

Cognitive structures of Iranian senior tourists towards domestic tourism destinations: A means-end chain approach

Abstract: This study constructed a hierarchical value map (HVM) which specified how Iranian senior tourists linked various attributes of domestic tourism destinations to definite consequences, and how such consequences helped them to satisfy their individual values. To do so, the present study, for the first time, demonstrated the cognitive structure of destination image on more abstract levels using the means-end chain (MEC) approach. Through the laddering technique and in-depth interviews with 30 Iranian senior citizens (ISTs), the hierarchical value map of the Iranian senior tourists was constructed, as a result of which seven key MECs were identified. The investigation revealed 12 attributes, 11 consequences, and five values that the Iranian senior tourists wished to achieve. Given the shortage of qualitative studies dealing with senior tourists' behaviour, the findings of this study could serve as a key basis for the segmentation of the senior tourism market and the formulation of destination positioning strategies in Iran.

Keywords: cognitive structures; destination image; Iran tourism; laddering technique; means-end chain; senior tourism

1. Introduction

In the attempt to attract more visitors, tourism destinations normally compete with each other. Although international tourism appears to be the main source of interest for tourists, domestic tourism can still serve a variety of destinations (Huybers, 2003) and has a salient contribution to the national economy (Stylidis, Belhassen, & Shani, 2015). Destinations provide a composite of places, products, services, attributes, activities, attractions and experiences (Pearce & Schaenzel, 2015) which meet the needs of tourists. Tourists may visualise stereotypical images of different travel locations; in response, tourism managers need to promote the image of their site to maximise the number of visitors (Sirgy & Su, 2000). Destination image is a mental structure that

1 represents thoughts, beliefs, emotions and impressions about a destination (Kim &
2 Chen, 2016). Similar to consumer brands, destination image is a vital factor for future
3 visitors as it offers “a pre-taste of the destination” (Fakeye & Crompton, 1991, p. 10).
4 Understanding how the destination image is shaped can be extremely helpful for
5 destination promoters in terms of creating an appropriate image of their destination
6 products (Hernández-Mogollón, Duarte, & Folgado-Fernández, 2017).

7 Suggesting that a destination image is the consumer’s “reasoned and emotional
8 interpretation”, Beerli and Martin (2004, p. 658) have added a distinct dimension to the
9 definition of destination image. An image is shaped through a broad spectrum of
10 informational and promotional resources, coupled with travellers’ personal knowledge
11 and direct experience of the location; an image, therefore, is the force that motivates a
12 visitor to evaluate and choose a destination (Gartner, 1994). According to Baloglu
13 (1999), an image is composed of two distinct but interrelated components: affective
14 (feelings) and cognitive (beliefs). An affective image involves an individual’s emotional
15 response to a product or place, while a cognitive image reflects product knowledge or
16 place characteristics. A specific tourist destination's attractions or attributes are
17 measured as a cognitive dimension of destination image (Becken, Jin, Zhang & Gao,
18 2017).

19 Focusing on the cognitive element represents a trend in cognitive psychology
20 that has been widely recognised and suggests that an individual’s acquired knowledge
21 in a specific domain has strong impacts on a significant proportion of his/her cognitive
22 processes and outcomes (R. Lachman, Lachman, & Butterfield, 1979). Mental processes
23 occurring between stimuli and behaviour can be understood by cognitive psychology
24 (Skavronskaya et al., 2017). Kanwar, Olson, and Sims (1981, p. 123) explain that the
25 content and organisation of the knowledge held in cognitive structures as well as their

1 effects have been considered by many cognitive theorists (Tulving & Donaldson, 1972;
2 Kintsch, 1974; Anderson, 1976). Cognitive structures fundamentally influence
3 processes such as attention, encoding, evaluating, storing, and applying information
4 (Marks & Olson, 1981).

5 The cognitive structure of destination image has been investigated in previous
6 studies (San Martín & Del Bosque, 2008). In most of these studies, the cognitive
7 structure of destination image is based on attributions of the destination and is examined
8 for various types of tourists. The number of senior tourists are increasing due to the
9 global rise in aging population (Le Serre, Weber, Legohérel, & Errajaa, 2017).
10 Therefore, investigating senior tourists' knowledge of the destination and their
11 knowledge of themselves in the form of cognitive structures of destination image could
12 enhance our understanding of the behavior of these tourists. This enhanced
13 understanding could therefore, act as the foundation for formulation of effective
14 strategies for senior tourism market as one of the emerging and attractive markets for
15 the tourism industry.

16 Our comprehensive review of the relevant literature in relation to cognition,
17 destination image, and senior tourism revealed three main gaps in the literature. (1) The
18 cognitive dimension of tourists' destination image is mostly exclusive to their
19 knowledge about destinations' attributes (Echtner, & Ritchie, 1991; Alcañiz, García, &
20 Blas, 2009; Stylidis et al. 2015). (2) The destination image of senior tourists has been
21 relatively overlooked, and the limited studies available, focus primarily on Western
22 tourists (Neves, 2012; Utama, 2017). This is despite the growing global population of
23 senior citizens, especially in Asia (Lee, 2016), and consequently the increase in the
24 number of senior tourists, the study of the behavior of Asian senior tourists has been
25 relatively overlooked (Le Serre, Legohérel, & Weber, 2013). (3) Finally, there are

1 limited studies focusing on the Iranian senior tourism market. This research therefore,
2 aims to investigate the cognitive structure of Iranian senior tourists (ISTs) toward
3 domestic destination. To do so the following questions have been developed and must
4 be answered:

- 5 • Which attributions of domestic destination are of particular interest to Iranian
6 senior tourists?
- 7 • What are the benefits/consequences of experiencing these attributes in the minds
8 of the tourists and which values these benefits are associated with?
- 9 • What are relationships between these cognitive categories in the cognitive
10 structure of senior tourists?

11 The contributions of this research are therefore, twofold. (1) Our research, for
12 the first time, explores the cognitive dimension of destination image in relation to the
13 Means-End Chain (MEC) theory and identifies the components of consequence and
14 value. It also demonstrates how they are linked to the concrete attributions of the
15 destination. (2) Considering the lack of studies focusing on destination image of Iranian
16 senior tourists (ISTs), this study therefore sheds new light on this relatively under-
17 investigated area.

18 The paper is organised as follows: first, the literature of senior tourism,
19 destination image and cognition is reviewed, following which the potential of the MEC
20 method for investigating cognitive structures is addressed. Subsequently, the MEC is
21 used for a qualitative study of destination image in a domestic tourism context. Finally,
22 research findings are reported and discussed, and their implications for further research
23 and applications are highlighted.

2. Literature Review

2.1. *Background to Senior Tourism*

The world is dealing with population ageing. In 2017, 13% of the global population was aged 60 and above and the elderly population is increasing at a rate of about 3% per year. It is predicted that by 2050, nearly a quarter or more of the global population will be 60 or older (World Population Prospects, 2017). Although senior people are usually identified by “calendar age”, there is no consensus about when this period of life starts (Caber & Albayrak, 2014). The lowest age suggested for recognising a person as “senior” is 50 (Patuelli & Nijkamp, 2016). Improved health conditions have aided senior population growth (Ji, 2012). Having more free time and active lifestyles are the characteristics of most contemporary seniors which have encouraged higher levels of interest in travel (Alén, Losada, & Domínguez, 2016). Seniors have significant disposable time and money to spend on travel (Nyaupane, McCabe, & Andereck, 2008) and both the size and purchasing power of this cohort of consumers are steadily increasing (González, Rodríguez, Miranda, & Cervantes, 2009). Consequently, the travel industry cannot overlook the senior travel market as a promising market segment (Losada, Alén, Nicolau, & Domínguez, 2017; Wang et al., 2013).

