

**IMPROVING USER INTERFACE
ACCESSIBILITY FOR CHINESE ELDERLY
TOURISM THROUGH SERVICE DESIGN IN
YANCHENG, JIANGSU PROVINCE, CHINA**

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UNIVERSITI SAINS MALAYSIA

2023

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YANCHENG, JIANGSU PROVINCE, CHINA**

by

CHANG RUNYI

**Thesis submitted in fulfilment of the requirements
for the degree of
Doctor of Philosophy**

August 2023

ACKNOWLEDGEMENT

Ever since I decided to study for a doctor's degree, I realized that I should devote myself to exploring and facing numerous challenges in the next journey. I was often confused and questioned myself, but sometimes, I felt delighted because I overcame many difficulties, which I almost gave up. However, I chose to face them as a positive researcher. Studying at the School of Arts, Universiti Sains Malaysia, is a precious treasure and the most sentimental memory in my life, accompanied with me in the future. It represents the experience of becoming a better version of myself and a precious epitome of the personal growth I accomplished when I was young.

Special thanks to my supervisor, Dr. Ahmad Zuhairi Abdul Majid, I have been extremely fortunate to complete my Ph.D. studies under his guidance. I am grateful to him for his professionalism and patience, which helped me gain confidence while recognizing the rigor and science of academia. I hope that in the future, I can be a teacher like him and impart my knowledge to my students and help them develop the right concepts. Meanwhile, thanks to all teachers in the school of Arts for creating an excellent study environment. Thanks to my parents for their accompany and encouragement. Their words make me believe in myself, be more confident, and have more passion for my study. Also, thanks to one of my friends, who shared my joy when I made progress and encouraged me when I met troubles. Thanks to all the people I mentioned, I will keep this precious help in mind and explore more unknown areas.

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LIST OF ABBREVIATIONS

SPSS	Statically Package for The Social Science
ANOVA	Analysis of variance
ICTs	Information Communication Technologies
GPTs	Group Package Tours
R&D	Research and Development
PSSD	Product Service System Design
WHO	World Health Organization

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**MENINGKATKAN PENGGUNAAN ANTARAMUKA KEBOLEHCAPAIAN
DALAM KALANGAN PELANCONG WARGA EMAS CHINA MELALUI
REKA BENTUK PERKHIDMATAN DI YANCHENG, WILAYAH JIANGSU,
CHINA**

ABSTRAK

Proses penuaan di China semakin memuncak. Sejak 2020, China menghadapi peralihan fasa daripada masyarakat yang sangat tua kepada masyarakat yang amat tua. Proses penuaan populasi yang semakin meningkat ini tidak dapat dielakkan, lalu membawa kepada pembentukan penuaan kumpulan pengguna dalam pasaran. Dalam konteks bidang pelancongan, warga emas ini mempunyai lebih banyak masa yang terluang, menghadapi tekanan kewangan yang rendah, dan mempunyai kuasa pembelian yang besar. Justeru, pelancongan warga emas signifikan dalam industri pelancongan. Walaupun terdapat banyak kajian akademik membincangkan pelancongan warga tua di China sebagai sektor yang berasingan, ia masih gagal memperbaiki kebolehcapaian pelancongan yang rendah. Sehingga kini, penyelidikan untuk mengenal pasti keperluan, tingkah laku, dan jangkaan warga emas dalam pelancongan masih tidak mencukupi. Natiujahnya, pengalaman pelancongan warga tua China tidak memberangsangkan kerana industri pelancongan tidak dapat memenuhi permintaan warga emas tersebut dari aspek produk, perkhidmatan dan proses perjalanan dengan tepat. Dalam kajian ini, pengkaji menggunakan reka bentuk perkhidmatan sebagai pendekatan antara disiplin untuk meningkatkan kebolehcapaian

kepada pelancongan warga emas. Dengan penggunaan gabungan kaedah kuantitatif dan kualitatif, pengkaji meninjau pelbagai faktor yang mempengaruhi pengalaman pelancongan warga emas sepanjang lawatan mereka. Berbekalkan perkhidmatan yang berpusatkan warga emas, pengkaji mencadangkan reka bentuk produk internet, reka bentuk perkhidmatan dan corak pelancongan inovatif yang disesuaikan daripada pakej pelancongan berkumpulan untuk memenuhi permintaan semasa warga emas China. Hasil kutipan data dibincangkan dengan pakar untuk mengesahkan bahawa dapatan bersifat komprehensif dan bersepadu untuk meningkatkan kebolehcapaian pelancongan warga emas China.

