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The holiday-related predictors of wellbeing in seniors

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ABSTRACT

There has been an increase in research on the relationship between holidays and wellbeing in the last decade. However, only a few studies have investigated this association in seniors and the impact of holiday-related predictors of wellbeing is understudied. The aims of this study were to: 1) compare the profile of senior tourists and senior non-tourists on socio-demographic indicators, health, physical activity, and social relations, 2) compare the profile of senior tourists and senior non-tourists on wellbeing, after adjusting for control variables, and 3) examine the impact of holiday-related predictors (frequency, mean duration, frequency of physical, social, cognitive and relaxing activities, degree of perceived health benefits) on wellbeing of senior tourists, over and above the role of various relevant covariates. A sample of 4130 seniors ($M_{age} = 68.2$ years, $SD = 5.8$, range 60–85) filled out a questionnaire related to the last holiday, daily activities, health, and wellbeing. Results showed that senior tourists were younger, more educated, wealthier, and healthier than senior non-tourists. In addition, the levels of wellbeing were higher in senior tourists compared to senior non-tourists, after adjusting for control variables. Hierarchical regressions analyses revealed that frequent holidays, a greater frequency of social and cognitive activities, as well as the degree of perceived health benefits were associated with higher wellbeing.

RESUMEN

Ha habido un incremento en la investigación sobre la relación entre las vacaciones y el bienestar durante la última década. Sin embargo, sólo unos pocos estudios han investigado esta asociación en los mayores y el impacto de los predictores relacionados con las vacaciones y el bienestar está sin estudiar. Los objetivos de estudio eran: 1) comparar el perfil de los mayores turistas y no-turistas en cuanto a indicadores socio-demográficos, salud, actividad física y relaciones sociales; 2) comparar el perfil de los mayores turistas y no turistas en bienestar, tras ajustar las variables de control; y 3) examinar el impacto de los predictores relacionados con las vacaciones (frecuencia, duración media, frecuencia de las actividades físicas, sociales, cognitivas y de relax, grado de beneficios percibidos en la salud) en el bienestar de los turistas mayores, más allá del rol de varias covariaciones relevantes. Una muestra de 4.130 mayores ($M_{edad} = 68,2$ años, $SD = 5.8$, rango 60–85) completaron un

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cuestionario relacionado con sus últimas vacaciones, actividades diarias, salud y bienestar. Los resultados mostraron que los turistas mayores eran más jóvenes, con mayor nivel de educación, con mayores ingresos y gozaban de mayor salud que los mayores no-turistas. Además, los niveles de bienestar eran superiores en los turistas mayores comparados con los no-turistas, tras ajustar las variables de control. El análisis de regresiones jerárquicas reveló que las vacaciones frecuentes, una mayor frecuencia de actividades sociales y cognitivas, así como el grado en el de beneficios percibidos para la salud estaban asociados con un nivel de bienestar más elevado.

RÉSUMÉ

La recherche sur la relation entre les vacances et le bien-être a connu un grand développement au cours de la dernière décennie. Cependant, seules quelques études se sont penchées sur cette association parmi les personnes âgées et il n'y a pas eu d'études sur l'impact des prédicteurs de bien-être liés aux vacances. Les objectifs de cette étude étaient: 1) de comparer le profil des touristes seniors et les seniors non-touristes sur les indicateurs sociodémographiques, la santé, l'activité physique et les relations sociales, 2) comparer le profil des touristes seniors et des seniors non-touristes en ce qui concerne le bien-être, après ajustement en faveur des variables de contrôle, et 3) examiner l'impact des facteurs prédictifs liés aux vacances (fréquence, durée moyenne, fréquence des activités physiques, sociales, cognitives et relaxantes, degré des bénéfices pour la santé) sur le bien-être des touristes seniors en tenant compte du rôle de diverses covariables importantes. Un échantillon de 4 130 seniors (Moyenne = 68,2 ans, écart-type = 5,8, intervalle de 60 à 85) a rempli un questionnaire portant sur les dernières vacances, les activités quotidiennes, la santé et le bien-être. Après ajustement tenant compte des variables de contrôle, les résultats ont montré que les touristes seniors étaient plus jeunes, plus éduqués, plus riches et plus en santé que les seniors non-touristes. De plus, les niveaux de bien-être étaient plus élevés parmi les touristes seniors que chez les seniors non-touristes. Les analyses de régressions hiérarchiques ont révélé que des congés fréquents, une plus grande fréquence d'activités sociales et cognitives, ainsi que le degré d'avantages pour la santé étaient associés à un bien-être plus élevé.

摘要

在过去的十年之间，对假期与健康之间关系的研究有所增加。然而，只有少数研究调查了老年人和幸福感的关系，幸福感的假期相关的预测指标没有得到充分的研究。这项研究的目的是：1）比较老年游客和老年非游客在社会人口指标、健康状况、身体活动和社会关系的情况， 2）在调整控制变量之后，比较老年游客和老年非游客的幸福感的状况，3）研究假期相关的预测指标（频率，平均持续时间，身体、社交、认知和放松活动的频率，感知健康效益的程度）对老年游客幸福感的影响，以及各种相关协变量的作用。在一个 4,130名老年人的样本中（中位数 = 68.2岁，标准差 = 5.8，范围 60–85）填写了与上次假期、日常活动、健康和幸福感有关的问卷。结果显示，老年游客比老年非游客更年轻，受教育程度更高，更富有，更健康。此外，调整控制变量后，老年游客的幸福感水平高于老年非游客。层次回归分析显示，经常度假，社交和认知活动的频率较高，以及感知健康益处的程度与较高的幸福感有关。

Introduction

For a long time, tourism has been mainly considered an economic activity. However, with the increasing number of studies on social tourism and the association with wellbeing, tourism research has shifted to a more social science approach. Thus, tourism started to be considered a social force (Higgins-Desbiolles, 2006), robustly connected to individuals' wellbeing and health. As argued by Smith and Diekmann (2017), tourism studies have extended over time to other disciplines such as psychology and have become more focused on wellbeing in the last few decades. Taking a holiday[1] contributes to the quality of life as they favor social interaction, personal development and individual identity (Richards, 1999). In that perspective, some authors describe the wish to depart for a holiday as a primary desire essential to the quality of life and as a psychological need to slip away from daily life pressure and/or boredom (Richards, 1999; Urry, 1995).

