The impact of using non-media information sources on the future use of mass media information sources: The mediating role of expectations fulfillment

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Received 16 May 2006; accepted 14 February 2007

Abstract

An empirical study of 350 tourists reveals that using non-media information sources for planning tourist trips influences expectations fulfillment. The use of non-media information sources also has a direct impact on the future use of mass media information sources for future tourist trip planning, as well as an indirect impact through expectations fulfillment. More specifically, the main determinants of expectations fulfillment of local infrastructure are commercial brochures, travel agents and internet; expectations fulfillment of entertainment structures is affected by institutional brochures, travel agents and the internet; future use of mass media sources is influenced by expectations fulfillment of local infrastructure and entertainment structures; this factor is also influenced by past use of institutional brochures and the internet. Discussion centers on the implications of this model to theory and managerial development of tourism and services strategies. Directions for future research are also presented.

Keywords: Services marketing; Tourism; Information sources; Mass media

1. Introduction

From a theoretical perspective, understanding consumer behavior is essential in decoding all the activities used to develop, communicate and sell services. Similarly, from a practitioner’s perspective, it is necessary to understand the motives regarding why some services are preferred or rejected by consumers. With this understanding, it will be possible to influence consumers’ decisions by developing appropriate strategies.

Consumer behavior study is much more complex for services than for goods, due to their intrinsic character-istics: intangibility, inseparability of production and consumption, heterogeneity, and perishability (Zeithaml, Parasuraman, & Berry, 1985). Tourist consumer behavior is particularly complex because the final decision of buying tourist services presents distinctive aspects. First, the acquisition process has a strong emotional component for consumers. Second, purchasing is often the culmination of a long process of planning, choice, evaluation and assessment of alternatives by a large number of people. More importantly, this intangibility of tourist services creates uncertainty and perceived risk in the consumer’s mind (Hugstad, Taylor, & Bruce, 1987; Zeithaml, 1981). So, before buying a tourist service, consumers acquire a large quantity of information and anticipate the consumption, creating images and expectations.

Information search is a dynamic area of services research, with a relatively large conceptual and empirical basis. However, selection of information sources mostly explains “who, when, where, how and why” consumers search for information in the pre-purchase phase. Rare
research (see Fodness & Murray, 1999) as an exception) indicates that the use of information sources influences future search behaviors.

To our knowledge, no research exists regarding the impact of information search patterns on future information search behaviors. Moreover, although a wide range of empirical studies have been developed concerning the impact of information sources on expectations, no empirical study has analyzed the impact of expectations fulfillment on the future use of information sources. Previous research indicates that expectations fulfillment is shaped through information sources that consumers obtain in the pre-purchase stage (Spreng & Page, 2001; Webster, 1991). Since future consumer choices are based on expectations, a better understanding of this relationship is vital to marketing managers (Anderson & Salisbury, 2003). By understanding how consumers will search for information, we have a basis to influence consumers’ expectations (McColl-Kennedy & Fetter Jr., 1999). Information search in the pre-purchase stage strongly influences overall consumer decision, mainly because it influences consumers’ images and expectations (Murray, 1991).

Similarly, the process of expectations formation in the tourism industry is particularly relevant given that tourists make their purchase decisions while building on expectations (Gartner, 1989). Tourists typically travel to a place different from their residence, and in several cases to a place where they have never been before. To explore or reduce the risk of unfamiliar product experimentation, tourists seek information (Dodd, Pinkleton, & Gustafson, 1996) and create destination expectations (Baloglu & Brinberg, 1997). Hence, since consumers perceive tourism products taking into consideration their service expectations (Parasuraman, Zeithaml, & Berry, 1988), these expectations become a major influence on consumer choices (Neelamegham & Jain, 1999).

Common sources of customized information are travel agents, institutional and commercial brochures, and the Internet. Marketers use these sources to build tourists’ specific expectations with the goal of influencing future purchase decisions (Murray, 1991). Non-customized information might also affect tourists’ product image. This information is typically not requested by consumers, but comes instead in the form of reports and advertising in mass media. It is our aim to develop a model that assesses the importance of non-media information sources, and their impact on expectations fulfillment and on the use of mass media information sources in future trip planning. In addition to mass media information sources, we include four non-media information sources: travel agents, institutional brochures, commercial brochures and the Internet. Tourists use these non-media information sources in information search to select the route to the destination, accommodation, and activities at the chosen destination.

This article is organized into the following sections. First we present an overview of the current literature. Then we introduce the different sources, test the conceptual framework via a survey of 350 tourists, and present the empirical results. Implications for theory and managerial practice, limitations of the research and future directions are also considered.

