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Progress on Outbound Tourism Expenditure Research: A Review

Mehran, J., & Olya, H. G. (2018). Progress on outbound tourism expenditure research: A review. *Current Issues in Tourism*, 1-27. https://doi.org/10.1080/13683500.2018.1517734

This study aims to identify how the paradigm of outbound tourism expenditure (OTE) research transforms from economic to social concern. It also explicates the evolution of OTE from an advocacy platform to a sustainability platform. This study adopts a hybrid of narrative and systematic reviews to study OTE as a complex social phenomenon. This hybrid review is complemented by a thematic review and semantic network analysis on gaps and future directions of relevant studies. The results reveal that the paradigm of OTE research is directed from economic toward social thinking. This study proposes an application of socially related antecedent configurations, social theories, pragmatic methods, and various scales of study contexts as promising solutions to address the complexity and heterogeneity of OTE. The study concludes that the conceptual structure of OTE is premised on a sustainability platform, which is influenced by socio-cultural, environmental, economic, and political issues. This study provides a road map that enlightens the current state of OTE, prevailing topics, and pathways for further research.

Keywords: outbound tourism expenditure, social paradigm, sustainability platform, hybrid review, semantic network analysis, global issues

Introduction

The United Nations World Tourism Organization (UNWTO) defines OTE as the tourism expenditures of resident visitors outside the economy of reference (UNWTO, 2010, p. 34). Tourism has attracted much attention over the last decades due to its enormous contribution to economic growth (Martins, Gan, & Ferreira-Lopes, 2017). This is a world of accelerated economic, social, and cultural change driven by advancements in transportation, rapid technological progress, and the communication revolution. These forces lead to the growth of outbound tourism and make this area more complex in terms of the stimulus and market scale of OTEs. Specifically, OTE is affected by many global challenges, such as shifts in the global economy, game-changing innovation, geopolitical turmoil, and so on (Cohen & Cohen, 2012). In 2016, the OTE saw a 2.6% growth, ($1,220 billion US) (UNWTO, 2017). Research on outbound tourism is significant as OTE is calculated as a tourism import expenditure for the country of origin. Its value is added to the country in comparison to the money exported from the country.

The paradigm in tourism studies is defined as, "the constellation of beliefs values, techniques and so on shared by the members of the tourism academy" (Tribe, Dann, & Jamal, 2015, p. 30). According to Kuhn (1970), tourism development shifted substantially from conventional perspectives. "This paradigm shift would occur when, say, sustainability became the winning social programme with sustainable values and principles at its core" (Tribe, Dann, & Jamal, 2015, p. 35). In the social paradigm, political and ideological issues are considered key contributors to sustainable development (Gough & Scott, 2006). Choi and Sirakaya (2005) indicated that sustainability provides a new strategy for developing destinations that can establish a symbiotic relationship between tourism with its encompassing environmental, social, cultural, and political conditions.

This study relies on Jafari's (1990) platforms as a theoretical underpinning for the rationalization of platform change in OTE research. Five platforms, namely, advocacy, adaptancy, cautionary, knowledge-based platforms, and public outreach, evaluate the growth of tourism knowledge from an evolutionary perspective. An advocacy platform is industry- and economy-oriented, focusing on the perceived risk-free contributions of the industry toward growth and development. The knowledge-based platform is multidisciplinary and is driven toward sustainable development and the science of tourism, which reflects a maturing of the research and scholarship, along with a recognition of the complexity and realities of the industry (Jafari, 1990).

Public outreach implies that tourism knowledge is not only disciplinary but derives from the extra-academic world. Therefore, tourism development should be sustainable, as it must respect the axis of environment-landscape, economic-entrepreneurial, socio-cultural, and the collaboration between relevant stakeholders in order to establish a consensus between the private and the public sectors (Jafari, 2005). Choi and Sirakaya (2005, p. 381) stated that, "developing and testing innovative frameworks, new scales, and measurement tools" reflect the paradigm shift toward sustainability, which is more compatible with Jafari's knowledge-based and public outreach platforms. Nonetheless, no study corroborates the complexity of OTE and the paradigm shift of OTE from an advocacy to a sustainability platform.

This review study offers two substantial contributions. First, it elucidates the complexity of OTE by reviewing the inclusion of a wide range of antecedents to predict tourism expenditure. This study also shows the complexity of OTE by classifying various groups of non-economic antecedents, social, cultural, environmental (e.g., climate), socio-demographic, psychological, and trip/destination-related contributions in OTE. It further argues that the heterogeneous interactions of economic and non-economic antecedents increase the OTE complexity. For example, the income of tourists can play either a positive or a negative role in predicting OTE, while the role of the tourists' income is determined by the attributes of other antecedents in a conceptual model. This argument is in accordance with the current issue of the complexity of consumer behaviour in tourism that is recently discussed in the literature as interdisciplinary research encompassing behavioural and economic sciences (e.g., psychology, sociology, and economics), which need further theoretical research (Woodside, 2017).

Second, this study seeks to identify how the OTE platform shifted from an advocacy platform to a sustainability platform. This study evaluates the links between current global trends to OTE, which show that sustainable solutions are required to deal with the OTE's complexity. The complex trend of OTE needs to be researched according to a social paradigm which can be classified under a sustainability platform (Jafari, 1990, 2005; Kuhn, 1970). This research is among the first to apply a thematic review on the limitations and recommendations for further OTE research. The outcomes of a thematic review on future directions recommended by past studies offers a more reliable illustration of the topic's progress. The results of the thematic review supplement findings from the hybrid review to describe the thematic evolution of OTE.

This study intends to address the following research questions: What features make OTE a socially complex phenomenon? How has OTE research evolved from an advocacy to a social paradigm? This paper intends to investigate the abovementioned research questions by conducting a hybrid review of the core elements of the relevant studies to explain the complex and heterogeneous nature of OTE. Discussion of narratives and systematic reviews on the roles of diverse groups of antecedents, theories, and analytical approaches used in OTE modelling confirm the complexity and paradigm shift in the modelling. The application of a thematic review helps trace the transformation of OTE studies from an advocacy to a sustainability platform.

The following section describes the complexity of OTE and the global trends associated with it. The theoretical background is followed by a section describing the method used to explain the three review approaches, namely, systematic, narrative, and thematic. The results and discussion section presents the results of the three reviews. Finally, the conclusions offer policy implications for both practitioners and researchers.

Theoretical Background

Why Is OTE a Socially Complex Phenomenon?

Tourism offers a combination of products and services which need to be customized based on the preferences of different market segments. Tourism research may be categorized as transdisciplinary, interdisciplinary, cross-disciplinary, multidisciplinary, or even extra-disciplinary (Jafari, 2003; Kozak & Kozak, 2013; Laws & Scott, 2015). The role of OTE as one of the subfields of tourism economic research is a relatively under-researched topic that needs to be more carefully examined in order to appreciate the dynamic, complex, segmented, and evolutionary nature of this specific area in tourism (Laws & Scott, 2015).

Tourist expenditure behaviour is defined as a system with complex interactions (Abbruzzo, Brida, & Scuderi, 2014a), which involves a complex process of individual decision-making (Olya & Al-ansi, 2018). Specifically, complexity arises from the fact that travel decision-making involves multiple decisions around the various elements of the vacation, which are highly influenced by situational factors, such as personality, attitude, brand preference, perception, cognition, and market segmentation (Belk, 1974; Cohen, Prayag, & Moital, 2014). Furthermore, expenditures cover the purchase of both tangible/visible items (e.g., transportation costs) and intangible items (e.g., emotional), products and services which may be interrelated (Brida & Scuderi, 2013; Laesser & Crouch, 2006). For example, in OTE modelling, participants' psychographic patterns, individually or as a group (e.g., general attribute and overall concept), reflect a sophisticated situation in the model because the prediction of psychological behaviour is an emerging area in social science. In this regard, Cohen et al. (2014) suggest that the complexity of tourism consumption behaviour can be best studied through a less structured methodology involving narrative accounts of actions and activities. On the other hand, nonlinear equations for predicting expenditures using psychological antecedents are also recommended as a solution to tackle the complexity of OTE (Brida & Scuderi, 2013). It appears that innovation mixed with a multi-method approach are required to decode the complex and heterogeneous nature of OTE.

From a global perspective, the globalisation of tourism is influenced by the general trends of growing economies, technology, and the development of communication and transportation (Brondoni, 2016). An economic crisis would then escalate the complexity of the OTE on a global scale (Bernini & Cracolici, 2015; Bojanic, 2011; Dragouni, Filis, Gavriilidis, & Santamaria, 2016; Sato, Jordan, Kaplanidou & Funk, 2014). Over the past decade, with the arrival of internet-based technologies (social networks, geolocation systems, development of mobile phone apps, etc.), tourists have become smarter about their travel and well aware of their purchase patterns. E-travel services contribute to the ease of travel and transportation. Nonetheless, this increases the complexity of consumer purchase behaviour due to the sophistication of technological tools and risks involved in e-commerce (Fang, Zhao, Wen, & Wang, 2017; Ho & Lee, 2007).

Another reason for the complexity of the OTE are the differences between the conditions in tourists' countries of origin and those of their destinations in terms of social, cultural, educational, health-related, and economic aspects (Gholipour, Tajaddini, & Al-mulali, 2014; Olya & Mehran, 2017). For example, Gholipour et al. (2014) found that tourists with less personal freedom in their countries of origin and/or stricter regulations search for that personal freedom in their destinations and, therefore, spend to fulfil their needs. Thus, scholars attempt to model OTEs by employing various antecedents, theories, methods, and levels of study to explain the complex conditions that drive OTE in the changing world (Cardenas-Garcia, Pulido-Fernández, & Pulido-Fernández, 2016; Yoo et al., 2017) (Figure 1).

Insert Figure 1 here.

