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Understanding senior tourists' preferences and characteristics based on their overseas travel motivation clusters

Abstract

This study aims to identify the role of seniors' overseas travel motivations in terms of preferred attraction types and activities, socio-demographic features, and preferred travel-related features. The results show that the motivation of potential senior travelers is a multidimensional construct. A five-cluster solution using extracted senior travel motivational factors demonstrates distinctive characteristics. The clusters show differences on gender, marital status, preferred travel partner, preferred accommodation type, and level of travel information technology acceptance, which are accounted for by preferred attraction types and activities. Consequently, this study indicates that senior travel motivation can be an important segmentation indicator.

Keywords: senior; motivation; segmentation; preference; cluster

Introduction

The senior population aged 60 years and over has exponentially increased in recent decades, from 382 million in 1980 to 962 million in 2017, and is projected to reach 2.1 billion by 2050 (United Nations, 2019). This demographic change indicates that the senior tourism segment will in the future constitute one of the largest markets for international travel and hospitality businesses. Research on the senior market for tourism and hospitality is crucial to attracting this future market and facilitating the development of attractions to cater to their needs and wants.

The term "seniors" is defined by an individual's psychological/cognitive abilities (Wang, Norman, & McGuire, 2005), statutory enactments (Hsu, Cai, & Wong, 2007; Prideaux, Wei, & Ruys, 2001), or physiological markers (Tiago, de Almeida Couto, Tiago, & Faria, 2016). Even though this study defines those aged 55 or over as "seniors" in keeping with commonly applied criteria (Otoo & Kim, 2020; Sangpikul, 2008), those of other studies used ages such as 50 years

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old (Littrell, Paige, & Song, 2004), 60 years old (Hung, Bai, & Lu, 2016) and 65 years old (Kim, Woo, & Uysal, 2015).

In accordance to projected population changes and industrial needs, tourism academics are striving to keep pace with the changing trends. These academics have focused on constraints (Fleischer & Pizam, 2002; Hsu & Kang, 2009), transport mode choice (Baloglu & Shoemaker, 2001; Hung & Petrick, 2010), cohort effect (Lehto, Jang, Achana, & O'Leary, 2008), activity engagement (Littrell et al., 2004), and expenditure (Kuo & Lu, 2013). However, a review of previous studies indicates research gaps. First, these studies fail to explore senior travel motivational factors through rigorous scale development in such aspects as validity, reliability, dimensionality, the order of importance among their motivations, and items affiliated with each motivation domain. Travel motivation refers to internal drive to travel and is a starting point for understanding seniors' underlying demand of travel drive.

Second, even though many studies have segmented traveler groups according to demographics and behavioral or attitudinal indicators, there has been little effort to dissect the senior travel market and analyze seniors' diverse traits in relation to their travel motivation. In addition, existing attempts to segment the senior market typically have adopted a novelty-familiarity approach to segmentation (Cohen, 1972) without considering the more salient characteristics of senior travelers, their preferences, or their motivations (Lieux, Weaver, & McCleary, 1994; Tiago et al., 2016; Ward, 2014; Littrell et al., 2004; Shoemaker, 1989, 2000; You & O'Leary, 1999). Without analyzing senior travelers' characteristics according to segments, destination marketers cannot correctly select target markets to cater to their particular needs and wants.

Third, previous studies did not extend to examining preferences for activities in a destination, tourism products, or programs according to their segments. Assessment of preferences helps to identify practical implications for industry or practical stakeholders because such information can offer clues to develop tourism products, programs, and services that attract tomorrow's senior cohort.

Hence, a major purpose of this study is to segment a senior overseas travel market on the basis of seniors' travel motivation and to investigate their travel preferences. More specifically, this study is concerned with five objectives: (1) to identify the underlying dimensionality of senior overseas travel motivation scale; (2) to explore their travel motivational clusters; (3) to identify seniors' preferred attraction types and activities according to different travel motivational clusters; (4) to investigate the relationship between seniors' socio-demographic variables and the clusters; and (5) to examine the relationship between seniors' travel-related characteristics and the clusters.

Literature

Segmentation of the senior tourism market

Tourism market segmentation is undertaken by grouping a heterogeneous subset on the basis of shared similarities, needs, or characteristics to predict potential behavior and to direct specific marketing strategies for each segment (Alén, Losada, & Domínguez, 2016). The process of segmenting heterogeneous tourists is considered a key prerequisite for developing effective marketing campaigns capable of reaching expected targets (Moschis & Ünal, 2008).

Only a few studies have segmented the senior travel market. For example, Shoemaker (1989) classified senior travelers as "family travelers," "active resters," and the "older set."

Family travelers enjoy short trips with family members and repeat their visits. whereas "active resters" is characterized by their spiritual and intellectual enrichment, socialization, rest and relaxation, escapism, and engagement with physical activities and visits to historical sites.

However, the "older set" prefers all-inclusive package tours and trips to resorts. Later,

Shoemaker (2000) conducted a cluster analysis of seniors and reported three response sets. An "escape and learn" group, which was similar to his 1989 "active resters" cluster, consisted of visiting new places, rest and relaxation, escape, and experiencing new things. The group "the retirees" constituted retirees and unemployed seniors. The third cluster was labeled "active storytellers" and characterized by active engagement in leisure pursuits comparable to the "active resters" of Shoemaker's 1989 study.

You and O'Leary (1999) classified older travelers in the United Kingdom into three cohorts based on push-pull motivations: passive visitors, enthusiastic go-getters, and culture hounds. Their study found that the "passive visitors" cluster preferred visiting friends/relatives/family, placed importance on the availability of efficient public transportation, sanitation, personal safety, and opportunities to socialize in a tourism location; the "enthusiastic go-getters" cluster was motivated to seek togetherness with family, novelty, knowledge enhancement, and escape, and placed importance on transportation, high standards of hygiene and cleanliness, personal safety, and congenial weather in selecting a tourism destination. You and O'Leary (1999) concluded that it is important to understand the influence of travel motivations on preferences, destination choices, and preferred activities.