2. Conceptual framework and hypotheses

Service consumers tend to evaluate information in a more complex and distinctive way than do consumers of goods because they are in a context of perceived risk and, therefore need much more information than when evaluating a good (Murray, 1991). Tourists seek information to explore or reduce the risk of unfamiliar product experimentation (Dodd et al., 1996). They create expectations by creating a destination image through many sources, such as non-media tourism information sources and mass media information sources (Gartner, 1989; Stabler, 1988).

In this study we develop a conceptual model (see Fig. 1) in a tourism context, where we analyze how the use of non-media information sources directly and indirectly influences future use of mass media information sources through consumer expectations.

3. Tourism information sources

Information search exists at the internal and external level (e.g. Bettman & Park, 1980). In this study we focus on the external level, namely on information sources that can be controlled by tourism institutions. External search is a conscious and motivated decision to acquire information from the consumer’s environment (Murray, 1991). It is associated with the “degree of attention, perception, and effort directed toward obtained environmental data or information related to the specific purchase under consideration” (Beatty & Smith, 1987, p. 85). Consumers choose information sources in a limited number that will help them to plan their consumption process better, in such a way as to reduce the level of perceived risk (Murray, 1991).

Tourism search typically makes use of a variety of external information sources (Moutinho, 2000). These information sources form the basis for trip planning (Sneppenger, Meged, Snelling, & Worrall, 1990). When searching for tourist information, one must consider the variety of sources used (Beatty & Smith, 1987; Srinivasan & Ratchford, 1991). From both theoretical and practitioner perspectives, it is particularly useful to study the importance of specific information sources that tourists use for selecting services (see Brucks, 1985; Fodness & Murray, 1999).

Literature on services, namely in the tourism field, suggests that information search in this area involves more information sources than in the case of other products. Information acquisition is necessary for purchase decisions after the destination selection, such as choosing accommodation, transportation and activities (Filiatrault & Ritchie, 1980; Jenkins, 1978; Perdue, 1985). Information
search strategies embrace specific combinations of tourist information sources in the planning process (Fodness & Murray, 1999).

In this study we considered two types of information sources: non-media (institutional and commercial brochures, travel agents and internet) and mass media information sources (advertising and reports in broadcast media). Tourism organizations produce non-media information sources at a local level. Mass media refers to information sources that broadcast at a national scale through television, press or radio. This dichotomy is based on the assumption that consumers can reach information in two ways: actively and non-actively (Midgley, Dowling, & Morrison, 1989). In the first case, tourists search for information with a purpose: to reduce the uncertainty of new product experimentation (Kotler & Armstrong, 1998). They search for brochures, go to travel agencies or look for information on the Internet to build their own information about destinations. In the case of mass media information sources, consumers do not request the information (Newman & Stuelin, 1973). Tourists encounter mass-targeted messages (e.g. advertising or reports on broadcast media) while they read the newspaper, watch TV or listen to the radio (Gensch, 1970; Newman & Stuelin, 1973). The dichotomy of non-media and mass media information sources is thus based on active and passive information search and on customized and non-customized information provided to the masses.

We will now discuss the different types of information sources included in our model.

4. Non-media information sources

4.1. Information from brochures

Although some researchers often analyze information provided in brochures from a broad perspective, this distinction is essential. In line with previous studies (Bieger, Laesser, & Gallen, 2000; Fodness & Murray, 1999; Raitz & Dakhil, 1989), we make the distinction between institutional and commercial brochures. Commercial brochures come from tourism service enterprises in the private sector (e.g. hotels, restaurants). Institutional brochures come from tourist or local public organizations (tourism offices and local or regional government organizations).3

4.1.1. Information from institutional brochures

When planning their trips, tourists tend to use informative travel brochures as a key source of information. These sources are very informative and reliable due to their

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3In order to differentiate institutional from commercial brochures to respondents we presented these two information sources in the following way: commercial brochures as brochures of travel agents, guidebooks, brochures of hotels; and institutional brochures as municipal, local, national or institutional informative brochures.
institutional nature, as institutions and operators at the destination itself produce them (Bieger et al., 2000; Nolan, 1976). Many studies have revealed that tourists regard it as a major source of trip-planning information (see Fodness & Murray, 1999; Gursoy & Umbreit, 2004; Raitz & Dakhil, 1989; Snepenger et al., 1990).

