A Study of Older Adults' Travel Barriers by Examining Age Segmentation

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Abstract

With the Baby Boomers increasing in age and those 85 and over being the fastest growing age segment, the older adult population is increasing at a rapid rate. On a global scale, by 2030, the oldest old (85+) population is expected to have increased by 151 percent. As the population continues to gray, researchers have discovered there are numerous differences in the travel interests, preferences, and choices of individuals within different life stages of old-age. Clearly, the term "old-age" should no longer be viewed as an umbrella term or a uniform stage of life. Further segmenting older adults into different age groups will assist in determining patterns in older individuals' travel needs and interests, helping them to negotiate constraints. This study seeks to explore similarities and differences in constraints to travel amongst these four age brackets (pre-seniors: younger than 65; the young-old: 65-74; the old-old:75-84; and the oldest-old: 85+). The results from one-way analysis of variance revealed that respondents in different age groups reported significant differences in many respects regarding their reasons not to travel. In particular, the oldest-olds often expressed more conservative views when it comes to travel compared to pre-seniors and young-olds. This study suggests that future services and research on older travelers must recognize this fast growing trend in old age and reorient their efforts towards improving travel experiences for older adults within specific stages of late-life.

Keywords: Age segmentation, Travel barriers, Tourism

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Introduction

With the Baby Boomers increasing in age and those 85 and over being the fastest growing age segment, the older adult population is increasing at a rapid rate and will continue to do so (Dunkle, Roberts, & Haug, 2001). On a global scale, by 2030, the oldest old (85+) population is expected to increase by 151percent since 2005 and those 65 and over by 104percent, compared to only 21percent for those under 65 (UN Dept. of Economic and Social Affairs, 2005). Today, those who are 65 years old may expect to live an additional 18.6 years (Greenberg, 2009).

Research is revealing that life remains transitional long after age 65, meaning old-age should no longer be viewed as an umbrella term or a uniform stage of life (Lee, Chen, &Hewitt, 2011). As the population continues to gray, researchers have discovered there are numerous differences in the travel interests, preferences, and choices of individuals within different segments of old-age. Thus, viewing all persons 65 and above as part of a single stage of life is no longer an adequate way to study all old individuals. Researchers have proposed dividing older adulthood in to three segments: the young old (65-74), the old-old (75-84), and the oldest-old (85 +) (Suzman & Riley, 1985; Schaie & Willis, 2002, p. 79). The current study suggests that such age-segmentation in later life will assist in determining patterns in older individuals' travel needs and interests, helping them to negotiate constraints.

An increasing number of older adults will consequently result in older travelers. A number of researchers have already documented that travel remains an important part of life for older individuals (McGuire, Boyd & Tedrick, 2004, p. 192; Rosenfeld, 1986; Blazey, 1992, p. 776; Sugerman, 2000, p. 12). Older adults have been recognized as a sizable market for the tourism industry (Backman et al., 1999; Lee, Greafe, & Obenour, 2008; Reece, 2004; Shoemaker, 1989, 2000).

This means that the leisure and tourism industry should reposition them appropriately to pay attention to the travel needs and preferences of the older population. However, few researchers interested in travel and tourism has further investigated differences in various segments of old-age. Hong, Kim, & Lee (1999) conducted travel expenditure research on elderly households. In their study, segmentation of old-age within tourism research was employed It was noted by the authors that researchers prior to their study viewed those over 65 as a homogenous group and failed to distinguish the differences within this large group of people.

They divided participants in to young-old (55-64), old (65-74), and very old (75+). As a result, they found the "young-old," well-educated baby boomers often went on more vacations than their counter-parts, suggesting that the more educated and economically affluent baby boomers may be a significant market for higher cost forms of travel and vacation.