Kim, Wei, and Ruys (2003) utilized a nonlinear artificial neural network methodology to emulate the neurophysical structure and decision-making processes of the brain in segmentation. They established four segments of tourists: active learner, relaxed family body, careful

participant, and elementary vacation. The "active learner" group comprised widows and women who were strongly motivated by growth/learning and development, new experiences, and activities. They were in low income categories and showed a tendency to travel with family and friends. The "relaxed family body" group was particularly characterized by a stronger interest in rest and relaxation. The "careful participants" group was comprised of men of higher annual income, and were motivated to seek new experiences, health, and well-being. The "elementary vacationers" group was more concerned with basic needs during travel.

Evidently, the senior travel market was segmented according to the degree of novelty and familiarity to seek newness or uniqueness. Senior tourist segments which value novelty tend to be more active travelers (Lieux et al., 1994; Shoemaker, 2000; Tiago et al., 2016; Ward, 2014). Such individuals travel alone or in smaller groups and are more likely to be recent retirees (Shoemaker, 1989, 2000). By comparison, familiarity travelers stick to lifestyles or environments similar to what they know (Cohen, 1972; Plog, 2001). Among such seniors, there is a preference for passivity, escape, conservativeness, and moderation in travel (Carneiro, Eusébio, Kastenholz, & Alvelos, 2013; Kim et al., 2003; Ward, 2014; You & O'Leary, 1999).

The ensuing discussions provide theoretical insights into the nature of the senior tourism niche and the gap in critical research. First, since there is no reliable and valid construct to measure senior travel motivation, there is a need for meticulous efforts to develop a verified instrument. Second, efforts to segment senior tourists with a validated motivation scale are required. Third, since research has shown that the senior market is not homogeneous (Moschis & Ünal, 2008), there is a need to analyze seniors' traits in diverse aspects for effective segmentation. Fourth, most of the literature is in the field of domestic tourism. These limitations naturally lead to the rationales for conducting this study.

Travel motivation

Traditionally, travel motivation is the underlying intrinsic, psychological or mental drive that compels a person to seek leisure engagement as a past time (Pearce & Lee, 2005). The value of motivations in tourism studies is implicit in identifying tourists' needs and to properly match those needs to the right activities, interests or destination attributes (Albayrak & Caber, 2018; Kim & Lee, 2002; Otoo, Kim, & Choi, 2020). Tourist motivation is likewise an important indicator of visitor loyalty, image, and behavioral intentions (Albayrak & Caber, 2018; Hosany, Buzova, & Sanz-Blas, 2019; Prayag & Lee, 2019; Kim & Prideaux, 2005). It is critical to understand specific tourist segments and cohorts, their unique demands and to accurately associate products with their needs (Hosany et al., 2019; Otoo & Kim, 2020).

One of the earliest attempts to conceptualize travel motivation produced the push-pull theory - describing the forces of attraction elsewhere (pull) and the inherent motivational influences on an individual which cause a disequilibrium correctable via tourism experience (push) (Caber & Albayrak, 2016; Kim, Lee, & Klenosky, 2003). However, since motivation as a socio-psychological construction is intricate, it reflects a multi-dimensional array of individual needs and wants. On the backdrop of Maslow's needs-based motivation theory, a five-step model of travel career ladder (TCL) was advanced by some scholars (Pearce & Lee, 2005; Ryan, 1998). The TCL proposes a hierarchical structure of motivation on the basis of relaxation, safety and security, relationship, self-esteem and development, and fulfilment. Accordingly, the TLC is influenced by factors such as stage in life, informational needs, economic status and travel engagement expertise (Pearce & Lee, 2005). Nonetheless, now that seniors' travel motivations vary across their segments, exploring a relationship between their motivation and behavior is

intricate (Otoo et al., 2020; Prideaux, Wei, & Ruys, 2001; Sangpikul, 2008).

Method

Conceptualization of this study

This study explored senior overseas travel motivation and attempted cluster analysis of senior travel motivation domains. Then a comparison was made of their preferred tourism attraction types, preferred tourism activities, socio-demographic features, and preferred travel features across the motivational clusters. More specifically, tourist preference in this study is defined as the act of selecting from a set of choices as influenced by one's motivations (Tran & Ralston 2006). Tourist preferences including their choices of travel transport, accommodation, services, or choice of travel companion, as explained by the theory of human needs were linked to their motivation (Agrusa & Kim, 2008; Moschis & Ünal, 2008; Tran & Ralston, 2006).

Researchers have explored a range of tourist preferences and typically associated them with travel attributes such as choice of facility/service (Kim, Raab, & Bergman, 2010; Moschis & Unal, 2008), accommodation (Chan & Baum, 2007; Lieux et al., 1994), travel arrangement type (Wong & Kwong, 2004), travel technology needs (Cai, Feng, & Breiter, 2004), preferred tourism activities (Agrusa & Kim, 2008; Littrell et al., 2004), and the design of tourist experiences (Tran & Ralston, 2006). For example, Chan and Baum (2007) found that eco-tourists were primarily attracted by destinations with eco-lodges. Among those who were motivated to escape routine life, preferences for eco-lodges were salient. A study of Lieux et al. (1994) likewise found significant differences for three motivation clusters (novelty active, reluctant seekers, and enthusiast travelers) across eight accommodation types. However, since the relationship between senior tourists' motivational segments and a set of preference attributes

were not adequately explored, this study taps into investigating the relationships. The conceptual framework is presented in Figure 1. The statistical analyses used were factor analysis, cluster analysis, one-way ANOVA, and Chi-square test.