To date, the links between holidays and wellbeing of people have been demonstrated in literature (Chen & Petrick, 2013). However, there are few studies that have been focused on the potential benefits of holidays on wellbeing in seniors (Balderas-Cejudo, Leeson, & Urdaneta, 2017; Ferrer, Sanz, Ferrandis, McCabe, & Garcia, 2016; Gu, Zhu, Brown, Hoenig, & Zeng, 2016). Many tourism studies investigated the profile of the senior market (e.g. Alén, Losada, & de Carlos, 2017) but little is known about the links between the factors associated with holiday experiences and wellbeing in senior tourists.

This study contributes to the tourism literature by providing a psychological perspective on the relationship between holidays and wellbeing in a large sample of seniors. The first approach will consist in comparing the profiles of senior tourists and senior non-tourists on various factors such as socio-demographic indicators, health, general physical activity, and social relations. Second, the association between taking holidays and wellbeing will be examined after adjusting for control variables. In addition, this study responds to a gap in knowledge by exploring the unique contributions of various holiday-related factors, such as type of activities, duration, frequency and perceived benefits, on wellbeing of senior tourists, over and above the role of relevant covariates.

Below, we provide a review of the literature on the links between holidays-related factors and wellbeing of seniors and a description of objectives of this study, following by a description of the method used and data analyses performed. We then present findings from our analyses in relation to research questions, discuss these findings and provide a short conclusion on key findings of this study.

Literature review and objectives

Research has shown that holidays contribute positively to health and wellbeing of people (Diekmann & McCabe, 2016; Wei & Milman, 2002). Multiple studies have documented the positive association between holidays and wellbeing (e.g. De Bloom et al., 2010; Gilbert & Abdullah, 2004; Wei & Milman, 2002), life satisfaction (e.g. Sirgy, Kruger, Lee, & Yu, 2011), quality of life (e.g. Dolnicar, Yanamandram, & Cliff, 2012; Kim, Woo, & Uysal, 2015; Richards, 1999; Sirgy, 2010), positive emotions (e.g. Mitas, Yarnal, Adams, & Ram, 2012) and happiness (e.g. Nawijn, 2011). According to Minnaert and Schapmans (2009), tourism participation can be considered as a form of social intervention tool. Indeed, as pointed out by several studies, holidays have the potential to bring

benefits to disadvantaged and even excluded individuals' wellbeing such as the senior citizens (e.g. Dann, 2001; McCabe & Johnson, 2013; Minnaert & Schapmans, 2009). However, despite an increasing number of studies conducted in recent years (Ahn & Janke, 2011; Ferrer et al., 2016; Gu et al., 2016; Hunter-Jones & Blackburn, 2007; Jia et al., 2016; Kim et al., 2015; Moal–Ulvoas & Taylor, 2014; Morgan, Pritchard, & Sedgley, 2015; Nimrod, 2008; Nimrod & Rotem, 2010, 2012; Staats & Pierfelice, 2003; Toepoel, 2013; Wei & Milman, 2002), the relationships between holidays and seniors' wellbeing is still unclear (Balderas-Cejudo et al., 2017; Chen & Petrick, 2013; Gu et al., 2016). Specifically, the existing literature is characterized by a large, heterogeneous spectrum of operationalizations of wellbeing such as psychological wellbeing (Wei & Milman, 2002), life satisfaction (Ferrer et al., 2016), quality of life (Kim et al., 2015), happiness (Staats & Pierfelice, 2003), mood state (Jia et al., 2016), affects (Staats & Pierfelice, 2003) or self-rated health (Gu et al., 2016). In psychology, wellbeing has widely been conceptualized as including two main components (Diener, Oishi, & Lucas, 2003): a positive evaluation of one's life (i.e. life satisfaction, the cognitive component) and everyday positive feelings and moods (i.e. happiness, the affective component). However, in the previous studies, these two components of wellbeing were not systematically taken into account. Another limitation of the majority of the existent studies is that they did not focus on the holiday-related factors specifically associated with wellbeing of senior tourists. Indeed, only a limited number of studies have examined the specific role of different holiday-related activities (e.g. physical, social, cognitive, relaxing) for wellbeing in senior citizens (Kim et al., 2015).