4.1.2. Information from commercial brochures

Much of the travel and tourism industry relies on commercial brochures (of tour operators, travel agencies and hotels) (Bieger et al., 2000). Tourism services use brochures as a privileged advertising channel. Travel agencies and operators typically use these sources to provide their clients with concrete information about different themes (e.g. hotels, destinations, recreation parks) (Gursoy & Umbreit, 2004). Tourists use regularly commercial brochures from hotels and tourist operators to select a tourism destination (Bieger et al., 2000).

4.2. Travel agents

Service consumers tend to have a great preference for personal sources of information, especially when acquiring a complex service, such as a touring excursion (Murray, 1991). Through their sales force, travel agencies can be one of those personal sources. As do other service providers, tourism agencies might use their sales force (i.e. the travel agents) to create a favorable image (see Zeithaml et al., 1985). Travel agents add value to the tourism industry in several ways. They are geographically close to the tourist and assist the customer by doing much of the searching on their behalf. They are also able to cater to the individual requirements of each tourist and can customize a holiday to suit each client. As the closest intermediary to the customers, they are in the best position to build relationships with them (Wynne, Berthon, Pitt, Ewing, & Napoli, 2001). They might play a major role in clarifying problematic issues, while providing feedback to service customers.

Travel agents have played and will continue to play an important role as information sources in the tourism sector (Connolly & Olsen, 2001). Since the early work of Nolan (1976), travel agents have been considered as a source of information examined in several tourism studies. Travel agents are a useful information source for tourists (Gitelson & Crompton, 1983), at both individual and group levels (Snepenger, 1987). Tourists consult them about routes, accommodation and activities at the destination (Shoemaker, 1984). Also, tourists exhibit a preference for booking through travel agents and appreciate human interaction and personal advice (Ader et al., 2000; Morrison & King, 2002).

4.3. Internet

Today, the Internet is assumed to be an important channel for services marketing and is leading to profound changes in the way firms interact with consumers. Consumers now have increased access to informational electronic marketplaces and use this information in a sophisticated way to select their services (Parasuraman & Zinkhan, 2002). The Internet provides accurate and specific information that can reach the target audience with the accuracy of more personalized information sources. This new interactive medium can be considered as a rational medium (Leong, Huang, & Stanners, 1998) of difficult classification. The Internet is not easily classified as either impersonal or a mass media channel (Reardon & Rogers, 1988).

Indeed, analysts have identified the Internet as the cause of a revolution in the services sector. Its potential allows service firms to enlarge their market worldwide (Lovelock, Vandermerwe, & Lewis, 1999), providing firms with an unprecedented ability to communicate directly and effectively with potential customers. This is due to, among other things, the cost-effectiveness of the Internet and the convenience for customers. Increasing digitalization will make it progressively easier to alter particular aspects of a service and quickly observe how customers respond (Wyner, 2000).

In the tourism sector, the internet has become an important source of information to consumers who are more and more demanding, and who become each day more familiarized with this emerging world of information (see Buhalis, 1998).

With the relatively widespread adoption of the Internet, tourism businesses of all sizes might expand and acquire new customers and create more sophisticated products to reach new customer segments. Tourists have become more independent and sophisticated in using a range of tools to arrange their travel (Buhalis, 1998). The key to the tourist’s decision is the existence of relevant information. With the Internet such information might be available and more accessible (Connell & Reynolds, 1999). Customer satisfaction depends on the accuracy of specific information on destinations’ accessibility, accommodations, facilities, attractions and activities. The Internet satisfies the needs of consumers for convenient access to transparent information. It allows them to compare information. They are able to cover the entire variety of choices of travel, accommodation, transportation and leisure services, holiday packages, prices and availability (Buhalis, 1998). This type of information will naturally help tourists to plan complex tourist activities, such as long trips (Bieger et al., 2000).

Please see Table 1 for a summary of tourism information sources.

5. Fulfillment of expectations

Tourists form their destination images on the information acquired from different sources (Gartner, 1989). Resulting images influence perceived expectations. Expectations are associated with what consumers feel or desire from a service (Parasuraman et al., 1988). These expectations will naturally
influence customer intentions to use or reject a service (Dorsch, Grove, & Darde, 2000; Webster, 1991).

Expectations are associated with consumer predictions about a service performance. They are beliefs about something that will happen in the future, so they present a certain degree of uncertainty (Spreng & Page, 2001). Due to high human and financial costs, extensive information search will normally precede the decision to make a vacation trip to a given destination. Prior to buying a tourist excursion, marketing begins with the identification of a specific need. This need leads to an anticipation search will normally precede the decision to make a vacation trip to a given destination. Prior to buying a tourist excursion, marketing begins with the identification of a specific need. This need leads to an anticipation of a specific tourist product by controlling the content

As mentioned above, some researchers suggest that expectations fulfillment is positively affected by information acquired from various non-media information sources (Spreng & Page, 2001; Webster, 1991). We expect that the fulfillment of tourist destination expectations regarding the characteristics of the region, as well as local infrastructure and entertainment structures, are positively affected by information acquired from different information sources. More specifically:

H1. The expectations regarding the characteristics of the region are affected by:
   H1a. institutional brochures;
   H1b. commercial brochures;
   H1c. travel agents;
   H1d. Internet.