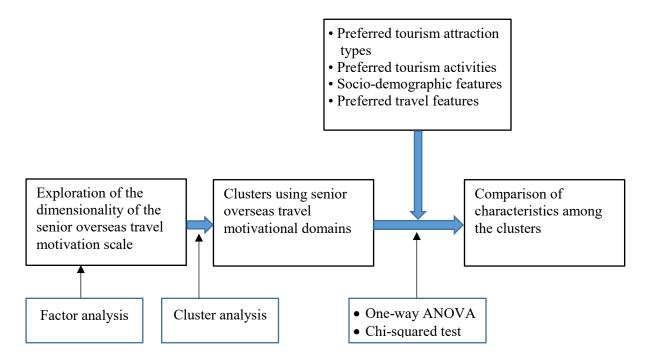


Figure 1. Conceptual framework of this study

Measurement

Thirty-eight items pertinent to senior overseas travel motivation were derived by reviewing the literature (e.g., Baloglu & Shoemaker, 2001; Carneiro et al., 2013; González, Sánchez, & Vila, 2017; Horneman, Carter, Wei, & Ruys, 2002; Jang & Wu, 2006; Lieux et al., 1994). A pool of items to represent preferred tourism attractions and preferred activities were likewise drawn from previous studies (e.g., Lehto et al., 2008; Wang, Wu, Luo, & Lu, 2017). Responses to the items on motivations and preferences were measured on a 5-point Likert-type

scale (1="strongly disagree"; 5="strongly agree"). Socio-demographic (gender, age, marital status, educational level, income) and travel-related characteristics (travel duration, travel partner, accommodation type, travel arrangement type, information technology acceptance) were measured using categorical variables. An operationalization to measure information technology acceptance was adopted from previous studies (Kim, Kim, Kim, & Kim, 2016; Lieux et al., 1994).

Data collection

The target population for this study comprised seniors aged 55 years and above as previous studies had adopted this as a criterion for defining a senior (Backman, Backman, & Silverberg, 1999; Boksberger & Laesser, 2009; Fleischer & Pizam, 2002; Hong, Kim, & Lee, 1999; Hsu et al., 2007; Otoo & Kim, 2020; Sangpikul, 2008). Before the main survey, a pretest and a pilot test were conducted to enhance face and content validity (Hair, Black, Babin, & Anderson, 2010). Fifty international doctoral students majoring in tourism and hospitality were involved in the pretest. Items were removed or reworded in response to comments raised at this stage. For example, the terms "elderly," "grey," and "while I am alive" were rephrased because they were considered sensitive. To ensure clarity, complex vocabulary such as "recuperation" and "egotistic" were replaced. Redundant items within the same one motivational domain, including "price of accommodations," "price of meals," "city trips," and "senior discounts," were deleted.

In the pilot study, 100 senior respondents were singled out from a pool provided by an online panel survey company located in the United States. To determine their eligibility, the respondents were requested to answer two screening questions: whether they were 55 years old

or above and had traveled overseas in the past three years. They gave some comments, including noting a need to merge similar items (e.g., "rest" and "relaxation" were merged as "rest and relaxation") and a need for rewording (e.g., "I want to relieve the pressure of my life" was reworded to "I want to feel refreshed").

After revising the questionnaire based on the pilot test, the main survey was designed to utilize a panel-based online data collection to solicit responses from seniors via the same online company. This approach was advantageous in terms of cost-effectiveness, the feasibility of attaining wide coverage, easy selection of a target sample, quick collection, and minimization of data entry errors (Evans & Mathur, 2005).

Three inclusion criteria were adopted for the main survey: respondents had to (1) be aged 55 or older; (2) have traveled overseas in the past three years; and (3) hold citizenship of the United States or Canada. Securing a sample of 500 or more cases is required for "very good" factor analysis (Comrey & Lee, 1992, p. 217). The survey was conducted from June to September 2018 with 600 participants. A total of 532 cases were usable for further analyses after 68 were ruled out due to multiple missing values.

Factor-cluster analysis approach

As with any analytical tool, the factor-cluster approach has been critiqued for certain weaknesses because cluster differences are not clearly distinguished (Dolnicar & Grün, 2008). At the same time, they acknowledged the absence of negative impact if the data contained well-separated segments. They considered that factor analysis is useful to combine variables to make one factor and thus prevent a satiation where one factor is weighted highly in the segmentation solution. Certainly, in a univariate or single variable situation, measurement items may be

evidently distinct and different but in a multivariate situation, factor analysis is appropriate to describe and represent tens, hundreds, or even thousands of variables (Hair et al., 2010). Since results of performing EFA lead to further statistical analyses, creation of factors is necessary.

Therefore, this integrated analytical approach has been popularly adopted to tourism journals (Caber, Ünal, Cengizci, & Güven, 2019; Errichiello, Micera, Atzeni, & Del Chiappa, 2019; Murdy, Alexander, & Bryce, 2018; Ramires, Brandao, & Sousa, 2018; Soldatenko & Backer, 2019). For example, Caber et al. (2019) analyzed conflict management styles of professional tour guides using this approach, whereas Errichiello et al. (2019) explored the implications of wearable virtual reality technology for museum visitors' experience using this method. Soldatenko and Backer (2019) proved that cluster analysis could be undertaken using identified factor grouping of motivations. In a similar vein, Ramires et al. (2018) applied this approach to understanding the motivation-based cluster analysis of international tourists visiting Portugal.

Results

Profile of respondents

According to the frequency analyses, about 46% of the participants were aged between 60 and 64. Approximately 60% were female, and 60.7% were married; 70.1% were college graduates. As for their occupational status, 39.1% were retirees, 29.5% company workers, and 14.1% were self-employed. Their annual household income fell into two categories, US\$20,000-39,999 (24.1%) and US\$40,000-59,999 (21.1%). In terms of travel features, 47.9% indicated a preference for a 7-10-hour flight to an overseas destination and 52% preferred to spend nine nights or more at an overseas destination. More than two-thirds of the respondents (71.6%)

preferred to use mid-priced accommodation during an overseas travel. Approximately 50% indicated a preference for traveling with their spouse/partner, while 45.5% preferred to make their own travel arrangements.

