Chapter 2
Segmentation Approaches to Older Tourists

Abstract Recognizing the differences between tourists is the first step toward competitive advantage. Segmentation allows the identification of groups of tourists who share some common characteristics and who are likely to respond similarly to marketing stimuli. Various approaches exist to segment tourist markets. Some scholars distinguish between a priori and a posteriori methods. While a priori methods involve conceptual classifications, a posteriori methods consist of the analyses of empirical data to derive a grouping. Proceeding from this classification, this chapter first presents a review of the main segmentation approaches that can be used to cluster older tourists and then provides directions for future research in segmentation studies.

2.1 Segmentation in Tourism Studies

Most tourism scholars and practitioners agree that segmentation is a key prerequisite of successful marketing strategies. With reference to the tourism market, segmentation can be considered a form of grouping tourists who share common needs and characteristic with the aim of predicting future tourist behavior and directing specific marketing strategies (Tkaczynski et al. 2009). The segments should have a good "strategic fit" with an organization's resources, core competences, and external environmental factors (Morritt and Weinstein 2012). Segmentation criteria include, for example, demographic or psychographic characteristics, travel needs, and motivations (Bieger and Laesser 2002). To be effective, market segmentation should lead to the definition of clearly identifiable, measurable segments, accessible in terms of distribution and communication. Segments should also be substantial in terms of sales and profitability, stable, and differential (Bieger and Laesser 2002).

There is no consensus in the literature about the most effective segmentation criteria for older tourists. When referring to "older" tourists, age is used as an implicit segmentation criterion; however, as argued by Ward (2014), the aging process varies considerably among individuals because people grow old biologically, psychologically, and socially at different times during their lives. For this reason, some scholars have long criticized the use of bare chronological age as a segmentation variable for older tourists (Moschis et al. 1997).

The aim of this chapter is to provide a review of the main segmentation approaches that can be used to cluster older tourists. Accordingly, the following paragraphs will provide a review of the literature belonging to two main streams of research: the most common types of segmentation approaches in tourism, and segmentation approaches to older individuals in tourism studies.

2.2 A Classification of Segmentation Approaches in the Tourism Literature

Tourism literature recognizes two major types of segmentation approaches: (1) a priori or conceptual segmentation (Mazanec 1992) or commonsense segmentation (e.g., Dolničar 2004), and (2) a posteriori (Mazanec 1992), post hoc (e.g., Wedel and Kamakura 2012), or data-driven segmentation (Mazanec 1992; Dolničar 2004, 2008).

In tourism studies, conceptual segmentation has been considered an approach that leads to the definition of a typology in which the grouping criteria are known in advance, that is, a priori (Dolničar 2004). This type of segmentation is based on theoretical elements. In her review on segmentation studies published in the Journal of Travel Research between 1990 and 2004, Dolničar (2004) argued that the most common type of segmentation used in tourism studies is a priori segmentation. Some examples of a priori segmentation in older tourists include segmentation based on cohorts (e.g., millennials vs. baby boomers), or classifications based on type of tourists (e.g., older motorcoach travelers). Dolničar (2008) also outlined the following four steps of a priori (commonsense) segmentation: in Step 1, the researcher chooses a segmentation criterion, in Step 2 the respondents are grouped in segments according to such criterion. Then, in Step 3, statistical analyses help the researcher to identify significant differences between segments, and finally, in Step 4, the researcher assesses the usefulness of the market segments from a managerial and marketing perspective.

A posteriori segmentation is based on analysis of the data to gain insights into the market and decide which segmentation criteria are the most effective in that specific context (Dolničar 2008). While typologies are theoretically based and derive from a discretionary selection of variables (i.e., a priori), taxonomies are empirical by definition (Bailey 1994). Starting from an empirical data set, for example the result of a guest survey in a hotel, a posteriori segmentation uses quantitative analysis techniques to empirically derive a grouping (Dolničar 2002). A posteriori segmentation based on data analyses was introduced by Haley (1968) and has been adopted in tourism studies since the 1980s (e.g., Calantone et al. 1980; Mazanec 1984). Since then, several studies have adopted an a posteriori segmentation approach in the tourism literature (Dolničar 2008). Examples of this approach used to cluster older tourists include an analysis of travel motivations or vacation activities (e.g., Le Serre and Chevalier 2012; Chen and Shoemaker 2014; Alén et al. 2015). The advantages of a posteriori segmentation include the validation of data-driven segment solutions that are used for marketing planning, more in-depth-research into a certain market, provision of a basis for forecasting, the possibility of regularly evaluating the effectiveness of the segments, and the applicability to multi-period data (Dolničar 2004).

In reviewing and categorizing the segmentation approaches in tourism, Dolničar (2004) further classified a priori and a posteriori segmentation as follows: (1) purely commonsense segmentation, that is, a priori segmentation based on existing knowledge of which tourist characteristics are relevant for grouping visitors; (2) purely data-driven segmentation, based on a posteriori analyses; (3) a priori segmentation followed by a posteriori segmentation; and (4) two rounds of a priori segmentation, in which tourists are classified on the basis of conceptual criteria in two subsequent steps.

2.3   Segmentation Approaches to Older Tourists

Most scholars agree that the older tourist market is far from homogeneous and therefore segmentation is needed (Sangpikul 2008a). Several studies have attempted to segment the older tourist market according to a number of different criteria; however, no systematic analysis about segmentation criteria has been conducted. This chapter will categorize the studies according to the a priori and a posteriori segmentation approaches to provide a systematized analysis (Fig. 2.1). In Table 2.2, a classification of segmentation studies about older tourists, published between 1982 and 2016, is proposed.
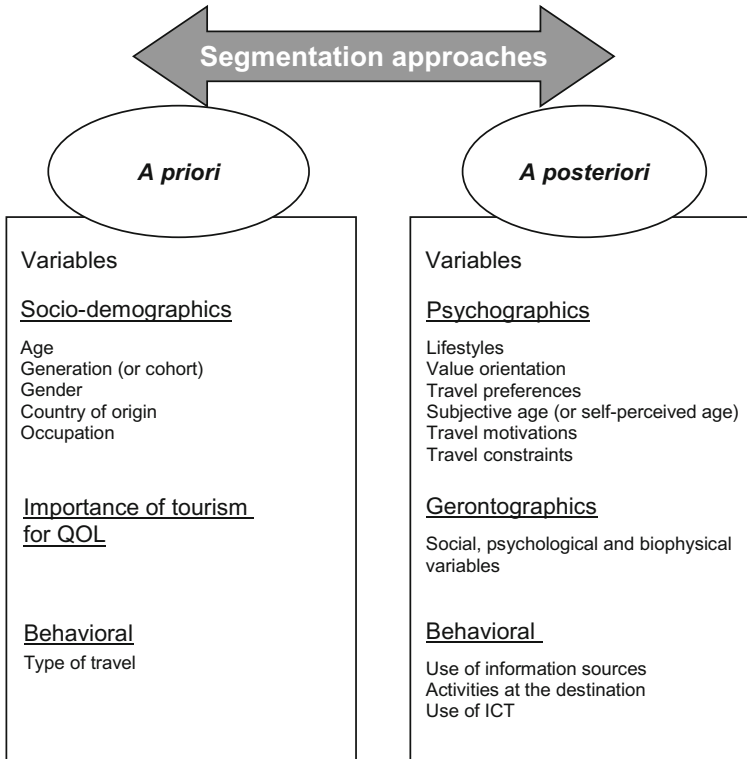
Fig. 2.1 Segmentation approaches to older tourists: a classification. *Source* Author's elaboration

2.4 A Priori Segmentation Approaches

The main a priori segmentation approaches identified in the literature are based on socio-demographic criteria. Socio-demographic variables include elements such as age, generation or cohort, gender, country of origin, and occupation. A priori segmentation criteria are often used by tourism organizations as a means to address certain segments of tourists. For their relevance in older tourist studies, age and generation segmentation criteria will be addressed separately in Sects. 2.4.1 and 2.4.2 respectively, while other socio-demographic variables will be reviewed in Sect. 2.4.3. A priori segmentation can also be based on the perceived importance of tourism activities for quality of life (QOL), as reported in Sect. 2.4.4.