Some scholars did explore the possible mechanisms that could explain the potential benefits of holidays on seniors' wellbeing. Although the psychological dimension of wellbeing was not considered, Gu et al. (2016) recently suggested possible mechanisms that can explain the potential benefits of holidays on seniors' self-rated health: increase of cognitive functioning (e.g. learning experiences, interpersonal communication), frequency of exercises (e.g. walking), social interactions, self-esteem, personal development, and decrease of perceived stress (thanks to escaping of the stressful routine environment). Participation in activities during the holidays represents an important factor associated with the wellbeing in senior tourists (Kim et al., 2015; Nimrod & Rotem, 2010, 2012; Wei & Milman, 2002). The increase of the frequency of activities on holidays has often been reported in studies to explain the potential benefit of a holiday on seniors' wellbeing (Kim et al., 2015). The activity theory (Havighurst, 1961) postulates that 'being involved and maintaining the activities and social interactions of middle age for as long as possible is essential to wellbeing' (Nimrod & Rotem, 2012, p. 380). Wei and Milman (2002) considered the number of activities practiced on holidays (range 0–18) and found a positive association between this factor and wellbeing in a sample of 84 senior tourists. Nimrod and Rotem (2010) highlighted that the more the seniors (age range 50–88) participated in various activities (e.g. educational, physical, cultural, spiritual, etc.) during their last holidays, the more they reported various associated benefits (e.g. general enjoyment, excitement, social bonding, relaxation). Nimrod and Rotem (2010) showed that irrespective of the type of activities (e.g. physical, educational, non-physical) that seniors practiced during holidays, the psychological benefits (such as excitement and relaxation) were present and were relatively similar from one senior to another. In another study, Nimrod and Rotem (2012) showed that holiday-related activities characterized by new experiences were

associated with the benefits gained from the tourism experience because they represent opportunities for personal development, which contribute to deepen the sense of meaning in life and then lead to a higher level of wellbeing (Nimrod & Kleiber, 2007).

In addition, tourism experiences provide opportunities to promote social interactions in later life (e.g. Caradec & Petite, 2008; McCabe & Johnson, 2013; Morgan et al., 2015; Toepoel, 2013). Toepoel (2013) showed that seniors (age range 55–75+) who went at least once on holidays over the last 12 months reported lower scores of loneliness compared to seniors who did not go. Many other studies found relationships between social activities practiced on holidays and lower levels of loneliness, the creation of new social interactions and the satisfaction with social contacts in seniors (e.g. Caradec & Petite, 2008; Ferrer et al., 2016; Nimrod & Rotem, 2012; Toepoel, 2013). Moal–Ulvoas and Taylor (2014) highlighted how taking holidays helps senior tourists to improve their relationships with others. These authors suggested that seniors are more open-minded during the holidays, therefore allowing them to better understand others and deepen relationships with them (for example, they communicate and laugh more than in everyday life). Leisure activities such as holiday participation reinforce the feeling of being connected to others (social connectedness, Toepoel, 2013), which in turn contributes to a higher feeling of social inclusion (Ferrer et al., 2016; Gu et al., 2016; McCabe & Johnson, 2013; Minnaert, Maitland, & Miller, 2009; Morgan et al., 2015; Toepoel, 2013).

Together, these different psychosocial mechanisms could help to explain how holidays may be beneficial for seniors' wellbeing. Overall, on holidays, seniors tend to be more relaxed and more available to reflect on their life and to appreciate advanced age (Moal–Ulvoas & Taylor, 2014). Holidays generate a set of positive emotions (Mitas et al., 2012) that allow seniors to reassess their lives in a brighter light and to develop strategies to better cope with the stressors (such as bereavement, illness, and body changes) that occur more often, on average, at their age (Moal–Ulvoas & Taylor, 2014).

Despite the evidence that specific holiday-related activities and experiences have the potential to explain the association with wellbeing, another limitation of the previous studies is that they did not focus on frequency, duration, and perceived health benefits of holidays on wellbeing, although they were identified as important predictors of seniors' health and wellbeing in leisure research (e.g. Chang, Wray, & Lin, 2014; Chen & Petrick, 2014; Chen, Stevinson, Ku, Chang, & Chu, 2012; Williamson, 2016).

Besides studies that have investigated the relationships between holidays and wellbeing, others researchers have examined personal and social factors associated with the participation of seniors citizens in holidays (Ferrer et al., 2016). Some tourism studies have addressed the profile of senior tourists compared to senior non-tourists. For example, there is evidence that both personal (e.g. age, gender, income, health status, lifestyle) and social factors (e.g. social relations) are related to the probability of going on holidays (e.g. Ferrer et al., 2016; Gu et al., 2016). These studies showed that those who had at least one holiday during the last year were more likely to be younger, female, to engage more in leisure activities in everyday life, to have a higher socioeconomic status and better self-rated health compared to senior non-tourists. However, to the best of our knowledge, no studies analysed the difference between both groups in terms of wellbeing, after adjusting for various relevant covariates such as socio-demographic indicators, health status and the frequency of physical and social activities in everyday life.

As part of a broader research project focused on the consequences of senior's holiday participation (BEST[2]), the current study looked more particularly at the relationships between holidays and wellbeing in a large sample ($N = 4130$) of seniors. We systematically explored the relationships between holiday-related factors (frequency, mean duration, frequency of physical, social, cognitive, and relaxing activities, degree of perceived health benefits) and wellbeing in senior tourists, after adjusting for relevant control variables (socio-demographic indicators, self-rated health, general physical activity, and social relations). The specific research questions of this study were the following:

(1) How do the profiles of senior tourists and senior non-tourists differ on socio-demographic indicators, self-rated health, general physical activity, and social relations?
(2) Do senior tourists have higher scores of wellbeing than senior non-tourists, after adjusting for control variables?
(3) What are the holiday-related factors (frequency, mean duration, frequency of physical, social, cognitive and relaxing activities, degree of perceived health benefits) that significantly account for wellbeing in senior tourists, over and above the role of relevant covariates?