The findings of Hong et al.'s (1999) study have important implications for the tourism field in terms of socio-economic factors that may constrain travel for some older adults while liberating others. However, very little research involving age-segmentation has been conducted since this study. Given the fact that there are many recognized benefits for older persons who travel during their leisure time (McGuire, Boyd, & Tedrick, 2004), more research is needed to uncover what may impede older adults in varying age segments from travel. In the current study, "older adults" are divided in to pre-seniors (younger than 65), the young-old (65-74), the old-old (75-84), and the oldest-old (85+). This study seeks to explore similarities and differences in constraints to travel amongst these four age brackets. Ideally, with the publication of this study and similar to follow, the tourism industry will soon be able to position their services so as to be compatible with the needs of older adults from varying cohorts and socioeconomic backgrounds, significantly improving customer satisfaction across a broad range of customers.

Literature Review

With the expansion of older adults and prior research documenting that travel and tourism remains important to those constituting this part of the population (McGuire, Boyd, & Tedrick, 2004, pp 192; Blazey, 1992:776), there is a need for research to determine how tourism service providers can help the older population overcome constraints and continue to have the desire to travel for their leisure. In the past two decades, tourism and leisure researches have revealed that a number of constraints to travel exist for those who are 65 and over (Blazey, 1992; Kazeminia, Chiappa, & Jafari, 2013; Alon, Shitrit, & Chowers, 2010). Of those identified barriers, health status could potentially be a severe constraint to travel for those of the old-old, and especially oldest-old. Patterson (2006) found that during the early retirement age, a tendency to travel increases; however, once an individual's health begins to deteriorate, time spent traveling will decrease.

The research literature has recorded that older adults experience physiologic constraints when compared to young people; however, in most cases, the samples used in these studies consisted of participants across broad ranges of old-age and did not compare differences between the young-old, old-old, and oldest-old. For example, Alon, et al. (2010) found in their comparison of physiologic constraints to travel between younger travelers in their 20s and older travelers between 60 and 82 that among the older participants, hypertension, hyperlipidemia, and cardiovascular diseases make travel more difficult.

Gautret, Gaudart, & Leder, et al. (2012) found in their comparison of younger travelers 18 to 45 and older adults between 60 and 98 that older travelers are also more susceptible to diseases contracted while on a trip. The participants between 60 and 98 were at a heightened risk of contracting severe malaria, rickettsiosis, or urinary tract infections. They were also more likely to suffer from altitude illnesses or traumatic injuries. While 60 to 98 is an age range of 38 years, it is important to note that 22% of the older travelers in this study were over 70 (Gautret et al., 2012), suggesting that health concerns may pose the largest issue for the old-old and oldest-old.

Further exploring the increased vulnerability of older adults during travel, Alon, et al., (2010) compared the travelers between 60 and 82 and those in their 20s, finding that some older travelers reported headache and dizziness compared to none of the travelers in their 20s. The older travelers experienced accidents nearly resulting in falls. One older traveler even underwent surgery for a fracture sustained during his vacation and another was diagnosed with diabetes immediately following his travels, exemplifying the decrease in flexibility and increase in disease that often accompanies increasing age (Alon et al., 2010). Even though older travelers seem less capable of disease resistance while travelling, they are less likely to seek pre-travel advice and medical examinations than younger travelers (Gautret et al., 2012).

It is critical that older adults receive all routine immunizations and their doctors ask if they plan to travel so that any additional immunizations that are needed can be given (Spain & Edlund, 2010). These exams will also allow doctors to determine if there are any health issues that could impact the individual's ability to travel or if traveling could worsen current conditions (Spain & Edlund, 2010).

Doctors should coordinate with travel agencies to ensure older travelers are prepared to safely travel to particular regions. Other studies that have focused on comparison between older travelers and younger travelers have indicated that older adults are more susceptible to environmental factors. Older travelers prefer well-organized trips over high risk, rugged endeavors often enjoyed by many young men (Alon et al., 2010; Aro, Vartit, Schreck, et al., 2009). In Gautret et al.'s report (2012), older adults were found to be susceptible to altitude related cardiac and respiratory issues, suggesting that undergoing pre-travel medical assessments and taking preventative measures when hiking, such as progressive acclimatization to altitude or use of acetazolamide, may reduce susceptibility.