Tourism and travel literature has been experiencing a considerable amount of growth in the number of studies specifically focusing on the senior tourist market since 2000. These studies have primarily attempted to identify different aspects of the senior market by exploring factors such as travel motivations, travel satisfaction, travel constraints, perceived health status and the associations of those factors with the segmentation of senior tourists, their travel choices and travel purchase decisions (Caber & Albayrak, 2014). Nielsen (2014) provided an overview of the literature on seniors’

1 tourist behaviour and described different methods of approaching it as analysis of
2 constraints, comparative analysis, analysis of heterogeneity and temporal analysis.
3 Because of the relation between how seniors' tourist behaviour has been approached
4 and how seniors are viewed, in Nielsen's (2014, p.118) study, two broad views were
5 suggested: (1) seniors are seen as an ageing group or (2) as a heterogeneous group.
6 Following the comprehensive study of Nielsen (2014), the senior tourist market has
7 encouraged researchers to investigate in this field and examine various topics,
8 especially in relation to constraints (Huber, Milne, & Hyde, 2018); accommodation
9 (Anuar, Musa, Khalid, & Anderson, 2017; Losada et al., 2017); length of stay and
10 frequency of travel (Alén, Nicolau, Losada, & Domínguez, 2014; Losada, Alén,
11 Domínguez, & Nicolau, 2016); motivation and spirituality (Alén, Losada, & de Carlos,
12 2015; Moal-Ulvoas, 2017; Moal-Ulvoas, 2016; Patuelli, & Nijkamp, 2016); and
13 cognitive age (Le Serre et al., 2017).

14 Cognitive age, such as cognitive structure, stems from the field of cognitive
15 psychology and is often used in senior consumer behavior research. The cognitive age is
16 connected to self-perception of the individual and determines what age the person feels
17 regardless of his/her calendar age (Le Serre et al., 2017). Barak (1987) creates a new
18 multidimensional age scale (cognitive age) to replace the identity age scale. The
19 cognitive age scale successfully merges the identity age with personal age to gain an
20 appropriate reliability and validity. The relationship between cognitive age and behavior
21 of the seniors, including values (Sudbury & Simcock, 2009) and the motivations of
22 tourists (González et al., 2009) have been investigated before. However, considering
23 that cultural and personal definitions of age often differ (Barak, Stern, & Gould, 1988),
24 in one recent study concerning cognitive age, Le Serre et al. (2017) identified culture as
25 a moderating variable in relation to cognitive age and senior behavior. The findings of

1 this study show that in Asian culture (Chinese), cognitive age relation with travel
2 perceived risk was stronger than European culture (France).

3 A number of studies have been conducted since 2000 which focus on the
4 perspectives of senior tourists in relation to tourist destination choice. For example,
5 Shoemaker (2000) identified a number of criteria for choosing a tourism destination by
6 American senior tourists. The most important of these criteria were: beautiful natural
7 scenery, accommodation prices, special discounts for seniors, and transportation costs.
8 Norman, Daniels, McGuire & Norman (2001), similarly provided an analysis of the
9 push/pull motivational factors and reported 6 important motivations/benefits (e.g.
10 family, escape and relaxation) and 9 remarkable attributions (e.g. culture, climate,
11 people and historical attractions) for the American senior tourists. Furthermore, Huang
12 & Tsai (2003) found that Taiwanese senior tourists pay attention to historical, natural
13 landscapes attributes and religious and Western programs. Neves (2012) identified
14 Portuguese tourism destinations' attractions for domestic senior tourists and analyzed
15 the relationship between these perceived attractions (nature, shopping, the environment,
16 health care facilities, and history) and the socio-demographic characteristics of this type
17 of tourists. Lee (2016) also identified four attribute-level satisfaction factors for the
18 Taiwanese senior tourists in his study. These factors were (1) diversity of natural and
19 cultural resources, (2) barrier-free access to tourism and recreation attractions, (3)
20 provision of senior-related facilities and services, and (4) quality of senior-only tour
21 operations (Lee, 2016, p.18). Utama (2017) presented the destination image model of
22 Bali Tourist Destination. In this model, the effect of three variables of push motivations,
23 destination identity and destination creation on the destination image variable was
24 measured from the perspective of foreign national senior tourists. The findings of this

1 study show that the destination creation and push motivations affect the destination
2 image.

3

4 ***2.2. An Overview of Senior Tourism in Iran***

5

6 In the latest census in Iran (2016), the elderly aged 60 and older, make up 9.3% of the
7 population, which has been steadily growing since 1976 (Statistical Centre of Iran,
8 2017); it is expected that by 2050, the elderly will account for about 30% of the Iranian
9 population (Secretariat National Council of the Elderly, 2017). By 2011, Iran had
10 passed the second phase of the age transition (young stage), and by 2031, the third
11 phase of age transition (middle aged increase) will finish. After 2031, the aging phase
12 will dominate Iran's demographic structure (Moshfeq & Mirza'i, 2010).

13 With regard to the movement of the Iranian population towards middle age and
14 aging, issues such as hygiene, health, the provision of comfort and the wellbeing of the
15 elderly in the community are becoming more widespread every day (Motie Haghshenas,
16 2011). Paying attention to the development of senior travel and planning for special
17 tours can be considered as a way to fill part of the leisure time for Iranian seniors
18 (Asadi, Rahimzadeh & Ahmadkhani, 2016).

19 As far as senior tourism is concerned, very limited research has been conducted
20 in Iran. Ghalamkari (2014) divided the market of Iranian senior tourists based on travel
21 motives and individual characteristics into three segments: younger seniors, rich seniors
22 and pluralist seniors; this study presented strategies for the development of domestic
23 tourism for these groups. Asadi et al. (2016) provided a comprehensive framework for
24 identifying and exploring the direct and indirect effects of each of the factors affecting
25 the development of the senior tourism industry in Iran. The results of this research

1 revealed that *security, relaxation and comfort of the residence* are the most important
2 factors in Iran's senior tourism development model. Using a cognitive mapping
3 approach, Asadi, Boroumand Zad & Maleki Nejad (2017) provided a qualitative model
4 for explaining the development of senior tourism in Yazd province. Their research
5 findings demonstrate that factors like security, insurance, health standards, special
6 services and transportation status play an important role in the development of senior
7 tourism in Yazd province.

8 Despite the rising median age of Iran's population in recent years and the
9 formation of the emerging market of senior tourism in Iran, limited studies have been
10 carried out in the field of Iranian senior tourists. Since the definition of marketing
11 strategies requires the recognition of consumer behaviour and the amount of research
12 done on the behaviour of the senior tourist is insignificant, the need to study the factors
13 affecting the behaviour of Iranian senior tourists is clear.