2.4.1   Age

Tourists have traditionally been divided into groups in terms of chronological age (Swarbrooke and Horner 2006). Age represents the most frequently used type of a priori segmentation criterion for older tourists. For example, one of the first studies to address market segmentation for older tourists (Anderson and Langmeyer 1982) used the age of 50 as a segmentation variable and compared under-50 and over-50 travelers. A number of studies have used the age of 50 as a commonsense criterion to define older tourists (e.g., Hawes 1988; You and O'Leary 1999; Kim et al. 2003; Littrell et al. 2004; Sund and Boksberger 2007; Jang and Ham 2009; Patterson and Pegg 2009; Nimrod and Rotem 2010; Le Serre and Chevalier 2012; Chen et al. 2013; Ward 2014). However, different age thresholds have been used to define older tourists (see Chap. 1). Some scholars used the age of 50 (e.g., You and O'Leary 1999; Littrell et al. 2004; Sund and Boksberger 2007; Jang and Ham 2009; Le Serre and Chevalier 2012) or 55 (e.g., Javalgi et al. 1992; Mathur et al. 1998; Backman et al. 1999; Hong et al. 1999; Muller and O'Cass 2001; Fleischer and Pizam 2002; Hsu and Lee 2002; Reece 2004; Sangpikul 2008b; González et al. 2009; Chen and Shoemaker 2014; Alén et al. 2015). Other studies have focused on the 60-plus (e.g., Horneman et al. 2002; Boksberger and Laesser 2009) or the 65-plus age groups (Lawton 2002; Borges Tiago et al. 2016) because "in several countries those over 62 or 65 years of age are granted senior benefits" (Borges Tiago et al. 2016, p. 14).

Some other scholars provided a priori classification of older tourists into different age groups. For example, Javalgi et al. (1992) explored the differences in the use of package trips, travel agents, and other travel-related characteristic between three age groups: the under 55s, the 55–64s, and the 65s-plus. Further, some scholars have segmented older tourists according to different grades or levels of "olderness." Hong et al. (1999) provided a classification of United States older tourists by grouping them into three categories: the "young-old" (aged 55–64), the "old" (aged 65–74), and the "very old" (aged 75+). Similarly, Sund and Boksberger (2007) divided older tourists into "pre-seniors" (aged 50–59) and seniors (aged 60+), though defining as "the real seniors" only those individuals over retirement age (65 years in Switzerland).

Some scholars have employed age as an a priori segmentation criterion in pure commonsense segmentation studies Dolničar (2004). For example, Anderson and Langmeyer (1982) compared the under and the over 50s. Nevertheless, most often, age represents the first a priori segmentation criterion for subsequent data-based analyses. For example, Borges Tiago et al. (2016) used age as the first step of their segmentation, followed by data-driven segmentation based on traveling preferences.

Exceptionally, some studies have identified age based on a posteriori data-driven analyses. For example, Ananth (1992) measured the median age (59 years) of the respondents to define the two segments under study: "mature travelers" and "younger travelers". In this sense, age can also be used as a posteriori segmentation criterion.

2.4.2 Generation or Cohort

Recent studies about older tourists have considered tourists not for their individual age, but for their belonging to a specific generation, which is generally considered to range over 10 years (Kim et al. 2003), or cohort. A "cohort" has been described as "people within a delineated population who experience the same significant event within a given period of time" (Pilcher 1994, p. 483). Generational segmentation implies, for example, considering the baby boom generation rather than older tourists in general. An example of cohort descriptions with reference to the north American market can be found in Table 2.1, which compares "the matures" with "the baby boomers" (by describing them in terms of television series, music, and significant events).

The role of generation on travel behavior has been addressed in the literature, mainly using one of the following frameworks: (1) theory of generations, (2) human life-cycle theory, and (3) continuity theory (Chen and Shoemaker 2014). What

Table 2.1 Cohorts' features in the United States: the matures and the baby boomers

The matures	"Whom do you think of when you hear the word Doctor? Well, if you are a member of the Mature generation, you probably think of Dr. Spock (…) We were born before 1945 and number 50+ million. We are Clint Eastwood, Queen Elizabeth II, Jack Nicklaus, Betty Ford, and Rosy the Riveter. And yes, we are even the Rolling Stones. Born before 1945, we are still a powerful economic force. We came of age in the shadows of the economic turmoil, common enemies, and America's emergence as a major force in the world and in our daily lives. Our attitudes toward life and work were formed in the throes of the Great Depression, the New Deal, two world wars, rationing, and the GI Bill. We were marked by tough times that required us working together for victory. As a result, we value teamwork, self-discipline, sacrifice, hard work, and putting money away for a rainy day. We believe in duty, institutions, authority, patriotism, and law and order. And, in our minds, rewards are earned"
The baby boomers	"We are Jimmy Buffett, Demi Moore and Clarence Thomas. We are Bill and Melinda Gates, Dorothy Hamill and Scott Hamilton, as well as Barbie and Ken. We are baby boomers. Born between 1945 and 1964" (…) "Some call us the 'Me' generation because we were the first group of Americans to put our own needs and desires ahead of the good of the group. We came of age in a period of great economic prosperity, marked by the expansion of suburbia, a television in every home, two cars in every garage, and a college education in our future. Our attitudes toward life and work were formed in the throes of mass marketing, Woodstock, Vietnam, the Pentagon Papers, the resignation of a President, assignations of iconic leaders, and the Miranda decision. As a result, we value individuality, personal growth, and involvement. We have high expectations and demand top service. We celebrate youth, have a health and wellness focus, and will 'retread' not retire. For us, work is an adventure and rewards are deserved. And for us, the future is now"

Source Author's elaboration on Knutson (2008). Reprinted from the Hotel Business Review with kind permission from www.HotelExecutive.com

these theories have in common is that they emphasize generation or cohort and demographic effects on travel behavior.

As reported by Chen and Shoemaker (2014), Mannheim (1952) introduced the theory of generations (or sociology of generations) based on the consideration that individuals of the same age belonging to the same socio-historical context in which remarkable events characterized their youth share "certain definite modes of behavior, feeling and thought" (Mannheim 1952, p. 291). In other words, individuals belonging to a certain cohort share unique value systems, personalities, and behavioral traits that distinguish them from other generations. Warnick (1993, as in Chen and Shoemaker 2014) was one of the first scholars to examine cohort effects on domestic travel in the United States and found significant differences between baby boomers (i.e., individuals born between 1946 and 1964) and the "silent generation" (i.e. individuals born between 1925 and 1945). Based on a survey conducted in Canada and the United States, Lehto et al. (2008) corroborated Warnick's (1993) findings by comparing travel experiences between the baby boomers and the silent generation. The results show that there exist some cohort differences between the older baby boomers and the silent generation regarding the kind of tourism experience sought and the actual vacation activities taken. You and O'Leary (2000) conducted a generational cohort comparison between "young seniors" (55–64) in two time periods: 1986 and 1995. They also performed a longitudinal study between the 45–55-year-old group in 1986 and the 55–65-year-old group in 1995. The findings support the dominance of the cohort effect over the age effect.

