The archival research data used for this study was based on the selection of "retired people" in relation to their profession. The selection of interviewees was mainly based on the age-related definition of seniors in most studies, i.e. people over 50 years old. While we have defined a category of entrepreneurs by age and career experience, the boundaries of this group are not necessarily defined by those two.

With regard to the broad division of ethics in this phase, there are many studies that use the term "third age" to refer to SPErs (Gimmon et al., 2018; Hart et al., 2004; Weber & Schaper, 2004), which roughly divides a person's life into periods of childhood and adolescence, professional maturity, third age, and dependency. As to the exact starting point of this period, we can refer not only to the OECD's classification of the senior entrepreneur as a "retirement system", but also to the start of working life in the general sense of society. In this study, we also found that many older people do not limit their decision to start a business to the time of statutory retirement, but rather to whether there is an opportunity at the end of their career maturity or whether they are at the threshold of their former work stress level. As for the upper age limit when starting a business, the. Also, during our interviews, many respondents said that "the upper age limit for starting a business should be determined by health factors." Although this factor is not often discussed in SPE studies, it can in fact be seen as a basic prerequisite for SPE to be carried out.

Taking the above information together, we can use life expectancy as a reference value for the "health" threshold and the statutory retirement age as a reference value for "career maturity". Given that most of the people in this survey made their decision to start a business almost in the last five years of their career, we can construct a relatively scientific scope for the SPE definition. That means, all persons who have engaged in entrepreneurial activity from five years before the statutory retirement age to any age as long as their health permits (not limited to the first time) can be included in the scope of the SPE examination.

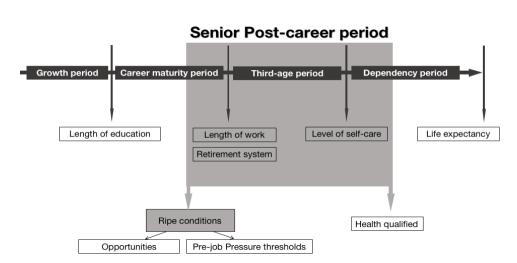


Table 9 Theoretical Classification Criteria For Senior Post-Career

4.2 Senior post-career: a stage of life with unique meaning

When considering the impact of age alone on entrepreneurship, the results of several studies show that there are significant differences in entrepreneurial intentions and types of decisions when entrepreneurs are aged between 44 and 50, 50 and 60, and 60 and above respectively (Lévesque & Minniti, 2006), which was again verified by this study. When the SPErs were asked about their perceptions of age in the interviews, there was also a relatively consistent perception. That is, the age factor has a much greater impact on the type of entrepreneurship than on the entrepreneurial decision itself. This also means that age itself is neither a "facilitator" nor a "hindrance" to entrepreneurial decision-makers, but rather a topic of how one would choose to start a business at different ages.

Furthermore, many studies conclude that age has a significant impact on senior entrepreneurship (Ruiu & Breschi, 2019; Weber & Schaper, 2004) when in essence it should be said that it is the other related factors triggered by age that are the determinants of SPE (Hatak et al., 2015). It is very specifically recognized through this study that when the age factor itself is considered, it is not directly perceived by entrepreneurs. Rather, it is the deep social experience, the extensive social connections, and the deep wealth that come with age that are positive motivators for entrepreneurship. The health risks associated with old age and social norms can also be negative factors for senior entrepreneurship.