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ABSTRACT

The aging process in China has been accelerating. Since 2020, China has moved from a deeply aging society to a super-aging society. The growing base of population aging inevitably brings about the aging of consumer groups in the market. Especially when elderly people are in tourism, they have more available time, lower financial pressures, and considerable purchasing power, so elderly tourism is becoming an integral segment of the tourism industry. Although extensive literature has discussed elderly tourism in China as a separate sector, it has not been able to change the situation of low accessibility. Until now, there has been insufficient research to identify the needs, behaviors, and expectations of elderly people in tourism. As a result, the traveling experience of Chinese elderly people is unsatisfactory since the tourism industry cannot accurately match the demands of the elderly in terms of products, services, and travel processes. In this study, the author applied service design as an interdisciplinary approach to improving accessibility to elderly tourism. Using a combination of quantitative and qualitative methods, including Pearson correlation, multiple linear regression, and interview verification. The author explored a range of factors that influence traveling experience of elderly people throughout journeys. Based on elderly people-centered, the author proposed internet product design, service

design and an innovative travel pattern which adapted from group package tours to suit the demands of elderly people in China today. Most importantly, all findings are discussed with experts to verify that they are comprehensive and integrated to improve the accessibility of Chinese elderly tourism. This study, breakthroughs the discussion of "accessibility" from a single perspective and shows the comprehensiveness and systematicity of service design as an interdisciplinary tool applied in a traditional industry. Meanwhile, it vividly depicts the needs and prospects of Chinese elderly people for future life in their unique cultural background.

CHAPTER 1

INTRODUCTION

1.1 Introduction

This chapter provides an overview of the research content, including background, problem statement, research questions, research objectives, significance, conceptual framework, limitations and delimitations, and outline of the study. This section focuses on outlining the critical steps of the study. The background of the study explains in detail the contextual factors for conducting a study on elderly tourism in China. The problem statement section summarizes the bottlenecks in developing elderly tourism as a specific group of organizations in the industry. Later research questions and objectives correspond to this study's listing of the problems to be solved and the objectives to be achieved through this study. In the conceptual framework session is the researcher's grasp of the overall research ideas and the layout of the concepts. To give a complete picture of the possibilities and coverage of the study, the researcher also states the limitations of this study and the significant implications it will bring to Chinese society and the elderly population. From chapter one,

1.2 Background of the Study

“Service design” was put up by Shostack as early as 1982 in the financial industry instead of the field of design at first, due to the service concept precedes the concept of design (Kimbell, 2011). As service design has developed, today most service

designers strive to improve medical care, transportation, tourism, retail, and other industries through the way of service design thinking, providing more opportunities and solutions to modern society (Stickdorn & Zehrer, 2009; Ahmad, 2022). In tourism, service design is considered an emerging discipline and major attitude of stakeholders (Peters, 2016; Stickdorn, 2009). For entrepreneurs and scholars, service design has been adopted to enhance the customer's experience during travel, including innovations, qualities, and processes (Lepre, 2018). In the context of tourism, Tussyadiah (2009) argued that service design encompasses all approaches to design and designing research. As a traditional service industry, tourism contains many processes and outcomes of the interaction between people-to-people and people-to-products. These interactive processes largely influence people's judgment and experience of their environment. Tourism is a process people experience within a self-imposed period. Therefore 'service' and 'experience' are vital to tourists and the tourism industry. And among the top five service design thinking concluded by Marc Stickdorn, user-centered is the first item that highlighted services should be designed and experienced through the customer's eyes. These are evidence of the commonality between service design and tourism in developing their own businesses with the user experience at the center. And once again, the important role that service design plays in tourism has been confirmed by many tourism scholars, namely all design in tourism can be reduced to the design of services (Stickdorn & Zehrer, 2009a; Tussyadiah, 2014a).

In developed countries, the main markets of tourism are shifting toward elderly group in the demographic term because the extent of ageing is first seen in these areas (Santos et al, 2016). Meanwhile, there is also a huge demographical change in China, Yang (2021) indicates China enters a deeply aging society by 2020 and is already aging faster than many countries in the world. The development trend of China's aging population has intensified demands for organizations and the elderly market from individuals, while the expectation of the whole society for the industry has also increased a lot.