Life-cycle theory, also called the "life span perspective" or "theory of human development stages," derives from psychology studies. Erikson (1963) identified eight phases in life that a person normally experiences: infant, toddler, preschooler, school-age, adolescent, young adult, middle-aged adult, and older adult. Later, scholars grouped these phases into four main phases: childhood, young adulthood, mid-adulthood, and elder adulthood. In the tourism literature, Lawson (1991) suggested that the relevant life-cycle stages are "young single," "young couple" (with no children), "full nest" (with children), "empty nest" (children have left home), and "solitary survivor" (the widow or widower). In each phase, individuals take different social roles and have different value systems. As individuals grow older, their beliefs, attitudes, values, and physical condition change and influence their behavior (e.g., Lepisto 1985). However, a common difficulty encountered by scholars addressing life-cycle theory is that not everyone fits into standardized family life-stage definition (Sund and Boksberger 2007). Based on Lawson's classification, Sund and Boksberger (2007, p. 6) argued that the relevant stages for the study of older tourists would be "empty nest I" (still working), "empty nest II" (retired) and "solitary survivor". For example, Romsa and Blenman (1989) divided older Germans into four age cohorts (30–39, 40–49, 60–69, and over 70) and emphasized that the use of two cohorts of older individuals was intended to help understanding that motivations change in the retirement stage.

Life-cycle theory has been recently addressed in older tourist studies with regard to the role of grandparents in intergenerational travels. The relevant stages for the

study of older tourists would presumably in this case be "empty nest I" (still working), "empty nest II" (retired) and "solitary survivor." Accordingly, in their study about Israeli older individuals, Fleischer and Pizam (2002) found that the number of vacation days taken tend to decrease in the 65-plus older cohort compared with the 55–65-year-old cohort. Recently, Chen and Shoemaker (2014) identified interactive effects between generations. In particular, life-cycle stages affect not only older tourists' perceived travel barriers, but also their attitude toward leisure travel, their destination selection, and their travel activities. Hence, Chen and Shoemaker (2014) stress that it is important to segment older tourists by life-cycle stage (e.g., 55–60, 61–70, 71–80) rather than by chronological age.

While life-cycle theory generally emphasizes differences between stages of life, continuity theory maintains that during the aging process, a large proportion of older individuals tend to show consistency in psychological characteristics as well as in behavioral traits. In other words, older adults tend to have the same values, attitudes, emotions, and behavior through time, despite their changing physical, mental, and social status (Chen and Shoemaker 2014). For example, Shoemaker (2000) divided respondents in two cohorts: 55–64 and 65-plus and compared their travel motivations, attitudes, destination selection, perceived barriers, and travel activities with the responses provided by older tourists in a study he had conducted ten years earlier (Shoemaker 1989). The findings showed that the older tourist market in Pennsylvania had remained relatively stable over a decade. In their study of German tourists, Lohmann and Danielsson (2001) found that travel propensity, or patterns of tourist behavior, remained the same for about 20 years for a given generation, and so they concluded that, in accordance with continuity theory, the travel patterns of individuals tend to be stable over time and therefore older tourist behavior might be predicted from their past experiences.

In line with continuity theory, Chen and Shoemaker (2014) found that the motives, attitudes, destination selection criteria, and travel activities of older tourists did not change radically across life-cycle stages and generations. Specifically, the same cohort of older tourists did not change as they advanced through the aging process in their travel motives, attitudes, destination selection criteria, or travel activities. In addition, older tourists at different life-cycle stages within the same generation did not differ across that same set of variables. Further, they found that tourists tended to be more homogeneous beyond 61 years of age. Finally, older tourists at the same life-cycle stage but belonging to different generations did not differ across the same variables.

2.4.3 Socio-demographics

Besides age and generation, some of the most frequently used demographic variables to segment older tourists include gender, country of origin, and occupation. Several empirical studies about older adults address gender differences between groups of the sample in a posteriori analyses. However, in line with the purpose of

this section, hereafter only those studies are presented that consider gender as a major a priori segmentation variable. Regarding this, some studies about older tourists have focused on gender-based segments. For example, Hawes (1988) explored the tourism-related lifestyle profiles of women aged 50 and older. The findings show that the socio-demographic profile of those interested in tourism experience included higher education and income levels, small household size, activeness, and acceptance of the uncertainty involved in traveling. More recently, Hughes and Deutsch (2010) conducted a qualitative study on older gay men living in the United Kingdom, thus including gender, lifestyle, and a specific country of origin.

Several studies of older tourists have focused on a specific market of origin, be it a region, a country, or a more circumscribed area. For example, one of the first segmentation studies about older tourists (Vincent and De Los Santos 1990) addressed older "winter Texans" (i.e., tourists who travel to Texas and stay at least for one month during the winter season). Traditionally, from a geographic point of view, most segmentation studies addressed countries where population aging is already a significant phenomenon, such as Australia (Horneman et al. 2002; Kim et al. 2003), the United States (Sangpikul 2008a; Jang and Ham 2009) and Japan (You and O'Leary, 2000). Other countries have been explored, as well. For example, Boksberger and Laesser (2009) explored older Korean tourists and identified travel constraints and the types of travel experiences these tourists demand. Nimrod and Rotem (2010) focused on Israeli retirees who had traveled abroad at least once in the year prior to the survey. More recently, some studies have addressed European countries. In this regard, Le Serre and Chevalier (2012) focused on French retirees, and Carneiro et al. (2013) investigated older Portuguese tourists undertaking social tourism initiatives.

Fewer studies have dealt with older tourists' country of origin in a comparative approach. For example, Caber and Albayrak (2014) compared the importance of hotel attributes for three market segments identified based on tourists' country of origin (German, Dutch, and British) and found significant differences between the three markets. For example, Dutch senior tourists gave more importance to food service attributes ("small food portions" and "special dietary menus") than did the other respondents. However, further research is needed to identify similarities and differences between tourists belonging to different countries of origin.

Retirement has traditionally been considered a discriminant variable to identify older individuals. Sund and Boksberger (2007) went as far as to define "real seniors" to be only those individuals over retirement age. Several studies have argued that because of their additional free time and increased flexibility, older individuals tend to dedicate their additional free time to leisure activities, traveling in particular (Nimrod and Rotem 2010; Jang and Wu 2006; Lehto et al. 2008). In addition, some scholars showed that older tourists tend to stay longer at the destination compared with non-retired tourists (Blazey 1992; Wang et al. 2005). Hence, several studies about older tourists have used retirement as an a priori segmentation variable (e.g., Cleaver et al. 1999; Nimrod and Rotem 2010; Le Serre and Chevalier 2012). A few studies (e.g., Tongren 1980; Blazey 1992) compared

differences in travel behavior between the retired and non-retired members, based on the consideration that retirement is more effective than age to segment older individuals because it concerns the stage in the life-cycle in which individuals share common characteristics. Blazey (1992) found that travel and interest in travel activities tend to remain constant after retirement. Conversely, Fleischer and Pizam (2002), in their study about Israeli retirees, argued that the age group between 60 and 70 (i.e., individuals who are just before or after retirement) present the longest vacation. Besides being used as an a priori segmentation criterion, retirement status has been often used to help profile clusters identified on the basis of a posteriori segmentation criteria, such as travel motivations or travel constraints.