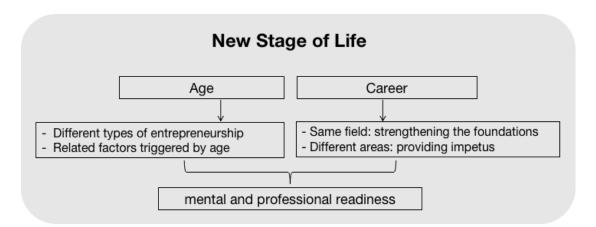
In terms of career experience, much of the literature concludes that past work experience is important for seniors starting a business as it provides the necessary skills and contacts (Kautonen et al., 2010; Singh et al., 2003) and industry experience is considered a key driver of entrepreneurial confidence (Miller, 1983; Singh & DeNoble, 2003). While the data from the survey suggests that previous careers are important for later entrepreneurship, "how important" is not directly evident from the results. Only the subsequent in-depth interviews gave us more insight into that the area of previous career experience does not necessarily have a positive effect on the area of entrepreneurship. Many SPErs do not choose to start a business in the same industry as their previous career, but they still consider their previous work experience to be important to their venture. The reasons for this include the fact that they all developed their new goals and directions in life through the human and social resources they accumulated in their previous work environment, which also served as a bridge for grafting (Kerr & Armstrong-Stassen, 2011). In addition, older employees place a high value on job controllability, as they even prefer uncertain but seemingly controllable self-employment to uncertain employment (Gimmon et al., 2018). Add to this discrimination against older people in the job market, a work environment that employees can control becomes important (Linardi & Costa, 2021).

In terms of whether novice, serial or parallel entrepreneurial experience has an impact on SPE, we can see from the previous literature that, in general, the main difference between the three comes from the fact that novice entrepreneurs tend to be less well supported in terms of funding and resources than parallel and serial entrepreneurs, while parallel entrepreneurs tend to be more robust in their entrepreneurial behavior and are relatively low-risk enthusiasts, while serial entrepreneurs are less likely to start up on their own, i.e. they tend not to initiate new adventures (Alsos & Kolvereid, 1998). And none of these characteristics seem to fit well with the population profile of SPE from this research. In our interview cases, we can see that almost all senior

entrepreneurs are at a comparable level in terms of financial and networking accumulation, there is no huge difference, and senior entrepreneurs are generally not too adventurous. Thus, all we can say from this study is that those who started their entrepreneurial activities earlier in their careers are more likely to continue to do so in old age, but that differences in previous entrepreneurial experience do not have a significant impact on entrepreneurial decisions in older age.

When we look at age and former occupation as a composite factor, we get a different impression. From the questionnaire data, we can see that most people do not see "age" as the most important factor in starting a business after retirement, while the occupation is. Almost all the respondents said that when deciding whether to start a business or not, they did not consider "whether I am the right age to start a business", nor did they feel that they were at a disadvantage over young entrepreneurs, but rather that their professional experience (whether positively or negatively driven) gave them an advantage. At this point, age and the end of a career represent more of a marker for a critical point in a "life stage", and together they represent a consolidation of life experiences, both mental and professional in terms of readiness and skills. The decision to start a business or not has to be catalyzed by a combination of other factors, both personal and environmental.

Table 10 Comprehensive Explanation Of Senior Post-Career And The Mechanisms By Which They Affect Entrepreneurship



4.3 Individual determinants

Dissecting the determinants of entrepreneurial activity from a psychosociological perspective is often seen in entrepreneurship studies (Begley & Boyd, 1987; Hofstede & Mccrae, 2004). They highlight the fact that it is the differences in personality between individuals that allow entrepreneurs to achieve different entrepreneurial outcomes through their own intuition, imagination, and effort (Cuervo, 2005). During interviews, we focused on the respondents' self-evaluation of their own personalities, together with the observations and summaries made by the interviewer throughout the in-depth interviews. When we compare the classic five-factor personality model of Costa & McCrae (1992), we find that the *Strong, Tough*, and *Positive*

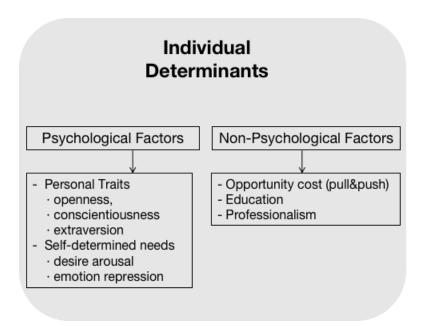
corresponding to *Openness, Conscientiousness*, and *Extraversion* are the most strongly related personality characteristics to SPE.