Regarding travel preferences, urban tourism (mean=3.30) and ecotourism (mean=3.15) had relatively average scores, while health tourism (mean=2.79) and cruise tourism (mean=2.97) had relatively low scores. In terms of attraction types, visits to natural scenery (mean=3.37). This was followed by historical attractions (mean=4.23) and cultural attractions (mean=4.22). As for preferred tourism activities at a destination, respondents showed relatively strong preference for dining (mean=3.90), outdoor activities (mean=3.68), and shopping (mean=3.12). They indicated strong acceptance of travel information technology (mean=4.16).

Results of factor analysis regarding senior overseas travel motivation

A large number of items generated even after pilot and pre-test are indicative of the importance of the items in implementing senior travel motivation research. It is necessary to identify the suitable dimensionality of senior travel motivations even though arbitrary "variable elimination" was suggested by Dolnicar and Grün (2008). Thus, to extract the underlying domains of senior overseas travel motivation, exploratory factor analysis was used with the principal component factor extraction and varimax rotation methods. This generated an eightfactor model where dimensions had an eigenvalue greater than 1.0. Commonalities ranged from .52 to .83, indicating that all items are at least moderately or strongly related to the set of factors (Pituch & Stevens, 2016).

The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy of .92 and Bartlett's test of sphericity (χ^2 =12856.12, p<.001) indicate that high factorability of the data was achieved

(Cudeck & Browne, 1983; Hair et al., 2010). The factor structure accounted for 69.01% of the variance. In addition, the factor loadings ranged from .59 to .88, exceeding the .5 minimum threshold deemed necessary for inclusion in the factor interpretation process (Hair et al., 2010).

The domains extracted from the factor analysis process were labeled as follows: seeking knowledge/learning, experiencing culture/nature, seeking self-esteem, seeking once-in-a-lifetime experiences, achieving a sense of socialization, escaping, seeking nostalgia, and seeking time with family. These domains explained 29.81%, 12.97%, 6.45%, 5.28%, 4.41%, 3.73%, 3.31%, and 3.06% of the variance, respectively. Their reliability alphas were .91, .90, .85, .87, .86, .81, .86, and .80, respectively, which exceeded the .7 threshold (Nunnally, 1978). The grand mean scores for the domains ranged from 2.93 to 4.55. The results are presented in Table 1.

Table 1. Factor analysis of senior overseas travel motivation

		Factor	
Domains and items	Commonalities	loadings	Mean
Domain 1: Seeking knowledge/learning (Eigenvalue=11.33, Variance			
explained=29.81, Cronbach's α=.91, Grand mean=4.10)			
To seek intellectual enrichment	.75	.81	4.02
To expand my knowledge	.75	.77	4.20
To learn new things and enrich my life	.79	.74	4.29
To gain a learning experience	.75	.74	4.26
To broaden my horizon	.68	.73	4.08
To keep myself well-informed	.64	.68	3.76
Domain 2: Experiencing culture/nature (Eigenvalue=4.93, Variance			
explained=12.97, Cronbach's α=.90, Grand mean=4.55)			
To see historical sites	.78	.84	3.81
To experience cultural sites	.80	.82	2.96
To experience beautiful scenery	.71	.77	2.82
To experience natural sites	.73	.76	3.64
To experience cultures different from mine	.61	.59	2.82
Domain 3: Seeking self-esteem (Eigenvalue=2.45, Variance			
explained=6.45, Cronbach's α=.85, Grand mean=2.93)			
To tell others about my travel experiences	.65	.74	2.97
To gain the respect of others	.75	.70	2.35
To gain a sense of achievement or accomplishment	.62	.68	3.60
To gain self-esteem	.69	.65	2.54
To feel privileged or important	.65	.64	2.37
To enjoy a place where others value and appreciate me	.59	.59	3.75

Domain 4: Seeking once-in-a-lifetime experience (Eigenvalue=2.01,			
Variance explained=5.28, Cronbach's α=.87, Grand mean=3.84)			
To enjoy my time while I can	.74	.75	4.12
To make the most of my free time while I can	.70	.72	4.00
To feel refreshed	.61	.52	3.92
To seek outdoor recreational opportunities while I can	.55	.64	3.58
To give myself a treat	.59	.58	4.13
It is a good way to spend my money while I can	.52	.58	3.56
Domain 5: Achieving a sense of socialization (Eigenvalue=1.68,			
Variance explained=4.41, Cronbach's α=.86, Grand mean=3.53)			
To make contact with new people	.77	.83	3.74
To feel connected with other people	.76	.81	3.54
To see and meet different people	.72	.79	3.89
To share my thoughts and feelings with others	.64	.65	3.12
To be with people who share my interests	.61	.60	3.33
Domain 6: Escaping (Eigenvalue=1.42, Variance explained=3.73,			
Cronbach's α=.81, Grand mean=3.73)			
To get away from doing a lot of thinking	.69	.76	2.82
To get away from the crowds (people or traffic)	.64	.74	2.96
To escape from the stress of daily life	.68	.69	3.64
To escape from my routine	.65	.66	3.81
Domain 7: Seeking nostalgia (Eigenvalue=1.26, Variance			
explained=3.31, Cronbach's α=.86, Grand mean=2.63)			
To remember times from my past	.80	.85	2.47
To meet old friends	.78	.83	2.41
To visit a place where I have memories	.68	.76	3.03
Domain 8: Seeking time with family (Eigenvalue=1.16, Variance			
explained=3.06, Cronbach's α=.80, Grand mean=3.57)			
To enjoy time with my family	.83	.88	3.69
To enjoy a family event	.76	.82	3.30
To be with my partner	.59	.74	3.71

Level of preference for tourism attractions and activities

Respondents showed a relatively average level of agreement with the statements, "I prefer to engage in urban tourism" (mean=3.30) and "I prefer to engage in ecotourism" (mean=3.15). However, they indicated relatively low agreement with the statements, "I prefer to engage in health tourism" (mean=2.79) and "I prefer to engage in cruise tourism" (mean=2.97). In terms of preference for attraction types, respondents showed a high level of agreement with

the statement, "I prefer to visit historical attractions" (mean=3.37). This was followed by "I prefer to visit historical attractions" (mean=4.23) and "I prefer to visit cultural attractions" (mean=4.22). As for preferences for tourism activities, respondents reported a relatively high level of agreement with the statements, "I prefer dining at a destination" (mean=3.90), "I prefer outdoor activities at a destination" (mean=3.68), and "I prefer shopping at a destination" (mean=3.12).