In recent studies, scholars attempted to model expenditures with novel non-economic antecedents, such as social, cultural, psychological, and trip/destination-related characteristics (Wang & Davidson, 2010a, 2010b). As an illustration, Brida and Scuderi (2013) considered authenticity perception as a psychological antecedent along with socio-demographic factors and visit motives to predict visitors' personal expenditures. Olya and Mehran (2017) used sub-indices of prosperity, namely, governance, entrepreneurship, health, personal freedom, safety, and security to explore causal models for high and low levels of OTE. Health care (Hung, Shang, & Wang, 2013), age group (Marcussen, 2011), and past behaviour (Smolčić Jurdana & Soldić Frleta, 2017) were employed as antecedents of OTE. Researchers also used cultural factors and happiness as antecedents of tourism expenditure (Fereidouni, Al-mulali, & Mohammed, 2017; Gholipour & Tajaddini, 2014; Gholipour et al., 2014; Gholipour, Tajaddini, & Nguyen, 2016).

In terms of theoretical frameworks, although economic theories (e.g., demand theories) are frequently used in the OTE literature (Abbruzzo et al., 2014b; Brida & Scuderi, 2013; Eugenio-Martin & Campos-Soria, 2014; Smolčić Jurdana & Soldić Frleta, 2017; Wang & Davidson, 2010a, 2010b), the adoption of social theories (i.e., system theory, interactionist theory, and behavioural theory) attracted the attention of tourism scholars to explore disciplinary boundaries based on theoretical cores.

To highlight the significance of non-economic theories in the modelling of expenditure, Wong, Fong, and Law (2016, p. 958) discussed the application of social theories in social systems and pointed out that "a social system is a complex network of hierarchical dependence, with one system nested within another." Consequently, the

> environment fit, systems theory, or institutional theory consistently assert that because individual people are nested within a social system, their behaviour should be understood in light of the macro-environment (Wong et al., 2016, p. 958).

Recently, Olya and Mehran (2017) recommended that the application of complexity theory is an advance in theoretical reasoning as it accommodates the complex interactions of causal factors leading to high/low OTE levels.

Pragmatic methods and analytical approaches help to understand the complex interactions of expenditure antecedents (Brida & Scuderi, 2013). In response to calls for the application of new methods, much research attempted to explain the association of antecedents with advanced techniques. Specifically, the Tobit model (Brida, Disegna, & Osti, 2013), Tobit regression (Kim et al., 2011), quantile regression (Lew & Ng, 2012), the scobit discrete-continuous model (Wu, Zhang and Fujiwara 2013), and the semi-ordered bivariate probit model (Eugenio-Martin and Campos-Soria 2014) used for modelling tourism expenditure. Abbruzzo et al. (2014a) applied graphic models to describe the complexities underlying the consumption behaviour of tourists. Olya and Mehran (2017) used configurational modelling by the application of fuzzy-set qualitative comparative analysis (fsQCA) as an asymmetric method to predict OTE at the country level.

The majority of research studies are cross-sectional in nature and focus on a specific destination. This is also reported as a limitation of these studies, as well as a justification for the occurrence of heterogeneities in the results and the dilemma in the generalization of the results. Inclusion of environmental factors, such as climatic (Eugenio-Martin & Campos-Soria, 2011), social, and cultural situations in tourists' countries of origin (Gholipour et al., 2014; Wang, 2014) in OTE model can be considered remedies for previously ignoring the key role of geographic conditions in OTE research. Moreover, market segmentation in tourists' countries of origin (Hung, Shang, & Wang, 2012) and prosperity indicators in these countries (Olya & Mehran, 2017) are other specified indicators of tourists' places of origin in a geographical context. Similarly, Etzo, Massidda, and Piras (2014) reported a diversity of expenditure patterns across northern and southern parts of Sardinia in Italy. Destination image is also considered as one of the predictors of tourist expenditure behaviour (Abbruzzo et al., 2014a, 2014b; Bernini & Cracolici, 2015).

Global Trends and Sustainability of OTE

There are emerging concepts, such as contemporary world issues, which could have enormous impacts on the patterns of tourists' expenditure behaviour. Several studies highlight the effect of the world economic instability, recession, and stagnation on the expenditure behaviours of tourists from different continents (e.g., European, American, and Asian) at both national and international levels (Alegre & Pou, 2016; Almeida Garrod, 2017; Bernini & Cracolici, 2015; Dragouni et al., 2016; Eugenio-Martin &

Campos-Soria, 2011, 2014; Kim, Park, Lee, & Jang, 2012). Moreover, destinations may be struggling with other social, economic, environmental, political, and cultural issues, such as terrorism, an aging population, climate change, global migration, and refugee crises, and the emergence of a sharing economy and online peer-to-peer (P2P) platforms, which all may have substantial impacts on the travel and tourism (T&T) sector (World Travel & Tourism Council [WTTC], 2017). This study identified the current key global issues that influence OTE. The following discussion of the linkage of these issues with OTE may help scholars to model OTE in the context of a sustainability platform.

The terrorism crisis is a current and future global threat that does not recognize borders and may influence people regardless of their geographical location. Security to prevent and combat terrorism would directly affect tourist behaviour in the various contexts of their expenditures. Generally, growing concerns around safety and security of destinations have caused tourists to rethink if, where, when, and how they will travel, and to what extent they will need to manage their budget for travel expenses.

Christmas markets are examples of important international tourist destinations in many countries, which account for a remarkable amount of expenditure (Brida et al., 2013; Brida & Tokarchuk, 2017), that have stepped up safety and security measures recently. As a result, the combination of trip- or destination-related factors (e.g., transportation, place of accommodation, destination security rules and regulations) with tourists' psycho-cultural perceptions toward safety and security may change the pattern of outbound expenditures on both an individual and international scale in those markets. Consequently, limitations in mobility and accessibility (e.g., visa bans and electronic device restrictions on airplanes) may force people to spend extra money and time to travel and to access the required information or internet sites, causing them to perhaps use other airlines or completely change transportation services (Olya & Al-ansi, 2018).

An aging population is another important controversial international issue, which may affect all types of tourism, and thus, tourists' expenditure patterns. According to the WTTC (2017), by 2025, the number of trips taken by people over the age of 65 worldwide will double to more than $180 million in revenue. Hence, the tourism industry may confront a new trend of aging tourists who seek their needs, such as health care (e.g., health tourism), in destinations that offer high quality services at a lower cost. Riker (2014) acknowledged the significance of the aging population of US residents on OTE.

However, as the association of age and tourism expenditure is heterogeneous, it is not straightforward to conclude older tourists are top spenders.

Another contemporary issue is refugee increment rates in developed countries. Migration turns out to be one of the main prerequisites of both inbound and outbound travel. The tourism and immigration nexus may substantiate complex interactions of the host society's structures with emerging transaction patterns between the host and the immigrant source country (Balli, Balli, & Louis, 2016; Pappas & Papatheodorou, 2017). (Etzo et al., 2014). According to Seetaram (2012), migrants will make multiple overseas visits for different purposes and will travel back to their home country for business and leisure, and may also promote their home country as a destination in their current country of residence. Therefore, the information concerning migrants and refugees in both origin and destination countries affects the pattern of OTE in these countries.

Global warming and climate change are emerging issues that may also affect many places around the world. Specifically, the impact of the weather on tourism is complex, as some tourism activities are directly dependent on climate, such as "sun, sea, and sand activities," as well as skiing, hiking, or river boating activities (Olya & Alipour, 2015a). In terms of an international scale, Olya and Alipour (2015b) indicated that climate change changed the peak seasons of tourists in the Mediterranean regions, in which summer now gets hotter and tourists may travel to destinations at higher altitudes that offer more favourable climates during the summer holiday. Such gravity alterations in tourist flows may influence the patterns of tourism expenditures in respect to the cost of travel, accommodations, tourism products, and services that vary by destinations. Generally, climate change in the long run will no doubt affect the patterns of outbound travel and outbound expenditures of people on both regional and global scales.

Methods

Review studies are conducted with the primary purpose of investigating the changes and evolution of a discipline to improve understanding of the progress in a field and to discover trends (Cheng, Li, Petrick, & O'Leary, 2011). Five commonly used methods in review studies are meta-analysis, narrative, systematic quantitative reviews, qualitative thematic review, and hybrid mix of two (Jin & Wang, 2016; Kim et al., 2018). In this study, a hybrid method was applied; a combination of narrative and systematic quantitative review, which was supplemented by qualitative thematic reviews and semantic network analysis in order to sketch both broad and in-depth insights into OTE. The application of the hybrid method enabled the mapping of both the bibliometric of the studies, as well as a critical analysis of topical areas to find the discrepancy and diversity of results of the core elements in relevant studies (e.g., antecedents, theory, method, and scale of study).

By means of a narrative discussion, the research production was excavated within each category of antecedents (Czarniawska, 2004), elaborating the heterogeneities of OTE and its antecedents, as well as reviewing the data and methodological approaches, and identifying theoretical gaps in the selected studies. The narrative analysis of this study offered an in-depth understanding of how OTE research is formulated, structured, understood, and presented by leading authors. In addition, frequent antecedents in topical areas were classified into five groups (i.e., economic antecedents), and the application and role of each group of antecedents were identified in relation to OTE. The accuracies and deficiencies of the methods and analytical approaches, as well as the data scales, were compared and explained in the narrative section.

With the aid of a structured systematic review, the landscape and boundaries of OTE knowledge were mapped by counting and charting what was studied and, therefore, shed light on what is yet to be studied. To capture the OTE studies, the terms “tourism expenditure,” “outbound travel demand,” “outbound tourism expenditure,” “outbound spending,” and “tourist spending” were used in the search platform of the Web of Science core collection. Journal articles that included the above key terms in the title, abstract, and/or keywords were retrieved. Descriptive statistics of the main elements (e.g., antecedents) relevant to OTE studies were calculated.

The outputs of the hybrid review were complemented by emphasizing proposed research gaps and future recommendations for studies portrayed on the thematic review map. By synthesizing the semantic analysis results with the emergent role of global issues in OTE, pathways for further research recommended, which illustrates an informative map for tackling the complex system of OTE. More precisely, a content and thematic analysis was conducted on gaps and future recommendations to recognize a semantic network among core elements (e.g., antecedents, methods, and theory) of OTE research. First, NVivo software (QSR International Pty Ltd, Doncaster, Victoria, Australia) was used to extract and classify the gaps and future recommendations of all studies. The information was then imported to Leximancer software (Leximancer Pty Ltd, Brisbane, Australia) to perform thematic analysis.