Among the individual characteristics summarized in our coding of the most immediate determinants of entrepreneurship among the respondents, we saw both the arousal of desire and the repression of emotion, which seems to confirm the self-determination theory that the utility of starting a business should include the satisfaction of psychological needs (Braun, 2006; Deci & Ryan, 2000). Personal behavioral satisfaction of essential, long-term psychological needs is a determinant of psychological well-being (Matos et al., 2018). At the same time, we should also see that psychological satisfaction motivation has a high degree of individual variability and that senior people choosing to start a business may not bring immediate quick gains, but it can bring a high degree of psychological satisfaction (McCrae et al., 1999).

In addition, an individual's exploitation of opportunities is determined by non-psychological factors (Cuervo, 2005). The findings from this study suggest that SPErs weigh the current income from their job against the future rewards of starting a business when choosing to start a business. The opportunity cost of starting a business is judged differently depending on the stage of the career, but in general, it is all about maximizing utility (Gimmon et al., 2018). In terms of targeting, the opportunity costs perceived by SPEs can be either "push" or "pull" (Harms et al., 2014b). Push factors refer to the senior post-career group's choice to reduce the stress of livelihoods and increase freedom in retirement or old age through entrepreneurial activities, including a mismatch between personal goals and work conditions, lack of job security, job market discrimination, and health issues (Kautonen et al., 2008)(Willis et al., 2019). Pull factors include autonomy, purpose, enjoyment, flexibility, and financial incentives, implying that older people achieve a transition to being their own boss or a more autonomous and flexible role through opportunity identification and development (Weber & Schaper, 2004).

Considering the experiences and traits developed in the senior post-career population before the age of 30, i.e. in the pre-career period, as a "default" non-psychological factor (McCrae et al., 1999), a better educational background and a higher level of professionalism help seniors to start their own businesses. This is not only revealed by previous scholarly works (Gimmon et al., 2018; Kautonen, 2013) but also reconfirmed in this study.

Table 11 Aggregated Individual Determinants



4.4 Environment determinants

The exploitation of entrepreneurial opportunities depends on economic environmental factors that stimulate and make the entrepreneurial activity possible which are macroeconomic environment, market or industry conditions, financial environment, and geographical environment (Cuervo, 2005). From the results of this study, SPErs value the *Macro-cycle* of the economy above their own perception of the geographical environment, above their own analysis of the characteristics of the industry, and above the requirements of the financial environment.

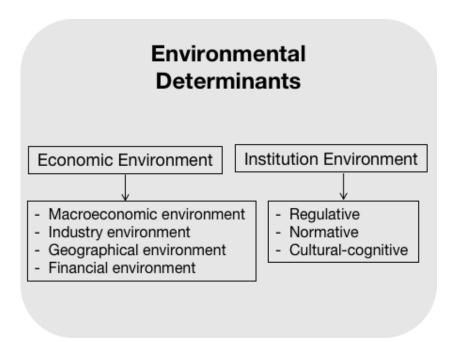
At the institutional environment level, we found that the role of policy orientation reflected in this study could well explain the *Regulative* aspects of Scott's (1995) theoretical framework. Social policy orientation has a longer-term direct or indirect influence on SPE, whether it has entered an aging society (Minniti, 2004). The attention and even dependence, on regional or cooperative organizations for the development of SPE, should be noted, judging from the positive and affirmative assessment by both the public and the senior post-career community as seen in the research (Brittain & Freeman, 1980). And the development of regional or cooperative organizations is directly influenced by policy orientations at a considerable level (Cuervo, 2005). Furthermore, the degree of development of the aging society has a direct impact on the depth and breadth, and even the urgency, of government policymaking (Spencer & Gomez, 2011). The greater the aging of a society, the greater the attention paid to aging issues by academics and governments, and the greater the emphasis on policies to encourage entrepreneurship among older people (Clarysse et al., 2011).