2.4.4 Importance of Tourism Activities for Quality of Life

Tourism studies have long shown that travel contributes to QOL for older tourists (Javalgi et al. 1992) and creates new interests in their lives (Lee and Tideswell 2005). The QOL construct first emerged in the 1960s. QOL can be described as "a person's sense of well-being, satisfaction or dissatisfaction with life, or happiness or unhappiness" (Dolničar et al. 2013. p. 725) and a "conscious cognitive judgment of satisfaction with one's life" (Rejeski and Mihalko 2001, p. 23). It can be measured either uni-dimensionally or multi-dimensionally in terms of overall life satisfaction, or satisfaction about specific domains. Other authors argue that overall life satisfaction relates to happiness within many individual life domains (e.g., Lee and Sirgy 1995, as in Dolničar et al. 2013). According to Dolničar et al. (2013), travel and tourism play a triple role in contributing to QOL by providing: (1) physical and mental rest and relaxation; (2) personal development space and the pursuit of personal and social interests; and (3) symbolic consumption to enhance status. QOL is also a subjective and dynamic concept that can change over time, even for the same person.

Dolničar et al. (2013) extended the QOL literature in the context of tourism and introduced a new segmentation base that could beneficially be used to segment older tourists. Based on the assumption that not all people want to travel, Dolničar et al. (2013) proposed a "Grevillea Model of the Importance of Vacations for QOL" and tested it empirically among Australian respondents. The *Grevillea* is an Australian native flower known for its beautiful blossom, and it was used as a metaphor to explain the importance individuals attribute to tourism in their lives. Based on a survey, an a priori or commonsense segmentation study was conducted by separating respondents into three groups: those who dragged the vacations item onto the Grevillea's stem, indicating that vacations are core to their QOL; those who dragged the vacations item onto the Grevillea's flower, indicating that vacations enhance their QOL; and those who dragged the vacations item onto the grass next to the Grevillea, suggesting that vacations do not affect their QOL. The results revealed that a minority of Australians (10%) perceive vacations as critical to QOL, while the majority (about 60%) perceive vacations contribute to, but are not

essential to QOL. The remaining 30% indicated that traveling does not contribute to their QOL. The first cluster contained the highest proportion of retirees, as well as some full-time workers, and they tended to be high income earners. Individuals belonging to this group were motivated to experience new things and adventures, have fun and be entertained, gain social recognition, and escape from everyday routine. From a managerial perspective, this implies that it is worth promoting the positive effect of vacations on QOL. In addition, Dolničar et al. (2013) found that vacations' importance to QOL changes over the stages of life.

A recent study further investigated the role of tourism experiences for QOL in the framework of activity theory. As argued by Kim et al. (2015), to understand older tourists' behavior, major psychosocial theories such as disengagement theory and activity theory have been developed and applied. Disengagement theory, developed by Cumming et al. (1961), proposes that the aging process involves a reduction in activity, and therefore older tourists gradually choose to "withdraw from active life and focus on inner fulfillment" (Kim et al. 2015, pp. 465–466). Conversely, activity theory criticizes disengagement theory and supports an understanding that the increased discretionary or free time available to retired individuals provides the opportunity for maintaining high activity levels or roles that are essential for life satisfaction and enrichment. Based on this theory, Kim et al. (2015) hypothesized that "vacation experience" itself can contribute to older individuals' overall QOL. The findings of their study conducted among retirees in South Korea show that satisfaction with trip experience affects leisure life satisfaction, and leisure life satisfaction influences one's sense of well-being (one's QOL) and revisit intentions.

2.5   A Posteriori Segmentation

To cluster older tourists in a posteriori segmentation studies, some of the most frequently used criteria include psyschographics, gerontographics, and behavioral variables.

2.5.1   *Psychographics*

Psychographics can be defined as "the development of psychological profiles of consumers and psychologically based measures of distinctive modes of living or lifestyles" (Hsu 2002, p. 4). Psychographics include, for example, the assessment of an individual's lifestyle, value orientation, personality, and opinions (e.g., about travel) (Kotler et al. 2006). In tourism studies, different definitions of psychographic variables can be found. The common ground for the use of psychographic segmentation is the idea that lifestyles, attitudes, opinions, and personalities of

individuals can affect people's travel behavior (Swarbrooke and Horner 2006). As a matter of fact, since tourism activities are highly related to self-concept and consumers are often highly involved in them, psychographics can represent an effective way to increase precision in market segmentation (Hsu 2002).

This section proposes a selection of psychographic variables often used to segment older tourists: lifestyles, values and travel preferences. The following subsections will then discuss in more detail some psychographic variables that are considered particularly relevant when grouping older individuals: subjective age or self-perceived age (Sect. 2.5.1.1), travel motivations (Sect. 2.5.1.2), and travel constraints (Sect. 2.5.1.3).

With regard to lifestyle-based segmentation studies, several scholars agree that lifestyle changes with age and that today's older tourists are more active and independent than those of the past (Hawes 1988; Muller 1996; Patterson 2006; Hung and Petrick 2009; Alén et al. 2014, 2015). Alén et al. (2015) argue that older tourists' lifestyle is now based more around entertainment and the enjoyment of traveling in their leisure time than it was for previous generations. Lifestyle has been used as a segmentation variable for older tourists since the 1980s. For example, Hawes (1988) identified three distinct travel-related lifestyle profiles for older women. Muller (1996) developed four lifestyle-based typologies for Australian baby boomers, which were adopted in a subsequent study (Muller and Cleaver 2000) to establish which of the baby-boomer lifestyle segments would be more attractive for adventure tourism products. Lifestyle in relation to sexual orientation has been explored in a qualitative United Kingdom–based study (Hughes and Deutsch 2010) to profile older gay men in terms of holiday requirements.

Some scholars also segmented older tourists based on their value orientation. For example, Mathur et al. (1998) segmented older travelers based on "value orientation" intended as lifestyle and attitudinal variables, while Cleaver et al. (1999) used personal values in combination with other psychographic variables to profile older tourists.

Finally, travel preferences represent an effective segmentation criterion in several studies. For example, Backman et al. (1999) segmented nature-based travelers according to activity, interest, and opinion scales describing nature-based benefits sought by tourists. Hsu and Lee (2002) classified motorcoach travelers on the basis of traveling preferences by using tour operator and tour package selection attributes. More recently, Borges Tiago et al. (2016) profiled tourists according to traveling preferences measured in terms of the quality of the accommodation, safety of the accommodations, natural features, general price levels, how tourists were welcomed, and the quality of the activities or services available. Based on the travel perceptions of older Koreans tourists, Lee and Tideswell (2005) identified four clusters: "constrained travelers" (the biggest cluster), "quality-of-life-seeking travelers," "ambivalent travelers", and "novelty-seeking travelers" (the smallest cluster). With particular regard to holiday type preferences, Horneman et al. (2002) used psychographics and demographic characteristics to segment the older Australian tourists and identified six segments, namely: "conservatives" (which represent the highest proportion in the sample), "pioneers", "aussies", "big

spenders", "indulgers", and "enthusiasts" (less than 5% of the sample—the lowest proportion of the sample). Sometimes, preferences for service factors can also be used to segment older adults. For example, Chen et al. (2013) segmented older tourists attending hot spring hotels in Taiwan based on their evaluation of the importance of key items for spa services.