Elderly tourism is also called “senior tourism” or “mature tourism.” Because some countries called older adults in different ways, like “elderly”, “seniors,” or “mature”, but they are the same meaning (Marvel, 1999). This field has been studied before about the term “elderly tourism” (Wu et al., 2018; Hwang et al., 2020), so the term will be used in this study. Wang (2021) noted that according to a survey conducted by the National Working Commission on Aging, the number of elderly people traveling each year has accounted for more than 20% of the total number of tourists in China. The challenges for Chinese elderly tourism industry are lack of service innovation and fluent service process, therefore, the tourism industry does not provide high accessibility compared to the elderly group of tourism industry in the western countries (Chen, 2018; Luo, 2018; Li, 2007). The elderly tourism service products occupy 20% of the market in China, compared to 50-60% in the west country (Hu, 2016). Hence, regardless of market collaboration, product design, or service design, it is an urgent

adjust for elderly people in tourism contextual. Although China has increasingly paid attention to the elderly tourism development since 1982, there are still many limitations in the accessibility of Chinese elderly tourism for the travelers, tourist attractions, hotel settlement process, and transportation facilities that all of them do not meet the psychological and physical characteristics of elderly people (Ji, 2017; Tong, 2019). The lack of research on the elderly in tourism scenarios, consequently market neglect of the needs, behaviors, and expectations of this group for a long time, has led to older visitors not having a perfect travel experience or even a great memory. (Tong & Yim, 2018; Brinker & Cain, 2011; Fick & Brent Ritchie, 1991). Hsu & Huang (2016a) concluded the travel behaviors of Chinese elderly are various and driven by their needs and expectations, and mainly seeking for services and products that can enhance their traveling experience. This study, therefore, proposes the needs, expectations, and wants of elderly people as a starting point to promote service innovation, product development, and market cooperation in the tourism sector, which will enhance the accessibility of the sector based on safeguarding the traveling experience of elderly people.

As a traditional industry, tourism is open to the whole public, while it is still necessary to be divided into more homogenous groups or segments with distinct needs, characteristics, and behaviors (Losda, 2015). In fact, in the first half of 2017, the number of elderly tourists in China increased 2.4 times compared with the same period last year, most of their age is between 60 and 70, and tourists over 70 accounted for 20

percent in the elderly tourists' group (Luo & Chen, 2018). According to the Travel consumption Behavior Report of the Elderly in China (2022, Dec.), 81.2% of elderly respondents are willing to travel if their physical and economic conditions permit, and only 9.7% of them explicitly say they are not willing to travel; from this survey, domestic travel motivations accounted for 56.7% and international travel motivations accounted for 43.3%. Various attributes contributing to this increasing segment to participate in tourism, but a few academics have apparent consensus on two aspects. Firstly, compared to other population segments, elderly people have more available time, high purchasing abilities, and low debt pressure (Santos & C Veiga, 2016; Rajesh lyler & Jacqueline, 2006). They can freely participate in trips except on national holidays, which significantly alleviates the "off-season" worries of tourism and related industries. Besides, Heung and Kucukusta (2012) stated that nowadays, the elderly is more pursuing the enjoyment and wealth of the spiritual world and their desire for life experience and attempts. In China, seasonal tourism, wellness tourism and red tourism are already available for the elderly, and in the future, there will be a growing number of activities that convey spiritual and cultural exchange through tourism.

Nevertheless, according to previous studies and research, some notification-worthy issues of the elderly tourism in China can be concluded in the following. Tourism products are service products; the cores are multiple services often referred to as a service package or bundle (Steikdorn & Zeher, 2009; Smith, 1994). Firstly, tourism products for elderly people in China are outdated and do not keep up with China's

social development trend. Hsu and Huang (2015) suggested that when designing tourism products, pundits in tourism need to consider the fundamental changes taking place in the country and the social strategies that the Chinese elderly adopt to adjust to the changes. In addition, Gao (2018) concluded that as a tourism product, group package tours which are managed by tourism agencies uniformly, had monopolized the Chinese tourism market for a long time. Because of its affordable and worry-free features, many tourists consider it a mainstream choice. For elderly tourists, package tours is an effective way to simplify travel decisions and save a lot of time making decisions and reservations(Kazeminia et al., 2015a). A package tour, namely mass, also has many defects, which embracing paralyze the inherent tourism potential and standardized the experience, hinder the genuine experience of tourists, rarely involved attractions visited equitably, goes beyond the limits of environmental resilience, compulsory consumption, low qualities in the food and accommodation environment (Tong & Yim, 2018; Lepre, 2018).

Furthermore, currently, tourism industry lack accessibility when it comes to the needs and behaviors of psychological and physical for elderly people. For example, Kim and Woo (2014) indicated that understanding and researching about the behavior difference, activity theory of elderly need to be developed. Huber, Milne, and Hyde (2018) interviewed 23 elderly people, and an examination of the research participants' life courses revealed twelve life events with a significant impact on elderly tourism behavior. The most significant one of the twelve factors is deteriorating health. Also,

physical and psychological status directly affects elderly tourists. They are feeling less confident and anxious about going out because their body is functioning less than it was when elderly people were young, including presbyopia, slow movement, weak hearing, and often feeling tired, which result in mental constraints and limitations. These physical aging developments do not represent a complete disability, just a normal aging process. This study also does not discuss people with total disabilities who cannot act independently. As Xiang & Fesenmaier (2017a) suggested, disabled people are divided into different types and grades. When we discuss the universal elderly group should remove disabled people since they need pure and perfect protection mechanisms and policies.