With respect to the first research question, in line with previous studies (e.g. Ferrer et al., 2016; Gu et al., 2016), we expected tourists to be younger, female, to frequently participate in leisure and exercise, to have a higher socioeconomic status and higher self-rated health scores compared to senior non-tourists. In addition, we also expected tourists to report higher levels of wellbeing when compared to non-tourists, after adjusting for control variables. To the best of our knowledge, the last research question has not yet been addressed in seniors, using comprehensive wellbeing measures. Thus, our goal was to explore the specific components of holiday experiences and their predictive role for wellbeing in senior tourists.

Method

Participants

A sample of 31,799 French-speaking seniors was selected from the database of a health insurance company in Belgium, a social tourism provider and intermediary (Diekmann & McCabe, 2011). This health insurance company is the largest in Belgium (holding 41.1% of the Belgian market share in 2016). Participants were contacted by email and invited to respond to an online survey about the last holiday, their health and their wellbeing between October and December 2015. The inclusion criteria were: being between 60 and 85 years old, having no functional limitations (based on the Katz score[3]; Katz, Down, Cash, & Grotz, 1970), having no psychiatric and mental disorders, and not having been hospitalized for more than a month during the past year. A total of 5617 seniors filled out the questionnaire (response rate = 18%[4]). As some questionnaires contained more than 5% of missing data (i.e. the threshold considered as consequential; Schafer, 1999), the final sample size was $N = 4130$ (representing a response rate of 13% of the original sample). Compared to the original sample ($N = 31{,}799$), the final sample ($N = 4130$) showed similar age and gender distributions. In terms of age, in the final sample 65%

were aged 60–69, 30% were aged 70–79, and 5% were aged 80–85. In the original sample, these proportions were 66%, 26% and 5%, respectively. Regarding gender, the final sample comprised of 39.5% of women and 60.5% of men while the original sample had 39.8% and 60.2%, respectively. The higher proportion of men in the final sample could be explained by two observations: the original sample provided by the health insurance company was initially more represented by men (60.2%) and men are more likely than women to respond to online tourism surveys whatever their age (Dolnicar, Laesser, & Matus, 2009).

The descriptive analyses (Table 1) revealed that the mean age of participants was 68.2 years ($SD = 5.8$) and they have attended in school for an average of 12.61 years ($SD = 4.24$). The majority of the respondents were men (60.5%), living with a partner (66.8%), retired (84.9%) and had a net monthly income per household between 1601 and 3000 euros (52.7%). Participants also reported good general health and wellbeing ($M = 3.67$, $SD = .82$; $M = 3.61$, $SD = .71$, respectively, measured both on a five-point scale).

Table 1. Characteristics of respondents.

Variables	*n*	*M*	*SD*
Age (years)	4130	68.2	5.8
Education (years)	4130	12.6	4.24
Gender (% of men)	2500	60.5	
Household composition	3981		
Partner (%)		66.8	
Alone (%)		25.4	
Children (%)		2.7	
Partner and children (%)		4.9	
Living in a community (%)		0.2	
Retired	4130		
Yes (%)		84.9	
Net monthly income per household (in euros)	4051		
Less than 1000 (%)		1.8	
Between 1000 and 1600 (%)		23.7	
Between 1601 and 2200 (%)		26.5	
Between 2201 and 3000 (%)		26.2	
Between 3001 and 5000 (%)		19.6	
Over than 5000 (%)		2.2	
General physical activity[a]	4130	4.09	1.35
Social relations			
Frequency of social contacts[b]	4130	5.41	.93
Quality of social contacts[c]	4130	4.14	.83
Self-rated Health			
General health[d]	4130	3.67	.82
Number of health symptoms (from a list of 11)	4130	2.20	1.75
Functional limitations[e]	4107	2.50	1.26
Self-rated memory failures[f]	4130	2.50	.88
Wellbeing	4130	3.61	.71
Life satisfaction[g]	4130	3.46	.79
Happiness[h]	4130	3.77	.75

Notes: *n*: sample size, *M:* mean, *SD*: standard deviation.
[a]1 = less than four times a year, 2 = two to three times a year, 3 = one to two times a month, 4 = one to two times a week, 5 = three to six times a week, 6 = over six times a week.
[b]1 = never, 2 = a few times a year, 3 = one to four times a month, 4 = one to three times a week, 5 = three to six times a week, 6 = each day of the week.
[c]From 1 = not at all satisfied to 5 = totally satisfied.
[d]From 1 = very poor to 5 = very good.
[e]From 1 = never to 5 = very often.
[f]From 1 = never to 5 = always.
[g]From 1 = not at all satisfied to 5 = totally satisfied.
[h]From 1 = very unhappy to 5 = very happy.

Measures

Socio-demographic indicators

Respondents completed questions about their gender, age, household size and composition (single, with a spouse, with children, with a spouse and children, living in a nursing home), professional status (retired or professionally active), years of education, and monthly net income in euros per household (less than 1000, 1000–1600, 1601–2200, 2201–3000, 3001–5000, over 5000). The detailed characteristics of respondents are presented in Table 1.

Holidays and holiday-related activities

Respondents answered questions about the frequency and mean duration of holidays taken during the past 12 months, as well as their characteristics: destination, organized travel (yes or no), travel companion(s) (alone, partner, others), the frequency of participation in various activities (physical, social, cognitive, relaxing)[5] and the degree of perceived health benefits. *The frequency of holidays* in the past 12 months was measured on a five-point scale ranging from 1 (no holiday) to five (over 3 holidays). The *mean duration* of holidays was the ratio between the total number of nights spent on holidays and the number of holidays taken in the past 12 months. *The frequency of participation in various activities performed during the last holiday* was assessed on a five-point scale ranging from one (never) to five (very often). Finally, *the degree of perceived health benefits* related to the last holiday ('Do you think that your last holiday has had a positive impact on your health?') was assessed on a five-point scale ranging from one (not at all) to five (a lot). The detailed characteristics of holidays in senior tourists are presented in Table 2.