Blazey (1992) found in his study that retired travelers between 50 and 85 also prefer to visit destinations they are familiar with and that again, involve less adventure, compared to unretired travelers who enjoy novel vacations. Therefore, pre-arranged, tour like activities or outdoor sites made accessible through bridges and paved trails may be important for travel experts to consider when trying to attract older travelers (Alon et al. 2010). Older adults are also at a higher risk for sun damage and should take extra care to use sunscreen and other protective measures (Schindler, 2005). As people age, they also become more sensitive to heat, meaning older adults, especially the old-old and oldest-old, are at a heightened risk for dehydration and heat exhaustion (Schindler, 2005; Schlaudecker, Moushey, & Schlaudecker, 2013).

Distance and place of residence also play a major role in constraint related travel. Davis, Fox, & Hillsdon et al. (2011) found in their study of physical activity among older adults between the ages of 70 and 90 that those who use walking or mobility aids, live in more deprived areas, and live in households with one or no car were significantly less likely to take weekly trips to visit friends or family, shop, for entertainment or hobby purposes, to go to the doctor, or to attend religious functions. Laverty, Palladino, Lee, & Millet (2015) found in their comparison of travel by foot or bike between older and younger individuals that only those over 70 were significantly less likely than those between 18 and 49 to engage in these modes of travel. Those with a difficult time walking, who live in economically disadvantaged areas, or who do not own or have access to a car will thus be less likely to engage in tourism related travel.

Driving also decreases with increasing age. Those in Davis et al.'s (2011) study between the ages of 70 and 74.9 and high in physical function made five times as many weekly trips by automobile than those over 85 or low in physical function. This finding suggests that the young-old should be a primary target for travel destinations attainable by automobile for residents in local or nearby regions. In their systematic review of research analyzing how older individuals can overcome barriers to mobility, Baert, Gorus, & Mets et al. (2011) pointed out that no studies gave exclusive attention to those over 80, highlighting the need for more research focusing on the old-old and oldest-old, which will help these groups of people both improve their health and continue to travel. Traveling in a group or with a companion may help individuals who no longer drive to overcome this barrier.

A lack of companionship is a key constraint found amongst older adults aged 70 to 99 (McCluskey, Thurtell, Clemson, & Kendig, 2011). Kazeminia et al. (2015) found that physical issues and a lack of companionship are the two major travel constraints amongst the senior population. Socio-emotional Selectivity theory suggests that emotional closeness to family increases throughout adulthood (Carstensen, 1992), which suggests that older travelers may find traveling with family emotionally rewarding. Gladwell & Bedini (2004) studied the impact of care giving on leisure travel, finding that caregivers and care recipients traveling together makes travel a meaningful part of life for both participants.

This suggests that travel companionship may emerge as a new service to help older adults who are physically frail or do not have family to travel with them, particularly the old-old and oldest-old, to continue to make travel a part of their lives. Kazeminia et al. (2015) found in their analysis of online travel discussions that one of the major discussions was "how to find a travel partner." Several members of online communities in the study said they find traveling with children, grandchildren, partners, or other close relatives very gratifying. Discussions were also identified regarding ideas of forming small travel groups with other older adults. A 60-year old woman in the study commented that even the organization of the trip would be better conducted through a group rather than an individual effort (Kazeminia et al. 2015). As age increases, older travelers are more likely to become widowed or lose travel partners. Traveling in groups was found to be a support system for those who are physically disadvantaged, in need of finding new travel companions, or looking to minimize risk and uncertainty (Kazeminia, et al. 2015).