Cluster analysis

To determine the best number of clusters for the senior overseas travel motivation dataset, K-means clustering was conducted using mean values of the eight domains extracted by factor analysis. The results yielded five distinct clusters: a group which reported high motivation across all eight motivation subsets (Cluster 1); a group with low family motivation and relatively low nostalgia (Cluster 2); a group with low motivation to seek self-esteem, once-in-a-lifetime experiences, socialization, escape, and nostalgia (Cluster 3); a group who, although they exhibit a low level of nostalgia, reported medium-level motivation for other motivation subsets (Cluster 4); and a group with low nostalgia motivation, relatively low escape and self-esteem motivations, and relatively high motivation to spend time with family (Cluster 5). The five-cluster solution showed the best coherence and interpretability.

Clusters 1, 2, 3, 4, and 5 contained 26.9%, 19.7%, 6.6%, 24.2%, and 22.6% of the sample, respectively. A series of one-way ANOVA tests indicated that the five clusters extracted were significantly different in terms of the averages means across all eight motivation domains. To ascertain the homogeneity assumption that the population variances of the dependent variable are equal for all groups, a series of Levene's tests were performed. Now that the values were not

significant at the .05 level, the homogeneity of variance assumption was not violated. In addition, a concern on the assumption was alleviated since sample sizes in the clusters were similar. The distribution of the motivation clusters is presented in Figure 2 and Table 2.

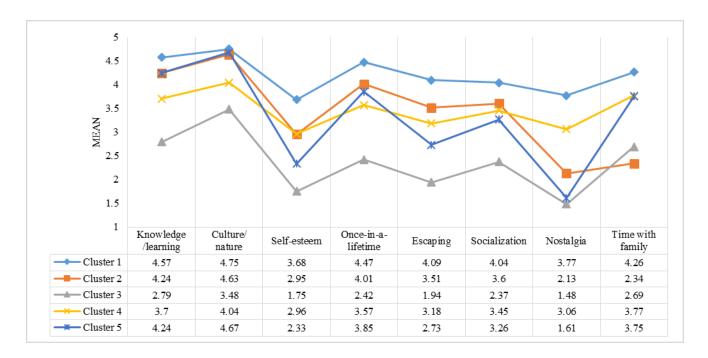


Figure 2. Results of cluster analysis using senior overseas travel motivations

Table 2. ANOVA results for travel motivation domains across different motivation clusters

	Cluster 1	Cluster 2	Cluster 3	Cluster 4	Cluster 5	<i>F</i> -value	p-
Motivation domains	(n=143)	(n=105)	(n=35)	(n=129)	(n=120)		value
Seeking knowledge/learning	4.57a	4.24 ^b	2.79 ^d	3.70°	4.24 ^b	86.87	.000
Experiencing culture/nature	4.75^{a}	4.63 ^a	3.48^{c}	$4.04^{\rm b}$	4.67^{a}	74.18	.000
Seeking self-esteem	3.68^{a}	2.95^{b}	1.75 ^d	2.96^{b}	2.33°	97.93	.000
Seeking once-in-a-lifetime experiences	4.47^{a}	4.01^{b}	2.42^{d}	3.57°	3.85^{b}	123.83	.000
Escaping	4.09^{a}	3.51^{b}	1.94 ^e	3.18^{c}	2.73^{d}	95.60	.000
Achieving a sense of socialization	4.04^{a}	3.60^{b}	2.37^{d}	3.45^{b}	3.26°	61.22	.000
Seeking nostalgia	3.77^{a}	2.13°	1.48^{d}	3.06^{b}	1.61^{d}	193.01	.000
Seeking time with family	4.26a	2.34 ^d	2.69 ^c	3.77 ^b	3.75 ^b	117.49	.000

Note: a, b, c, d, and e indicate sources of significant difference (a>b>c>d>e, p<.001).

Differences in tourism preferences across overseas travel motivation clusters

A series of one-way ANOVA tests was conducted to assess the main differences in seniors' preferences for tourism attractions and activities among the five motivation clusters. Significant differences (p<.001) were established for all four preferences. Detailed results are reported in Table 3.

Since Tukey's honestly significant difference for a post-hoc ANOVA test is more conservative (Hair et al., 2010), it was applied to determine the sources of significant differences. Regarding preference for urban tourism, seniors in clusters 1 and 4 were significantly different at the .001 level from those in clusters 2 and 5. People in Cluster 1 were most likely to prefer ecotourism among the clusters, whereas seniors in Cluster 3 were least likely to prefer urban and ecotourism. Those in clusters 1, 2, and 4 were significantly different at the .001 level from those in clusters 3 and 5. In terms of preference for health tourism, those in clusters 1 and 4 seniors were significantly different at the .001 level from those in clusters 2 and 5. Interestingly, seniors in Cluster 3 were least likely to prefer health and cruise tourism types.

Seniors in Cluster 3 were least likely to prefer historical attractions, whereas those in clusters 1 and 5 were most likely to prefer them. As for natural scenery, those in clusters 1, 2, and 5 were more likely to prefer this type of attraction than people in clusters 3 and 4. Also noteworthy is that cultural attractions were less likely to be preferred by those in Cluster 3.