Wellbeing

As in a previous study (Galinha & Pais-Ribeiro, 2012), we created a global measure of well-being based on the definition suggested by Diener et al. (2003). We created a composite score of wellbeing including both cognitive (life satisfaction) and affective components (happiness). *Life satisfaction* was assessed by adopting the French version (Blais, Vallerand, Pelletier, & Brière, 1989) of the Satisfaction with Life Scale ([SWLS], Diener, Emmons, Larsen, & Griffin, 1985), a measure widely used in studies on the relationships between tourism experiences and wellbeing (e.g. Chen, Petrick, & Shahvali, 2016; Ferrer et al., 2016; Gilbert & Abdullah, 2004; McCabe & Johnson, 2013; Staats & Pierfelice, 2003; Sirgy et al., 2011). Respondents answered to five items on a five-point scale ranging from one (not at all agree) to five (strongly agree). The five items of this questionnaire yielded a Cronbach's alpha of .87 and they were averaged to obtain the SWLS score. *Happiness* was measured by the first item ('To what extent do you feel happy or unhappy?') adopted from the Happiness Measure ([HM], Fordyce, 1988). Respondent answered on a five-point scale ranging from one (very unhappy) to five (very happy). The HM index measures the affective component of wellbeing and is well known to have good psychometric properties in terms of reliability, construct and discriminative validity (Jarden, 2011). According to Diener (1984), HM should be more adopted in studies using wellbeing measures. SWLS and HM scales are reported in psychology literature as reliable assessments of wellbeing (Jarden, 2011). In this study, the cognitive (life satisfaction) and affective (happiness) components were highly inter-correlated, ($r = .69$, $p < .001$), reinforcing the utility of combining these dimensions into a unique composite score of wellbeing.

Table 2. Characteristics of holidays in senior tourists.

Variables	*M*	*SD*
Holidays in the last 12 months		
Frequency of holidays in the last 12 months		
1 holiday (%)	37.6	
2 holidays (%)	30.9	
3 holidays (%)	16.6	
Over 3 holidays (%)	14.9	
Mean duration of each holiday in the last 12 months (days)	6.85	5.77
Last holiday		
Destination		
France (%)	47	
Mediterranean Europe (Spain, Italy, Greece, etc.) (%)	23	
Belgium (%)	12	
Other countries in Europe (Netherlands, Germany, etc.) (%)	11	
Rest of the world (Africa, etc.) (%)	7	
Organized travel		
Yes (%)	19.9	
No (%)	80.1	
Travel Companion(s)		
Alone (%)	7.4	
Partner (%)	69	
Others (%)	23.6	
Perceived health benefits of the last holiday[a]	4.10	1.00
Physical activities[b]	3.73	1.23
Social activities[b]	2.28	1.33
Cognitive activities[b]	3.41	1.26
Relaxing activities[b]	2.94	1.21

Notes: $N = 2661$.
M: mean, *SD*: standard deviation.
[a]From 1 = not at all to 5 = a lot.
[b]From 1 = never to 5 = very often.

Self-rated health

Respondents provided multiple indicators of health: general health, the number of health symptoms, the degree of functional limitations, and self-rated memory problems. *General health* ('How do you rate your overall health?') was assessed on a five-point scale ranging from one (very poor) to five (very good). The number of *health symptoms* ('Which health problems do you have currently?') was based on a list of the 11 most common diseases in both genders of the Belgian population over 65 years of age (i.e. hypertension, cholesterol, diabetes, thyroid problems, arthritis, arthritis, back pain, urinary disorder, eye disorders, osteoporosis, prostate disorder) and other health problems added for the current study (i.e. asthma, insomnia, difficulty moving, other). The degree of *functional limitations* ('Have you been limited for at least six months because of a health problem in activities that you practice everyday?') was assessed on a five-point scale ranging from one (never) to five (very often). Finally, the degree of *self-rated memory failures* ('Do you have memory problems in your everyday life?') was assessed on a five-point scale ranging from one (never) to five (always). These indicators were adapted from the Belgian Health Survey (Scientific Institute of Public Health, 2013) except for the indicator of self-rated memory failures (Van der Linden, Wyns, von Frenckell, Coyette, & Seron, 1989).

General physical activity

Respondents reported the frequency of physical activity in their everyday life ('Do you practice physical activity such as sports, gardening, walking, etc.') on a six-point scale

(one = less than four times a year, two = two to three times a year, three = one to two times a month, four = one to two times a week, five = three to six times a week, six = over six times a week). This item was adapted from the Dijon Physical Activity Score that has been validated in French in healthy seniors (Robert et al., 2004).

Social relations

Two indicators were used to assess the frequency and quality of social relations. *The frequency of social contacts* was assessed by one item ('Usually, how often do you have contact [face-to-face, telephone] with other people such as your spouse, children, friends, acquaintances, personal caregiver, etc.?') on a six-point scale (one = never, two = a few times a year, three = one to four times a month, four = one to three times a week, five = three to six times a week, six = each day of the week). *Quality of social contacts* was assessed by one item related to perceived social support ('How satisfied are you with the support of these people in your everyday life?') on a five-point scale ranging from one (not at all satisfied) to five (totally satisfied). These questions were adapted from the Belgian Health Survey (Scientific Institute of Public Health, 2013).