Finances are yet another major constraint to travel for older adults. This is an area that will especially require analysis within each of the three age segments of older adulthood because the Baby Boomers tend to be more educated and economically affluent than their parents' (the oldest-old) generation (Muller & Cleaver, 2000; Patterson, 2002).Kazeminia et al. (2015) found that some older adults engaging in online travel discussions mentioned having to shorten their stay due to cost. Even technological constraints have been encountered when trying to make travel arrangements online.

The cost of medical and travel insurance can even pose a barrier to travel for older adults, especially the old-old and oldest-old, which tend to have the most severe health conditions and be on the greatest number of medications (Schindler, 2005). Tourism professionals should strive towards continuing to offer luxury vacations for Baby Boomers while at the same time, making vacations more financially feasible for those who fall in to older segments of old-age.

In sum, numerous researchers have reported that constraints often stand between older individuals over 65 and travel (Alon et al., 2010; Gautret et al., 2012; Kazeminia et al., 2015; McCluskey, Thurtell, Clemson, & Kendig, 2011; Laverty, Palladino, Lee, & Millet, 2015; Davis et al., 2011; Schlaudecker, Moushey, & Schlaudecker, 2013; Schindler, 2005); however, with the exception of few groundbreaking studies such as Hong et al.'s (1999) cross-sectional study nearly 20 years ago, few researchers within the tourism field to date have divided older adulthood in to different segments. The current study divides older adults in to pre-seniors (younger than 65), the young-old (65-74), old-old (75-84), and oldest-old (85+) with the intention of unveiling similarities and differences in constraints to travel that the existing literature has yet to discover, informing tourism professionals of how to best serve multiple cohorts and individuals within a rapidly expanding portion of our population.

Methodology

Data were collected during the years 2012-2015, mainly in the Northwest region of the state of Ohio. College student volunteers were recruited to conduct in-person interviews.

A questionnaire and an interview instrument were developed after a systematic literature review was conducted, along with the administration of a focus group (N=5, age ranged from 64-78). The questionnaire includes four sections: demographics, health status, leisure life style, and travel activities.

The measuring constructs in the analysis include perceived health status, reason not to travel, taking a vacation in the past 12 months, encountering health problem on the trip, and demographic information. Among these variables, perceived health status and reason not to travel were operationalized with a five-point Likert scale, where 1 equals strongly disagree and 5 equals strongly agree, with higher scores indicating having more health problems or difficulties to travel. For example, the respondents were asked to indicate their agreement to these questions: "In general, you feel good about your health status;" "you don't take a vacation because you cannot drive a car anymore." Encountering a health problem during the trip and taking a vacation in the past 12 months were answered with Yes and No answers. Then standard demographic questions were asked for age, gender, race, marital status, education level, and household income. As a result, a total of 423 questionnaires were completed.

Data analysis was conducted with SPSS software, version 17.0. Both descriptive and inferential statistics were employed for data analysis. The descriptive method documented respondents' social demographic information and mean score descriptions of perceived constraints for reasons not to travel. The chi-square test was used to examine differences among the four age segments regarding whether or not they took a vacation trip in the past 12 months. Finally, one-way analysis of variance was used to determine whether statistically significant differences existed among mean scores of the perceived constraints as reasons for not to travel and post-hoc analysis was used to further examine where differences exist among the four sub-groups.

Results

The participants were predominantly older women (65.5%, N = 272), and constituted about two-thirds of respondents. The age of the sample ranged from 60 to 96 with a median age equating to 77.5 years. Of 423 respondents, 19.5% were pre-seniors (N=83), 44% were young-old (N=184), 27% were old-old (N=113), and 10% were the oldest-old (N=42).

The majority of participants were still married (N=254, 61%), while 35% (N=144) were widowed and a small portion (N= 17; 4%) reported they were never married. Table 1 documents this demographic information.