The process of whether society's perception of aging is active, or passive can be seen as the *Normative* dimension of the institutional environment. Here we find that unlike the EU's emphasis on active aging (Gimmon et al., 2018) and the OECD's emphasis on inclusive entrepreneurship (OECD, 2013), China's Jiangsu Province's policy orientation towards SPE is more likely to be part of a complementary strong nation strategy (JASW, 2016). Differently oriented policies can be

interpreted as narrative systems with different inclusiveness structures, resulting in different entrepreneurial outcomes (Kurek & Rachwał, 2011). Since the Chinese government released the Outline of the 12th Five-Year Plan on National Economic and Social Development ("12th Five-Year Plan") planning framework in 2011, policies have been oriented towards a comprehensive transformation of economic development at the level of society as a whole, with a particular focus on science and technology innovation and strengthening the country with talents, with a special emphasis on fostering a new generation of young and middle-aged science and technology innovators. In the context of China's growing aging, the main task of the government in guiding innovation and entrepreneurship among the elderly is to bring into play the talent that lies within the elderly population but also to assist in guiding the transfer of knowledge and wealth from the elderly to the young and middle-aged, helping to deepen entrepreneurial behavior at a societal level.

The occupational arrangements of older couples and traditions of child-rearing division of labor, as culturally *Cognitive* institutional factors, also have an impact on SPE. The public perception of careers is another manifestation of the social and cultural climate that has influenced the development of SPE. Chinese society generally favors a career in the public service over a career in entrepreneurship or self-employment, which is often a fairly stable and well-paying job and is generally looked up to by society due to the sense of social power (Efendioglu & Yip, 2004). Moreover, the "strong pursuit of career development" and "active efforts to transition" are unacceptable to many older generations (Say & Patrickson, 2012).

Table 12 Aggregated Environmental Determinants



5. Conclusion

This paper examines the determinants of SPE in a country-specific qualitative analysis in the context of global aging, considering not only a detailed view of the impact of age and former career on entrepreneurial intentions but also suggesting the particular significance of the two as composite factors. At the same time, we hope that examining both intrinsic personal determinants and extrinsic environmental factors will provide a more comprehensive outline of the scientific logic of SPE determinants.

One of the objectives of this study is to provide a scientific definition of the currently vague and confusing academic definition of SPE. For the specific case of China, the expected life expectancy per capita in China has now reached 77.3 years (National Bureau of Statistics of China, 2022), the current legal retirement age in China is nevertheless 60 years for men and 55 years for women, i.e. the average working period in China is now stands at 40.1 years (Chen & Chan, 2011). Given that senior post-career, as a special life stage, should start to be counted from as early as the later stages of professional maturity, it is important to consider that age itself does not have a decisive impact on entrepreneurial behavior, i.e., it can be extended as long as health permits. In this study, we found that the timing of most entrepreneurial decisions was almost within the last five years of a former career, i.e. the age of 49 to 72 can be used to define a reasonable range of SPE in China.

A further objective of this study is to examine the individual and environmental determinants of SPE and the mechanisms that influence them. Firstly, the combined identity of age and former career suggests that age does not necessarily constitute an influential factor in senior post-career entrepreneurial decisions but can be used as a categorizing factor for the type of entrepreneurship; former career has a significant influence on entrepreneurial decisions, but the manner and "direction" of influence can vary from person to person. Overall, this combination of characteristics constitutes an important stage of life label that will have a combined effect on the SPE together. Next, from the analysis of the personal determinants of SPErs, we found that Openness, Conscientiousness, and Extraversion are the common character qualities possessed by SPErs. Moreover, from self-determination theory, the psychological satisfaction of being "repressed" and "aroused" is a very important entrepreneurial motivation for the senior postcareer group. In addition, the push and pull factors can also be used to explain the decisionmaking mechanisms of entrepreneurs when analyzing opportunity costs, as well as the educational background, and professional level. Finally, analyzing the unique characteristics of the environment in which SPE operates, the senior post-career community's judgment and perception of current macroeconomic trends play the most important role in the perception of the overall economic climate. As for the institutional environment, older people are deeply affected by the policy orientations that typify social regulations, the normative awareness of society's perception of aging also has a strong influence on entrepreneurial decisions, and cultural cognitions such as family ethics are not to be ignored as determinants of entrepreneurship.