14

15 ***2.3. Cognition and Destination Image***

16 Many researchers who have dealt with tourism regard destination image as a
17 multidimensional construct which essentially rests on two dimensions: affective
18 evaluation and cognitive evaluation (Baloglu & McCleary, 1999a; San Martín, Herrero,
19 & García de los Salmones, 2018). These dimensions create a general image of the
20 location in question (Baloglu & McCleary, 1999b), although the cognitive image has a
21 greater impact on general destination image (Hernández-Mogollón et al., 2017).
22 Cognitive evaluation is determined by reference to knowledge and beliefs held about a
23 location, whereas affective evaluation involves all feelings about the location in
24 question (Baloglu & McCleary, 1999a; Pike & Ryan, 2004). Through cognitive

1 evaluation, the tourist relies on the objective attributes of the location within the limits
2 of his/her knowledge (San Martín & Del Bosque, 2008). The attributes which may
3 persuade a tourist to visit a destination include natural and historical background, rich
4 heritage, lodging facility, the climate, among others (Stylidis et al., 2015). That is, the
5 more the tourist is aware of the positive features of the location, the more reliable
6 his/her cognitive evaluation will be (Sahin & Baloglu, 2011). Drawing on
7 sociolinguistic models explaining the formation of the destination image, Dann (1996)
8 and Gartner (1994) have identified three elements of an image: (a) affective (b)
9 cognitive and (c) conation. According to Agapito, Oom do Valle, and da Costa Mendes
10 (2013), these three dimensions of destination image are hierarchically interrelated and
11 the influence of the cognitive component on the conative dimension is higher when
12 mediated by the affective component. Moreover, Alcañiz et al. (2009) attempted to
13 advance knowledge of the cognitive dimension of a destination's image by analysing its
14 composition and posited three positions (functional, mixed and psychological attributes)
15 on a continuum. They added the third position, called the "mixed", to Echtner and
16 Ritchie (1991, 1993). Echtner and Ritchie's (1991, 1993) multi-attribute approach to the
17 cognitive component of destination image was to provide a continuum of Functional
18 (based on tangible or measurable perceptions) - Psychological (intangible and abstract
19 characteristics) that different attributions of destinations were posited in its different
20 position. Given that the destination image is the representation of destination in tourist's
21 mind (Fakeye & Crompton, 1991), we can use the concepts of cognitive psychology to
22 define this representation as a hierarchy of categories. This constitutes different levels
23 of abstraction in the mind, and the destination attributions have the lowest abstraction.

24 Early cognitive psychologists were remarkably influenced by computational
25 analogy, which was increasingly growing as a method of exploring mental functioning

1 (Gardner, 1985). The mind was conceptualised as a data processor or “software” and the
2 brain was seen as the hardware. Interaction with the external environment was
3 visualised as informational input; primarily, the mind was described as being a
4 representation tool that converted sensory input into internal representations, which
5 produced adjustive behaviour and processes as an output (Garfield, 1990). Knowledge
6 of the world was an amalgamate of internal representations that were mostly stored in
7 long-term memory. This primary configuration of cognitive psychology soon developed
8 into a study of knowledge representation/process which advocated a radically rationalist
9 explanation of behaviour (Moore, Smallman, Wilson, & Simmons, 2012).

10 The notion of cognitive structure, as far as the *encoded representations of*
11 *information* are concerned, has become a central concept in consumer behaviour
12 models. Such models assume that information is encoded and stored in organised
13 networks of representations known as *knowledge structures* or *cognitive structures*
14 (Kanwar et al., 1981). In an individual’s memory, these representations can be
15 organised as schemata (schemas) or cognitive structures which are associated with a
16 given product. A product schema involves coded representations of brand knowledge,
17 product attributes, conditions of use, general information about categorising the product,
18 and selection/evaluation rules. The coded information may be perceived to be organised
19 or interrelated and may be stored in memory as a structural framework of knowledge
20 (Norman & Bobrow, 1975). As a result, the schemata or cognitive structures of the
21 product may encompass both *real* knowledge and evaluations/emotions, whilst storing
22 purchase criteria and even decision rules and strategies (Olson, 1978). According to
23 Ghosh and Gilboa (2014), representation of knowledge about a concept including its
24 attributes and the relations among those attributes happens in a schema as a cognitive
25 structure. Many researchers recognise knowledge structures or structured knowledge

1 (Jonassen, Beissner, & Yacci, 1993) as a state through which the individual sorts out
2 facts, concepts, propositions, theories, and raw data (Taber, 2000). More specifically,
3 knowledge structures are regarded as a hypothetical construct that organises the
4 association between concepts in memory (Shavelson, 1972). Therefore, it is assumed
5 that the order of information retrieved from long-term memory can, to some extent,
6 reflect how an individual cognitive structure defines concepts and their links (Ifenthaler,
7 Masduki, & Seel, 2011). It is generally accepted that individuals use the information in
8 their long-term memory to understand, interpret, and store new information (Olson,
9 1980). Broadly speaking, cognitive structures are expected to leave a strong impact on
10 individuals' cognitive processes and behaviours (Marks & Olson, 1981).

11 The term hierarchy or cognitive structure refers to a hypothetical link between
12 three interrelated constructs: product/brand attributes, consequences (e.g. perceived
13 benefits) of using special attributes, and consumers' orientations or end-states of being
14 (e.g. personal values including security, happiness, and self-esteem) (Krystallis, 2015).
15 The foundation of the MEC theory is a model of cognitive structures which represents
16 the path through which concrete product characteristics are linked with consumer values
17 (McIntosh & Thyne, 2005). In the literature, people's inner thinking and cognitive
18 structures in relation to a given product or event have been widely investigated through
19 MEC theory (Lin & Fu, 2017). There are two approaches to the MEC theory:
20 motivational and cognitive. The motivational perspective uses MEC to gain an insight
21 into consumers' purchase motivations. For instance, this approach attempts to detect the
22 consequences that may follow the use of the marketing mix characteristics of a given
23 product and the way such consequences are interlinked. The cognitive approach, on the
24 other hand, employs MEC as a model of the "consumption-related cognitive structure"
25 which stores and organises the information about consumption in memory. In other

1 words, the cognitive structure is hypothesised as a basic hierarchal model in which
2 cognitive categories with differing levels of abstraction "are interlinked in chains and
3 networks" (Grunert & Grunert, 1995, p. 210).

4 Applying the MEC theory to the tourism and leisure context primarily
5 concentrates on tourist behaviour in terms of the choice of destination (Jiang, Scott, &
6 Ding, 2015; Klenosky, Gengler, & Mulvey, 1993; Klenosky, 2002; Pike, 2012),
7 museum and heritage visiting (Thyne, 2001), nature-specific experiences (Lin, Fu, & Li,
8 2017), choice of accommodation (Mattila, 1999), and other possible areas of
9 investigation. In these cases, both MEC theory and the laddering technique are used.
10 These theories can formulate qualitative research methods, as well as conceptual
11 models, used to interpret the meanings that tourists and hosts associate with buying,
12 consuming or experiencing tourism-related products/services. Meanwhile, they can
13 facilitate an understanding the personal values underlying tourists' and hosts'
14 behaviours (McIntosh & Thyne, 2005).

15 **3. Methodology**

16 ***3.1. MEC Theory and Laddering Technique***

17 Broadly speaking, in studies concerned with marketing, MEC is employed to
18 understand consumer behaviour (e.g. Jeng & Yeh, 2016; Walker & Olson, 1991). MEC
19 is governed by expectancy-value theory and tries to outline the hierarchical relations
20 established between product attributes (means), consequences arising from these
21 attributes for consumers (benefits), and personal values (ends) which are reinforced by
22 the consequences. The rationale behind MEC suggests that products (e.g. commodities,
23 services, destinations, and ideas) are meaningful to consumers and that consumers
24 evaluate meanings when making decisions about buying and consumption (Gutman,

1 1982). MECs are hierarchical cognitive chains whereby consumers' product knowledge
2 is connected to their self-knowledge. The lower levels of the MEC hierarchy encompass
3 objective knowledge about product attributes and their perceived associations with
4 functional (concrete) consequences arising from product use. Such functional
5 consequences may be associated with more abstract knowledge regarding psychological
6 consequences of product use. Finally, some MECs may associate psychosocial
7 consequences with concrete or completely abstract self-knowledge about consumer
8 values and consumers tend to perceive products as *self-relevant* when their product
9 knowledge regarding functional attributes and consequences is associated with their
10 self-knowledge of favourable psychosocial consequences and values (Walker & Olson,
11 1991).