Regarding preference for tourism activities at a destination, the mean scores of Cluster 1 were significantly higher than those of other clusters in terms of preference for outdoor activities, shopping, and dining. On the other hand, those in Cluster 1 revealed the highest preference for outdoor activities. Those in clusters 2, 4, and 5 reported a moderate preference for outdoor activities. However, people in Cluster 3 were the least likely to prefer all activities.

Table 3. ANOVA test results for preferred tourism attractions and activities for different

	Clustel	3					
Travel preference			F-	<i>p</i> -			
	1	2	3	4	5	value	value
Preference for tourism attraction types							
I prefer to engage in urban tourism	3.57^{a}	3.27^{b}	2.87^{c}	3.34^{ab}	3.13^{bc}	6.57	.000
I prefer to engage in ecotourism	3.44^{a}	3.20^{ab}	2.29^{c}	3.14^{ab}	3.03^{b}	10.77	.000
I prefer to engage in health tourism	3.19^{a}	2.70^{bc}	2.26^{d}	2.92^{ab}	2.43^{cd}	13.27	.000
I prefer to engage in cruise tourism	3.45^{a}	2.73^{b}	2.14^{c}	3.11 ^{ab}	2.74^{b}	12.16	.000
I prefer to visit historical attractions	4.50^{a}	4.25^{b}	3.66^{d}	3.95°	4.37^{ab}	15.35	.000
I prefer to visit attractions of natural scenery	4.67^{a}	4.49^{a}	3.80^{b}	3.96^{b}	4.53a	30.31	.000
I prefer to visit cultural attractions	4.61a	4.30^{b}	3.23^{d}	3.90^{c}	4.33^{b}	31.06	.000
Preference for activities							
I prefer outdoor activities at a destination	4.09^{a}	3.64^{b}	3.09^{c}	3.47^{b}	3.63^{b}	12.36	.000
I prefer shopping at a destination	3.77^{a}	3.03^{bc}	2.14^{d}	3.12^{b}	2.73°	22.33	.000
I prefer dining at a destination.	4.28a	3.95^{b}	2.77°	3.73^{b}	3.89^{b}	22.82	.000

Note: a, b, c, and d indicate sources of significant difference (a>b>c>d, p<.001).

Difference in socio-demographic features across overseas travel motivation clusters

A series of Chi-squared tests were conducted to examine statistically significant levels of association between the five clusters and socio-demographic variables, as shown in Table 4. Significant differences were observed across the five clusters at the .05 and .001 levels for gender and marital status. With regard to gender, Cluster 3 (57.1%) consisted mostly of men, while those in clusters 1, 2, and 5 predominantly comprised women. Regarding marital status, all clusters except Cluster 2 (54.3%) comprised married seniors. In contrast, the most obvious differences on marital status were observed in clusters 5 and 4 (70.8% and 69.8%, respectively). It is interesting that no significant difference at the .05 level was found for age, educational level, or annual household income across the clusters.

Table 4. Comparison of socio-demographic features across different clusters

Socio-demographic variables	Clusters					χ^2	<i>p</i> -
	1	2	3	4	5		<i>p</i> -value
Gender							
Female	62.2	65.7	42.9	52.7	66.7	11.10	.026
Male	37.8	34.3	57.1	47.3	33.3		
Age 55-59 years							
55-59 years	37.8	30.5	22.9	33.3	25.8		

35.7	38.1	40.0	28.7	36.7	12.85	.380
22.4	22.9	25.7	29.5	31.7		
4.2	8.6	11.4	8.5	5.8		
28.0	54.3	28.6	22.5	22.5		
64.3	31.4	65.7	69.8	70.8	49.01	.000
7.7	14.3	5.7	7.8	6.7		
21.7	24.8	14.3	34.1	29.2		
76.9	72.4	80.0	60.5	67.5	26.68	.320
1.4	2.9	5.7	5.4	3.3		
5.6	12.4	14.3	12.4	5.0		
24.5	28.6	17.1	20.2	25.8		
21.7	24.8	17.1	20.2	19.2	30.95	.056
23.1	16.2	20.0	23.3	13.3		
15.4	11.4	8.6	10.9	16.7		
9.8	6.7	22.9	13.2	20.0		
	22.4 4.2 28.0 64.3 7.7 21.7 76.9 1.4 5.6 24.5 21.7 23.1 15.4	22.4 22.9 4.2 8.6 28.0 54.3 64.3 31.4 7.7 14.3 21.7 24.8 76.9 72.4 1.4 2.9 5.6 12.4 24.5 28.6 21.7 24.8 23.1 16.2 15.4 11.4	22.4 22.9 25.7 4.2 8.6 11.4 28.0 54.3 28.6 64.3 31.4 65.7 7.7 14.3 5.7 21.7 24.8 14.3 76.9 72.4 80.0 1.4 2.9 5.7 5.6 12.4 14.3 24.5 28.6 17.1 21.7 24.8 17.1 23.1 16.2 20.0 15.4 11.4 8.6	22.4 22.9 25.7 29.5 4.2 8.6 11.4 8.5 28.0 54.3 28.6 22.5 64.3 31.4 65.7 69.8 7.7 14.3 5.7 7.8 21.7 24.8 14.3 34.1 76.9 72.4 80.0 60.5 1.4 2.9 5.7 5.4 5.6 12.4 14.3 12.4 24.5 28.6 17.1 20.2 21.7 24.8 17.1 20.2 23.1 16.2 20.0 23.3 15.4 11.4 8.6 10.9	22.4 22.9 25.7 29.5 31.7 4.2 8.6 11.4 8.5 5.8 28.0 54.3 28.6 22.5 22.5 64.3 31.4 65.7 69.8 70.8 7.7 14.3 5.7 7.8 6.7 21.7 24.8 14.3 34.1 29.2 76.9 72.4 80.0 60.5 67.5 1.4 2.9 5.7 5.4 3.3 5.6 12.4 14.3 12.4 5.0 24.5 28.6 17.1 20.2 25.8 21.7 24.8 17.1 20.2 19.2 23.1 16.2 20.0 23.3 13.3 15.4 11.4 8.6 10.9 16.7	22.4 22.9 25.7 29.5 31.7 4.2 8.6 11.4 8.5 5.8 28.0 54.3 28.6 22.5 22.5 64.3 31.4 65.7 69.8 70.8 49.01 7.7 14.3 5.7 7.8 6.7 21.7 24.8 14.3 34.1 29.2 76.9 72.4 80.0 60.5 67.5 26.68 1.4 2.9 5.7 5.4 3.3 5.6 12.4 14.3 12.4 5.0 24.5 28.6 17.1 20.2 25.8 21.7 24.8 17.1 20.2 19.2 30.95 23.1 16.2 20.0 23.3 13.3 15.4 11.4 8.6 10.9 16.7