Table 1: Demographic Profiles

Age	N	%
60-64	83	19
65-74	184	44
75-84	113	27
85+	42	10
Gender		
Male	148	35.5
Female	269	65.5
Marital status		
Married	254	61.2
Widow	144	34.7
Never married	17	4.1

Further, descriptive statistics revealed that 71 % of respondents reported they had taken a vacation in the past 12 months, vs. 29% who did not do so. This result was further examined by breaking respondents into four age-segmented groups and running a chi-square analysis. The cross-tabulation showed significant differences among the four age-segmented groups. Interestingly, 70% of the pre-senior, young old, and old-old groups all reported having taken a vacation in the past 12 months, while over half of the oldest-old (54.1%) indicated they did not do so (Figure 1).

Figure 1: Comparison of statement "has take a vacation in the past 12 months across groups"
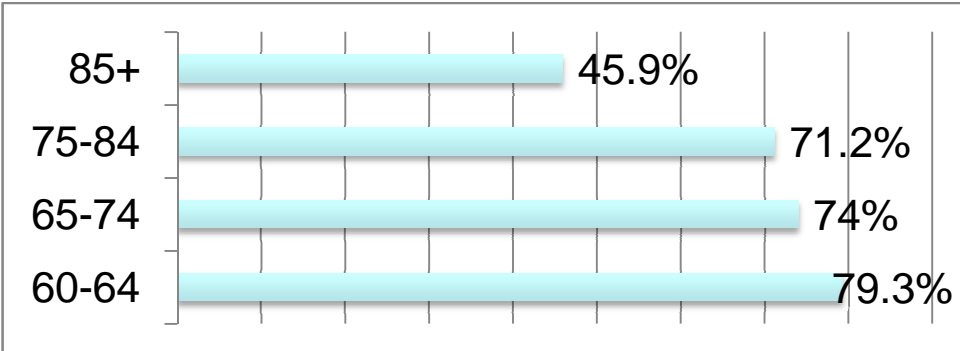
Descriptive statistics in Table 3 indicated the constraint items that were rated with the highest and lowest mean scores. The item with the highest mean score was "I will go if a family member will go with me (mean = 3.48)." The perceived constraint with the lowest mean score was "I cannot drive a car anymore (mean = 1.64)" Most constraint items were rated with a mean score below 2.0 based on a 5 point Likert-type scale. This indicates that on average, respondents tended to disagree with identified constraint statements with the exception of the item "I will go if a family member will go with me" which was positively coded (differently from others items).

Table 2: Descriptive statistics for perceived constraint items

Constraint items	N	M	SD
No Interest	414	1.91	1.19
No Money	413	2.41	1.20
No one to go with me	415	1.87	1.10
Don't know where to go	413	2.00	1.10
No time	415	2.05	1.18
Will go if family go with me	413	3.48	1.24
Too old to travel	414	1.85	1.18
Cannot drive anymore	411	1.64	1.13
Don't like to meet a stranger	413	1.69	.96
My health can't afford to travel	414	1.81	1.06

The results from the one-way analysis of variance revealed that significant differences existed in many respects regarding reasons not to travel, including "no money," "no time," "cannot drive anymore," "don't want to meet a stranger" and "health condition cannot afford me to travel" (Figure 2). The Bonferroni Post-hoc test was then run to discover where differences occur among the four age groups regarding these items. The respondents in the oldest old group expressed their most significant concern is their health status when it comes to their reason for not traveling ($F=10.6$, $P<.000$), while pre-seniors indicated that they are significantly short of time ($F= 5.5$, $p< .001$) and money ($F=3.8$, $p< .01$) used to travel compared to the old-old and oldest old respondents. The oldest olds also indicated that they don't want to meet a stranger as another reason for them not to travel, which is significantly different from the other three groups ($F=6.4$, $p<.000$).

For the items of "feel too old to travel" and "cannot drive a car anymore," both the oldest old and old old showed significant differences from the other groups of respondents (F= 23.2, p<.000; F=19.3, p<.000); while no difference was found between young-old and pre-seniors. Table 3 displays results of the post-hoc test from a one-way ANOVA, dividing respondents in to four subgroups.