2.5.1.1   Subjective Age or Self-perceived Age

The concept of subjective age was first introduced by Tuckman and Lorge (1953) in gerontology studies and has later developed to describe a set of non-chronological age variables (Barak and Gould 1985). As argued by González et al. (2009), the questioning of chronological age as a segmentation criteria for older tourists arises because numerous studies in geriatrics and psychology show that older individuals tend to see themselves as being younger than their actual age. Subjective age has also been described in terms of cognitive age. In their study, Mathur et al. (1998) found that the cognitive age of all the segments (value orientation–based as well as chronological age–based) was less than that of their respective chronological age. Also, the difference between chronological age and cognitive age for "new-age elderly" (i.e., as opposed to "traditional elderly") was almost 12 years. Muller and O'Cass (2001) conducted a study among the 55-plus age group dividing respondents into two segments: "the young at heart" and "the not so young at heart." The findings show that the subjectively "younger senior" felt in better health, sought fun and enjoyment in life, traveled for physical stimulation and a sense of accomplishment, and had higher expectations of a holiday. Subjective age was measured in two ways: felt age ("I feel as though I am in my …"), and activities age ("While on a travel holiday, the activities I would choose to experience or enjoy would be those of a person in their …"). The cognitive age scale developed by Barak and Schiffman (1981) was adapted and 14 half-decades were provided as response categories (early 20s, late 20s, early 30s, late 30s, right through to late 80s or older). The results showed a discrepancy between an individual's chronological age and his or her subjective age. The magnitude of the gap between actual and subjective ages was computed for each person by subtracting subjective age from actual age. About 8% of respondents considered themselves to be older than their chronological age, while the majority of respondents felt younger than their actual age (about half of them had gaps of nine years or less, and half had gaps of 10 years or more).

González et al. (2009) used cognitive age as a segmentation variable for people aged over 55. Cognitive age was measured with the following dimensions: actions, interests, feelings, health, thinking, and expectations. A survey among individuals aged 55 and older who had been involved in travel activities in the previous year was conducted. The cluster analysis identified two segments—"active livers" and "stable passives"—who differed both in travel motivations and behavior.

Le Serre and Chevalier (2012) deepened the investigation launched by prior researchers (e.g., Mathur et al. 1998; Sellick 2004) by introducing discrepancy age, defined as the gap between the cognitive age and the ideal age. The authors

developed a multivariate segmentation model combining travel motivations, travel perceived risks, discrepancy age, and demographic variables.

Overall, scholars tend to agree that how individuals feel and how they would like to be regarded can be used to predict their travel behavior more effectively than their chronological age.

2.5.1.2 Travel Motivations

Travel motivations are the "socio-psychological motives that predispose the individual to travel" (Yuan and McDonald 1990, p. 42). Understanding tourists' motivations is particularly significant for practitioners if they want to satisfy tourists' needs and desires more effectively (Sangpikul 2008b).

Travel motivations have long been used as a segmentation variable in tourism studies. Shoemaker (1989) was one of the first scholars to segment older tourists based on tourism motivation. He identified three market segments: "family travelers," "active resters," and "older set." The first cluster represents passive individuals who use pleasure tourism as a way to spend time with their immediate families and do not like to plan their trip in advance. The second cluster is composed of very active individuals who use tourism as a means to reach intellectual and spiritual enrichment; for relaxation purposes, to escape the everyday routine; and for socialization purposes, to meet people and socialize. The third cluster is also very active, but prefers all-inclusive hotels and resorts.

Building on Shoemaker's study, Vincent and De Los Santos (1990) explored older winter Texans and found their study group to resemble Shoemaker's "active resters" and "older set." These individuals preferred to plan their travels, stay for long vacations, and undertake several tourist activities. Those who stayed in parks matched closely the profile of "active resters," while those who rented apartments, homes, or condos had characteristics similar to those of the "older set."

Lieux et al. (1994) found that older tourists can be segmented into more detailed groups. They surveyed individuals aged 55-plus in the United States. Based on the motivations for choosing a pleasure destination and lodging preferences, three clusters were identified: "novelty seekers", "active enthusiasts", and "reluctant tourists." Only active enthusiasts could be readily interpreted in terms of tourism motivation. This group participated in many activities with enthusiasm. Novelty seekers and reluctant tourists were less easily interpreted by their travel reasons using multiple discriminant analysis.

Motivations are widely accepted as push factors for travel behavior (Pearce and Caltabiano 1983). The theory of push and pull factors assumes that tourists are pushed by their own needs and motivations and pulled by destination attractions (Dann 1981). In this framework, You and O'Leary (1999) used push and pull factors to segment older British tourists. They identified three clusters: "passive visitors," "the enthusiastic go-getters" and "the culture hounds." Push and pull factors were also considered by Horneman et al. (2002) who profiled older tourists according to their demographic and psychographic characteristics, including the

evaluation of different holiday settings. Six market segments were used to highlight the differences that exist in terms of holiday attractions, travel motivations, and information sources used among older tourists when planning and choosing a holiday. Sangpikul (2008a) also adopted the theory of push and pull motivations to investigate travel motivations of United States older travelers to Thailand. The results of factor analysis identified three push and four pull factor dimensions. Among them, novelty- and knowledge-seeking, and cultural and historical attractions are viewed as the most important push and pull factors, respectively. The cluster analysis revealed two distinct segments within the United States older tourist market: the "cultural and historical seekers" and the "holiday and leisure seekers." More recently, Ward (2014) segmented older Irish individuals based on an examination of their push and pull travel motivations. From this analysis, four distinctive segments were identified, namely enthusiastic travelers, cultural explorers, escapists, and spiritual travelers.

Boksberger and Laesser (2009) segmented older Swiss travelers by means of travel motivations and identified three clusters, two of which partially resemble life cycles: "time-honored bon vivants," who are toward the end of their professional life; "the grizzled explorers," who are retirees; and "the retro travelers," who differ from the previous groups in terms of education and professional positions. Based on travel motivations, Le Serre and Chevalier (2012) segmented French retirees in four groups: "the relaxed intellectual senior travelers;" "the knowledge hunter senior travelers;" "the hesitating, non-intellectual and non-sportive senior travelers;" and "the active and open-minded senior travelers." These segments differ considerably in terms of travel behavior characteristics.

More recently, Carneiro et al. (2013) conducted a market segmentation of Portuguese older tourists participating in a social tourism program based on motivations. Three clusters emerged: "the passive seniors," "the socio-cultural seniors," and "the active seniors." Chen and Shoemaker (2014) explored travel motivations across generations. Specifically, they used the responses to the variables measuring travel motivations for pleasure travel in the 2006 data to cluster individuals into mutually exclusive groups.

Alén et al. (2015) identified the existence of various profiles of older tourists by means of using socio-demographic variables, motivation, and travel characteristics. Five market segments were identified according to the behavioral variables analyzed that allow marketers to target older tourists in the most convenient manner and to exploit new market opportunities. Some scholars have also defined motivation-based segmentation as "benefits segmentation" (e.g., Ahmad 2003; Nimrod and Rotem 2010). This segmentation method focuses on the desirable consequences sought from tourism.

Overall, travel motivations have been widely used in older tourist studies and scholars argue that they provide an effective segmentation criterion. Sellick (2004) emphasized the importance of combining several psychological characteristics (e.g., travel motivations, travel risk perceptions, cognitive age, and demographic

characteristics) when segmenting the older tourist market. However, as pointed out by Le Serre and Chevalier (2012), few new motivations have been revealed in the last decades and further studies should be conducted to segment tourists on the basis of more aging-related criteria.