Difference in preference for travel features across overseas travel motivation clusters

In addition, a series of Chi-squared tests were implemented to assess significant levels of associations between the five clusters and travel-related indicators. The results, presented in Table 5, indicate that significant differences were observed at the .001, .05, and .01 levels on preferred travel partner, preferred accommodation type, and information technology acceptance, respectively. In response to preferred travel partner, respondents in Cluster 5 (62.5%) showed the highest preference for spouses. Concerning preferred accommodation type, members in Cluster 5 (80%) reported the strongest preference. Lastly, the result on travel information technology acceptance showed that those in Cluster 1 (45.5%) and those in Cluster 3 (40%) reported fast acceptance of information technology, whereas members of clusters 2, 4, and 5 reported neither fast nor slow acceptance.

Table 5. Comparison of preferences for travel features across different clusters

Travel-related variables		Clusters					р-
	1	2	3	4	5	χ^2	value
Preferred travel duration (by flight)							
Less than 3	4.9	1.9	17.1	4.7	1.7		
3-6 hours	19.6	25.7	20.0	23.3	22.5		
7-10 hours	45.5	49.5	40.0	44.2	55.8	26.01	.054
11-14 hours	18.9	14.3	14.3	15.5	15.0		
15 hours or above	11.2	8.6	8.6	12.4	5.0		
Preferred travel partner							
Alone	7.7	24.8	14.3	4.7	5.0		
Spouse	47.6	27.6	57.1	56.6	62.5		
Friend	13.3	25.7	11.4	14.7	11.7	64.51	.000
Family	28.7	18.1	11.4	21.7	20.0		
Other	2.8	3.8	5.7	2.3	0.8		
Preferred accommodation type							
Budget/economy accommodation	15.4	20.0	31.4	24.8	13.3		
Mid-priced accommodation	72.0	68.6	57.1	69.8	80.0	15.89	.044
Upscale/luxury accommodation	12.6	11.4	11.4	5.4	6.7		
Preferred travel arrangement type							
Make my own travel arrangements	44.8	47.6	54.3	45.0	42.5		
Package tour	18.2	10.5	20.0	18.6	10.0	11.35	.183
Own + package tour	37.1	41.9	25.7	36.4	47.5		
Information technology acceptance							
Very slow acceptance	2.1	4.8	5.7	8.5	2.5		
Slow acceptance	9.1	10.5	22.9	17.1	15.0		
Not fast but not slow acceptance	43.4	45.7	31.4	51.2	52.5	28.75	.004
Fast acceptance	45.5	39.0	40.0	23.3	30.0		
Very fast acceptance	2.1	4.8	5.7	8.5	2.5		

Table 6. Summary of senior overseas travel motivation clusters

Motivation to travel abroad	Highest level on the motivation domains (mean=4.20)	High level on the motivation domains	Lowest level on the motivation domains	High to very high	Low to very low level
abroad			motivation domains		
	(mean=4.20)	(2.42)		level on the	on the motivation
		(mean=3.43)	(mean=2.37)	motivation domains	domains (mean=3.31)
				(mean=3.47)	
Motivation trait of	High motivation	High culture/nature,	Relatively high	High culture/nature	High culture/nature and
cluster		middle self-esteem,	culture/nature and	and family, and	family, and low self-
		low nostalgia	family but low others	middle self-esteem	esteem and family
Preference for type of	Very high level on	High level on the	Very low level on the	High to very high	Low to very low level
tourism	the preference for	preference for type of	preference for type of	level on the	on the preference for
	type of tourism	tourism items	tourism items	preference for type of	type of tourism items
	items (mean=3.41)	(mean=2.98)	(mean=2.29)	tourism items	(mean=2.83)
				(mean=3.13)	
Preference for tourism	Very high level on	High level on the	Very low level on the	Low to very low level	High to very high on
attraction	the preference for	preference attraction	preference attraction	on the preference	the preference for
	attraction items	items (mean=4.35)	items (mean=4.59)	attraction items	attraction items
	(mean=4.59)			(mean=3.94)	(mean=4.41)
Preference for tourism	Very high level on	High to very high	Lowest level on the	High on the	Low to very low level
activities	the preference for	level on the	preference for	preference for	on the preference for
	tourism activities	preference for	tourism activities	tourism activities	tourism activities items
	items (mean=4.05)	tourism activities	items (mean=2.67)	items (mean=3.44)	(mean=3.42)
		items (mean=3.54)			
Gender	Female	Female	Male	Female	Female
Marital status	Married	Single	Married	Married	Married
Preferred travel	More likely to travel	More likely to travel	Likely to travel with	Likely to travel with	More likely to travel
partner	with family	alone or with friend	spouse	spouse	with spouse
Preferred	More likely to prefer	More likely to prefer	More likely to prefer	More likely to prefer	Most likely to prefer
accommodation type	upscale/luxury	mid-priced	budget/economy	mid-priced	mid-priced
	accommodation	accommodation	accommodation	accommodation	accommodation
Information	Fast acceptance	Neither fast nor slow	Slow to fast	Neither fast nor slow	Neither fast nor slow
technology acceptance		acceptance	acceptance	acceptance	acceptance