New Stage of Life Age Career Different types of entrepreneurship - Same field: strengthening the foundations Related factors triggered by age - Different areas: providing impetus mental and professional readiness Individual **Environmental Determinants Determinants** Psychological Factors Non-Psychological Factors **Economic Environment** Institution Environment Opportunity cost (pull&push) Personal Traits Macroeconomic environment Regulative openness - Education Industry environment Normative Geographical environment Cultural-cognitive conscientiousness - Professionalism Financial environment extraversion Self-determined needs desire arousal emotion repression

Table 13 Conceptual Framework of SPE Determinants

The contribution of this study to the academic field can be summarized by the fact that it begins with a comprehensive study of SPE as a multi-systemic concept. Unlike most of the literature on senior entrepreneurship, which simply sets a value for seniors in general (Maritz et al., 2021; Stypińska et al., 2019; Van Solinge, 2014), this study establishes a scientific system that starts from the roots of the third age definition and divides the life span of individuals according to their journey into and out of the labor market. The definition of SPE takes into account factors such as the length of the formative years influenced by national education policies, the age of retirement influenced by national retirement policies, and human life expectancy influenced by technological and social development, to provide a realistic definition of what SPE is. Secondly, the study of the determinants of SPE makes up for the fact that many studies have only used TPB theory to explain the psychological aspects of motivation for entrepreneurial behavior in general while neglecting the influence of many non-psychological and external environmental factors (Harms et al., 2014b; Kautonen et al., 2010). In particular, by placing the study in the specific context of China, it is clear that not only has little research been conducted specifically on the Chinese labor market from the perspective of SPE, but not to mentions the uniqueness of considering the development of SPE in China in the context of the country's particular economic, political and cultural systems in a comprehensive manner. While this single case study may lack some international translational utility, for a country with a population of 1.4 billion people, being able to address a difficult issue for a market that is facing severe aging is another way of contributing to the stable development of SPE globally.

With the increasing proportion of senior employees in good health who are at the end of their careers, it is socially relevant to understand whether they want to start a business and why. From a corporate employer's perspective, these employees may become highly motivated intrapreneurs if managed well or may take valuable knowledge with them if they leave (Hatak et al., 2015). If we have gained the knowledge that employees at the end of their careers are more ambitious and more eager for controlled work and flexible work schedules, we can as business owners make targeted and adaptive changes at the corporate management level (Kohlbacher et al., 2015). Giauque et al. (2010) have found that transformational leadership and goal-oriented management are more likely to stimulate intrapreneurship in companies. Specifically, competitive remuneration packages, continuous training, and development later in a career, organizational support and university training for improvement and inclusion in the decision-making process, and technological solutions for flexible working hours and locations are all tools that can help meet the flexibility needs of senior employees (Ratten, 2019). From the perspective of social governance, the government's policy orientation towards an aging society should change from "supporting the seniors" to "revitalizing the seniors" (Kurek & Rachwał, 2011). The investment and operation of pension funds is only a way to ensure the "life-support money" of the elderly, and in essence, it is only a way to provide for them. In contrast to cultivating the elderly as a consumer group, revitalizing the creativity of the seniors through policy orientation is a more meaningful way to create long-term well-being for society (Matos et al., 2018). In addition, from the mainstream cultural perspective, under the current retirement system in China, women already have fewer years of service than men, and nonetheless have a higher level of health than men. Women's entrepreneurial self-momentum is almost indistinguishable from that of men, but the cultural system shackles women much more (Sexton & Bowman-Upton, 1990). So perhaps policymakers can play an indirect role in influencing the development of SPE in terms of policies that promote better health for all, while improving the status of men and women in terms of institutional justice, such as giving women more tax benefits or encouraging and promoting men as family supporters to unshackle women from the inertial perception of being family supporters.