2.5.1.3 Travel Constraints

For older tourists, travel constraints represent a particularly important segmentation criterion since aging can be associated with a gradual decline or increased difficulties in mobility or health conditions. Travel constraints have been described as barriers or factors preventing older individuals' participation in tourism activities (Nielsen 2014) and the tourism literature has segmented tourists according to perceived travel constraints (e.g., Li et al. 2011). However, while motivation factors are often used to cluster older tourists, few contributions have used travel constraints as a segmentation variable for older adults. For example, Kim et al. (2003) explored the motivations and concerns of older West Australians (aged 50 and over) that were relevant to domestic and international holiday travel and identified four groups: "active learner", "relaxed family body", "careful participant", and "elementary vacationer." In addition, travel constraints is one of the six dimensions of travel perceptions that emerged in the study conducted among older Koreans by Lee and Tideswell (2005). In this study, constraints included difficulties related to travel organization (e.g., obtaining information), perceived health, affordability, and other people's conditionings (e.g., "Other people tell me I am too old to travel" or "My spouse dislikes travel"). This construct was then used as a clustering variable and four groups were identified. The largest segment (43% of respondents) was labeled "constrained travelers," and it consisted mainly of females who tended to be 65 years and older. This group faced several constraints and had low energy to travel (i.e., traveling and travel arrangements were considered tiring activities). Even though the constrained travelers did not consider travel to be important for their QOL, they thought that travel activities would alleviate their boredom.

2.5.2 The Gerontographic Approach to Older Tourists

The concept of gerontographics is based on several of social, psychological, and biophysical variables. As described by Moschis (1996), the gerontographic life-stage model classifies older adults into four groups based on the amount and type of aging they have experienced. The first of the four groups is the "healthy indulgers". This group represents 18% of the 55-and-older population. Because they have experienced the fewest life-changing events, members of this group behave like younger consumers. "Healthy hermits" are the second group and

represent 36% of the 55-and-older group. Moschis (1996) claims that members of this group are most likely to have experienced life events that have affected their self-concept and self-worth, such as the death of a spouse. Members of this group do not want to be considered old and often do not accept their limitations. The third group is the "ailing outgoers", which represents 29% of those 55 and older. Members of this group, unlike the healthy hermits, accept their "old age" status and acknowledge their limitations. The fourth group consists of "frail recluses", who make up 17% of those 55 and older. Members of this group have accepted their old age status and have adjusted their lifestyles to reflect physical declines and changes in social roles.

According to Sudbury and Simcock (2009), one weakness to these general models is that few demographic differences between segments emerge. To develop useful profiles of older consumers, it would be more effective to use a wide variety of variables, including demographics. Although Moschis (1996) did not discuss travel and tourism in his review of consumer typologies, it can be hypothesized that each group would have different attitudes toward travel. Even though the geron-tographic approach has not been much used in tourism studies yet, it could offer the opportunity to target specific segments of older consumers with specific offerings.

2.5.3 Behavioral Variables

Behavioral segmentation has been used in the literature, both in a priori and in a posteriori approaches, depending on the specific behaviors investigated. For behaviors that can easily be divided into categories, the a priori method was used. For example, travel type is usually considered to comprise a priori segmentation criteria: nature-based tourism (Backman et al. 1999) or motorcoach tourism (Hsu and Lee 2002) are some examples. However, data-driven research is needed to segment older tourists on more complex behavioral variables.

For example, Littrell et al. (2004) focused on travelers aged 50 and over and explored their tourism activities and shopping behaviors during travel. Travel activities included outdoors, cultural, and sports and entertainment tourism. Consequently, three profiles of older tourists emerged, namely "active outdoor/cultural tourists", "cultural tourists," and "moderate tourists." These pro-files differed according to the importance given to shopping during travel, the likelihood for shopping at retail venues, preferred shopping mall characteristics, and the sources of travel information about shopping.

Nimrod and Rotem (2010) examined the associations between older tourists' behavior and perceived benefits. In their study among Israeli retirees, who had traveled abroad at least once in the year prior to the survey, the authors identified four differentiated sub-segments based on their destination activities, but the dif-ferences between them in terms of the benefits gained were rather minor. Nimrod

and Rotem (2010) argued that a balance mechanism in older adults' tourism leads to maximization of benefits in different activities and/or circumstances.

Le Serre and Chevalier (2012) identified the profiles of older travelers using segmentation criteria based both on aging and on behavioral tourism variables. A questionnaire was submitted to retired French people. Using behavioral variables, cluster analysis was performed and four distinct segments were identified: each differed considerably from the others regarding a set of variables, including consumer behavior variables.

Alén et al. (2015) explored the existence of various profiles of older tourists by means of using socio-demographic variables, motivation, and characteristics of travel of seniors. In particular, Alén et al. (2015) considered sources of information as a travel characteristic that can be effectively used to segment older tourists.

In recent years, the use of Information and Communication Technologies (ICT) has also gained increased attention as a segmentation variable for older tourists. In this regard, Pesonen et al. (2015) adopted a qualitative approach to profile Finnish older tourists according to their use of online travel services. Three types of tourists emerged: "adventurous experimenters," "meticulous researchers," and "fumbling observers." In addition, Wang et al. (2017) explored the relationship between ICT usage and tourism behavior of Chinese older outbound travelers. Four clusters of ICT usage emerged, thus emphasizing the differences in the use of technology for travel purposes among older tourists. Nevertheless, more data-driven research on older tourist behavior is needed to identify new meaningful segmentation variables.

2.6 Conclusions and Directions for Future Research

From the literature review conducted in this chapter it emerges that, even though an age reference is useful in practical terms when addressing older individuals, it would not be of much value to define older tourist just in terms of age. Cohorts, or better, perceived age would provide a more useful segmentation criterion than just chronological age. The older segment is extremely heterogeneous in terms of socio-demographic characteristics, psychographics, attitude, and travel behavior. In this sense, future research should use multiple segmentation criteria, which could help to grasp more deeply the multi-faceted nature of this heterogeneous group (Faranda and Schmidt 1999). The importance of tourism for QOL should also be addressed in more detail to distinguish lack of interest in traveling from possible travel barriers. Future research could further explore the role of gender differences in travel motivations and behavior and the role of travel companions. Recent statistics (Laesser et al. 2009) highlighted the increased number of solo travelers who require specific guarantees, for example in terms of personal safety, and who expect not to be penalized by the tourism industry, which often imposes "price penalties" (i.e., supplements for solo travelers) rather than seize the opportunity presented by this specific segment.

Table 2.2 A selection of segmentation studies

Author(s) (year)	Quantitative method	Qualitative method	Age	Segmentation approach	Segmentation criteria	Main findings
Anderson and Langmeyer (1982)	x		50+	A priori	Age	The study revealed that under-50 and over-50 travelers differ on a number of important dimensions. The findings show that the over-50 travelers have needs and expectations for vacation that could result in their responding to promotions, advertising, and travel packages that would be ignored by the under-50 group
Hawes (1988)	x		50+	A posteriori	Lifestyles	This study focused on older travelers. The results suggest three distinct travel-related lifestyle profiles, distinct differences between some of the age groups, and managerially useful media preference pattern differences
Romsa and Blenman (1989)	x		60–69; 70+	A priori	Cohorts	This paper analyzes vacation patterns of older Germans within the contextual framework of an environmental motivational model. The influence of age and environmental factors on tourist participation is examined by comparing the behavior of four age groups (younger vs. older). Motivations inducing tourist travel were found to be similar across age cohorts, while spatial patterns vary. The older travelers tend to seek less stressful modes of transportation and vacation habitats

Table 2.2 (continued)