12 In MEC research, there is a semi-structured, one-on-one interviewing technique
13 called *laddering*, which is normally used to recognise the components of consumers'
14 MECs (Klenosky et al., 1993; Reynolds & Gutman, 1988). The laddering technique
15 involves a tailored interview format that draws on "a series of directed probes"
16 revolving around the question "Why is that important to you?". The ultimate purpose of
17 this questioning is to identify the sets of linkages between key conceptual elements
18 across the range of product attributes (A), consequences (C), and personal values (V)
19 (Krystallis, 2015). The interview technique provides the respondents with an
20 opportunity to speak openly, utter long sentences without being interrupted by the
21 researchers, and communicate more than one consequence for each attribute or more
22 than one value for each consequence (Botschen, Thelen & Pieters, 1999).

23 The attributes of products used by consumers can be identified through a variety
24 of techniques (Krystallis, 2015). Such attributes are then selected as a starting point for
25 in-depth interviews. Following an analysis of the content of laddering data, a summary

1 table (i.e. the implication matrix) is reached in which all direct or indirect linkages
2 between Cs, As and Vs (the “A-C-V ladders”) are outlined. Next, most frequently
3 emerging connections are represented as a tree diagram called the *hierarchical value*
4 *map*. This map is inherently structural and reflects the associations across all levels of
5 abstraction (Reynolds & Gutman, 1988). Gutman (1982) and, Olson and Reynolds
6 (1983) adopt a cognitive structure perspective, stating that the hierarchical value map
7 acquired from laddering data is “an aggregate map of cognitive structure” (Olson &
8 Reynolds, 1983).

9 **3.2. Data Collection and Sampling**

10 In this study, the interviewees were Iranian senior citizens (over 50 years of age) who
11 had undertaken a minimum of three trips to domestic destinations over the past five
12 years and had plans for subsequent travels. A qualitative investigation requires
13 information-rich participants, and individuals with travel experience would be more
14 likely to have a clear idea of destination characteristics and their own desires. As a
15 result, a purposive sampling method was used to identify the primary participants who
16 were predominantly the friends and acquaintances of the researchers. The participants
17 were then asked to introduce other candidates. The data was collected from March 2017
18 to June 2017 through 30 interviews conducted in Shiraz, Iran. Generally, a sample size
19 ranging from 30 to 60 participants would be acceptable for a MEC-specific study
20 (Reynolds & Gutman, 1984). The time and place of the interviews were arranged based
21 on the participants’ preferences.

22 Each interview was initiated with a short introduction. The interviewees were
23 informed of the purposes of the interview and the researchers were allowed to record
24 the conversations. The respondents were first asked about their next destinations, and

1 they specified at least three different places. Next, the respondents were asked to
2 describe the considerable attributes of the destinations in question. On average, every
3 respondent would mention 4-6 cognitive elements concerning attributes. Subsequently,
4 the attributes which seemed to be more important to the respondents were designated as
5 the starting point of the laddering procedure. Based on these attributes, through the
6 conventional probe “Why is that important to you?”, the interviewees were asked to
7 subconsciously associate product attributes with consequences and/or their personal
8 values. The same process was continued until the respondents could no longer provide
9 an answer to the question raised. Interviews with the participants ranged from 30 to 75
10 minutes and were audio recorded.

11 ***3.3. Data Analysis Approach***

12 Interviews were transcribed and content analysis was conducted to identify content
13 codes which represented the cognitive elements relevant to destinations. First, in the
14 coding process, the interview data were classified as concept codes. Then, concept
15 codes with close meanings were classified into content codes. Due to the focal
16 importance of terminal values in directing the entirety of the cognitive hierarchy, such
17 values were coded according to Rokeach (1973) and Schwartz’s (2012) theory of basic
18 human values. Schwartz's theory of value classified 10 "motivationally distinct values"
19 into four categories. As part of the coding process, some concept codes were grouped
20 according to the values of Schwartz's universalism, benevolence and security values.
21 Codes related to spirituality were also included in the Rokeach's (1973) terminal value
22 of salvation.

23 Through the coding process, 101 concept codes were identified, which were then
24 categorised into 28 summary content codes for subsequent analysis (see Table 1). The
25 content summary codes included 12 attributes, 11 consequences, and 5 values. The

1 reliability of the codes was assessed through the opinions of two evaluators, with 85%
2 agreement on the codes assigned. Due to the software constraints in analyzing Persian
3 data as well as the researchers' decision to present the results of this study in English,
4 content codes were translated from Persian into English. Following the coding process,
5 ladders based on the A-C-V levels were mapped. Each participant could create several
6 ladders. The ladders of each respondent were entered into the LadderUX software and
7 the data was analysed to construct both the implication matrix and the hierarchical value
8 map (HVM) that represent the Iranian senior tourists' cognitive structure of destination
9 images (see Figure 1).

10
11 To establish a comprehensive HVM, direct linkages across A-C-V items were
12 compared with a cut-off level (Krystallis, 2015). Although Gengler and Reynolds
13 (1995) proposed a cut-off level at 5% of the sample size, the value was considered to be
14 2 in this study. In other words, every definite linkage in the HVM had to be mentioned
15 at least once by at least three respondents. On average, for each respondent, 4.7 ladders
16 were obtained from a total of 141 ladders and the average element / content code per
17 ladder was estimated at 2.7 by the software.

18

19 Table 1. Summary Content Codes

20 Figure 1. Iranian Senior Tourists' HVM

21

22 **4. Results and Analysis**

23 All of the respondents had already travelled to domestic destinations in Iran. The
24 experiences they gained made it possible for them to discuss their knowledge of and
25 beliefs about the destinations. Table 2 provides a summary of the respondents'

1 demographic information. The study sample included Iranian senior tourists (ISTs) who
2 were above 50 years of age. In this study, the mean age of the respondents was 64 years
3 ($50 \leq$ respondents' age ≤ 82); 13% had lost their spouse, and 53% were female.
4 Furthermore, 60% held academic degrees.

5
6 Table 2. Demographic Profile of the Respondents
7

8
9 Out of the laddering data, seven major MECs were extracted that yielded a good
10 understanding of the Iranian senior tourists' cognitive structures (see Table 3). In the
11 present study, key MECs are those cognitive chains in the aggregate map of cognitive
12 structure of Iranian senior tourists, which relationships between cognitive categories are
13 strong or moderate. While a key MEC can start with several different attributes, it
14 ultimately leads to a single value.

15 MEC 1 dealt with "*historic attractions- national pride-universalism*". Table 3
16 illustrates (in)direct linkages in MEC 1 across A-C-V levels; the numbers to the left of
17 the decimal point clarify how many direct relations at various levels of abstraction were
18 established between two cognitive categories, whereas the numbers to the right of the
19 decimal point in every cell show the number of indirect relations (Reynolds & Gutman,
20 1988). For instance, in MEC 1, "historic attractions" had ten relations with "*national*
21 *pride*"; that is to say, this direct relation was mentioned by the respondents ten times.
22 Similarly, there were 14 indirect relations between "historic attractions" and
23 "universalism"; this suggested when the researchers probed into the cognitive categories
24 beyond "historic attractions" during the laddering process, the respondents mentioned
25 "universalism" 14 times at the level of values.