Leximancer uses a quantitative method in which to identify semantic networks in qualitative data (Jin & Wang, 2016). This software helped to identify the main research themes in the gaps and future direction of each paper and the interlinkages of concepts and related nodes in OTE. The outcomes offer pathways for further trends in the complex phenomenon of OTE. Leximancer is a content analysis software which counts word frequency and analyses word meanings by extracting the main concepts and ideas within passages of text (Scott, Zhang, Le, & Moyle, 2017). It is different from other content analysis software (e.g., NVivo and ATLAS.ti) because of its ability to code terms and phrases (Spasojevic, Lohmann, and Scott, 2018).

Several steps in Leximancer's operation were performed to achieve interpretable results: (1) gaps and future recommendations suggested in each study were extracted and imported to the NVivo software, (2) words, such as, "like" and "each" and other meaningless terms were excluded, (3) a custom configuration and editing concept seed and thesaurus were arranged for semantic information (Tseng, Wu, Morrison, Zhang, & Chen, 2015), (4) some repeated steps were taken in examining the results, exploring and modifying settings, and further exploring the main topics within the text, and (5) relevant concepts were compiled as themes, and their relationships were identified.

Results and Discussion

This section consists of three main parts. The first provides a descriptive analysis obtained from the systematic review of relevant journal articles. The second presents the results of the narrative review on OTE antecedents, theories, data, methods, and analytical approaches used in the modelling. The third section evaluates the results of the thematic review analysis constructed by the conceptual mapping of the interlinkages of future research recommendations in terms of OTE antecedents, methodologies, theories, and the role of tourists' geographical origins.

Results of the Systematic Review

Data extracted from 52 relevant journal articles were entered into an Excel 2016 spreadsheet for analysis. The types of extracted data are as follows:

- Summary of expenditure category antecedents based on authors and years.

- Frequency of expenditure category antecedents in the study.
- List of theories, data scales, methods, and analytical approaches used in OTE research.
- Frequency of studies based on geographical location on a continental scale.
- Frequency of studies by journal name.
- Number of OTE publications per year (2007–2017).

The category of antecedents used in this review study are summarized in Table 1. The results of the systematic review of the predictors of OTE showed that 48% of all studies investigated pure economic antecedents (e.g., income level). Economic theories are based on modelling tourist spending at the individual level and tourism expenditure at the macro level. The majority of the studies measured and reported economic antecedents. However, the number of studies that considered social antecedents as an expenditure antecedent was greater than those that considered only pure economic antecedents. In other words, the role of non-economic antecedents was found to be significant in OTE modelling.

Insert Table 1 here.

Figure 2 demonstrates the frequency of the five antecedent categories in all 52 studies. The application of social antecedents was seen in 58% of all studies, while 75% of those studies used socio-demographic antecedents in the group of social antecedents. The other 25% of social antecedents were those such as, the political situation in the country of origin, the role of governance, health care, and safety and security, all of which recently attracted the attention of scholars in modelling tourism expenditure, specifically in international travel (Gholipour et al., 2014; Olya & Mehran, 2017; Sun, Lee, & Chen, 2015). Trip-/destination-related antecedents are the three most frequent categories of antecedents, with a 35% share of all reviewed research. Thirty-one percent of the studies used psychographic antecedents as an indicator of OTE and, surprisingly, the role of cultural and climatic antecedents attracted minimum attention of scholars in modelling tourism expenditure with a share of only 19% (Figure 2).

Insert Figure 2 here.

Notably, studies recognized the cultural distinctiveness of respondents in terms of both national scales and regional diversification using new analytical approaches at both the micro and macro levels. As shown in Table 1, the role of psychographic antecedents is explored in the development of OTE models, while the application of these antecedents was not as widely reported as were the socio-demographic and trip-related antecedents in tourism expenditure studies prior to 2007 (Dragouni et al., 2016; Wang & Davidson, 2010b).

The theories, data, methodology, and analytical approaches used in OTE studies are presented in Table 2. The application of theories as the basis for conceptual models is not often mentioned in studies, as only about 36.5% directly highlighted the application of new theories in crafting the research model. However, the statement and application of econometric theory and methods (Davidson & MacKinnon, 2004) were conspicuous in the reviewed research (60% of the studies directly mentioned theory application). Some tributaries of economic theory, such as socio-economic theory and the economic theory of scarcity, were found to be emerging in modelling the expenditure behaviour of tourists. Moreover, 77% of all studies applied symmetric analytical approaches in modelling OTE. In terms of the data scale used in OTE studies, more than half of the reviewed studies (55%) used data at the individual/household level, while 45% used national, continental, and international data (Table 2).

Insert Table 2 here.

Figure 3 demonstrates the distribution of research on different continents. A total of 44% of the relevant review studies were conducted in European countries. The US, as the second top spending country in the world since 2012 (UNWTO, 2016), is researched thoroughly on both household and country expenditure levels in 13% of the reviewed studies. According to the US Travel Association (2012), the annual growth rate of travel expenditure in the US is predicted to increase from 2.1% in 2016 to 4.3% in 2020. According to the systematic review results, Europe was the most visited continent in 2016 and among the top spenders in the world. However, only specific countries studied in the context of OTE. Therefore, the results of those studies are generalized at each level.

For example, the most studied countries in Europe were Spain and Italy. In the Asian Pacific, the most researched were China and Hong Kong. Consequently, the context of the OTE research appears to be limited to specific regions and countries. In fact, the expenditure patterns of tourists in Middle Eastern countries attracted no attention from scholars. In the continent classifications and divisions in the systematic review, we considered the Middle East and the Asian Pacific as two separate groups for Asia. Because of the importance of some countries in the Asian Pacific, such as China, which has been the top spending country since 2012 (UNWTO, 2016), a considerable number of studies focused on these countries (Jin & Wang, 2016).

The results of the systematic review showed that there is a paucity of research on the spending behaviour in African countries (Figure 3). The reason for such a scarcity may be due to the unavailability data. Despite the lack of attention to Africa, scholars forecast a tremendous number of tourists visiting African destinations (especially South Africa), where the offer of cultural and colonial ties between African countries and European outbound markets, such as the use of mutual languages, acts as a motive for European visitors to target African destinations (Saayman & Saayman, 2008). In addition, international arrivals from Africa have almost doubled since 1990 and tourism receipts in Africa increased by 2% in 2016 in comparison to the previous year (Brown & Hall, 2008; UNWTO, 2016). The numbers of arrivals in emerging economies (e.g., Africa) is expected to exceed those of advanced economies before 2020. In 2030, it is projected that 57% of international arrivals will be in emerging economic destinations and 43% in advanced economic destinations (UNWTO, 2016).

Although only two studies found for Australia, Tourism Research Australia (2008) reported that the Australian outbound market has been expanding since 2003. Australia is a highly ranked tourism market for countries such as, New Zealand, Fiji, Singapore, and Indonesia. It is expected that these destinations will seek information on Australian travellers with the goal of increasing the net economic benefit from their international inbound tourism. Moreover, immigration is a significant socio-political trend that plays an important role in determining international tourist departures from Australia (Seetaram, 2012).

Insert Figure 3 here.

Against this backdrop, there is a lack of research on OTE using international data, and there are only eight studies, with the inclusion of review studies, that assessed OTE on an international scale (i.e., data used from countries on different continents). The results of the systematic review also showed that the geographical distribution of OTE research is not well-balanced globally. According to the WTTC (2013), the OTE structure is changing due to the trend in reduced distances and lengths of international trips, hence, the number of international travellers increased, perhaps because travel is increasingly seen as a necessity rather than a luxury. The WTTC (2017) recently reported that declining openness in the global economy is harming competitiveness and making it harder for leaders to drive sustainable growth. To address this gap, a comprehensive understanding of tourist expenditure patterns from different parts of the world is critical, as total expenditures on tourism increased (WTTC, 2017).

Therefore, the differences of tourist preferences, which vary across locations from the country of origin, help market managers develop marketing plans based on more realistic and accurate information. This study recommends samples from different regions in order to draw informative maps of expenditure-generating source markets. The OTE, as a main proxy of tourism, is perceived as an important source of foreign exchange, which is used for financing economic growth (Tugcu, 2014). As a result, in order to go beyond conventional perspectives and to be in accord with sustainable values and principles, the environmental, social, cultural, and political conditions on an international scale provides a valuable clue as to the social paradigm shift in OTE modelling. Eventually, the application of socially derived antecedents (e.g., political and ideological issues) in OTE modelling on an international scale would better address the transformation of social paradigms in tourism expenditure at the macro scale.

The journals that most commonly feature papers on OTE are shown in Figure 4. Not surprisingly, out of 52 journal articles, 62.5% of these papers were published in tourism journals, accounting for 88% of the OTE-related topics. The remainder were published in non-tourism journals, covering 12% of the intended focus areas. Hence, it appears that tourism journals are the preferred target for publications about OTE, while business and marketing journals welcome OTE research. In terms of the number of OTE articles, *Tourism Economics* was the most popular journal, with 13 articles, followed by *Tourism Management,* with 11, *Annals of Tourism Research,* with seven, and *Current Issues in Tourism,* with six published articles. The *Journal of Travel and Research* contained four papers and was ranked fifth. Other journals with only one article in the last ten years are shown in Figure 4.

Insert Figure 4 here.

The various numbers of tourism expenditure papers published per year in the period from 2007 to 2017 are displayed in Figure 5. The graph shows continuous growth, with an increase of journal articles since 2007, while the peak year for publication is 2014. The number of OTE publications decreased in 2009 and 2015. Nevertheless, the incremental growth rate of OTE publications has been steady since 2015. Similarly, Kim et al. (2018) found that the number of overall review studies in a tourism and hospitality context had grown over the previous five years compared with the period from 2007 to 2011. One of the reasons for such fluctuations may have its roots in the European economic recession of 2008 and the decline in world trade during the crisis may have affected the interest of research in analysis and forecasting future trends of expenditures on a global scale. However, after the economic recovery, plenty of research studied and measured the role of the economic crisis in expenditure behaviours of tourists. In fact, the diversity of topics in tourism economics is extensive with regard to global issues and crises that may affect the tourism industry; therefore, these topics attract research on tourism in other complementary fields to OTE. For example, terrorism and the refugee and immigration crises have greatly impacted the world since 2014 and become timely topics that might cause the decline of 2014 publications in this field.