H2. The expectations fulfillment regarding local infrastructure and entertainment structures is affected by:
   H2a. institutional brochures;
   H2b. commercial brochures;
   H2c. travel agents;
   H2d. Internet.

6. The relationships between fulfillment of expectations and future use of mass media information sources

During the last decades, quite a number of empirical studies concerning the impact of information sources have been developed. These studies conclude that information gathered in mass media channels has a strong impact on expectations fulfillment (Dorsch et al., 2000; Neelamegham & Jain, 1999; Smith, 1993). In this study, we suggest that expectations fulfillment affects the future use of mass media information sources.

Mass media information sources are a key communication channel for service firms because they present immediate benefits to consumers (Zeithaml et al., 1985). Although this search provides a greater variety of information to solve a specific information problem (Dodd et al., 1996), it does not provide customized information. Consumers spend more time and effort than when collecting information from customized sources, as mass media information sources act independently of the consumers’ active process of information search (Gartner, 1989). Researchers consider it as a formal (Raitz & Dakhil, 1989) and impersonal information source (Hugstad, Taylor, & Bruce, 1987). Mass media information sources have a volunteer character, and include reports and advertising (Raitz & Dakhil, 1989) on broadcast media.

Many investigators have pointed out reports in broadcast media as an important information source, mainly because consumers consider them as a neutral and independent source (Beatty & Smith, 1987; Mitra, Reiss, & Capella, 1999).

Marketers can also influence consumers’ perceptions about a specific tourist product by controlling the content

<table>
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<tr>
<th>Table 1: Tourism information sources</th>
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<td><strong>Non-media information sources</strong></td>
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<td>Commercial brochures</td>
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<td>Material produced by tourism service enterprises in the private sector.</td>
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<td>Institutional brochures</td>
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<td>Material produced by tourist or local public organizations.</td>
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<td>Travel agents</td>
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<td>Travel agencies sales force.</td>
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<td>Internet</td>
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<td>Travel agencies and tourism destination webpage.</td>
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<td><strong>Mass media information sources</strong></td>
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<tr>
<td>Reports on mass media</td>
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<tr>
<td>Articles and documentaries in broadcast media (television, press and radio).</td>
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<tr>
<td>Advertising on mass media</td>
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<td>Private advertising in broadcast media (television, press and radio).</td>
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and frequency of mass media advertising (Dorsch et al., 2000). Advertisers present their brands and products in the most favorable way (Moore & Lutz, 2000). They construct their advertising messages emphasizing the benefits that consumers may realize by purchasing their service products (Zeithaml et al., 1985).

Advertising also has an important role in the tourist destinations marketing strategies (Siegel & Ziff-Levine, 1990), due to the complexity of this type of product (Manfredo, 1989). Advertising gives tourists unique experiences before they buy the product. Ads give a direct sensory contact with the product (Kempf & Smith, 1998) while making a strong impact on consumer minds (Moore & Lutz, 2000). More specifically, advertising and media information are co-related with expectancy formation of brand attitudes before trial (Smith, 1993).

Some satisfaction models show that fulfillment of tourists' expectations is usually co-related with mass media information (Neelamegham & Jain, 1999). Research indicates that fulfillment of tourists' expectations is influenced by mass media information. The most relevant information inputs in mass media include television advertising and critic reviews (Neelamegham & Jain, 1999). However, in this research we are particularly interested in better understanding the opposite relationship, i.e. how fulfillment of expectations will influence the future of mass media information sources, because it is believed that consumers are reactive to previous experiences. Hence,

H3. Future use of mass media information sources is influenced by fulfillment of destination expectations associated with:
- H3a. regional characteristics;
- H3b. local infrastructure and entertainment.

7. The relationship between use of non-media information sources and future use of mass media information sources

As discussed above, tourists gather information from a variety of non-media information sources to support tourism decisions. That information is acquired mainly from formal information sources, i.e. created by marketers with the specific purpose of promoting tourism planning activities. These sources include institutional and commercial brochures, salespeople and electronic media (Raitz & Dakhil, 1989).