As a vulnerable and protected group, the elderly needs more attention from industry and society. However, in the Chinese elderly tourism industry, generally travel agencies provide single-formed group tours with limited content, and tour escorts lack working experience of leading the tourists with an understanding of their physical and psychological concerns (Li, 2007). Especially since China is a developing country with uneven regional economic development, the roads of some attractions are rugged, mainly historical sites and natural scenic spots. However, barrier-free road construction and facilities are far from enough, which also happens in hotels and restaurants. Regardless of physical objectives or intangible services, all of these do not adjust or convey human care sprits according to the elderly's sluggishness. Due to the industry's neglect of care and concern for older people that exacerbates the

psychological stress they suffer during travelling; elderly people have to give up visiting these attractions or are dissatisfied with services from providers with poor memories and regrets.

We live in an “experience economy”, which is a crucial deliverable of this economy through customers interact with appealing events and activities to obtain distinctive memories, like theme parks, tourism, and entertainment (Lim & Kim, 2018). Tussyadiah (2014) claimed that in tourism, all designing activities are articulated in service design since tourism is the biggest producer of creating experience and focuses on the customers’ experience and feelings. Instead of being designed, Customer experience is a complicated process that is co-created by customers interacting with multiple service elements, providers, or organizations. Until now, academics and practitioners have proposed that service design can play a particular role in tourism development to optimize the service process and improve the travelling experience (Peng, 2014; Stickdorn & Zehrer, 2009; Lepre, 2018). Services as intangible products have strong interaction characteristics. Tourists only know they are experiencing the service when they are in a mood of satisfaction or dissatisfaction (Whipple & Thach, 1988). Therefore, it is vital to design service content and process in advance in tourism. Recent studies emphasized using service design as an interdisciplinary approach in tourism to balance the resource interests of all parties from the perspective of customers and further show the service process through specific visualization tools in the service design for people with different academic backgrounds to observe and

discuss service processes (Stickdorn & Zehrer, 2009). Tong and Kim (2018) stated that the key deliverable of this economy is experience-centric service through which customers experience emotionally appealing events and activities that result in distinctive memory, including theme park, entertainment, party, tourism, nature experience services.

1.3 Problem Statement

According to the previous introduction, some issues that result in lacking accessibility of elderly tourism industry in China can be concluded in the following:

Firstly, one reason for lacking accessibility is that services in tourism do not consider the physical and mental particularities of the elderly.

Scholars pointed that pay attention to the physical and psychological of elderly people, including their needs, behaviors, expectations, attitudes during journeys (Hsu & Cai, 2007; Santos, 2016).

However, little research has addressed what kind of processes or touchpoints in the service can provide suitable or guaranteed services for the elderly outside. The traditional travel pattern--- group package tour--- for the elderly cannot take care of the special needs of the individual, which is a backward pattern of tourism (Gao, 2018; Lepre, 2016). Therefore, it is very important to research an innovative mode of elderly tourism with comprehensive and humanistic services.

Secondly, the content and process of the services provided by stakeholders are the

same as the current elderly tourism industry, which lacks research and cognition on the elderly. Moreover, stakeholders are disconnected from each other and do not cooperate to provide consistent services and systematic care for older people.

Stakeholders in the tourism industry play a continuous and vital role, their service levels are more significant than attractions of a particular destination in affecting future tour intentions (Whipple & Thach, 1998). The development of their services is critical for elderly people (Tong & Yim, 2019).

Zeher (2009) and Tussyadiah (2014) stated in tourism, service design is a tool that stakeholders need to adopt and produce service experience for consumers. They noted tools such as service blueprint, personas, customer journey can be used, but they haven't found how to apply these tools for elderly group. Although service design as an interdisciplinary way to explore in tourism is not anecdote, the research on the segmentation of tourism groups is still scarce. Besides traditional stakeholders, such as hotels, transportation, and others potential stakeholders related to the elderly in China can re-develop and cooperate in tourism is also a problem that needs to be addressed.

Thirdly, designing elements and content of service products for the elderly in tourism have not been delved. ICTs (information and communications technology or technologies) have been a typical representative of service products in tourism and are generally accepted and welcomed by young people, especially as an important bridge used by organizations and firms to convey brand value and maintain customer loyalty.