Figure 2: Significant differences revealed among four age-segmented groups
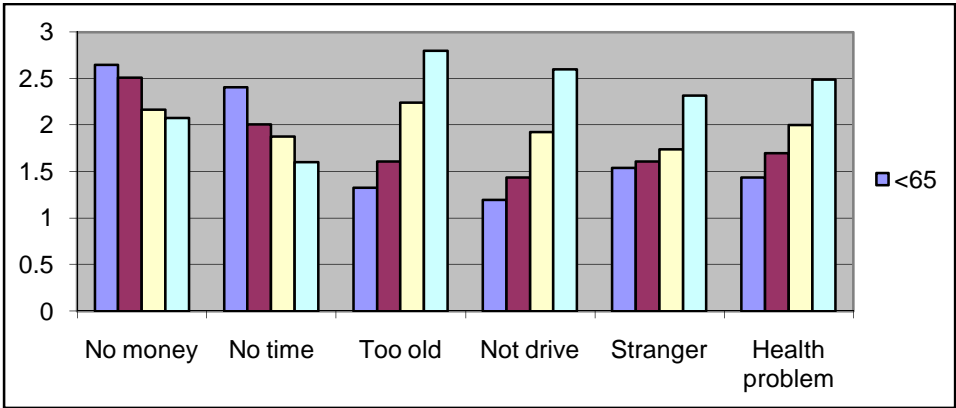
| F | 3.8 | 5.5 | 23.2 | 19.3 | 6.4 | 10.6 |
| p | <0.01 | <.001 | <.000 | <.000 | <.000 | <.000 |

Table 3: Post-hoc test of differences among four aged-segmented groups

Age	No $	No Time	Too old	Not Drive	Meet a Stranger	Health Issues
60-64	2.64^a	2.43^a	1.33^a	1.20^a	1.54^a	1.44^a
65-74	2.51^a	2.06^b	1.61^b	1.44^a	1.61^a	1.71^b
75-84	2.17^{ab}	1.88^{cb}	2.24^c	1.93^b	1.74^a	2.00^c
85+	2.1^b	1.60^c	2.80^d	2.60^c	2.31^b	2.48^d
* Different superscripts indicate statistically significant difference between groups						

The study also revealed that there are a few shared perceived constrains across the four age-divided groups, including no interest (mean = 1.2), no one to go with (mean=1.8), nowhere to go (mean =2.0) and will go if family members go with me (mean = 3.5).

Discussion

This study attempted to investigate the perceived constraints to travel among older adults at various stages of later life to determine specific travel-related barriers associated with age-segmented older adults. Taking a vacation for leisure-related travel can be very beneficial to one's physical and mental health (Matthews, 2003, as cited in Wilson, 2009). Recognizing such potential travel barriers will allow older individuals to negotiate these constraints, helping them to take more vacation trips.

This study compared oldest-olds with pre-seniors, the young-olds, and the old-olds, finding that significant differences exist regarding their perceived constraints to travel. The oldest-old adults were different from pre-seniors and young-olds, but in many cases, were similar to those respondents in the old-old categories. They expressed a great deal of concern regarding their health conditions when it comes to travel. This is a consistent finding with previous research in both leisure and gerontology studies that revealed a significant change in individual health status once reaching 75 years of life (Beales & Tulloch, 2013,) Similarly, research in the tourism field has found that older folk tend to show a high peak in travel during their early retirement years, then slow down when they reach age 75. The findings of this study support those of previous research and further validate the existing knowledge regarding constraints for older travelers.