Insert Figure 5 here.

Results of the Narrative Review

Discussion on the antecedents of OTE:

Review of the literature suggests that the division of OTE antecedents generally consists of five antecedent categories: economic, social, cultural and environmental, psychological, and trip-/destination-related characteristics. The results of most of the studies confirmed the heterogonous associations of the above antecedent categories with OTE (Wang & Davidson, 2010b). The intention of this section is to develop a broad picture of how the pattern of tourism expenditure antecedents is shifting from advocacy to a sustainability platform.

Economic antecedents:

Economic antecedents are usually measured as income level, GDP (Gross Domestic Product) and GNP (Gross National Product), exchange rates, wealth, cost of living in the country of origin, the cost of tourism in the destination country, and economic constraints (Brida & Scuderi, 2013; Dogru, Sirakaya-Turk, & Crouch, 2017; Eugenio-Martin & Campos-Soria 2014; Sato et al., 2014; Wang, 2014). Economic regressors show the positive impact of economic antecedents on medium to high levels of expenditure at an individual level (Lin, Shanshan, Mao, & Song, 2015), while at the macro level, there were few studies indicating that economic factors were not associated with OTE (Olya &

Mehran, 2017). Income is one the most commonly used predictors of expenditure and the most important antecedent in indicating purchasing behaviour, but it is used in OTE modelling as a positive significant regressor (Brida & Scuderi, 2013; Dogru et al., 2017). However, Alegre, Cladera, and Sard (2011) found evidence of a negative effect of income on OTE.

The heterogeneous association of economic antecedents with OTE can be justified due to different modelling techniques (e.g., asymmetric methods that consider the role of each antecedent along with features of other causal antecedents) and measurements (e.g., cut of the point choice and the insufficiency of linear methods), as well as the ignorance of situational factors (e.g., economic and refugee crises).

The links between the economic crisis and interfering antecedents with OTE are greatly influenced by income; however, this impact can vary under different saving's management schemes. As an example of the insufficiency of symmetric methods, we can point to the complex saving behaviour of tourists who are in economic crisis. More precisely, in a low saving regime, an increase in GDP per capita affects tourist expenditure decision-making, whereas, in a high saving regime, the precautionary saving behaviour (driven by psychological factors) lowers the spending on luxury goods/services (Wang, 2014).

Social antecedents:

Social antecedents cover socio-demographic, socio-economic, and various other social factors in expenditure modelling. The most frequent socio-demographic antecedents are age, gender, education, occupation, number of household members, marital status, life cycle, nationality, and family origin. In the literature, social antecedents are shown to have significant effects on tourists' decisions in the selection of a destination, as well as their expenditure. However, the empirical findings for the role of social-demographic antecedents in contributing to tourism expenditure are often in conflict (Wang & Davidson, 2010b).

Age plays different roles in formulating tourists' expenditure patterns. For example, Wang, Rompf, Severt, and Peerapatdit (2006) found that younger travellers spend more than older travellers, while Wang and Davidson (2010a) noted that middle-aged travellers spend more than other age groups. The positive effect of age on tourism expenditure reported in many studies. For example, Bernini and Cracolici (2015) found a positive effect of age on Italian household tourism expenditure. On the other hand, there are empirical studies reporting a negative link with age on expenditures (Mehmetoglu, 2007). Such inconsistencies are due to a complex set of socio-demographic characteristics (Wang & Davidson, 2010b). The testing and measuring of gender differences are also discussed in the literature, and the findings show that expenditures vary by gender (Brida & Scuderi, 2013). Sato et al. (2014) found that married and male participants spend more compared to single and female tourists. The incongruity among the effects of gender on OTE are probably caused by variations in the attributes of the social forces that can create boundary conditions for the interpretation of the results of demographic effects (Wong, Fong, & Law, 2016).

Occupation is another social antecedent of OTE; however, scholars described the relationship of occupation to OTE in different ways. For example, Eugenio-Martin and Campos-Soria (2011) revealed that general managers and self-employed professionals are more likely to travel, which is in contrast to unemployed, manual workers and business owners who might have less inclination to travel. On the other hand, Kim et al. (2011) indicated that professional workers spend less on transportation and sightseeing, and Lin et al. (2015) reported that there are studies which found no relationship between occupation and tourist expenditure.

Education, another controversial antecedent, is frequently considered in empirical studies in the form of years at school and the levels of education degrees/diplomas (Marrocu., 2015). Bernini and Cracolici (2015) pointed out that education has a positive impact on tourism expenditure. They reasoned that its significance is due to the fact that a higher level of employment contributes to higher income, thus higher expenditure. Similarly, Hung et al. (2012) stated that because educated people are more communicative and knowledge-oriented, they have more willingness to spend.

In contrast, Brida and Scuderi (2013) reported that education rarely turns out to be a significant indicator of expenditure. Moreover, Olya and Mehran (2017) found that there is not a significant relationship between education and OTE at the macro level. It is noteworthy that the inclusion of other social contributors, such as personal freedom, safety and security, health, and governance factors, in the formulation of tourism expenditure are more seriously examined recently (Gholipour et al., 2014; Jang & Ham, 2009; Medina-Muñoz & Medina-Muñoz, 2012; Olya & Mehran, 2017).

Cultural and environmental antecedents:

Destinations with diverse cultures and ethnicities provide significant evidence that they form distinct expenditure behaviour in terms of both inbound and outbound travel. Although the application of cultural antecedents is not as expansive as other antecedent categories, it is apparent that tourism operators should focus on tourists' origins and their cultural background in order to understand their complex behaviour while packaging, offering, and delivering tourism products and services (Cho, 2010). Therefore, attributes of the place of origin need to be considered as one of the important OTE antecedents (Etzo et al., 2014; Eugenio-Martin & Campos-Soria, 2014; Wang & Davidson, 2010a, 2010b).

Gholipour and Tajaddini (2014) assessed six cultural dimensions from 49 countries over six years, and found that the four dimensions of uncertainty, avoidance, pragmatism, individualism, and indulgence, significantly correlated with OTE. They then recommended policy makers consider the cultural background of the targeted segments in developing a marketing strategy. For example, in China's outbound context, popular culture, general media, and social media shape tourists' expectations and imaginations, which are culturally framed, and destination attractiveness is a result of that cultural appraisal (Jin & Wang, 2016).

Furthermore, cultural diversities in two regions of a given country could explain different expenditure behaviours in the households. This evidence can be another clue to illuminating the role of non-economic antecedents when economic antecedents are a part of the same country of origin (Bernini & Cracolici, 2015). Apart from the origin culture, a rich culture and tourism products (e.g., cultural activities) offered by a destination are also been found to be determinants of tourism expenditures (Pulido-Fernández, Cardenas-Garcia, & Carrillo-Hidalgo, 2016). In light of this, in recent years, a considerable number of tourism destinations are trying to enhance the value of their resources, attractions, and cultural identity in order to generate interest among potential cultural tourists to increase the economic impact of tourism (Pulido-Fernández et al., 2017).

In terms of environmental antecedents, climate change as a global issue, and the climate difference between the country of origin and the destination are also identified as antecedents of expenditure behaviour in outbound travel. Eugenio-Martin and Campos-Soria (2014) showed that tourists' cutback decisions on tourism expenditures depend on climate conditions in their place of origin. Another study revealed that a destination with an ideal climate, with access to coastal areas, increases tourism expenditures (Eugenio-Martin & Campos-Soria, 2014). Climate acts as both a pull and push factor in the decision-making process of British tourists' choice whether to travel domestically or internationally (Song & Li, 2008). According to Prayag and Hosany (2014), Europe represents an important outbound market for Middle Eastern tourists who are pulled by natural scenic beauty, excellent weather, rich culture, and the history of European countries.

Trip-/destination-related antecedents:

Length of stay, size of the travel party, time and typology of the trip, accommodations, payment method, means of transport, numbers of visited sites, trip purpose, information acquisition approach, and other travel intermediaries are the most incorporated antecedents of trip-/destination-related characteristics in modelling OTE (Song & Li, 2008; Wang & Davidson, 2010b). This category describes characteristics of visitors' trips; however, the impacts of some of these antecedents, such length of stay, first-time or repeat visitors, and travel party size, are found to be inconsistent. According to Brida and Scuderi (2013), the length of stay is positively related to tourism expenditure. Thrane and Farstad (2011) suggested that longer lengths of stay may lead to lower expenditures, while other studies found a negative effect of the length of stay on traveller's expenditure (Brida & Scuderi, 2013).

Travel party size is an often used antecedent which plays both positive (Craggs & Schofield, 2009) and negative roles (Alegre et al., 2011; Wu et al., 2013) in modelling OTE. Wang et al. (2006) claimed that there is no significant difference in expenditures between first-time and repeat visitors. Pouta, Neuvonen, and Sievänen (2006) found the opposite results, stating that repeat visitors tend to spend less than first-time visitors in their study. Nevertheless, the results of some other antecedents, such as travel distance, were found to be consistent. As an example, the longer the distance people travel, the higher is their intention to spend at the destination (Wang & Davidson, 2010b).

Psychological antecedents:

Psychological factors, including tourists' evaluation of their holiday/vendor and their own sociological characteristics, motivation, and tastes are found to be the most frequently applied antecedents in expenditure modelling. Due to a scarcity of data sets of the psychological characteristics of tourists, scholars tried to model expenditures by attitudinal antecedents in this area (Brida & Scuderi, 2013). For example, Smolčić Jurdana and Soldić Frleta (2017) added tourist satisfaction dimensions as a psychological antecedent into their expenditure modelling, and found a significant relationship between one dimension of satisfaction called, "diversity of facilities," and tourism expenditure. Alegre et al. (2011) reported that cultural visitors spend more than "sun, sea, and sand" visitors. Gholipour et al. (2014) stated that limited personal freedom is considered a push factor in the country of origin for outbound tourism and that the difference between personal freedom at the destination and personal freedom in the home country enhances outbound expenditures.

