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# Technology Use of Seniors on Their Travel Experience and Quality of Life

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# **Technology Use of Seniors on Their Travel Experience and Quality of Life**

## **Introduction**

Quality of life defined as an individuals' perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns (Woo, Kim, & Uysal, 2016), has been receiving increasing attention, especially in relation to travel and tourism for seniors (Silverstein & Parker, 2002; Uysal, Sirgy, Woo, & Kim, 2016; Woo et al., 2016). Leisure activities participation has long been considered as a critical component of successful aging, which can improve quality of life (Silverstein & Parker, 2002). As previous leisure studies indicated, leisure activities, especially leisure travels, play a majority part in the life of seniors, especially the retirees (Aranzabal, Ariza, Fuentetaja, Simon, & Franco, 2013; Pesonen, Komppula, & Riihinen, 2015).

The potential connection of leisure travel or tourism and quality of life has been demonstrated by previous studies. For example Alén, Losada, & De Carlos (2017), and Neal, Uysal, & Sirgy (2007) both indicate leisure travel can provide physical and mental relaxation, personal development, and opportunities for the pursuit of personal interests, thus, influence the overall life satisfaction and quality of life of travelers (Alén, Losada, & De Carlos, 2017; Neal, Uysal, & Sirgy, 2007). With the aging of our society, senior travelers are becoming major consumers of travel services and representing a growing market for travel business (Chen & Shoemaker, 2014). Travel and tourism services are regarded as an important aspect of life by seniors due to its potential to enhance psychological and physical well-being (Woo et al., 2016). Many stakeholders in the tourism and travel industry also have recognized the importance of seniors and senior markets (Chen & Shoemaker, 2014).

One challenge for senior travel is the technology used for travel purpose. Technology development in the last two decades has tremendously reshaped the tourism industry. Business and stakeholders of the travel industry have designed and implemented many technologies, especially information and communication technologies (ICTs) to improve the travel experience. However, for senior travelers, it could be challenging for them to adapt to technologies used for travel purposes (Pesonen et al., 2015). Previous studies have indicated that technology used for seniors can improve their independence, freedom, and confidence, which are correlated to high quality of life (Charness & Boot, 2009; Sixsmith, Gibson, Orpwood, & Torrington, 2007). However, these studies focused only on the everyday environment and daily activities for seniors, there are few studies done on the technology use for travel purposes and its impact on the quality of life of seniors (Gustafson et al., 2015). Since travel and tourism activities by its definition require people to be away from their usual environment (such as home environmental) and daily activities (such as job and daily errands), the seniors' technology use for travel can be different from their daily use which might cause potential challenges for seniors.

As the aging population grows worldwide, the concerns and demands for a higher level of life quality and overall life satisfaction have increased steadily (Alén et al., 2017). As indicated in previous studies, travel can improve senior's quality of life, and technology also helped to make senior more independent and confident. However, travel does present seniors with different environment and challenges, technology use, especially ICTs for travel purpose may or may not help to make travel easier for seniors. Therefore, it is unclear whether technology use for travel purpose of seniors can improve their travel experience and their quality of life. This study is

intended to review existing literature, exploring the impact of technology use for travel purposes of seniors who age 55 and older on their travel experience and quality of life.

**Methodology**

To explore the current state of scientific knowledge of the impact of technology use of seniors, travel, and quality of life, we conducted a review of the scientific literature using Google Scholar, PubMed, Web of science, and EBSCOhost. Google Scholar was selected as one of the databases for this literature review because it provides the most expansive coverage across different domains and generated most search results (Bramer, Giustini, & Kramer, 2016). PubMed and Web of Science databases were used to provide supplemental literature. PubMed can provide additional search results on quality of life, because of its medical and life science focuses (Bramer et al., 2016). Web of science and EBSCOhost used to double check if there are any related journal articles that were missed in searches with Google Scholar and PubMed because Web of Science was considered to provide more accurate results than Google scholar (Bramer et al., 2016), EBSCOhost because of its EBSCOHost's Hospitality and Tourism Complete database. The following keyword combinations were used to search for and identify relevant literature: travel/tourism, quality of life, seniors, technology, senior travel, smartphone/computer use/ICTs and, technology. Senior, elderly, older adults and aging were used interchangeably in the search. Only empirical studies are included in this literature review, conceptual papers were excluded.

We defined technology in this research to focus on technology can be used by seniors for travel purposes, such as personal computer, smartphone, and ICTs (Charness & Boot, 2009), however assistive devices such as power chair are excluded. Studies that involved technology for public use are also included, such as check-in kiosks at airport ticketing counter, however, the aircraft and its technological equipment were not included in this research. Research on technology uses for travel purposed in association with enhancing travel experience at pre-trip, during trip and post-trip stages are selected during the literature search.

**Results**

We have reviewed 43 empirical studies related to senior travel, senior technology use. Based on the focuses of the reviewed articles and the purpose of this study, we classified them into four major sections. The result is presented in Table 1 with the following sections: seniors and technology use; senior travel and quality of life; technology and travel experiences; and travel, seniors, technology use, & quality of life.

Table 1. Literature Review Results

Focuses	# of articles reviewed	Findings/conclusion	Limitations
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Seniors & technology use	17	Almost all studies in technology for seniors agreed on its benefits in increasing independence of the users. Use of assistive technology and Internet may decrease the sense of isolation for homebound elderly persons, and benefit senior's social well-being, and psychological well-being.	Most studies are qualitative research; therefore, their finding might not generalize to larger populations.
Senior Travel and Quality of life	10	Studies agreed that leisure travel offered significant benefits to respondents in terms of personal health (psychological and physical). Health, disability conditions and stress were recognized as leisure travel constraints	Mostly based on self-reported survey.
Technology & travel experience	16	Technology has been enhancing tourists' travel experience in the pre-travel planning stage, during travel and post-travel stage. Most studies recognized ICTs as the main tools for travel planning purpose, others emphasized the potential use of smartphone and virtual reality technology in the travel planning process.	Most studies did not focus on the senior population. Limited articles on assistive technology and travel experience.
Travel, seniors, technology use, & quality of life	0	No study is found. No prior study has explored the mediating effect of technology use on senior's travel experience and their quality of life.	

## Conclusion and Discussion

This ongoing study is determined to find out the impact of technology use for travel purposes of seniors on their travel experience and its impact on their quality of life. A systemic literature review is conducted to review previous studies. Based on the literature review, we have identified that there is a missing link in the literature on the relationship technology use for travel proposes and its possible influence on senior travelers' quality of life. As the literature search was only able to identify a small number of articles for technology use of seniors and their travel experience, it implies that there is a lack of research on this topic.

The literature is not inconsistent of whether technology for travel purpose can contribute to the senior tourists' travel experience. We have found out that most studies agreed upon the contribution of the technology used to the enhancement of quality of life for seniors. However, these studies were concerned with the everyday environment. Some studies even identified technologies adopted by companies in the travel industry can become challenges and barriers for seniors (Neuhofer, Buhalis, & Ladkin, 2015). However, the literature search could not find any study focused on technology use of seniors for travel purpose and its relationship to quality of life, despite that previous studies has proved that travel or tourism experience has influence on people's overall life satisfaction and quality of life (e.g. Neal et al., 2007; Sirgy, Kruger, Lee, & Yu, 2011; Uysal et al., 2016). future studies should re-evaluate seniors' use of technology for travel purpose

including assistive technologies. Further study will focus on identifying barriers and challenges for using technology for travel purpose, in order to design programs to improve senior's technical knowledge and increase their technology use during travel.

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