Author(s) (year)	Quantitative method	Qualitative method	Age	Segmentation approach	Segmentation criteria	Main findings
Vincent and De Los Santos (1990)	x		Retired	A priori	Type of travel and destination	The older winter traveler to Texas is profiled and an existing market segmentation theory is compared and extended to this specific market
Ananth (1992)	x		59+	A posteriori	Age	The median age (59 years) of the respondents was used to define the two segments under study: mature and younger travelers. The mature travelers have certain needs and expectations that influence them to ignore certain marketing promotions that may well be successful with younger travelers, and vice versa. Furthermore, some specific attributes are very important to mature travelers, yet are not promoted in lodging operators' marketing campaigns (e.g., grab bars, night lights, extra blankets, and medical facilities)
Javalgi et al. (1992)	x		55+	A priori	Age	The study focused on the behavior of senior citizens in the pleasure travel marketplace of the United States. The demographic differences among consumers under 55, 55 to 64 and 65+ are explained. It also explains the differences between senior and non-senior pleasure travelers with respect to types of pleasure trips taken

Table 2.2 (continued)

Author(s) (year)	Quantitative method	Qualitative method	Age	Segmentation approach	Segmentation criteria	Main findings
Mathur et al. (1998)	x		55+	A posteriori	Value orientation	This study segmented older individuals based on value orientation. Two clusters emerged: new-age elderly and traditional elderly. These segments were compared with two age-based segments (55–64 and 65 +). The findings show that older consumers' value orientations are an effective segmentation approach for travel services
Backman et al. (1999)	x		55+	A priori/a posteriori	Psychographics	This study explored differences and similarities in the older nature-based traveler market in the United States. The study supports the use of psychographic variables to differentiate the older nature-based market
Cleaver et al. (1999)	x		Retirees	A posteriori	Travel motives and values	This study focused on retirees and addressed their travel motivations, preferences for holiday destination types, favorite mode of travel, and personal values. The findings led to the identification of seven travel motive segments: nostalgics, friendlies, learners, escapists, thinkers, status-seekers, and physicals
Faranda and Schmidt		x		A priori/a posteriori	Multiple segmentation (e.g., cohort, self-perceived age, and life satisfaction)	This study examined the key factors that affect travel decision making, attitudes, and behavior of older tourists. After discussing relevant segmentation research, it recommended additional variables to improve the effectiveness of segmentation models

(continued)

Table 2.2 (continued)

Author(s) (year)	Quantitative method	Qualitative method	Age	Segmentation approach	Segmentation criteria	Main findings
Hong et al. (1999)	x		55+	A priori	Age	Using the 1995 Consumer Expenditure Survey, this study (a) examined the travel-related expenditure patterns of United States households headed by individuals 55 years old and older; and (b) used a double-hurdle model to identify factors that influence the decision to travel and the level of travel expenditure among the older segment. The total sample was divided into three groups: young-old (aged 55–64), old (aged 65–74) and very old (aged 75+). Older households spend the most on transportation, followed by food, lodging, sightseeing and entertainment, and other travel expenses. Travel expenditures increase at early stages of aging, but decreasing at late stages of aging
Fleischer and Pizam (2002)	x		55+	A priori	Age cycles/cohorts; country of origin	A survey of Israeli senior citizens was conducted to identify factors that affect their decision to take vacations for differing lengths of time. Their tourism motivation was found to be a function of income and health, but their trip duration changes with age. Between 55 and 65 years of age, expanding leisure time and increased household income cause an increase in the number of vacation days taken. In the older age group (65+), declining incomes and deterioration of health cause a decrease in the number of vacation days taken

Table 2.2 (continued)

Author(s) (year)	Quantitative method	Qualitative method	Age	Segmentation approach	Segmentation criteria	Main findings
You and O'Leary (1999)	x		50+	A priori	Travel push and pull factors	Using travel push and pull factors, the older British travelers' market is segmented into three distinct groups: passive visitors, the enthusiastic go-getters and the culture hounds. The three segments exhibit distinct differences in demographics as well as their destination participation patterns, travel philosophies, trip frequencies and other travel characteristics
Muller and O'Cass (2001)	x		55+	A priori	Subjective age	This study explored how older individuals feel, how healthy they feel, and their personal values, travel motives, travel risk perceptions, travel patterns and holiday destination preferences. This study divides older individuals into two groups: the young at heart and the not so young at heart. The findings show that the subjectively younger travelers feel in better health, look for fun and enjoyment in life, travel for physical stimulation and a sense of accomplishment, and have higher expectations of the holiday. In addition, they are more easily disappointed if the holiday is not satisfying

(continued)

Table 2.2 (continued)

Author(s) (year)	Quantitative method	Qualitative method	Age	Segmentation approach	Segmentation criteria	Main findings
Smith and MacKay (2001)	x		60–75	A priori	Age (younger vs. older)	This study investigated age-related differences in memory for pictures of tourist destinations. Ninety younger and 90 older adults viewed four pictures of tourist destinations and later recalled the content of the pictures. With destination familiarity and education variables statistically controlled, there were no age differences found in pictorial memory performance
Horneman et al. (2002)	x	x	60+	A posteriori	Push and pull factors	This study profiled older travelers according to their demographic and psychographic characteristics. Six market segments emerged with differences in terms of holiday attractions, travel motivations, and information sources used when planning and choosing a holiday
Hsu and Lee (2002)	x		55+	A priori (motorcoach travelers) + a posteriori based on tours selection criteria	Motorcoach tour selection attributes	This study focused on older motorcoach travelers. Three segments are identified on the basis of motorcoach tour selection attributes: the dependents, sociables, and independents. The three market segments also had significantly different age, retirement status, education, and income

(continued)

Table 2.2 (continued)

Author(s) (year)	Quantitative method	Qualitative method	Age	Segmentation approach	Segmentation criteria	Main findings
Lawton (2002)	x		65+	A priori	Type of travel; age	A survey of 1140 ecolodge patrons in Australia found that the older adult (65 years and older) component was similar to their younger counterparts in adhering to the basic ecotourism criteria of preferring natural environments, learning experiences, and sustainable practice. However, older adults differed with respect to the facilitation of these experiences, preferring a higher level of comfort and less risk
Kim et al. (2003)	x		50+	A posteriori	Demographics, motivations attributes, concerns attributes	This paper presents a descriptive analysis of neural network methodology and provides a research technique that assesses the weighting of different attributes and uses an unsupervised neural network model to describe a consumer–product relationship. This analysis is used to identify what trade-offs older travelers make as they decide their travel plans. Four segments were identified: active learner, relaxed family body, careful participants, and elementary vacation
Littrell et al. (2004)	x		50+	A posteriori	Tourism activities	This study developed profiles of older travelers based on travel activities (outdoors, cultural, and sports and entertainment tourism). In addition, it compared profiles on shopping variables. Three profiles of older tourists included "active

Table 2.2 (continued)

Author(s) (year)	Quantitative method	Qualitative method	Age	Segmentation approach	Segmentation criteria	Main findings
						outdoor/cultural tourists," "cultural tourists" and "moderate tourists." Profiles differed on the importance attached to shopping during travel, likelihood for shopping at retail venues, preferred shopping mall characteristics, and sources of travel information about shopping
Reece (2004)	x		55+	A priori	Age; destination	This explored the demand for household leisure travel to South Carolina for senior and non-senior households. The results show that two variables affect senior households' leisure travel behavior differently from non-senior households' behavior: housing type and distance. Housing type may represent unmeasured income arising from homeowners' equity
Lee and Tideswell (2005)	x		60+	A priori/a posteriori	Cohort; travel perceptions	Through a self-completion survey of 200 Korean residents over the age of 60 years, this study explored the attitudes of this market toward leisure travel. The constraints that may restrict the travel propensity of senior Koreans and the types of travel experiences they demand are revealed. Four distinct segments of senior Koreans were obtained: quality-of-life-seeking travelers; constrained travelers; ambivalent travelers; novelty-seeking travelers