National happiness also boosts long-term international T&T expenditure (Gholipour et al., 2016). Veisten, Lindberg, Grue, and Haukeland (2014) revealed that higher expenditure is associated with higher levels of environmentalism, optimism, and inspiration. In addition, they demonstrated that a visitor who is seeking excitement and danger has, in general, lower expenditures. Despite the fact that the number of the studies that review psychographic antecedents has been on the rise in recent years, almost all of these studies recommend the application of this antecedent category in future studies. This extensive demand is due to the complex measurement of psychological antecedents, as well as the striking diversity of the antecedents' nature, and this led to the current lack of relevant empirical studies.

Discussion on OTE theories and methods:

The results of the narrative review on antecedents revealed that studies on tourism expenditure need to use new theories, pragmatic methods, and novel analytical approaches within various data scales obtained from different geographical contexts in order to explain the complexities of the tourism expenditure phenomena (Brida & Scuderi, 2013; Dolnicar et al., 2008; Lin et al., 2015; Olya & Mehran, 2017; Wang & Davidson, 2010b).

Recent studies attempted to employ new theories to address the gap in the OTE literature. For example, Gholipour et al. (2014) used scarcity theory to examine the impact of personal freedom in a country on outbound tourism. Mental budget theory was applied for shopping expenditures in the Christmas market (Brida & Tokarchuk, 2017). Olya and Mehran (2017) applied complexity theory to describe the complex interactions of the sub-indices of prosperity with OTE at the macro level. Moreover, other social theories, such as, environmental fit, systems theory, institutional theory (Wong et al., 2016), consumer behaviour theory of satisfaction, and profitability chain equity theory (Disegna & Osti, 2016) were recently used in OTE studies.

As many scholars recommended innovative methods for solving the complexity of OTE, this review classified all studies based on both methods (e.g., qualitative and quantitative) and analytical approaches (symmetrical or asymmetrical modelling) (cf. Table 2). While there is a debate about the functionality of the methods, a recent review study argued that qualitative review studies have a higher average number of citations than quantitative studies due to the diverse challenges faced by the industry today (Kim et al., 2018). On the other hand, Ferrara, Marcellino, and Mogliani (2015) found that, in economic forecasting, nonlinear macroeconomics modelling leads to enhanced accuracy of up to 45% in comparison to the conventional linear modelling.

There are three justifications that highlight the significance of classifying analytical approaches as symmetric and asymmetric. First, recent notable studies emphasized the supremacy of qualitative analysis, as well as the nonlinear equation modelling in behavioural responses of individuals in tourism studies (Baggio & Del Chiappa, 2016; Dolnicar et al., 2008; Lew & Ng, 2012; Olya & Al-ansi, 2018; Olya, Altinay Gazi, Altinay Aksal, & Altinay, 2018; Olya & Gavilyan, 2016; Olya & Mehran, 2017; Olya, Shahmirzdi, & Alipour, 2017; Wu, Liu, Hsiao, & Huang, 2016).

Olya and Mehran (2017) found that the relationship between OTE and its indicators is asymmetric, and complex interactions of indicators in predicting OTE must be explained using asymmetrical approaches (e.g., fsQCA). Smeral and Song (2015) indicated that tourist behaviour obeys asymmetrical trends across the business cycle. This means that tourist behaviour in one phase of the business cycle is not the mirror image of its opposite phase. Smeral and Song (2015, p. 140) point out that "the validity of a forecasting model is also influenced—apart from its specifications—by the volatility of the business cycle during the forecasting period and/or the severity of ongoing structural changes." Similarly, heterogeneity and sophistication are two characteristics of the relationship of OTE and its interactions (Dolnicar et al., 2008; Jang & Ham, 2009; Lin et al., 2015; Wang & Davidson, 2010b).

Second, when predicting antecedents that are subject to socially complex issues, such as tourist behaviour, a set of combined factors must be considered to provide deeper insights into the mechanisms leading to the expected outcome(s) (Woodside, 2013, 2014). In symmetric methods, one antecedent (e.g., entrepreneurship) could have a significant impact on OTE, while in asymmetric modelling, its combination with other antecedents (e.g., governance and personal freedom) could explain the complex conditions leading to high OTE. Furthermore, systematic approaches can calculate unique causal recipes for both OTE and its negation (Olya & Mehran, 2017).

Third, Woodside (2013) called for a move beyond classical regression analysis (i.e., symmetric approach) in consumer behaviour research (e.g., tourist expenditure behaviour) as it may provide misleading results due to drawbacks of the use of an analytical approach. These drawbacks are pointed out as multi-collinearity, causal relationships of actual processes, positive and negative net effects of antecedents, and sufficiency and consistency of casual configurations of antecedents. Therefore, the application of asymmetrical approaches, along with pragmatic modelling techniques and various scales of data, can generate insightful views of OTE as it is a set theoretic method matched with complexity theory.

There are still several ambiguities regarding configurations of OTE to explain the role of expenditure antecedents at various scales of data (e.g., individual, national, and international). Future research should strive to achieve a greater methodological rigour and vigour in OTE modelling based on various contextual scales to deal with the complexity of OTE, which is currently trending to a sustainability platform. This study recommends the combination of symmetric and asymmetric approaches as a methodological solution for describing the complexity of OTE.

In terms of the scale of data, tourism expenditures at the micro level were thoroughly researched (Cho, 2010; Eugenio-Martin & Campos-Soria, 2011, 2014). Although modelling OTE on an international scale provides helpful implications for developing policies in both the country of origin and destination countries (Gholipour & Tajaddini, 2014; Gholipour et al., 2014; Olya & Mehran, 2017; Song & Lin, 2010; Veisten et al., 2014), the application of micro modelling is imperative and helpful as consumer behaviours in a particular market segment are diverse and heterogeneous. Therefore, conducting research on an individual/household scale is beneficial when tourism is transformed to a more customized and specialized industry. This research encourages modelling OTE at both the micro and macro levels as both present different angles from which to examine the complex nature of OTE.

On one hand, the pivotal role of macro-environmental studies may better explain the time-variant nature of tourist behaviour on the global scale, such as, economic crises (e.g., inflation and fluctuations of the stock) or social crises (e.g., terrorism and climate change), by which conclusions could be made at the macro level for the source markets or destinations planners. On the other hand, expenditure behaviour at the individual level is essential as OTE is heavily influenced by tourist demographics (e.g., gender, age, education, and income) (Aguinis et al., 2011; Eugenio-Martin & Campos-Soria, 2014; Olya et al., 2018; Wong et al., 2016). Therefore, OTE research needs to effectively accommodate the use of both macro and individual analyses of tourist behaviour.

Results of the Thematic Review

This study extracted the research gaps and future recommendations that appeared in 52 reviewed articles and used thematic review to identify the main concepts and ideas in the trends of OTE research. Analysis of future research directions offer implications illuminating the current and future research patterns of OTE. Furthermore, this research focused exclusively on the current and future trends of OTE, and explored how emerging key concepts in OTE trends are interlinked, which helped identify how to conduct interdisciplinary studies to tackle the complexity of OTE on the individual to international levels. Using Leximancer 4.5, this study conducted semantic network analyses to triangulate the interrelation of relevant concepts and organized these concepts into a variety of themes to recommend directions for further research. This study analysed a visual network of pathways for further research by revealing the deficiencies and needs of the under-researched aspects of OTE in terms of antecedents, theory, methods, data, and analytical approaches.

Figure 6 demonstrates a conceptual map showing how the research gaps and recommendations that appeared in each study can be represented as nine themes (social, socio-economic, methodology, psychographic, origin country, political, trip-related, culture and theory). Each theme reflects a group of conceptually related nodes (e.g., safety and government in political themes). The scattering of nodes (i.e., concepts) under specific similar contexts helped to identify the most suitable themes regarding emerging terms in the trends of OTE modelling. More than 17,000 concepts were automatically found by the Leximancer software. In order to avoid an unmanageable number of concepts for each theme, we allowed 25 of most repeated concepts in the total map. The most repeated concepts belonged to the nine above.

Insert Figure 6 here.

Research during the period from 2007 to 2017 focused on social, socio-economic, methodological, psychographic, origin country-related, political, trip-related, cultural, and theoretical characteristics. The findings of the thematic analysis were compatible with the results of the narrative and systematic reviews. General topics related to OTE in recent years demonstrate a paramount change from the economic role of antecedents of expenditure to socially, culturally, and politically related indicators (e.g., personal freedom and governance), which support the OTE's social paradigm shift. Similar to the results shown in Table 2, the recommendations for the application of cultural factors are not as expansive as other factors in OTE modelling. This means that future studies need to include cultural factors and relevant theories in OTE modelling.

As shown in Figure 6, nodes and concepts are very closely related to each other, which provides more evidence of the complexity of OTE. These results suggest that there are benefits to using a combination of socially related antecedents, such as socio-political, socio-psychographic, socio-cultural, and psychographic configurations to explain OTE. The most repeated concepts in the psychographic theme are related to tourist characteristics, their motivations, and future expectations, which are the most frequently applied antecedents in psychographic groups that appeared in OTE literature. The importance of safety, security, and government efficiency is parallel with socio-political issues mentioned in reviewed papers, and it is also in accordance with global trends of OTE research.

Tourism expenditure is influenced by the conditions of both destinations and countries of origin countries. Several concepts are identified under the theme of origin country conditions, such as climate, well-being, and availability of data on an international scale, which indicates the importance of geographical diversification in OTE modelling. In terms of method, most of the authors stressed the functionality of the analytical approach, while few studies applied both symmetric and asymmetric approaches to modelling OTE.

Conclusion and Policy Implications

This article contributes to the current knowledge of tourism expenditure by identifying the complexity of OTE, which is shifting toward a social paradigm from mere economic thinking. This study applied a hybrid method of narrative and a systematic review of 52 articles published in top tourism and business journals since 2007. The results of the review indicate the complexities of OTE modelling based on the novelties of antecedents, theories, and methods application. By bibliometric mapping of studies and critical analyses of OTE research, this study revealed how this social complex paradigm shift is evident in the epistemology of OTE. This study also used a qualitative thematic review to visualize the contents of the findings obtained from the sample studies. The semantic graph of future recommendation themes showed that a new pattern of antecedents (social, socio-economic, culture psychographic, and political trip-related), theories, methods, and the characteristics of the country of origin country need to be considered in future OTE research.