Data analysis

The data analyses were performed using IBM 23.3 SPSS Statistics (IBM Corp. 2015). The first research question was examined by conducting independent-samples *t*-tests (Chi-Squared tests for categorical variables) to compare senior tourists who went at least once on holidays in the last 12 months and senior non-tourists on socio-demographic indicators, self-rated health, general physical activity, and social relations. For the second research question, a one-way analysis of covariance (ANCOVA) was performed to compare scores of wellbeing in senior tourists and non-tourists, while taking into account the control variables (socio-demographic indicators, self-rated health, general physical activity, and social relations). Finally, the third research question was explored using a hierarchical multiple regression model with the following blocks of predictors: (1) control variables (age, gender, education years, income, general health, health symptoms, functional limitations and self-rated memory failures, general physical activity and frequency and quality of social relations), and (2) holiday-related factors (frequency, mean duration, frequency of physical, social, cognitive and relaxing activities and degree of perceived health benefits). All collinearity statistics were within accepted limits (Field, 2009; Myers, 1990), with the tolerance values for each predictor between .60 and .97 and the VIF values between 1.04 and 1.67. Finally, the assumption of the independence of errors was met with a value of 1.91 for the Durbin-Watson statistic, which is within the acceptable range (between 1.50 and 2.50, as suggested by Hair, Anderson, Tatham, & Black, 1998).

Results

How do the profiles of senior tourists and senior non-tourists differ?

In the present sample, 2661 respondents (64.4% tourists) had taken at least one holiday during the last 12 months before the survey, and 1469 (35.6%) were considered non-tourists. The detailed characteristics of holidays in senior tourists are presented in Table 2.

The results of comparisons between senior tourists and senior non-tourists (Table 3) revealed significant differences in terms of socio-demographic indicators (except for the gender), general physical activity, and social relations. Senior tourists were significantly younger, better educated, wealthier, more engaged in physical and social activities in their everyday life, and more satisfied with their social relations than senior non-tourists. In addition, senior tourists reported significantly higher scores on general health and lower scores on health symptoms, functional limitations, and self-rated memory failures.

Do senior tourists have higher scores of wellbeing than senior non-tourists, after adjusting for control variables?

There was a significant difference between senior tourists and senior non-tourists in terms of wellbeing, after adjusting for control variables (socio-demographic indicators, self-rated health, general physical activity and social relations), $F(1, 4015) = 123{,}94$, $p < .001$, $\eta p^2 = .03$. The senior tourists had higher scores of wellbeing ($M = 3.78$, $SD = .61$) than senior non-tourists ($M = 3.31$, $SD = .77$) over and above the control variables.

What are the holiday-related factors that significantly account for wellbeing in senior tourists?

As showed in Table 4, the results of the hierarchical multiple regression showed that holiday measures explained an additional 4% of the variation of wellbeing over and above the other significant predictors in the first block, $[F(7, 2569) = 21.47, p < .001]$. Block two showed that the more often seniors went on holidays, the more they perceived that the holidays had health benefits. In addition, the more they practiced holiday-related social and cognitive activities, the higher their wellbeing scores were. However, the duration of the holidays and the frequency of holiday-related physical and relaxing activities were not significantly associated with wellbeing of senior tourists.

Table 3. Comparisons between senior non-tourists and senior tourists.

	Senior non-tourists			Senior tourists						
Variables	*n*	*M*/%	*SD*	*n*	*M*/%	*SD*	*df*	t/χ^2	*p*	*d*
Socio-demographic indicators										
Gender (% of men)	916	62.4		1584	59.5		1	$\chi^2 = 3.17$	.08	
Age	1469	69.06	6.28	2661	67.74	5.46	2689.74	6.77	<.001	.22
Education years	1469	11.62	4.26	2661	13.15	4.12	2941.49	−11.21	<.001	.37
Net monthly income per household	1449	2.99	1.07	2602	3.70	1.14	3156.61	−20.01	<.001	.64
General physical activity	1469	3.75	1.56	2661	4.27	1.17	2393	−11.14	<.001	.38
Social relations										
Frequency of social contact	1451	6.19	3.76	2640	7.53	4.63	3526.86	−10.01	<.001	.32
Quality of social contact	1469	3.85	.98	2661	4.19	.85	2670.49	−11.07	<.001	.37
Self-rated health										
General health	1469	3.42	.87	2661	3.81	.76	2686.98	−14.60	<.001	.48
Health symptoms	1469	2.42	1.88	2661	2.08	1.66	2725.93	5.71	<.001	.19
Functional limitations	1460	2.85	1.33	2647	2.30	1.18	2711.10	13.21	<.001	.44
Self-rated memory failures	1469	2.58	.92	2661	2.45	.85	2843.92	4.45	<.001	.15

Notes: *n*: sample size, *M*: mean, *SD*: standard deviation, *df*: degrees of freedom, *t*: paired-sample *t*-tests, χ^2: Chi-squared tests, *p*: *p*-value, *d*: Cohen's d (effect size).

Table 4. Hierarchical multiple regression analysis predicting wellbeing in senior tourists.