Pratt, M.K. (2019) pointed the definition of ICTs is quite universal but the term is widely recognized as various devices, networking components, applications and systems that combined allow people and organizations (i.e., businesses, nonprofit

agencies, governments, and criminal enterprises) to interact in the digital world. App (or APPs) is an abbreviated form of the word "application (or applications)." An application is a software program that's designed to interact with users through digital interface(Ramos-Soler et al., 2019). ICT products should be designed and useful to elderly people, such as mobile phone application software (APPs), as pillar developing products in ICTs, which have not yet been provided guiding opinions by academics. Especially in travel scenario, Apps served for elderly group are quite insufficient. Hence, the elderly cannot participate in tourism activities through new products, which is also a reason for lacking accessibility of tourism for the elderly group.

With the rapid development of China's Internet, big data, artificial intelligence and other information technologies, intelligent services have been widely used and profoundly changed the way of life. But at the same time, elderly population in China is growing rapidly, many elderly people are unfamiliar with the use of Internet service products in travel. The design and implementation of Internet service products should be promoted as soon as possible (General Office of the State Council of the People's Republic of China, 2020).

Online self-services through the multichannel environment, various types of interfaces and devices have primarily been promoted in some industries which rely on customer interaction with employees or must handle business face to face, like banking and hospitality (Halvorsrud et al., 2016). Zomerdijk and Voss (2010) indicated that in experience-centered service design, the connections are vital between front and backstage as well as online and offline services. Therefore, design principles about internet products or services for elderly tourism using still need to be explored.

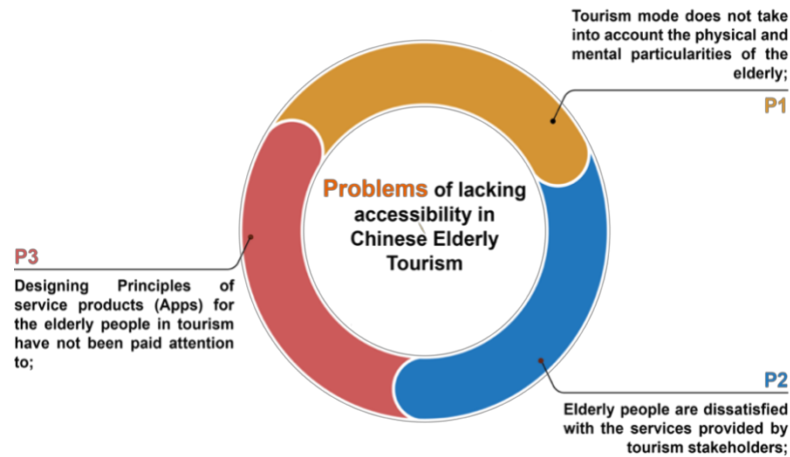


Figure 1.1 Framework for problem statement

Three problems mentioned above affect traveling experience of the elderly people and reduce the accessibility of Chinese elderly tourism. This research will break through the bottleneck and find new approaches for improving accessibility of elderly tourism in China.

The problem statement session explains why the accessibility of Chinese elderly tourism need to be improved since the above three aspects have weakened the traveling experience of the elderly which result in the accessibility of tourism is pessimistic. There is a one-to-one correspondence between problem statement and research questions, for example, services and products for elderly people do not consider their needs, behaviors, and expectations (corresponding to RQ1); also, inactive collaboration between stakeholders in tourism (corresponding to RQ3) and designing Internet service products (apps) are not suitable for elderly people use (corresponding to RQ2); When above three problems are solved, it will benefit the

traveling experience of the elderly so as to improve the accessibility of the elderly tourism, which corresponds to the fourth research question (corresponding to RQ2).

Service design has grown as a customer-centered, co-created, holistic approach focused on innovating existing services or creating new service ideas that meet the requirements of customer experience (Prestes Joly et al., 2019). More importantly, service design emphasizes that services are a continuous and dynamic process between the onstage and backstage to implementing and delivering services, including customers' actions, stakeholders, physical evidence, touchpoints, etc (Kimbell, 2011). The collaboration and balance between different roles make the services more suitable for customers and effective for providers, even creating opportunities for new stakeholders to benefit (Kozak & Gürel, n.d., 2015). After addressing the first research questions, the researcher will use these findings to discuss further how to improve the accessibility of Chinese elderly tourism, which corresponds to the fourth research question (RQ4).

1.4 Research Questions

Based on behaviors and needs of elderly people, the questions are as follow:

Research question 1: What are the opportunities and touchpoints in the Chinese elderly tourism service process?

Research question 2: What are service items in Internet service products that elderly tourists need?

Research question 3: How should stakeholders in tourism collaborate and develop based on the needs, behavior, and expectations of elderly people?

Research question 4: How the findings can contribute the accessibility of Chinese elderly tourism for elderly group?

How to solve these research questions will be demonstrate in the research methods section.