1 ***MEC 1***

2 As Figure 1 depicts, *historic attractions* was linked with the consequence of *national*
3 *pride*. With a history of about 10,000 years, Iran is a country that enjoys a rich culture
4 and history and its contributions to human history heritage are well understood
5 (Khodadadi & O'Donnell, 2018). The ISTs expressed a sense of *national pride* as an
6 achievement gained from visiting the monumental heritage, which helped them realise
7 the *universalism* value. For example, according to respondent 8, "I am proud to be
8 Iranian when I see historical monuments of the Achaemenid period". *Universalism*
9 value in turn contributed to a sense of accomplishment, originality, and inner harmony.
10 MEC 1 demonstrated a total of 19 direct relations and 14 indirect relations.

11

12 ***MEC 2***

13 *Culture* and *historic attractions* were sources of interest for the respondents because
14 these sources generate more knowledge, thus satisfying individual curiosity and leading
15 to broad-mindedness and wisdom. In the coding procedure used, *historic attractions*
16 included historic background and tangible objects, for instance old houses and palaces,
17 museums, caravanserais and castles, old neighbourhoods, the tombs of eminent
18 individuals, mosques/shrines, and bridges. *Culture* was regarded as an intangible entity
19 and included artistic background, literature, rites and rituals, local accents and dialects,
20 handcrafted artworks, foods, and agricultural products. The respondents preferred
21 destinations with historic attractions and cultural background because such sites offer
22 diverse experiences and new knowledge and ultimately help the respondents to meet the
23 *universalism* value which, as they expressed, is founded upon curiosity, wisdom, and
24 broad-mindedness.

1 For the respondents, *experience differences* was interpreted as a source of
2 experiencing new and distinct feelings, visiting new places, and comparing them.
3 Furthermore, *know more* was interpreted as gaining knowledge in a specific area,
4 learning a lesson from history, and tracing the genealogy of interesting topics. Historical
5 and cultural attractions brought about similar consequences, *experience of difference*,
6 *know more*, and finally the *universalism* value. For example, according to respondent 9,
7 “historical anecdotes can be taken into consideration, and subsequently change the view
8 of life”; alternatively, respondent 4 stated that “I compare old Kashan's homes with old
9 Shiraz homes and learn a lot”. As Table 3 shows, there were 55 direct relations and 40
10 indirect ones in MEC 2.

11 **MEC 3**

12 Natural landscapes and shrines are important to the respondents because such places are
13 considered to be pacifying and reflections of God’s majesty, inspiring them to have
14 (perceived) intimacy with God. Viewing natural landscapes and being present in saints’
15 sanctuaries helped the respondents return to their “inner selves” and experience positive
16 energy. By experiencing *relaxation* in a peaceful place, the respondents mean receiving
17 positive energy by releasing negative energy, overcoming sadness and worry, achieving
18 distance from the urban lifestyle, and connecting with their inner selves. In the
19 respondents’ own words, the main examples of *natural landscapes* are: seas,
20 forests/jungles, rivers, mountains/plains, caves, palm tree fields, deserts and desert
21 nights, richly green spaces, and pristine nature. *Relaxation*, with 23 direct relations, was
22 one of the significant consequences that the ISTs tried to realise in the travel
23 destinations they visited. Through inner peace and a contemplation of God’s creation,
24 the respondents sought to feel intimacy with God and to be relieved from the burden of

1 their sins; in other words, their intention was to realise a sense of *salvation* in their lives.
2 According to respondent 1, “the silence of nature relaxes me”, while respondent 11
3 stated that “by pilgrimage, I become relax, my negative energies are evacuated and I
4 feel closer to God”. In total, 36 direct relations and 13 indirect relations were observed
5 in MEC 3.

6 ***MEC 4***

7 As Figure 1 illustrates, attributes such as *activity in nature* and *previously unvisited*
8 *locations* released the ISTs from their normally monotonous lifestyle and consequently
9 helped them to develop a sense of joy and happiness. For *activity in nature*, some
10 activities in travel destinations were mentioned including cooking out in nature, fishing,
11 canoeing, swimming and scuba diving, using warm fountains, walking along the shore,
12 hiking, and enjoying flowers and plants. Respondent 6 made the following statement:
13 “observing the flowers and plants of other areas is my hobby and creates variety in my
14 life”. *Old-fashioned markets / shopping centres* in travel destinations were also
15 desirable and interesting locations for the respondents. For example, according to
16 respondent 12, “I enjoy the variety of colours and designs in the old markets”.
17 Moreover, respondent 1 specified that “shopping changes my mood, it's better to say
18 shopping therapy”. *Better feeling / joy*, with 19 direct relations and eight indirect
19 relations, was an important consequence that the ISTs tried to realise by recourse to
20 various facets. Several of them stated that *better feeling / joy* inspired *positive emotions*
21 which were, in their own words, happiness, cheerfulness, and a life with diversity, joy
22 and excitement. In MEC 4, 50 direct relations and 26 indirect relations were observed.
23

1 **MEC 5**

2 Discipline and cleanliness in cities, urban infrastructures, and new tourism attractions
3 (e.g. flower gardens, bird gardens, and aquariums) were all elements of the code *urban*
4 *order* (see Figure 1), and were interesting and enjoyable to the ISTs. The code *security*
5 involved values expressed by the respondents such as social order, cleanliness, and
6 protection of the environment. In total, there were 13 direct relations and five indirect
7 ones in MEC 5.

8 **MEC 6**

9 Memory loss is one of the characteristics of old age. Aging adults may even experience
10 severe forms of memory loss. Some of the respondents expressed that they might be
11 more likely to remember the names and specifications of *historic attractions* by visiting
12 such locations. Although they might have heard the names or seen the pictures of such
13 locations, the ISTs tended to forget the attractions quite quickly. Yet, visiting such
14 locations in person could make them more memorable (*durability in mind*) to the ISTs
15 and help them enhance their mental and psychological health. According to respondent
16 10, for example, “my memory is weakened. Seeing the historic buildings in person
17 makes them more memorable”. *Security* as a value represented wellbeing in MEC 6.
18 This chain showed a total number of 10 direct relations and 5 indirect ones.

19

20 **MEC 7**

21 As expressed by the respondents, *visiting family and friends* and buying
22 *gifts/souvenirs* were two attributes of the destination. Such gifts would primarily include
23 food and agricultural products, as well as handcrafted artworks, in the travel destination.
24 A tourist will buy such commodities as gifts for friends and family members living

1 close to home to please them, reinforcing friendship/kinship relationships, and
2 expressing a pure sense of sincerity. In the Iranian culture, to sustain friendship/kinship
3 relationships, it is particularly important to respond positively to people’s kindness,
4 make others happy, and show concern. In Islamic traditions, Muslims are advised to
5 maintain their relations with their kin, and the ISTs, who are generally faithful to
6 religious principles, considered such recommendations even when choosing a travel
7 destination. *Benevolence* as a value in MEC 7 referred to love, friendship and
8 assistance. As Table 3 shows, there were 30 direct relations and 14 indirect ones in
9 MEC 7.

10
11 Table 3. MECs of the Participants
12

13 5. Discussion

14 According to San Martín and Del Bosque (2008) some studies have explored “the
15 cognitive structure of destination image”; however, the notion of cognitive structure
16 mainly focuses on concrete cognitive categories (destination attributes) in these studies,
17 whilst abstract cognitive categories of consequence and value have not been
18 investigated. In the present study, the cognitive structures shaping the destination image
19 revealed a path in which various concrete destination attributes were linked to values. In
20 other words, the content of knowledge in the cognitive structure of the destination
21 image was identified in three categories: attribute, consequence, and value. Then the
22 way in which these categories could be organised or linked in the means-end chain was
23 investigated. Considering the current gap in the destination image literature in relation
24 to Iranian seniors and Middle Eastern culture, the Iranian senior tourists’ cognitive
25 structure of destination image was studied.