	Wellbeing					
	Model 1			Model 2		
Steps and predictors variables	*B*	*SE B*	*β*	*B*	*SE B*	*β*
Step 1: Control variables						
Age	.01	.00	.10***	.01	.00	.11***
Gender	−.06	.02	−.05**	−.09	.02	−.07***
Years of education	.00	.00	.01	−.00	.00	−.01
Income	.10	.01	.19***	.09	.01	.16***
General health	.25	.02	.31***	.22	.02	.27***
Health symptoms	−.02	.01	−.06**	−.02	.01	−.06***
Functional limitations	−.01	.01	−.02	−.01	.01	−.03
Self-rated memory failures	−.09	.01	−.13***	−.08	.01	−.12***
General physical activity	.04	.01	.07***	.03	.01	.05**
Frequency of social contacts	.05	.01	.07***	.05	.01	.06***
Quality of social contacts	.14	.01	.18***	.13	.01	.17***
Step 2: Holiday-related factors						
Frequency				.07	.01	.13***
Mean duration				.00	.00	.00
Physical activities				−.01	.01	−.02
Social activities				.03	.01	.06***
Cognitive activities				.02	.01	.04**
Relaxing activities				.01	.01	.01
Perception of health benefits				.07	.01	.12***
R^2		.31***			.35***	
ΔR^2					.04***	

Notes: Gender: 1 = men, 2 = women.
SE: standard error, *B*: unstandardized regression coefficient, β: standardized regression coefficient, R^2: R-squared, ΔR^2: *R*-squared change.
*$p \leq .05$; **$p \leq .01$; ***$p \leq .001$.
Valid $N = 2588$ (listwise).

Additional predictors of wellbeing

As presented in Table 4, the final model of hierarchical regression analyses accounted for 35% of the total variance of wellbeing. Being older, being a man, having a higher income, feeling healthy, feeling physically active, having more social contacts, and being satisfied with the support of one's social contacts were significantly related to higher wellbeing.

Discussion

As expected, the results showed that when compared to senior non-tourists, senior tourists were significantly younger, better educated, wealthier, more engaged in physical and social activities in everyday life and reported better health. These findings confirm those presented in recent studies that highlighted significant differences between older tourists and non-tourists (Ferrer et al., 2016; Gu et al., 2016). Second, the present study found that senior tourists had higher levels of wellbeing than senior non-tourists, after adjusting for control variables (socio-demographic indicators, self-rated health, general physical activity and social relations). Third, we found that holiday-related factors predicted greater wellbeing in senior tourists over and above the role of relevant covariates. Our results are in line with previous studies that showed a positive association between holiday participation and health and wellbeing in seniors (e.g. Ahn & Janke, 2011; Ferrer et al., 2016; Gu et al., 2016; Kim et al., 2015; Nimrod & Rotem, 2012; Wei & Milman, 2002). This study provided a better understanding on the relationships

between holidays and wellbeing by exploring the unique contribution of various holiday-related factors on wellbeing. Among the holiday-related factors, higher holiday frequency, frequency of social and cognitive activities, and degree of perceived health benefits were associated with higher levels of wellbeing.

The results showed differences in the contribution of the multiple holiday-related predictors of wellbeing. The frequency of holidays was found to be a significant predictor of wellbeing while mean duration was not. In other words, our findings suggest that it could be more beneficial to go on holidays several times over a year rather than to go once for a longer duration. Although multiple studies showed that the frequency of leisure activities was positively associated with seniors' wellbeing (e.g. Kelly et al., 2014; Kuykendall, Tay, & Ng, 2015; Windle, Hughes, Linck, Russell, & Woods, 2010), to the best of our knowledge, our study is the first to highlight that the frequency of holidays is associated with seniors' wellbeing. A possible interpretation is that each holiday is associated with developing a specific personal project, which generates positive affect before departure (e.g. Chen & Petrick, 2013; Hagger & Murray, 2014; Moal–Ulvoas & Taylor, 2014; Lawton, Moss, Winter, & Hoffman, 2002; Nawijn, Marchand, Veenhoven, & Vingerhoets, 2010). In this context, the more often seniors go on holidays, the more they develop personal projects and associated positive emotions in their everyday life.

Among the different types of activities practiced on holidays, social activities (e.g. group activities) represented the most important predictor of respondents' wellbeing. This finding supports other studies that have shown the benefits of holiday-related social activities (e.g. new social interactions, social sharing, satisfaction with social contacts, restoring and/or deepening relationships with others) on the reduction of loneliness (Toepoel, 2013), social inclusion (Ferrer et al., 2016; Gu et al., 2016; McCabe & Johnson, 2013; Minnaert et al., 2009; Morgan et al., 2015) and senior tourists' wellbeing (Ferrer et al., 2016; Hunter-Jones & Blackburn, 2007; Moal–Ulvoas & Taylor, 2014; Nimrod & Rotem, 2012). Many studies have demonstrated that the participation in social activities improves seniors' wellbeing (e.g. Adams, Leibbrandt, & Moon, 2011; Dupuis, 2008; Levasseur et al., 2015; Litwin & Shiovitz-Ezra, 2011; McAuley et al., 2000; Menec, 2003; Tsai & Wu, 2005). Indeed, seniors are more likely to experience greater loneliness in their everyday life compared to younger individuals, especially due to retirement and/or other factors associated with the ageing process such as the death of close ones (Gibson & Singleton, 2012). Social participation represents an adaptive strategy to counter social deficits related to ageing (e.g. Balderas-Cejudo et al., 2017; Silverstein & Parker, 2002).

Cognitive activities performed on holidays (e.g. reading, orienting, planning) represented another significant predictor of senior tourists' wellbeing. To the best of our knowledge, this is also the first study showing a positive association between cognitive activities practiced during the holidays and wellbeing of senior tourists. This result is consistent with previous studies observing this association in everyday life (e.g. Allward, Dunn, Forshaw, Rewston, & Wass, 2017; Chang et al., 2014; Olazaran et al., 2010; Paillard-Borg, Wang, & Winblad, 2009). For instance, Paillard-Borg et al. (2009) showed that cognitive activities (e.g. writing, playing music) enhanced the wellbeing of seniors more than did physical and recreational activities (e.g. watching TV). However, the underlying mechanisms of the effect of cognitive activities on wellbeing are not well known. As indicated by Gu et al. (2016), we can suggest that multiple cognitive activities practiced during the holidays (e.g. orienting oneself in a new town, activity planning, learning

new information) may cognitively stimulate senior tourists, which generates a greater sense of wellbeing. This idea should be further explored in future research.