6. Limitations and Future Research

Although this study combines the results of archival data and semi-structured interviews, it still faces several limitations. Firstly, due to the complexity and sheer volume of the Chinese market environment, the indicative results obtained from just 227 data from one province plus 10 indepth interviews are quite inadequate. The limited sample size compromises the accuracy of the issues that can be reflected (Douglas et al., 2021). The study was conducted six years ago, and the results are not as up-to-date as they could have been. In our analysis, we have focused on the psychological and non-psychological dimensions of individual determinants to guide our research, which may involve overlap problems (Gielnik et al., 2012). For example, there are many nonpsychological factors whose origins are psychological from a sociological point of view. Finally, due to a large number of analytical frameworks invoked and constructed, the problem of direct duplication and omission of different theoretical frameworks is also inevitable (Fletcher et al., 2018). On the other hand, although the study was originally designed to reveal as much as possible about the comprehensiveness of the problem, no research can be exhaustive, and the greater the effort to pursue breadth in this direction may in turn affect the depth of the results of the existing core research to some extent (Cassell, 2015). For example, there are still many characteristics of personalities that could be explored in this study, and many non-psychological factors such as gender perspectives were not highlighted. These limitations, if explored in depth in future studies, would contribute to the development of a framework for the determinants of SPE.

It is important to acknowledge that the study of SPE in the Chinese context still faces many challenges in both academic and practical terms. Firstly, in the Chinese social normative system, there is a need to continue to explore how to manage the relationship between entrepreneurship and family responsibilities in the context of the "obligation" of seniors to take care of their children after retirement or in their free time (Chen & Chan, 2011). Secondly, in the context of China's rapid economic development, the sheer volume of information, the speed of technological iteration, and so on are constantly challenging the cognitive efficiency of all participants in the market economy (Ruiu & Breschi, 2019). The general concern in society is whether it is appropriate for older people, who are now often the victims of new situations of fraud, to go into business (Efendioglu & Yip, 2004). Secondly, in terms of the cultural attributes that are necessarily embedded in entrepreneurial activities, there are many traditional festivals in China that have even been included in the national intangible cultural heritage list, the focus of which is on respecting and caring for the elderly (the "Chung Yeung Festival" for example), which in a sense reinforces the idea that the elderly should be treated with compassion, love, and support in Chinese society. This is at odds with the entrepreneurial orientation of encouraging innovation, risk-taking, acting ahead of time, taking initiative, and promoting the spirit of competition (Matos et al., 2018).

To this end, we believe that future research, based on a focus on the integration of theoretical innovation and practical exploration, can dig deeper from the perspectives of scenario embedding and mechanistic analysis to explain the mechanism of senior entrepreneurial action that fits the characteristics of the Chinese context (Marron et al., 2018). From the perspective of scenario-based embedding, SPE is inextricably linked to the unique regional issue of an aging society. Why does Japan, which is also heavily influenced by Confucianism, have a demographic profile of entrepreneurship that is vastly different from that of China? To what extent can we learn from the

practical experiences of other European countries? Answering such questions will help to distill contextualized research findings and solutions to social problems (Gielnik et al., 2012). Also, we need to further build a dialogue bridge between macro and micro-theory (Linardi & Costa, 2021). Thus, scenario-embedded SPE research needs to consider spatial (geographical area characteristics, institutional environment, and policy system) and temporal (stage of social development and life cycle) premises (Jack & Anderson, 2002). While this study has made some attempts in this direction, in the future it would be useful if empirical studies with a wider sample could be designed to further quantify the indicators and attempt to construct causal relationships among them for the reference of policymakers.