This study concluded that the platform of OTE transformed from advocacy to suitability as main elements of sustainability—namely, socio-cultural dimensions (e.g., personal freedom and aging population), environmental (e.g., climate change), economic (e.g., emergence of sharing economy), and socio-political (refugee crisis)—are affecting OTE. Accordingly, this study calls for OTE research to consider a shift from an advocacy standpoint to a sustainability platform. As the major dimensions of sustainability are interlinked, economic models serve as a necessary, but insufficient, solution to explain the complex nature of OTE. In this era of globalisation, international issues, such as, safety and security, an aging population, climate change, and technological advancement need to be considered in OTE model specification. These global phenomena increase the complexity of OTE by influencing the gravitation of tourists' flow, as well as their expenditure patterns.

The aging population is a factor that may influence the types of tourism from 3S tourism (Sea, Sand, and Sun) to medical tourism. Similarly, accessible tourism is recognized as a valuable niche market. Furthermore, the increase of tourists' awareness about environmental issues leads to the popularity of moral and green consumptions, and businesses are now investing in corporate social responsibility practices. Such transformations are associated with a platform change of OTE, as different products and services are being provided to satisfy the changing needs and values of tourists. From a socio-economic perspective, tourists prefer to stay in P2P accommodations or other sharing platforms which affect the decision-making and expenditure patterns of tourists who may perceive the economic and social benefits of a sharing economy.

Future studies should address the issue of heterogeneity caused by a wide spectrum of antecedents in the groups of social, political, and cultural issues, such as safety and security, health care, well-being, personal and political freedom, and governance for both origins and destinations. OTE studies require the application of multidisciplinary research covering both symmetrical and asymmetrical approaches in quantitative methods, as well as interviews, focus group discussions, and field observations. Since each methodological approach provides different insights into OTE, an innovative mixture of study methods would present valuable theoretical and managerial implications for the tourism and hospitality industries.

As yet, the majority of research articles do not fully exploit the potential of new geographic origins to represent a global image of OTE. The cultural distinctiveness of respondents needs to be assessed at micro and macro levels (Figure 3). Therefore, studies modelling OTE using data obtained from different parts of the world that range from individual to international scales will help businesses and governments develop sustainable and profitable marketing plans. Researchers should pay greater attention to some geographical regions that are ignored in OTE literature, as geographical distribution of OTE research is not yet well-balanced. Europe remains the top tourist destination in the world (35 of the top 50 touristic countries) and is the most researched (44%). Accordingly, geographic research expansion needs to be applied to the Australian and American continents as an important trend of factors affecting OTE in those continents are addressed in the literature and reviewed in this study. Furthermore, the expenditure behaviour of Middle Eastern and African tourists received little attention. According to the WTTC (2017), the world will be experiencing new expenditure-generating markets, as well as the current OTE source markets, by 2025.

A review of the composition of the research models suggest that scholars should pay closer attention to model specifications using a wide range of sets of antecedent categories, namely, economic, social, psychological, cultural, environmental, and trip-/destination-related factors, rather than merely convenient economic, socio-demographic, and/or trip-related factors, such as tourists' avoiding uncertainty, pragmatism, governance, and entrepreneurship in the tourists' countries of origin. To this end, the values, needs, demands, preferences, and expectations of tourists need to be informed by various combinations of antecedents (social, political, and trip/destination characteristics) that go beyond individual patterns of tourist spending. Marketing policies and managerial plans need to be developed at the local, national, and international levels to obtain a comprehensive view based on the complex interaction of attributes of spending behaviour influenced by social, cultural, and political contexts.

The findings from this review supports the idea that the future trends of OTE will focus on the asymmetric and nonlinear modelling of tourism expenditure to explain the complexity and heterogeneity of OTE. The application of asymmetric approaches in OTE studies have significantly increased in recent years, and it is important for tourism scholars to stay updated in terms of the latest methods in OTE studies. For example, fsQCA along with complexity theory is used to indicate OTE. To support this claim, it is noted that more rigorous and advanced analytical approaches (e.g., Artificial Neural Networks), along with conventional symmetric and asymmetric techniques, need to be applied for OTE modelling.

This study reviewed articles extracted from peer-review journals that appeared in the Web of Science core collection over the last decade. Future studies may use other search engine platforms to cover a wider time period. Additionally, considering the scarcity of OTE research in some geographic areas (e.g., Middle East, Africa), this study calls for reviewing research in a variety of languages, rather than solely in English language, which is a limitation of the current study. The expenditure behaviour of tourists from an inbound perspective would generate deeper insights from the interactions between spenders and service providers in the global tourism market. According to the UNWTO (2016), half of international arrivals will be in emerging economy destinations by 2030. Therefore, Asia, Central and Eastern Europe, the Middle East, Africa, and Latin America must exploit their market share growth by establishing a solid policy plan to increase inbound tourism expenditures, which will be a vital source of foreign currency earnings and an important contributor to the economy.

This is a hybrid review study, which includes systematic and narrative approaches, as well as a thematic review. Future research may perform a meta-analysis focusing on studies with similar methodologies and respond to the antecedents used for OTE modelling to evaluate effect size and weighting factors for each study, which would then allow scholars to address the importance and consistency of research outcomes in OTE.

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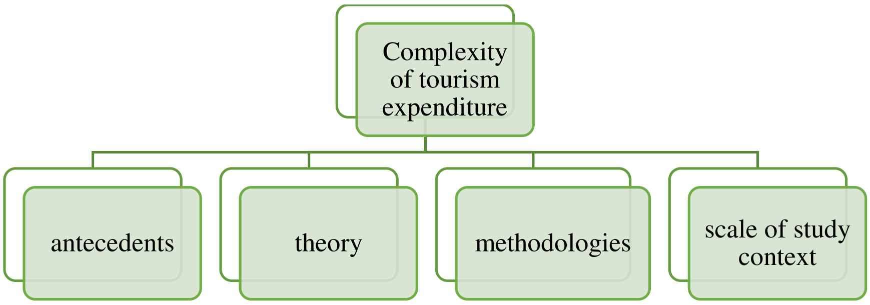


Figure 1. Addressing complexity of tourist expenditure

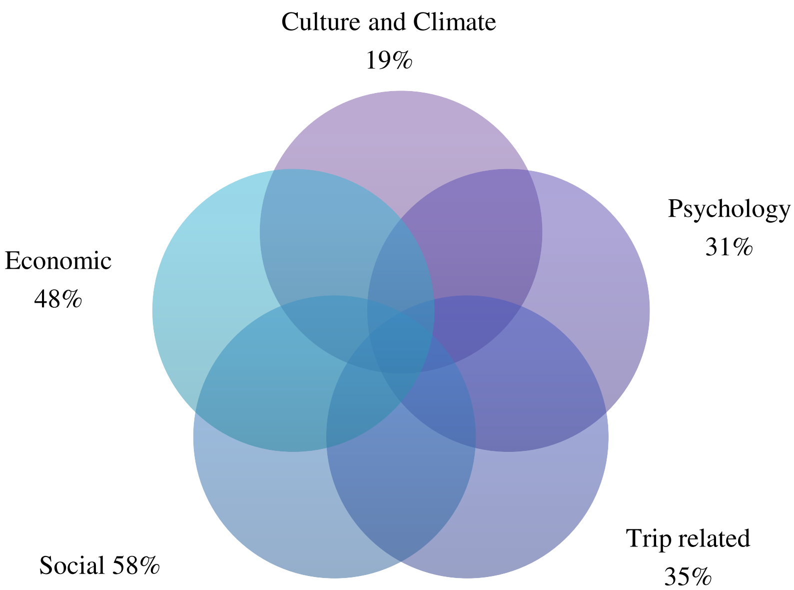


Figure 2. Frequency of category antecedents

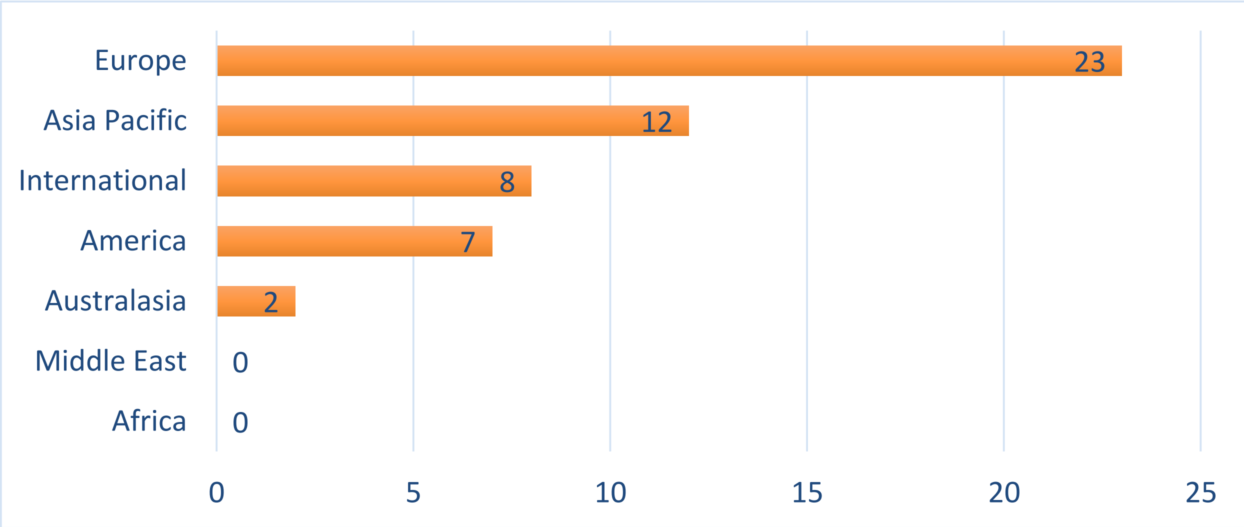


Figure 3. Geographical frequency of studies based on continents (%)