1.5 Research Objectives

Based on heterogeneous characteristics of elderly people and Chinese cultural content, this study aims to build a more appropriate series of services tourism for elderly people in China and make this part of tourism more accessible for them. The following are the objectives to be completed in this study:

Research Objective 1: To define touchpoints in traveling processes for elderly tourists to help them get rid of physical and mental constraints and enjoy tourism in more open and positive attitudes.

Research objective 2: To analyze the service items and functions of internet products as online service products to satisfy the needs, behaviors, and expectations of the elderly tourists.

Research objective 3: To propose theoretical propositions that guide stakeholders and service providers to innovate service processes and collaboration.

Research objective 4: To validate all findings with experts that this research can contribute to improving the accessibility of Chinese elderly tourism.

1.6 Significance of the Study

This study clarifies the confusion surrounding the main reason why tourism for the elderly in China is less attractive to the elderly and applies service design as an interdisciplinary medium to improve the traveling experience of Chinese elderly tourists to improve the overall accessibility of Chinese elderly tourism through three aspects (products, services, and stakeholders). For a long time, our society has been unable to clarify its attitude towards the elderly. Although aging forces us to face significant reforms in many areas of life, there seems to be no influential theory or case to guide us from what angle we should evolve. Examining today's behaviors and preferences of the elderly will assist all stakeholders in tourism to develop themselves and aid more potential business practitioners in this area. This study focuses on the quality of life of the elderly by providing new services which are suitable for their behavior, needs, expectations, cultural background, and values. Significantly impacted by COVID-19(Corona Virus Disease 2019), tourism, as a vital industry in China, urgently needs to find a sustainable way to readjust its industrial structure. This study will provide a detailed, valuable reference and guidance for the life of the elderly, which is of great significance and contribution to developing the national economy and cultural environment.

Furthermore, this study is one of a few to research elderly tourism by service design thinking and tools, and it can provide insights for other regions' research and future explorations. However, the conclusions of this study of Chinese elderly people cannot be directly applied to the development of tourism in developed countries.

1.7 Conceptual Framework

Influences on the accessibility of Chinese elderly tourism are multi-dimensions from three aspects, as the researcher listed in the problem statement session. Figure 1.2 is a framework of this research concept. The main reason affecting the accessibility of tourism for the elderly in China is the traveling experience of tourists, which among a positive correlation between both. Traveling experience is influenced by three aspects proposed by researchers, whereby it is necessary to develop service products (Apps) as new interfaces and devices to assist the elderly, explore new services that can be accommodated in travel patterns, and set collaborations for stakeholders.

A clear understanding of the cultural environment, psychological and physical conditions, traveling experience, and behaviors of the Chinese elderly group are fundamental in the research. Currently, contents of travel patterns are very limited to a few, so afterward will focus on considering more inherent and innovative services for the elderly through implementing service design thinking and tools. In terms of interest stakeholders, it is more important to connect them through service innovation, put forward constructive suggestions for their future development, help them expand their business territory, establishes a healthy competition environment, and achieve sustainable development. Regarding product design, the research focuses on ICTs (Internet Communication Technologies) as service products for elderly people that can be used in travel contextual. The increasing popularity of smartphones results in a hike in market share and the demands for quality services from tourists, like avoiding heavy

traffic jams, finding unfamiliar routes, or helping them rearrange schedules and getting more local information (Ismail et al., 2016). However, these service products are developed according to general standards for young people, so their functions or contents are not designed for elderly people even if they seem rich and exciting.

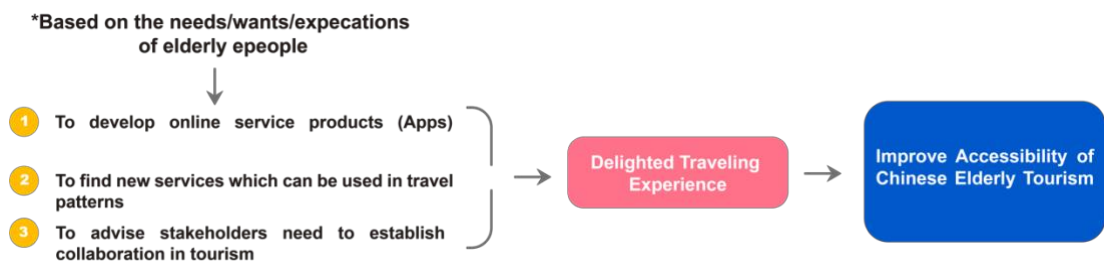


Figure 1.2 Concept framework for the research

1.8 Limitation and Delimitation of the Study

Due to the unique policy, cultural environment, and history of China, tourism has been perceived by the public a little later than that in western developed countries. Feng (2017) concluded that Confucianism influences Chinese culture with a strong sense of family and that parents play an important role in family responsibilities and households well into old age. For example, Chinese parents will take active or passive responsibility to take care of the family's newborn to relieve their children after retirement. Also, a previous leisure study identified traditional Chinese leisure and related activities as "passive leisure activities," they think walking around parks and visiting friends were the most common out-of-home activities that used to be prepared in advance. However, in western countries, people prefer to go outside and enjoy