1 The content of knowledge in the Iranian senior tourists' (ISTs) cognitive
2 structures of domestic destinations included 12 attributes, 11 consequences and five
3 values. Concrete cognitive categories/destination attributes, including *historic*
4 *attractions, culture* and *natural landscapes*, were perceived to be the most interesting
5 categories. These attributes are of interest to the majority of the senior tourists from
6 different nationalities. This is for example, highlighted in a number of studies focusing
7 on destination attributes perceived by senior tourists (Alen et al., 2015; Huang & Tsai
8 ,2003; Neves,2012; Norman et al. ,2001; Shoemaker, 2000; You & O'leary, 1999).

9 Further attributes such as *activity in nature, previously unvisited locations,*
10 *buying gifts/souvenirs,* and *pilgrimage sites* constituted another set of domestic
11 destination specifications important to the ISTs. However, previous studies have only
12 investigated the first two attributes (e.g. Norman et al., 2001; Shoemaker, 2000; You &
13 O'leary, 1999). Pilgrimage sites at the destination are important for some Iranian senior
14 tourist. Similar attribute was highlighted by Huang & Tsai (2003) as "religious
15 programs" for Taiwanese senior tourists. It is worth noting that majority of Iranians are
16 religious and visiting pilgrimage sites is part of the religious duty. This behaviour tends
17 to become more prominent with ageing (Moshfeq & Mirza'i, 2010). The attribute of
18 buying gift / souvenirs in travel destinations has not been mentioned in previous studies.
19 However, Jiang, et al. (2015) identified this destination attribute as "gift to relatives and
20 friends" for Chinese tourists (younger and older age groups) who travel abroad.

21 The respondents mentioned such attributes as *old-fashioned markets/shopping*
22 *centres, visiting family and friends, urban order, good people,* and *good climate* less
23 than ten times. The presence of shopping centers in the destination, particularly those
24 which are historical, was somewhat considered as important by some Iranian senior
25 tourists. This is similar to European senior tourists who also pay attention to shopping

1 centers (Neves, 2012; Alen et al., 2015 You & O'leary, 1999). The opportunity to meet
2 friends and family at the destination was also important to the Iranian senior tourists.
3 This issue has similarly been reported in other researches as one of the travel
4 motivations for the senior tourists (Esichaikul, 2012; Horneman, Carter, Wei, & Ruys,
5 2002; You & O'leary, 1999).Iranians are collectivist as far as family and religion are
6 concerned (Rahmani, Mirzaei, & vosughi, 2005). They endeavour to maintain their
7 relationships with family members and friends, and the findings of this research also
8 suggested that the ISTs paid attention to the possibility of visiting friends and family
9 members whilst deciding on a destination. The findings of this study show that the
10 climate and people have lower priority which is in line with Huang & Tsai's (2003)
11 study.

12 In the cognitive structure of the destination image extracted based on the theory
13 of the MEC chain, the benefits / consequences of the destination attributes are
14 considered as part of the knowledge formed in the individual's mind. In this study, 11
15 consequences were identified. The most frequent consequences in the study were *better*
16 *feeling / joy, relaxation, and know more*. MEC-focused studies in tourism have mainly
17 viewed consequences and values from a motivational perspective (e.g. Ho, Lin, &
18 Huang, 2014; Jiang, et al., 2015; Klenosky, et al., 1993; Klenosky, 2002); consequently,
19 these studies have regarded the consequences (*better feeling /joy, relaxation, and know*
20 *more*) along with other consequences such as *experience of difference, break from*
21 *routine and improved communication* as motivations behind non-senior tourists' travel
22 choices. The benefits of senior tourists have been investigated in previous studies, either
23 from motivation or push factors perspectives (Lehto, O'leary, & Lee, 2002; Patuelli &
24 Nijkamp, 2016). Four initial consequences were identified in the study of You and
25 O'leary (1999); Shoemaker (2000); Lehto et al. (2001) and Esichaikul (2012).

1 Esichaikul (2012) reported *relaxation* as the most important motive for European senior
2 tourists. The two consequences of *break from routine* and *improved communication* are
3 also in line with the studies of You and O'leary (1999); Shoemaker (2000); Boksberger
4 and Laesser (2009) and Norman et al. (2001).

5 Five consequences including *pain relief*, *durability in mind*, *recollection*,
6 *pleasing others*, and *national pride*, were also identified in this study. The consequence
7 of the *pain relief* and *durability in the mind* were similarly reported as the motive of
8 "health / well-being" in the studies of Alen et al. (2015) and Utama, (2017). *recollection*
9 of the sweet memories of the past and the memories of those who are no longer alive
10 (*recollection*) were presented as "nostalgia" motive in Sellick (2004) and Moal-Ulvoas
11 (2016) studies. The consequence of the *national pride* has also been similarly reported
12 in the LeSerr et al. (2013) study as motive of "pride and patriotism" for senior tourists in
13 China.

14 In this study, the values expressed by the respondents were categorised into five
15 codes, out of which the following three categories occurred most frequently: (a)
16 *universalism* (a sense of accomplishment, originality, inner harmony, curiosity, wisdom,
17 broad-mindedness, assiduity and a world filled with beauty); (b) *positive emotions*
18 (happiness, cheerfulness, life with diversity, joy and excitement); and (c) *security*
19 (health, social order, cleanliness, and environmental protection). Azadarmaki, Venus,
20 and Karami (2013) observed a dichotomy between tradition and modernity in terms of
21 cultural values in Iran. The main traditional values included religion, family, seniority
22 and collectivism, whereas modern value included variety seeking, hedonism,
23 opportunism, dependence, individualism, and new experiences. Japanese senior
24 consumers also attach great importance to security and enjoyment values (Kohlbacher
25 & Chéron, 2012). Security and safety have also been identified as key values for

1 American senior consumers (Schewe, 1990). Sudbury and Simcock (2009) concluded
2 that senior consumers with younger cognitive ages valued entertainment and pleasure in
3 life, whereas those who were cognitively older prioritised security. However, there was
4 a strong positive correlation between the cognitive age of the European senior (British)
5 consumers and the value of security.

6
7 In the present study, however, the respondents also emphasised values such as
8 *salvation* (intimacy with God and release from the burden of sins) and *benevolence*
9 (love and friendship, kindness, helpfulness, loyalty, and integrity). In their travels to
10 domestic destinations, the respondents tried to satisfy these values. Accordingly,
11 Schewe (1991) described *spirituality* and *social connectedness* as key values for senior
12 consumers. Moal-Ulvoas, (2017), stated that "Spirituality and focus on emotions" are
13 the remarkable characteristics of the seniors, and in his study, identified traveling
14 consequences for the seniors as creating "self-transcendent positive emotions" and
15 contributing to "spirituality".