Further, the oldest-old rated high on no-interest to meet strangers as their reason for not to travel in comparison with all of their other counterparts (pre-seniors, young-old and old-old). In tourism research, it has often been reported that meeting a new friend is a motivation for some people to travel. However, in gerontology study, the Socio-Emotional Selectivity Theory suggests that an individual's emotional closeness to loved ones increases as they age (Carstensen, 1992). Clearly, this study supports the Socio-Emotional Selectivity Theory. Thus, to meet someone new may not be a good motivation for all older folk, instead, offering the opportunity to spend time with family and friends could be a motive for these senior participants. This statement can also be evidenced from the shared constraint among all four age-segmented groups: "will go if a family member will go with me." This means that older adults across all age segments show a strong interest in traveling with a family member's companionship.

The oldest-old and the old-old showed significant differences on the items of "feel too old to travel" and "cannot drive a car anymore" from the other age groups, while the young-old perceive this item on the same constraint level as pre-seniors. In tourism study, the research community suggests that during the earlier retirement years, travel tendencies increase. In the current study, we found many older people did not feel they are too old to travel until they reached age 75 and beyond. Therefore, our study is consistent with previous research.

Finally, the oldest-old showed no difference from the young-old and old-old, but disagreed with pre-seniors on the item of "no time" as a barrier to travel. It is understandable that the pre-seniors younger than 65 are likely still in the workforce and have to commit to their work instead of travel, while retired people, which includes all three of the other age groups, rated significantly lower on the constraint item of "no time." As far as rating on the item of "no money" to travel, the oldest-old and old-old dispatched themselves significantly from pre-seniors and young-olds. The latter clearly rate themselves as more conservative when it comes to travel expenses, which may partially explain why most of them still remain in the workforce.

In sum, when one grows into the life stages of the old-old and the oldest-old in their life course, they tend to have more concerns and issues regarding their health and intrapersonal constraints (Crawford, Jackson, & Godbey, 1991).However, with the accumulation of a life-time of savings and plenty of free-time in their hands, the old-old and oldest-old do not see "no time" and "no money," which are critical assets for the travel industry, as problems for travel. We believe that further research unfolding how older persons can negotiate constraints will allow them to enjoy the many benefits of traveling for leisure late in life.

Research implications and limitations

This research has found that older adults do not like to meet strangers when growing into advanced age. Instead, growing closer to family and friends is often their preference. Thus, unlike the often-used strategy by many travel agencies to promote travel: "To meet new people" or "make new friends," agencies should instead arrange opportunities for older people to travel with family members or already close friends.

For example, offering a travel package that entails buying one and getting the second at half price for transportation or hotel costs could be used to encourage companionship with friends and family.

Another implication from the findings of this study is that as our life expectancy continues to increase and the life course of many individuals already in their later life stages continues stretching, clearly, individuals' interests, preferences, and needs start to become distanced from each other. We found older adults in four different age-segments perceived their health condition, aging process, and travel preferences differently when they come to reasons not to travel. Therefore, services and research on older travelers must recognize this trend and reorient their efforts towards improving travel experiences for older adults within specific stages of late-life.

While the findings of this study have contributed to the research and tourism service communities, still, no research can be immune from limitations. This research has a few shortcomings due to a non-random sampling method used for the data collection. This study relied on available, convenient subjects; consequently, this may have threatened its external validity. Thus, it may be limited in its ability to be generalized to the entire population.

The other limitation of this study is its low sample size for the oldest-olds. According to the National Institute on Aging's report, the older population who are 85andover is projected to be the fastest growing segment (increase by151 percent by 2030). A rapidly-growing number of individuals in this segment in the near future may result in a threat to the external validity of this research. Consequentially, this study may soon not be considered as representative of the entire oldest old population. For future studies, we recommend increasing the sample size of oldest olds or using weighted adjustment techniques to allow for the sample to represent the true population. Regardless, the results of this study will certainly alarm professionals who provide services in the tourism and leisure industry to further differentiate preferences among older adults in various later life stages to ensure specific needs are being satisfied among the pre-senior, young-old, old-old and oldest-old individuals.

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