exploring the unknown from the bottom of their hearts. Thereby, the travel behaviors, needs, wants, and expectations of elderly people are multifaceted and complicated. Other academics also proposed the same views, for example, Hsu (2007) concluded that pursuits of leisure were once regarded as a kind of waste in traditional Chinese concepts, although it has weakened a lot with the development of China's economy but compared with the western cultural environment is subtly different. Hsu and Cai (2007) presented a model of senior tourism motivations in China, trying to understand the factors that influence travel. From this, they found that the tourism motivations of the elderly in the Chinese cultural context differ from those western scholars concluded and put forward eight propositions. Some of these are uniquely Chinese.

As a result, the study is limited to Chinese policies and cultural backgrounds. Nevertheless, this does not mean that this study is useless in other countries. This study can evoke our society to focus and understand the needs and conditions of elderly people in China in the context of aging. In addition, the elderly market is China's future primary market, and understanding them will help foreign investors better invest in China. Hence, the results of this study can inspire academics and practitioners with different backgrounds to evoke their research attention and interests in this group.

1.9 Outline of the Study

This session aims to introduce the main steps and corresponding chapters throughout this study. Later, the author will introduce the key roles and significance of each step in this study according to the figure 1.3.

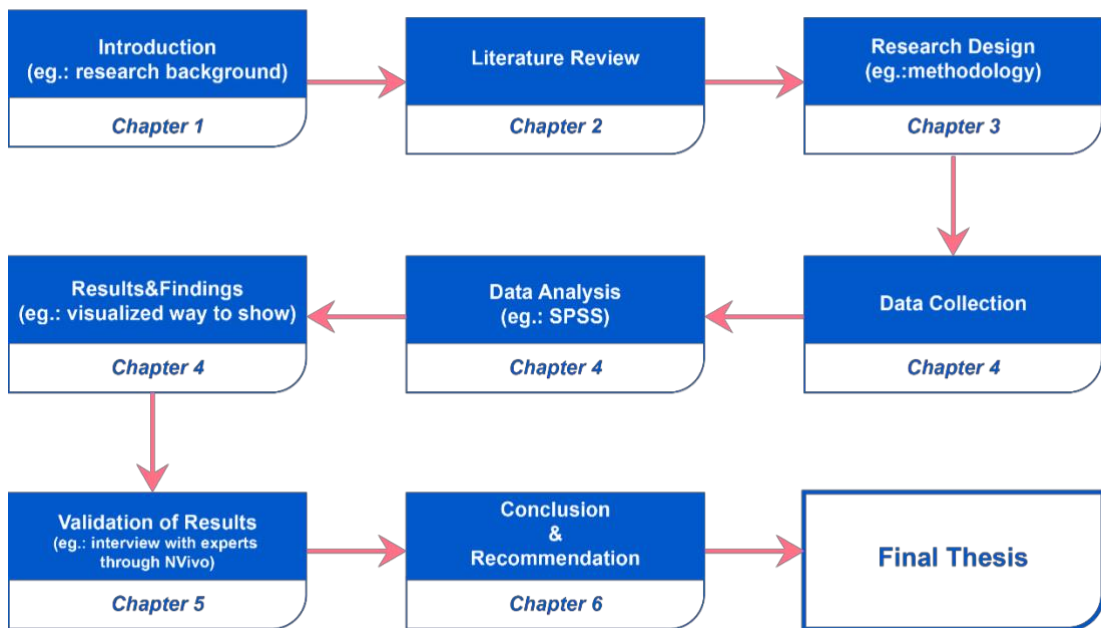


Figure 1.3 Outline of the study

Chapter one provides an overall view of the whole research and outlines important contents, including problem statement, research questions, research objectives, significance, and limitations. The section aims to set out the main elements of the research as far as possible, reflect the value and significance of the research, and depict the background and current status.

Following the first chapter, chapter two attempts to describe literature review part from research directions and topics, such as aging in China, tourism development and

elderly tourism, service design and its' relationship with tourism industry. Based on the above topics, this session systematically presents the research progress in China and other countries, as well as influenced cases and research methods.

Chapter three demonstrate details steps for how to conduct this research, including calculating sample size, study criteria, study location, and so on. This part also lists scientific instrument for analyzing data, also provides ethical approval letter and serial number to show this study is conform to ethical standards. As the middle part of the thesis, the chapter plays a very important role. It proposes solutions to the previous problems and plans each step to solve in detail. It also lays a scientific premise for the data analysis, results and discovery written later.