Discussion and implications

The goal of this study was to segment senior travelers by their specific preferences and to examine differences in socio-demographic and travel-related characteristics among the segmented groups. The major findings are as follows. First, this study found eight motivation domains and five clusters of seniors' overseas travel motivations. Among the eight motivation domains, the highest mean was that of "experiencing culture/nature" (mean=4.55), followed by "seeking knowledge/learning" (mean=4.10) and "seeking once-in-a-lifetime experiences" (mean=3.84). By implication, advertising campaigns could thus include nature and cultural sites such as the Grand Canyon, Niagara Falls, a safari tour, or other pristine natural and cultural heritage. The importance of experiencing culture/nature is consistent with conventional assertions about the motivations of the senior market (Otoo & Kim, 2020; Sangpikul, 2008). Again, as people grow older, time with family becomes a means to improve their quality of life (Horneman et al., 2002; You & O'Leary, 1999).

Second, five clusters were identified by cluster analysis. A summary of the results is reported in Table 6. Interestingly, Cluster 1 may be the most attractive segment for senior tourism destination marketers. This group is characterized as highly motivated across all motivation domains and having a preference for upscale/luxury accommodation. It can be inferred that they may be high spenders and more likely to book a plush hotel during overseas travel. In addition, they are the only group to signal fast acceptance of travel technology. Although research has suggested that today's seniors have the expertise necessary to utilize travel information services, it suffices to understand that the senior segment with highest motivation to travel is also more disposed to being reached using online or via other travel

information technology (Kim & Preis, 2016; Kim et al., 2016). Meanwhile, it is interesting to note that they are more likely to travel with their families. Hence, family-oriented packages could appeal to this segment.

Third, members of Cluster 2 were highly motivated by culture/nature and to a middling degree by self-esteem. However, they were less motivated by nostalgia, implying that they are less likely to revisit a destination due to a memorable past experience. It is interesting that members of Cluster 2 tended to be unmarried, women, and prefer to travel alone or with friends. Packages oriented towards attracting the elderly solo female tourist gaze could be effective in targeting this segment. In addition, tourism types including shopping tourism, special food tourism, or a pleasant natural spa are among the strategies tour companies and destinations marketers can utilize. Opportunities for exotic dining experiences, for example, could encourage senior travel (Lehto et al., 2008).

Fourth, Cluster 3 represented the group with the lowest motivation. In terms of characteristics, it was the least attractive segment for senior tourism destination marketers as well as the least likely to use travel information technology. However, because its members are generally men and more likely to be highly motivated to experience culture/nature and to spend time with family, a specific package to capture this segment should comprise opportunities for outdoor recreation, budget/economy-type accommodation, a direct approach to advertising including word-of-mouth, and a package that includes the opportunity to travel with one's spouse.

Fifth, the members of Clusters 4 were notable for their preference for urban and ecotourism while demonstrating relatively high motivation for seeking culture/nature. This suggests that urban tourism is a common avenue of escape from the routines and stressors of

daily life (Horneman et al., 2002; Lieux et al., 1994). Concerning preferences for attraction type, the Cluster 4 segment reported a relatively higher preference for historical attractions and natural scenery and relatively high nostalgia. As they had relatively low motivation for culture/nature, it is expected that urban-based tourism activities such as city, shopping, museum, and golf tours, could attract this segment. Urban tourism destinations including Hong Kong, Paris, Dubai, Bangkok, Seoul, and London can benefit from attracting this segment.

Sixth, it is noteworthy that although Cluster 5 demonstrated low or very low scores on the motivation domains, its members tended to have high to very high interest in visiting historical attractions, natural scenery, and cultural attractions. This means that the type of offerings at a destination can inform their interest in overseas travel. In addition, the majority of seniors in this cluster could be attracted with mid-priced accommodation, given that their motivation to travel does not relate to seeking self-esteem or once-in-a-lifetime experiences.

Lastly, the study emphasizes the idea that some variables are better indicators for segmenting the senior travel market. For example, age was used as an important criterion for segmenting travel cohorts (Backman et al., 1999; Hong et al., 1999). However, the current study shows that gender, marital status, travel partner, accommodation preference, and acceptance of travel information technology are more useful means to segment the senior travel market. Thus, they become relevant to tour companies, senior tourism destination marketers, and hospitality services. The ability to target the right segment may translate to competitiveness of a tourism or hospitality destination or business.

Conclusion and suggestions for future research

As examples of senior travel trends indicate that seniors are increasingly taking overseas holidays, US seniors have been reported to spend more than their younger counterparts on tourism, entertainment, and restaurant meals (Fleischer & Pizam, 2002). Similarly, Śniadek (2006) reported that the buying potential of French seniors was €150 billion annually while that of US seniors was \$30 billion annually. Given industry trends, the information garnered from this study suggests that sociopsychological issues such as motivation can be used to segment senior travelers and provide more detailed information on their preferred tourism type, attraction type, and socio-demographic and travel-related characteristics. Senior tourism destination marketers, tour operators, resorts, and service managers should consider senior motivation as a tool to segment prospective senior travelers and should carefully consider the findings of this research.

Further research is essential to understand the nature of the senior travel market in terms of overseas travel motivations, preferences, and characteristics. It is clear from this study that this market is heterogeneous. Therefore, research using diverse methodologies and tools, such as choice modeling, can enhance marketing targeting this segment. Additional research is required to understand how segmentation affects specific generations of seniors, such as baby boomers and silent generations, using the variables in this study. As a final point, this study was limited to subjects who had traveled overseas in the past three years. Future research could explore those seniors who are not active travelers.

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