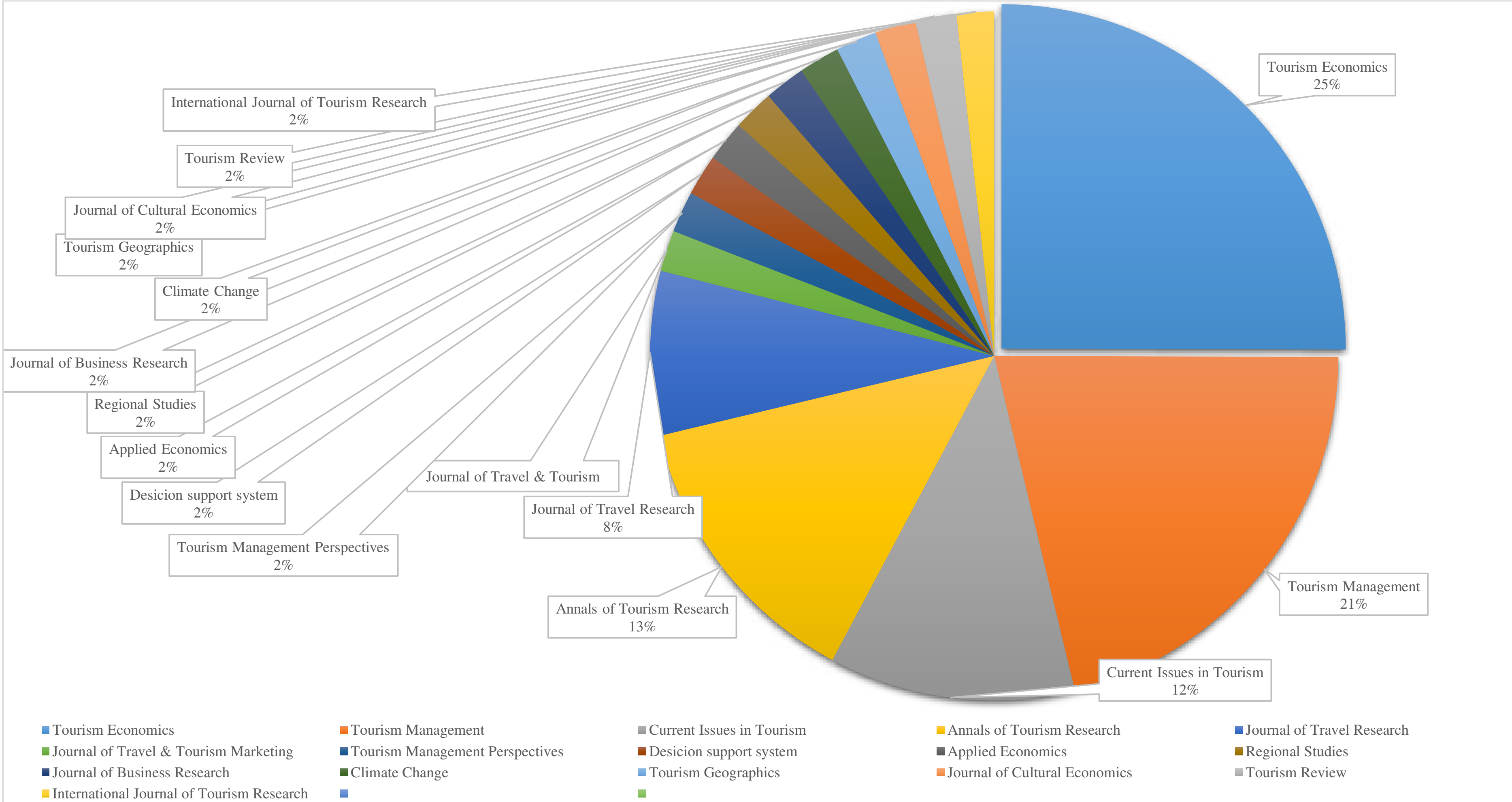


Figure 4. Frequency of studies based on journals

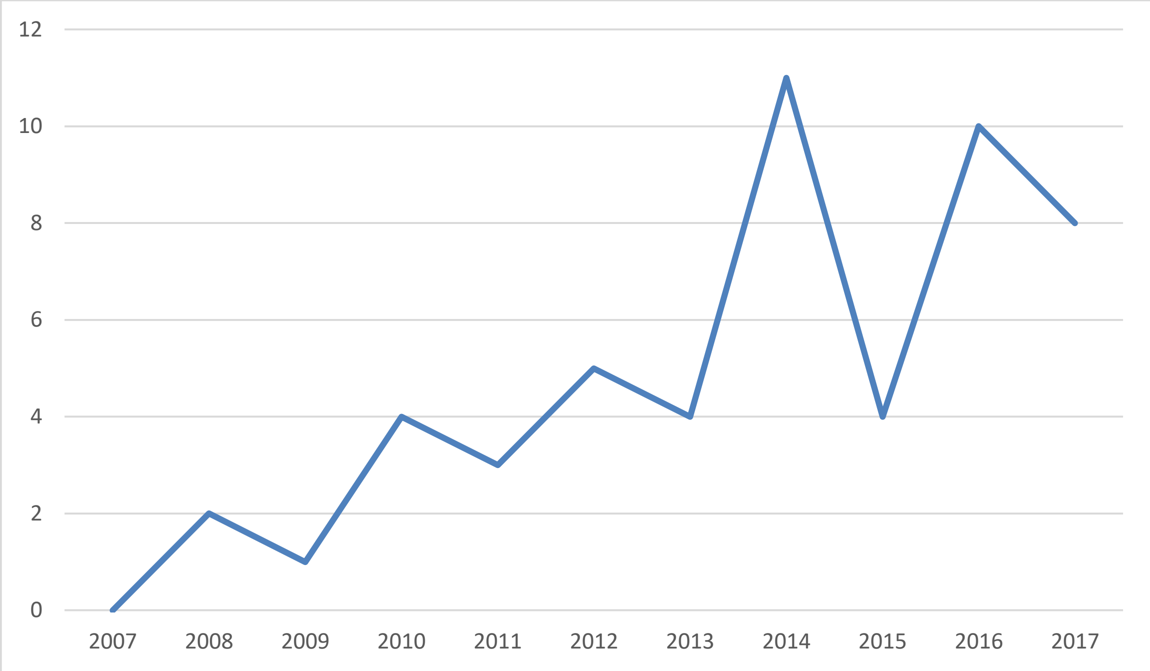
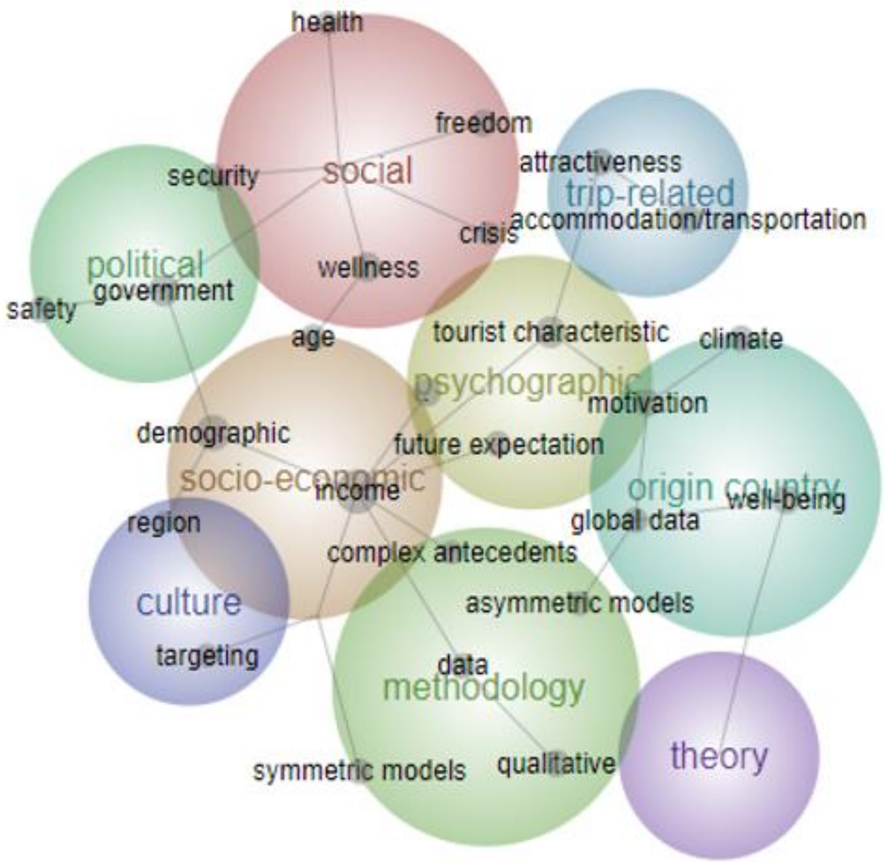
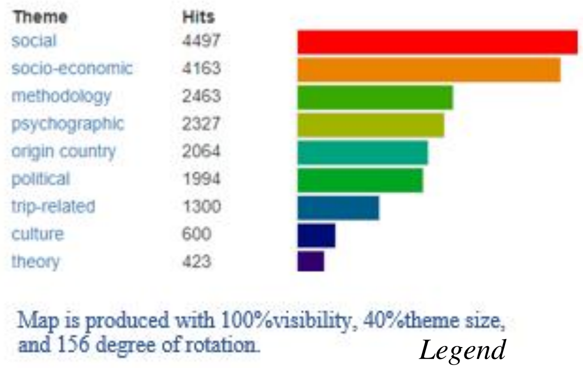


Figure 5. Number of reviewed tourism expenditure publications in last decade (2007-2017)





Legend

In the map, each circle is a theme and each dot is a concept.