Finally, our results also revealed that the perception of health benefits related to holidays significantly predicted senior tourists' wellbeing. Chen and Petrick (2014) showed that the more tourists perceive that holidays have health benefits, the more they go on holidays. These authors suggest that the perception of health benefits associated with holiday experiences increases the perceived importance of holidays in everyday life (i.e. increased attention to information and discussions about future holidays), thereby improving the likelihood of going on holidays. As described above, several studies have shown that the frequency of leisure activities is associated with seniors' wellbeing. Therefore, it may be the case that in our study, the more senior tourists perceived the health benefits of various leisure activities practiced on holidays, the more they engaged in these activities, and the happier they were as a result.

The findings have allowed to better grasp the factors accounting for wellbeing during ageing from a psychological perspective and their link with holidays. The results support the claims of social tourism researchers and practitioners to promote social tourism and to facilitate holiday participation, notably through social tourism provision. The comparison of seniors going on holidays and non-tourists clearly points out the benefits of holidays. This suggests that seniors should be made aware of the protective and beneficiary aspects for their health and wellbeing. Additionally, based on our findings, the tourism industry should develop more services adapted to seniors in order to comply with their specific needs and preferences. To this end, guidelines about the specific needs of seniors and their preferences in terms of types of activities could be created for tourism providers. At the societal level, the findings of this study could serve as evidence for encouraging public authorities to facilitate the access of holiday resources for low-income seniors. As showed by some studies, this strategy may have a beneficial effect on various aspects of the health and wellbeing of those people. Through tourism, seniors get the opportunity for social encounters and meet new people. Moreover, holidays help them to get out of their isolation, and be more physically active. They can forget about financial problems and others sources of worry during the time of the trip and focus their attention on more positive sides of their life (Ferrer et al., 2016; Medaric, Gabruc, & Sedmak, 2016; Morgan et al., 2015). Recent literature on social tourism widely recognizes potential benefits of holidays as an integral part of active ageing and a major form of intervention in social care (Medaric et al., 2016; Minnaert & Schapmans, 2009).

The results of the current study should be considered in light of several limitations. Firstly, our sample is not representative of the Belgian population of elderly people, especially considering the method of recruitment performed exclusively by a single health insurance company (albeit the largest in Belgium) and the online nature of the questionnaires. Indeed, 37% of Belgian adults aged between 65 and 75 years have never used Internet (Statbel, 2017b), which excluded a large proportion of this population from our study. Moreover, the sample was dominated by men whereas the opposite is found in Belgian population aged over 65 years (Statbel, 2017a). Secondly, the cross-sectional design does not allow us to draw any conclusions regarding the directionality of the association between holiday participation and wellbeing. Thirdly, that is possible that the validity of the measures has been affected by the retrospective nature of this study that could have generated memory bias. Finally, our findings should not be considered as an

agenda for policy. For example, one should not only focus on the practice of social and cognitive activities during holidays simply because these were the activities with the strongest associations with wellbeing. In addition, the ageing population is known to be a heterogeneous group (Lowsky, Olshansky, Bhattacharya, & Goldman, 2014), especially in terms of personal needs and interests. As such, seniors need to find personally fulfilling leisure experiences that give meaning to their lives (Gibson & Singleton, 2012).

Future research should consider longitudinal designs to explore the influence of a holiday on seniors' health and wellbeing. Additionally, pre–post designs could eliminate potential baseline differences and increase the validity of measures by limiting memory bias. There is also a need to investigate the mechanisms that underlie the relationship between the different types of social and cognitive activities practiced on holidays and senior tourists' wellbeing. Finally, future research could investigate how long the benefits of a holiday last for in seniors.

Conclusion

The research aims have been met by providing valuable data on holiday-related predictors of seniors' wellbeing. The results of this study showed, as expected, that senior tourists had a different profile than senior non-tourists: they were younger, more educated, wealthier, and healthier. In addition, their levels of wellbeing were higher compared to senior non-tourists, after controlling for socio-demographic indicators, health, physical activity, and social relations. The findings also showed that holidays significantly contribute to higher wellbeing scores over and above the role of relevant covariates. The analyses of significant holiday-related predictors of wellbeing showed that the more often seniors went on holidays, the more they practiced holiday-related social and cognitive activities and the more they perceived that holidays had health benefits, the higher their wellbeing scores.

Notes

1. Holidays refer to all journeys for pleasure including at least four consecutive nights away from home (World Tourism Organization [WTO], 1995).
2. Bien-être, Emploi, Santé et Tourisme social in collaboration with Université libre de Bruxelles (ULB) and funded by the Walloon region (Belgium) – Germaine Tillon funding on social innovation.
3. The Katz Index of Independence in Activities of Daily Living assesses the ability to perform activities of daily living independently. Patients are scored on a four-point scale for independence in each of six functions (bathing, dressing, toileting, transferring, continence, feeding). The scores range from one (totally independent) to four (totally dependent). People with a score of three or four on at least two criteria of the scale were excluded from the mailing list.
4. This percentage corresponds to the average level of responses obtained by the Mutualité Chrétienne in previous surveys.
5. The different activities were presented using specific examples: physical activities (e.g. visits, walks, gymnastics, aqua gym, dance), social activities (e.g. workshops, group games, group excursions), cognitive activities (e.g. reading, word games, itinerary planning) and relaxing activities (e.g. getting a massage, lying on a deckchair, taking a nap).

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