Meanwhile, the fourth chapter involves many contents, including profile of sampling, data analysis and the interpretation of findings will be discussed in chapter four where the result of the data collection is analyzed. Furthermore, service design thinking and tools will be employed to show new services in visualized way. This section presents the results of the quantitative part and based on the findings of this step to present new services through service design, which will provide the basis for the subsequent validation with experts.

After analyzing all data and creating visualized service process by service blueprint and customer journey, chapter five will focus on interviews with experts to verify that

all results from data are practical for the tourism industry and confirm that service design is effective to be applied in this elderly tourism and this study. All the interviews will be analyzed by NVivo, and the researcher will show the results in this chapter to prove that all results of this study are helpful and effective for improving the accessibility of Chinese elderly tourism.

Finally, the sixth chapter mainly summarizes the enlightenment brought by the conclusions and findings of the whole paper to the current situation, and what more possibilities should be included in future research. Most importantly, the researcher will present the findings from the perspective of design and propose suggestions for designing products, services, and new patterns of collaboration in years to come.

Hence, through the contents and connections of all chapters, the final thesis addresses all questions that the researcher proposed and be presented here to contribute as much as possible to future studies.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

This chapter shows the development process and current cognition of academia on related topics by enumerating and summarizing extensive literatures. These topics revolve around aging, the definition of the elderly, tourism and the elderly tourism in China, principles and applications of service design, and its' tools for visualization. Beyond that, this part is helpful to understand the current research gaps and research methods under the same topic, put forward views on the past academic research, and thus promote in-depth research in this field

2.2 Ageing

2.2.1 Definition of “Elderly”

The world is aging since increasing life expectancy and declining fertility rates have led to both an increasing number and proportion of the elderly, especially in developing nations and post-industrial countries.(Feng, 2017a) . According to the UN standards, when people over 60 exceed 10% or people over 65 years old exceed 7% of the population, the country or region can be defined as an “aging society”. WHO (World health Organization) predicted that by 2050, 2 billion people would be 60 years and older, and 80% of them will live in low and middle-income countries. China’s rapid aging speed has roused attention worldwide due to the birth control policy, namely,

only one child in one family, which was implemented in the 1970s. According to the report from the Chinese government, 25% of elderly people in the world will be Chinese, and China will become the most severe aging country with an aging rate of 35.1% by 2050.

The most common way to mark the threshold of an “elderly” is by calendar age. At present, the mainstream classification divides the elderly into three levels according to the chronology baseline, which over 60 are collectively referred to as "elderly", while those between 65 and 74 are "early elderly", and those over 75 as "late elderly”(Kalimullah & Sushmitha, 2017). Although aging is a challenge and rising intensive attentions globally, but there is not an unified divided or general agreement that reached consensus of which a person becomes old by every countries or fields. (Rudchenkov & Volkova, 2021) stated academic literature and business reports are still some confusions and misunderstanding about the starting age when people are become “old”. For example, conventionally in medical research often defines people are 65 years of old or above by chronology alone with its physical limitations, but in others have taken a broader approach and include as young as 55 who are consumers of products and services in hospitality programs(T. J. Lee et al., 2012; Sabharwal et al., 2015). Main underlying reasons for the different age criteria for 'elderly' in is that the retirement criteria for elderly people are not uniform in the world, and diverse cultural backgrounds and cognition. In additional, the different degrees of economic development in countries are also an important factor affecting the age division of the

elderly. For example, in developed Western countries, like in Britain, the Friendly Societies Act, enacted the definition of old age as 50, while people over 65 can receive pension benefits. According to the Law < Protection of the Rights and Interests of the Elderly > in China, the age of the elderly is clearly defined as 60, which is identify with the UN generally referred to the old population (Kowal, 2001).

In tourism literature, academics in the US and Europe were more likely to classify people over 65 as "elderly" or "seniors", but in Russia and Spain, some scholars set adults over 50 years of age and 55 referred to "elderly tourists", respectively (Alén et al., 2017a; Rudchenkov & Volkova, 2021). Therefore, ageing criteria should be flexible and consider diverse cultural background, social consensus, and industries. As the tourism industry has the vital characteristic of leisure, people who become "tourists" are supposed to have time and pension benefits, which are advantageous requirements for them to consider participating in activities.

2.2.2 Ageing Process in China

China is one of the fastest-growing aging populations in the world and the population of people over 60 years old is projected to reach 402 million (28% of total) by 2040 (WHO, 2018). The family planning birth policy was established as a basic state policy in September 1982 and written into the constitution in December of the same year, from which the rapid fertility decline combined with increasing life expectancy results a dramatic change in the age structure of population in China(Mai et al., 2009).