(a) Social: freedom, health, wellness, crisis

(b) Socio-economic: income, age, demographic, social class

(c) Methodology: data, asymmetric model, qualitative, complex antecedents, symmetric model

(d) Psychographic: tourist characteristics, motivation, future expectation

(e) Origin country: global data, climate, well-being

(f) Political: government, safety, security

(g) Trip-related: attractiveness, accommodation/transportation

(h) Culture: region, targeting

(i) Theory

Figure 6. Thematic map of emerging current and future gap concepts in OTE studies

Table 1. Summary of expenditure category antecedents based on authors and years

Authors	Year			*Category antecedents*		
		Economic	social	Psychology	Culture and environmental	Trip/destination
Abbruzzo, Brida, and Scuderi	2014a		×	×		×
Abbruzzo, Brida, and Scuderi	2014b		×			×
Aguiló, Rosselló, and Vila	2017					×
Alegre, Mateo, and Pou	2013	×	×			
Alegre and Pou	2016	×	×			
Almeida and Garrod	2016	×	×			×
Amelung and Moreno	2012				×	
Bernini and Cracolici	2015	×	×			
Bojanic	2011	×	×			
Brida, Disegna, and Osti	2013		×	×	×	
Brida, Fasone, Scuderi, and Zapata-Aguirre	2014		×			
Cárdenas-García, Pulido-Fernández, and Pulido-Fernández	2016			×		
Craggs and Schofield	2009		×	×		×
Dai, Jiang, Yang, and Ma	2017	×				
Disegna and Osti	2016		×	×		×
Dolnicar, Crouch, Devinney, Huybers,Louviere, and Oppewal	2008		×	×		
Dragouni Filis,Gavriilidis, and Santamaria,	2016		×	×		
Dumicic, Mikulic, and Casni	2017	×				×
Etzo, Massidda, and Piras	2014	×	×			
Eugenio-Martin and Campos-Soria	2014	×	×		×	
Eugenio-Martin and Inchausti-Sintes	2016	×				
Fereidouni, Al-Mulali, and Mohammed	2017	×				
Gholipour and Tajaddini	2014				×	
Gholipour, Tajaddin, and Al-Mulali	2014		×			
Halicioglu	2010	×				
Hung, Shang, and Wang	2013	×	×			
Jin and Wang	2016		×	×	×	×
Kim, kim, Gazzoli, Park, Kim, and Park	2011		×			×
Kim, Park, Lee, and Jang	2012	×				
Lee, Song, and Bendle	2010		×			
Lew and Ng	2012		×			
Lin, Shanshan, Mao, and Song	2015	×	×			
Marrocu, Paci, and Zara	2015			×		×

Medina-Muñoz and Medina-Muñoz	2012		×	×		×
Olya and Mehran	2017		×	×	×	
Pulido-Fernandez, Cardenas-Garcia, and Carrillo-Hidalgo	2016				×	
Pulido-Fernandez, Cardenas-Garcia, and Carrillo-Hidalgo	2017				×	×
Sato, Jordan, Kaplanidou, and Funk	2014	×	×	×		
Seetaram	2012	×	×			
Smolčić Jurdana and Soldić Frleta	2017	×		×		×
Song and Lin	2010	×				
Sun, Lee, and Chen	2015	×	×			
Thrane	2014			×		×
Thrane	2016	×			×	×
van Loon and Rouwendal	2017					×
Veisten, Lindberg, Grue, and Haukeland	2014			×		
Vietze	2011	×	×			×
Vogt	2008	×				
Wang	2014	×			×	
Wang and Davidson	2010b			×		×
Wong, Fong, and Law	2016	×	×			
Wu, Zhang, and Fujiwara	2013		×			

Note: × indicates the focus of each study in the category antecedents.

Table 2. Review of theories and methodologies

Authors (year)	Theory	Data scale	Methodology (analytical approach, technique)
Abbruzzo, Brida, & Scuderi (2014a)	-	Individual level	Quantitative (Symmetric, Penalized regression)
Abbruzzo, Brida, & Scuderi (2014b)	-	Individual level	Qualitative (graphical model)
Aguiló, Rosselló, & Vila (2017)	Economic theory	Individual level	Quantitative (Symmetric, regression)
Alegre, Mateo, & Pou (2013)	-	Individual level	Quantitative (Symmetric, Heckman model)
Alegre & Pou (2016)		Individual level	Quantitative (Symmetric, Heckman model)
Almeida & Garrod (2012)	-	Individual level	Quantitative (Symmetric and asymmetric, OLS and quantile regression)
Amelung & Moreno (2012)	-	Continental level(Europe)	Quantitative (Symmetric, linear regression)
Bernini & Cracolici (2015)	Life cycle theory	Individual level	Quantitative (Symmetric, Time series-cross sectional Data)
Bojanic (2011)	-	Individual level	Quantitative (Symmetric, ANOVA and cluster analysis)
Brida, Disegna, & Osti (2013)	-		Quantitative (Symmetric, mean comparisons tests, double-hurdle model-Tobit)
Brida, Fasone, Scuderi, & Zapata-Aguirre (2014)	-	Individual level	Quantitative (Symmetric, Heckit model)
Cárdenas-García, Pulido-Fernández, & Pulido-Fernández (2016)	-	Individual level	Quantitative (Symmetric, Gama regression model)
Craggs & Schofield (2009)	-		Mixed method (Symmetric: T-test and ANOVA, interviews and content analysis)
Dai, Jiang, Yang, & Ma (2017)	-	National level (China)	Quantitative (Descriptive analysis)
Disegna & Osti (2016)	Consumer choice theory, neoclassical economic theory of consumer behavior-theory of the satisfaction–profitability chain-equity theory	Individual level	Quantitative (Symmetric, Tobit model)
Dolnicar, Crouch, Devinney, Huybers,Louviere, & Oppewal (2008)	-	Individual level	Quantitative (Asymmetric, Binary Logistic Regression)

Dragouni Filis, Gavriilidis, & Santamaria (2016)	Socio-economic theory	National level (US)	Quantitative (Symmetric, Auto Regressive model)
Dumicic, Mikulic, & Casni (2017)	Economic theory	Continental level (Europe)	Quantitative (Symmetric, dynamic panel data model, PMG estimator)
Etzo, Massidda, & Piras, (2014)	-	National level (Italy)	Quantitative (Symmetric, dynamic panel data model, GMM)
Eugenio-Martin & Campos-Soria (2014)	Economic theory	Continental level (Europe)	Quantitative (Asymmetric: Semi-Ordered Bivariate Probit model)
Eugenio-Martin & Inchausti-Sintes (2016)	Economic theory	Individual level	Quantitative (Symmetric, two stage and tree stage least square, 2sls, 3sls)
Fereidouni, Al-Mulali, & Mohammed (2017)	Life cycle hypotheses & permanent income hypothesis	National level (Malaysia)	Quantitative (Symmetric, time-series co-integration regressions)
Gholipour & Tajaddini (2014)	-	Individual level	Quantitative (Symmetric, classical regression analyses)
Gholipour, Tajaddin, & Al-Mulali (2014)	Economic theory of scarcity	International level	Quantitative (Symmetric, panel data /GMM techniques
Halicioglu (2010)	consumer theory	National level (Turkey)	Quantitative (Symmetric, autoregressive distributed lag-ARDL)
Hung, Shang, & Wang (2013)	-	Individual level	Quantitative (Symmetric, Regression-multilevel analysis)
Jin & Wang (2016)	-		Review study
Kim, Kim, Gazzoli, Park, Kim, & Park (2011)	Consumption theory	Individual level	Quantitative (Symmetric, Timesereis/ PraiseWinsten/ NeweyeWest
Kim, Park, Lee, & Jang (2012)	-	National level (S. Korea)	Quantitative (Symmetric, Trobit regression)
Lee, Song, & Bendle (2010)	-	National level (Korea)	Quantitative (Symmetric, autoregressive moving average- ARIMA)
Lew & Ng (2012)	Economic theory	Individual level	Quantitative (Asymmetric, quantile regression)
Lin, Shanshan, Mao, & Song (2015)	-	National level (China)	Quantitative (Symmetric, descriptive analyses)
Marrocu, Paci, & Zara (2015)	-	Individual level	Quantitative (Symmetric and Asymmetric, linear and quantile regression models)
Medina-Muñoz & Medina-Muñoz (2012)	-	Individual level	Mix-method (Interview/classical regression)
Olya & Mehran (2017)	Complexity theory	International level	Quantitative (Asymmetric and symmetric: fsQCA and regression)
Pulido-Fern&ez, Cardenas-Garcia, & Carrillo-Hidalgo (2016)	-	Individual level	Mix method (Symmetric, Poisson regression analysis and conceptual approach)
Pulido-Fern&ez, Cardenas-Garcia, & Carrillo-Hidalgo (2017)	-	Individual level	Quantitative (Symmetric, OLS)

Sato, Jordan, Kaplanidou, & Funk (2014)	-	Individual level	Quantitative (Symmetric, OLS multiple regression)
Seetaram (2012)	-	National level (Australia)	Quantitative (Symmetric, co-integration technique using panel data)
Smolčić Jurdana & Soldić Frleta (2017)	-	Individual level	Quantitative (Symmetric, OLS multiple regression analysis)
Song & Lin (2010)	-	Continental level (Europe)	Quantitative (Asymmetric, nonlinear demand and function)
Sun, Lee, & Chen (2015)	-	Individual level	Quantitative (Symmetric, infrequency of purchase (IP) model)
Thrane (2014)	Economic theory	Individual level	Quantitative (Symmetric and asymmetric, OLS and quantile regressions)
Thrane (2016)	Economic theory	Individual level	Quantitative (Symmetric, OLS regression)
van Loon & Rouwendal (2017)	Economic theory of consumer behaviour	Individual level	Quantitative (Symmetric, OLS regression)
Veisten, Lindberg, Grue, & Haukel& (2014)	Tourist expenditure theory	Individual level	Quantitative (Symmetric: OLS and SEM)
Vietze (2011)		International level	Quantitative (Symmetric: regression/ HCSE-adjusted GLS)
Vogt (2008)		National level (US)	Quantitative (Symmetric: model of demand and)
Wang (2014)	-		Review study
Wang & Davidson (2010b)	-	-	Review study
Wong, Fong, & Law (2016)	Social theories (environment fit, systems theory, institutional theory), Economic theory, Interactionist theory, Behavioral theory, tourism theory, Distance decay theory	National level (Hong Kong)	Quantitative (Symmetric, time-series hierarchical linear modeling)
Wu, Zhang, & Fujiwara (2013)	Tourism motivation theory	Individual level	Quantitative (Asymmetric and symmetric, logistic regressions and correlation)