16
17 Investigating how the ISTs organised cognitive categories in their cognitive
18 structures was another purpose of this study. As Figure 1 shows, in the cognitive
19 structures of the ISTs, seven key MECs can be observed. In MECs 1, 2 and 3, the
20 linkage between cognitive categories are strong. As the respondents explained, visiting
21 *historic attractions* in destinations brought about three consequences: *national pride*
22 (MEC 1), *new experience*, and *know more* followed by the experience itself (MEC 2).
23 Achieving these consequences could reinforce the respondents' value of *universalism*.
24 According to Klenosky (2002), cultural and historic attractions are sources of interest
25 for American students on spring holidays because these sources generate more
26 knowledge, more learning and new experiences associated with accomplishment at the

1 value level. There is a Persian proverb that explains this research finding. An Iranian
2 proverb suggests that travelling and life experience are conceptually associated; in other
3 words, it is believed that travelling could enrich an individual's knowledge and
4 experience. Accordingly, experienced people who have visited different parts of the
5 world are respected in the Iranian culture. Gaining knowledge, especially about history,
6 culture and geography, was one of the main reasons the respondents visited travel
7 destinations. Domestic tourism, due to its inexpensiveness, could provide the
8 opportunity for travellers to gain a considerable amount of experience and knowledge
9 and move beyond their daily routine.

10 The respondents further explained that the major consequence arising from the
11 two attributes *pilgrimage sites* and *natural landscape* was *relaxation*, which could
12 consequently realise the ultimate goal of *salvation* (MEC 3). *Relaxation*, with 27 direct
13 cognitive linkages, following *better feeling / joy*, was the most basic benefit that the ISTs
14 obtained from destination attributes. Jiang et al. (2015) found that major consequences
15 motivating Chinese tourists (senior & non-senior) to travel to foreign countries are
16 pleasure, a sense of calm, experience of difference and enrichment of personal life as
17 achievements gained from visiting natural landscapes. Although individuals may
18 prioritise different attributes in a travel destination, they may have similar consequences
19 and values. For instance, the three attributes *activity in nature*, *previously unvisited*
20 *places*, and *old-fashioned markets/shopping centres*, with moderate cognitive linkages,
21 reflected the shared consequence *better feeling / joy* and ultimately brought about
22 *positive emotions* as a value for the respondents (MEC 4). There was a clear perception
23 that *better feeling / joy* to some extent resulted from *good climate* and *good people*.
24 *Buying gifts/souvenirs* and *visiting family/friends*, with moderate linkages, reinforced
25 friendship/family relationships as a shared consequence and reinforced *benevolence* as a

1 value (MEC 7). The realisation of *security* as a shared value depended on *urban order*
2 and *historic attractions*; naturally, in this path, there were two different consequences
3 with moderate linkages: *durability in mind* and *better feeling / joy* (MEC 5, MEC 6).

4 **6. Conclusion**

5 Previous research often studied the cognitive structure of the destination image with a
6 continuum of functional-psychological attributions and using survey studies. Also, some
7 previous studies reported tangible attributes of the destination in the form of pull
8 motivational factors that were interacting with the push factors (internalized from the
9 person) (Kim, & Lee, 2002). In this research, the cognitive dimension of the destination
10 image was examined from a new perspective. Our study makes a new theoretical
11 contribution to the field by investigating the cognitive structure of the destination image
12 based on the means-end chain theory. The aim was to penetrate the inner layers of the
13 mind of the individual and, in addition to the attributes of the destination, identifies the
14 benefits/ consequences of those attributes and the personal values which determine
15 his/her consequences. In other words, the individual's knowledge of the destination
16 connects to his/her knowledge of himself/herself. The hierarchical value map resulting
17 from the implementation of the laddering quality technique offers the integrated
18 cognitive structure of individuals towards the destination.

19 Additionally, this study contributes to advancing our understanding of the senior
20 tourists' behavior. There has been an increasing interest in the area of senior tourism
21 within the tourism literature since 2000. Particularly, researchers based in Europe, the
22 United States, and South East Asia have played a significant role in advancing our
23 understanding of this area. However, senior tourism remains relatively unexplored in
24 other countries that are facing the phenomenon of aging population. Among these
25 countries is Iran, which despite an emerging senior tourism market, the behavior of

1 Iranian senior tourists has rarely been investigated before. This study therefore, has
2 contributed to enhancing our understanding of the Iranian senior tourists. This in turn
3 has contributed to the body of knowledge on senior tourism. In our study, we have
4 identified the destination's attributes of the Iranian senior tourists and extracted their
5 benefits from the choice of these attributes and subsequently the values governing the
6 behavior of tourists. The findings of this study has shed light on important attributes for
7 Iranian senior tourists such as the possibility to buy souvenirs and having access to
8 pilgrimage sites, and the consequences of durability in mind and the sense of national
9 pride. Also the result suggested that a single factor could have different ends. For
10 instance, the results revealed that *historic attractions* led to different sets of MECs
11 (*experience differences, know more, national pride, recollection, and durability in*
12 *mind*). Within these sets of associations, *durability in mind* as a benefit led to *security* as
13 a value; likewise, *know more* as a benefit led to *universalism* as a personal value.

14 In addition to the theoretical contributions of this research, tourism destination
15 managers can also utilise the findings of this research. For example, promoting products
16 and services based on their features is considered to be the most basic form of
17 advertising, which can have a better impact on the target market by integrating product /
18 service benefits. Considering that in this research the benefits of destination attributes in
19 the mind of senior tourists have been identified, this knowledge can therefore, be used
20 to design effective advertising. Different levels of cognitive structure of destination
21 image of senior tourists may also lead to the segmentation and formulation of effective
22 marketing strategies for tourism destinations. Also, tourism managers can focus on key
23 MECs in order to strengthen the attributes of the destinations identified in these chains.
24 The aim would be to meet the hidden benefits and values behind these attributes, and
25 create the driving force necessary to influence destination choice by senior tourists.

1 **7. Limitations and Possibilities for Future Research**

2 This study had some limitations. The age-related specifications of the sample of
3 respondents made it difficult to ensure consistent focus during the interview process.
4 For example, early exhaustion during an interview, impatience, difficulty in
5 communicating, or having a delay in remembering particular material slowed down the
6 interview process. On the other hand, the willingness of some interviewees to
7 ‘confabulate’ and find someone to ‘lend an ear’ also posed some challenges.
8 Meanwhile, it was difficult to gain access to respondents who fell under the age group
9 under study, considering the inclusion criteria. The lack of sufficient information
10 sources about the income and purchasing power of Iranian senior individuals also
11 proved to be challenging.

12 This study addresses the means-end chain (MEC) theory from a cognitive
13 structure perspective and its integration with the destination image literature. It can be
14 suggested that the model of the cognitive structure of destination image presented in this
15 study, be examined in other cultural contexts and the variations between cognitive
16 categories due to intercultural differences be further studied. Further research may also
17 study the effects of the cognitive structure of destination image on the behavior of
18 senior tourists. The investigation of the correlation between this model and the senior
19 tourist behavior variables with the destination image based on the attributions and
20 behavior of the senior tourist can also be a suitable topic for future research. Finally, it
21 is necessary to address the cognitive dimensions of senior tourists according to their age
22 characteristics. Therefore, further studies could contribute to the richness of the
23 literature in this field.