(continued)

Table 2.2 (continued)

Author(s) (year)	Quantitative method	Qualitative method	Age	Segmentation approach	Segmentation criteria	Main findings
Sund and Boksberger (2007)	x		50+	A priori	Age	This study explored the willingness to pay for holiday rentals and travel preferences, among Swiss households. The findings show significant differences between both non-seniors and seniors, as well as between pre-seniors (50–59-year-olds) and seniors (age 60+)
Lehto et al. (2008)	x		Born between 1925 and 1964	A priori	Cohorts	This research explored two generational cohorts: the "silent generation" (individuals born between 1925 and 1945) and the baby boomers (born between 1946 and 1964). The study examined the differences in travel experience preferences of the two generational cohorts and assessed how inter-cohort differences manifest themselves in behavioral and vacation activity participation patterns
Sangpikul (2008a)	x		55+	A posteriori	Pull motivational factors (destination-based)	This study explored the United States older segment in terms of travel-related behavior and motivations to visit Thailand. This study also examined the possibility of segmenting the United States senior travel market by utilizing attribute-based benefits segmentation (pull motivational factors). The study revealed two distinct segments within the United States older travel market (i.e., "cultural and historical seekers" and "holiday and leisure seekers")

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Table 2.2 (continued)

Author(s) (year)	Quantitative method	Qualitative method	Age	Segmentation approach	Segmentation criteria	Main findings
Boksberger and Laesser (2009)	x		60+	A posteriori	Travel motivations	The article reports on the segmentation of Swiss older travelers on the basis of their travel motivation. Switzerland is considered a mature market which is why this country serves as a role model for future travel behavior. In contrast to previous studies, which identified up to six clusters, the results revealed three clusters: time-honored bon vivants, grizzled explorers, retro travelers
Jang and Ham (2009)	x		50+	A priori	Cohorts	This study examined the socio-demographic and economic determinants of travel expenditure and explored differences between baby boomer senior households (BBSH, i.e., headed by individuals aged 50–59) and older senior households (OSH, i.e., headed by individuals 60+) in the United States. The results revealed that more BBSH participated in leisure travels than OSH. However, the mean expenditure of the OSH was higher than for BBSH
Patterson and Pegg (2009)		x	50+	A priori	Cohorts, Psychographics variables (age, income, gender, education, and health)	This article aimed to understanding of the demographic characteristics of baby boomers and to investigate their changing needs for more challenging tourism and leisure experiences. In addition, it focused on segmentation according to a range of socio-demographic variables

(continued)

Table 2.2 (continued)

Author(s) (year)	Quantitative method	Qualitative method	Age	Segmentation approach	Segmentation criteria	Main findings
González et al. (2009)	x		55+	A posteriori	Cognitive age	The purpose of this study was to gain a broader knowledge of the concept of cognitive age and its use as a variable when segmenting the older Spanish market. Two segments were identified on the basis of cognitive age, i.e., active livers and stable passives. These groups differed in terms of travel motivations and behavior as tourists
Nimrod and Rotem (2010)	x		50+	A posteriori	Destination activities	This study explored the associations between older tourists' behavior and benefits gained by focusing on Israeli retirees. Results indicated four differentiated segments based on their destination activities, but the differences between them in terms of benefits gained were rather minor
Le Serre and Chevalier (2012)	x		50+	A posteriori	Travel motivations	This study identified the profiles of French older travelers (retired people) based on four factors of travel motivations (social motivation, relaxation motivation, sport motivation and (intellectual motivation). Four distinct segments were identified, which differed considerably from one another regarding a set of variables, including consumer behaviors variables

(continued)

Table 2.2 (continued)

Author(s) (year)	Quantitative method	Qualitative method	Age	Segmentation approach	Segmentation criteria	Main findings
Carneiro et al. (2013)	x		63+	A posteriori	Motivations to participate in social tourism programs	This paper presents a market segmentation of a Portuguese social tourism program for older tourist based on motivations. Three clusters emerged: "the passive seniors", "the socio-cultural seniors", and "the active seniors". The groups were compared on the basis of socio-demographic profile, travel behavior, benefits obtained, satisfaction, and loyalty
Chen et al. (2013)	x		50+	A priori (type of travel)/A posteriori (service factors)	Service factors	This study adopted a two-phase approach to incorporate the perspectives of older adults and operators in wellness tourism into the service factors. Seven customer service factors were identified, which served as a basis to segment older adults. Three groups emerged: a holistic group, a physiocare group, and a leisure and recreation group
Ward (2014)	x		50+	A posteriori	Travel motivations	This study focused on older Irish individuals. Based on push and pull travel motivations, four distinctive segments were identified, namely enthusiastic travelers, cultural explorers, escapists, and spiritual travelers
Caber and Albayrak (2014)	x		50–64 (pre-seniors) 65 + (seniors)	A priori	Age, geographic variables	This study identified the importance of hotel attributes for pre-senior, senior and younger (<50) tourists when selecting a hotel. Three market segments (German, Dutch, and British) were selected as the sample of the

(continued)

Table 2.2 (continued)

Author(s) (year)	Quantitative method	Qualitative method	Age	Segmentation approach	Segmentation criteria	Main findings
						research. The findings showed that "value for money" and "availability of organized entertainment in the hotel" were important attributes for older British tourists. Dutch tourists attached more importance to food service attributes than did the other respondents. The findings confirmed the importance of staff attributes for customer satisfaction
Chen Chen and Shoemaker (2014)	x		55+	A posteriori	Travel motivations for pleasure travel	This study employed time-series data along with the theory of generations, life-cycle theory, and continuity theory to analyze the psychological characteristics and travel behavior of American senior leisure tourists. Three generations were compared—the silent generation, the lucky few, and the baby boomers—using empirical data collected in 1986, 1996, and 2006. The findings support the applicability of life-cycle theory and continuity theory to the senior travel market. They also indicate that the theory of generations might be limited in explicating this market
Alén et al. (2015)	x		55+	A posteriori	Socio-demographic variables, motivation and travel characteristics of travel	This study identified profiles of older Spanish tourists by means of using socio-demographic variables, motivation, and travel characteristics. Five market segments were identified according to behavioral variables

(continued)

Table 2.2 (continued)

Author(s) (year)	Quantitative method	Qualitative method	Age	Segmentation approach	Segmentation criteria	Main findings
Pesonen et al. (2015)		x	Retired	A posteriori	Use of Information Technology	This study examined senior travelers as users of tourism Information Technology. A qualitative approach was adopted to provide insights into the topic, and nine Finnish seniors were interviewed. The study presents a tentative typology of three different types of senior travelers based on their use of online travel services: adventurous experimenters, meticulous researchers and fumbling observers
Borges Tiago et al. (2016)	x		65+	A posteriori	Traveling preferences	This study classified the factors that most influence older travelers' decisions. Using a database of respondents from 35 European countries, four subgroups were identified: "explorers," "livewires," "vacationers," and "homebodies," to reflect different preferences and behaviors
Wang et al. (2017)	x		55+	A posteriori	Information Technology usage	This study explored the relation between Information Technology usage and tourism behavior of Chinese older outbound travelers. The results revealed four segments of IT usage, which differ in terms of socio-demographics, travel motivation, and travel intention

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