APPENDIX I. INTERVIEW GUIDE

| | Name | Age | Gender | Date |
|--|------|-----|--------|------|
|--|------|-----|--------|------|

Introduction

Thank you very much for taking the time to do this interview. In the time to come, I would like to discuss with you some of the effects of age and previous work experience on your current entrepreneurial behavior. I will first gather some basic background information about you, and then talk about your previous work experience and your current entrepreneurial experience. This will involve some of your perceptions and evaluations of your age, which are for academic purposes only and are completely confidential. Do you give permission to record this interview?

Entrepreneurial Activities

Firstly, we will talk specifically about your current entrepreneurial experience. In the context of your entrepreneurial activities, I'm more interested in what motivated you to start your own business rather than continue with your previous work, and how you would rate the performance of your current venture.

- 1. What business are you in for now? When do you start and how are you doing with it?
- 2. What excites you the most during the entrepreneurial activities?
- 3. Do you find any obstacles in the process?
- 4. How many entrepreneurial experiences do you have? In what areas?
- 5. What are your goals for engaging in these activities?
- 6. When did you first get the idea for your business and when did you start putting it into practice?
- 7. How would you rate the results of your current venture?
- 8. What factors do you see as motivating you to start your own business? Which ones did we talk about above and which ones didn't?
- 9. What factors do you feel have influenced the outcome of your venture and which ones have we talked about above and which ones have not?
- 10. Do you think the age factor has any relevance to your motivation to start a business and how?
- 11. Do you think the former employment factor has any relevance to your motivation to start a business?
- 12. Do you think the age factor has any relevance to the outcome of your subsequent ventures and how?

- 13. Do you think the former employment factor has any relevance to the outcome of your subsequent ventures and how?
- 14. If you had your life to do over again, would you still choose to give up your former job and start a business at this age? Why or why not?
- 15. What do you think was the most immediate motivation that drove you to start your own business?
- 16. What do you think are the most significant factors that have shaped your entrepreneurial performance?

Perceptions of age and former professional experience

Next, we would like to focus on your perception and evaluation of your age conditions at this stage, and how you view the work you have done.

- 1. What stage of life do you think you are currently in?
- 2. At what age do you think life starts to be different and why?
- 3. What do you think is the difference between 20, 30, 40, 50, and 60-year-old generally speaking? Which age group is best for starting a business?
- 4. What kind of work experience have you had? What areas do they relate to?
- 5. What do you think your previous work has taught you? How would you rate your previous employed working experience as a whole?

Environmental Evaluations

I would then like you to give some of your thoughts and opinions on the current climate from your own experience.

- 1. What are the reasons that prevent you from continuing your previous work?
- 2. What are the reasons that support you to start your own business?
- 3. In what ways do you think the current economic developments have influenced your entrepreneurial endeavors?
- 4. In what ways do you think the current institutional environment has influenced your entrepreneurial endeavors?
- 5. What other policy support do you think you need to incentivize more older people to start their own businesses and improve their entrepreneurial performance?

Wrapping up

Thanks for your kindness to have this interview. Your answers will most definitely contribute to the quality of my work. If you have any additional insights, information, or other things you'd like to share with me, now is the time to do so.

APPENDIX II. QUESTIONNAIRE

| Name Age Gender Date | Name | Age | Gender | Date |
|----------------------|------|-----|--------|------|
|----------------------|------|-----|--------|------|

Personal profile

Let's start off with some questions about your personal background and your personal profile.

- 1. Can you describe your family of origin and your current family situation?
- 2. What are your educational experiences?
- 3. How would you rate your personality traits?
- 4. What hobbies do you have? When did this start? Is it still maintained? Do you participate in any hobby-related community? If so, how would you evaluate the community activities?
- 5. What is your current income situation and how does it compare to your previous job?
- 6. How would you evaluate your position in society today? What do you think the social connections you currently have mean to you?
- 7. What do you think are your most outstanding abilities? What has made you who you are today?
- 8. Do you consider or have you ever considered yourself to be part of some marginalized group?
- 9. What are the experiences in your life that you think have had a significant impact on you?

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