24

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1 Table 1. Summary Content Codes

Values	V1. Universalism (29) V2. Positive emotion (20) V3. Security (18) V4. Benevolence (15) V5. Salvation (13)
Consequences	C1. Better feeling / joy (30) C2. Relaxation (27) C3. Know more (22) C4. Experience differences (17) C5. National pride (13) C6. Break from routine (13) C7. Improved communication (11) C8. Recollection (7) C9. Please others (7) C10. Durability in mind (5) C11. Pain relief (4)
Attributes	A1. Historic attractions (29) A2. Culture (19) A3. Natural landscapes (16) A4. Activity in nature (15) A5. previously unvisited locations (11) A6. Pilgrimage sites (11) A7. Gift / Souvenir (10) A8. Old-fashioned market /shopping centres (8) A9. Visiting family & friends (8) A10. Urban order (7) A11. Good people (6) A12. Good climate (4)

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1 Table 2. Demographic Profile of the Respondents

Characteristics	Frequency	Characteristics	Frequency
Gender		Age	
Male	14	50–64 years	15
Female	16	≥65 years	15
Education		Marital status	
Below Bachelor's degree	12	Married	25
Bachelor's degree	14	Single	1
Master's degree and above	4	Widowed	4

Table 3. MECs of the Participants

MEC1: Historic attractions → Universalism							
Code	Historic attractions	National pride	Universalism				Subtotal
Historic attractions	0.00	10.00	0.14				10.14
National pride	0.00	0.00	9.00				9.00
Universalism	0.00	0.00	0.00				0.00
			Total				19.14
MEC2: Culture, Historic attractions → Universalism							
Code	Culture	Historic attractions	Experience differences	Know more	Universalism	Subtotal	
Culture	0.00	0.00	6.00	7.03	1.11	14.14	
Historic attractions	0.00	0.00	8.00	2.06	0.14	10.20	
Experience differences	0.00	0.00	0.00	9.00	3.06	12.06	
Know more	0.00	0.00	0.00	0.00	19.00	19.00	
Universalism	0.00	0.00	0.00	0.00	0.00	0.00	
					Total	55.40	
MEC3: Natural landscapes, Pilgrimage sites → Salvation							
Code	Natural landscapes	Pilgrimage sites	Relaxation	Salvation	Subtotal		
Natural landscapes	0.00	0.00	12.00	0.06	12.06		
Pilgrimage sites	0.00	0.00	11.00	0.07	11.07		
Relaxation	0.00	0.00	0.00	13.00	13.00		
Salvation	0.00	0.00	0.00	0.00	0.00		
				Total	36.13		

Table 3. (Continued)

MEC4: Activity in nature, previously unvisited locations, ... → Positive emotion							
Code	Activity in nature	Previously unvisited locations	Old-fashioned markets	Break from routine	Better feeling/joy	Positive emotion	Subtotal
Activity in nature	0.00	0.00	0.00	6.00	3.04	0.05	9.09
previously unvisited locations	0.00	0.00	0.00	7.00	1.04	0.04	8.08
Old-fashioned markets	0.00	0.00	0.00	0.00	8.00	0.05	8.05
Break from routine	0.00	0.00	0.00	0.00	7.00	3.04	10.04
Better feeling/joy	0.00	0.00	0.00	0.00	0.00	15.00	15.00
Positive emotion	0.00	0.00	0.00	0.00	0.00	0.00	0.00
						Total	50.26
MEC5: Urban order → Security							
Code	Urban order	Better feeling/joy	Security				Subtotal
Urban order	0.00	6.0	0.5				6.05
Better feeling/joy	0.00	0.00	7.00				7.00
Security	0.00	0.00	0.00				0.00
							13.05
MEC6: Historic attractions → Security							
Code	Historic attractions	Durability in mind	Security				Subtotal
Historic attractions	0.00	5.00	0.05				5.05
Durability in mind	0.00	0.00	5.00				5.00
Security	0.00	0.00	0.00				0.00
			Total				10.05
MEC7: Visiting family& friends, Gift/ Souvenir → Benevolence							
Code	Visiting family & friends	Gift/ Souvenir	Please others	Improved communication	Benevolence		
Visiting family & friends	0.00	0.00	0.00	7.00	0.06	7.06	
Gift/ Souvenir	0.00	0.00	7.00	1.03	0.05	8.05	
Please others	0.00	0.00	0.00	5.00	2.03	7.03	
Improved communication	0.00	0.00	0.00	0.00	8.00	8.00	
Benevolence	0.00	0.00	0.00	0.00	0.00	0.00	
					Total	30.14	

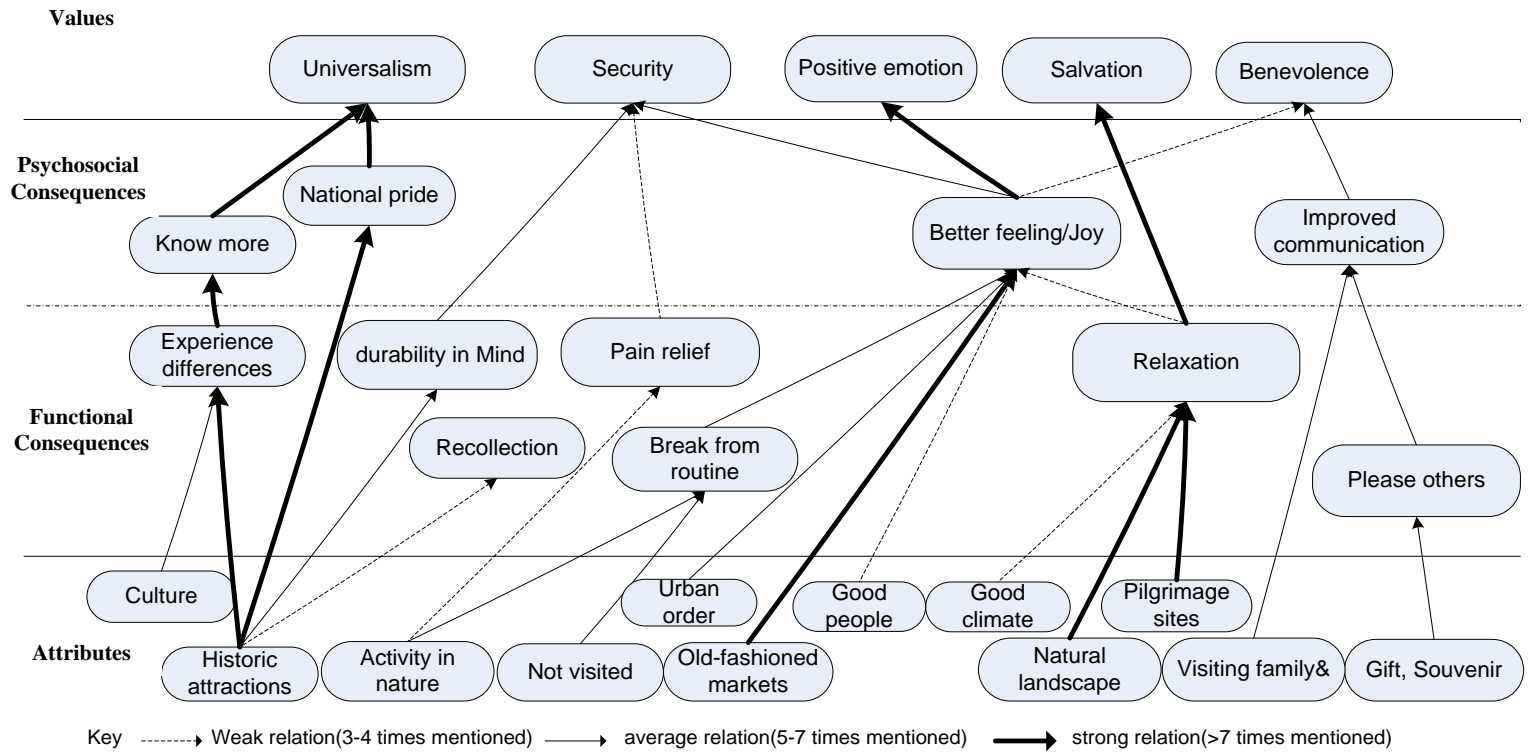


Figure 1. Iranian Senior Tourists' HVM