Mass media information is usually not requested, it is offered to consumers while planning tourism trips (Gartner, 1989). On the other hand, information gathered in mass media information sources is generally more appealing and varied than the information gathered in non-media information sources (Dodd et al., 1996). The preceding use of non-media information sources in trip planning is likely to be related to the use of mass media information sources in future trip planning. Not all non-media information sources have the same relationship with future usage of mass media information sources.

The importance of brochures information in tourist products has been defended by many authors who have concluded that institutional brochures (Fodness & Murray, 1999; Nolan, 1976; Raitz & Dakhil, 1989; Snepenger et al., 1990) and commercial brochures (Bieger et al., 2000; Snepenger et al., 1990) are important information sources for tourists as they plan their trips. When they visit these tourist destinations they consolidate the information acquired earlier in those brochures. However, in the future, tourists may use different sources, such as mass media information sources to plan their trips. Destination image is formed with sources such as advertising and travel brochures (Gunn, 1972), particularly, when planning trips with high-risk perception (Fodness & Murray, 1999). In sum, it is expected that:

H4. The use of institutional brochures in trip planning will lead to the utilization of mass media information sources in the future.

H5. The use of commercial brochures in trip planning will lead to the utilization of mass media information sources in the future.

8. Mass media information sources and travel agents

Tourism activity is considered as a high-risk purchase situation with a strong social component. Generally, in purchase decisions with a high-perceived risk, consumers tend to rely on personal information sources (Mitra et al., 1999). Consumers use information from personal channels in situations in which perceived risk and uncertainty have not been reduced sufficiently by formal information sources.

Service consumers—especially tourists—have greater confidence in personal sources (Mitra et al., 1999). Salespeople are particularly important in this kind of purchase (Hugstad et al., 1987). Consumers prefer personal information sources because they are more reliable than non-personal information sources. This preference for personal information sources is due to two factors: flexibility and credibility (Mitra et al., 1999). However, this fact of reliance on personal information sources does not reduce the need for effective advertising and public relations. Consumers utilize greater personal information search, but they also use a greater level of non-personal information (Mitra et al., 1999). This leads us to the following hypothesis:

H6. The use of travel agent information in trip planning will lead to less utilization of mass media information sources in the future.

9. Mass media information sources and Internet

The Internet represents an efficient medium for accessing, organizing and communicating tourist information.
The Internet as a communication medium is unique to tourists in several dimensions, such as interactivity, control, dynamics and content (Hoffman & Novak, 1996; Menon & Soman, 2002). It is a better communication channel because mass media channels limit audience behavior options and do not stimulate additional information search and usage (Kaid, 2002). First, the Internet provides more and varied information. Second, it offers more possibilities for seeking tourist information. Third, tourist Internet users have the ability to control their information usage. Finally, information obtained on the Internet is more interactive (Kaid, 2002) and provides perceptual experiences to tourists that are far superior to those of other mass media information sources (Rust & Varki, 1996). Some authors argue that soon Internet use will functionally replace traditional mass media information sources (Rust & Varki, 1996).

H7. The use of Internet information in trip planning will lead to a decrease in the utilization of mass media information sources in the future.

10. Methodology

10.1. The research setting

The research setting was a European country (Portugal) in the tourism service more specifically, in the hotel services sector. As one of the most important areas of tourist activity, the hotel sector becomes important to the definition of tourism, as the United Nations Organization (UNO) defines tourists as temporary visitors who stay at least 24 h in a tourist site that is visited for pleasure activities. This definition implies the use of lodging structures. The most recent data show that this country has increased its tourism market exponentially. There are high expectations for the future, given that Portugal is now one of the leading countries in terms of conditions and potentialities in the tourism services market, especially for European tourists (Miles, 1995; Murphy and Murphy, 2002; Wise, 2005).

10.2. Development of survey instrument

We developed a measurement scale to capture the importance that tourists give to the information sources in their trip planning. In an early stage, we used previously established scales (Furse, Punj, & Stewart, 1984; Raitz & Dakhil, 1989; Snepenger et al., 1990) to develop our survey instrument. We then translated the initial scales into Portuguese and adjusted them to tourism services user reality. Following this, we discussed the scales with people capable of understanding the nature of the concept being measured. All the items were assessed through a seven-point Likert scale (ranging from “1—not important at all” to “7—extremely important”). The questionnaire was initially developed in Portuguese and then translated into English, French, Spanish and German. After revisions, we used a pre-test sample of 30 tourism students in order to test the reliability of the scales (through Cronbach $\alpha$; Cronbach, 1951). The pre-test results were used to refine the questionnaire further. In order to avoid translation errors, the questionnaires were translated back into Portuguese.

10.3. Data collection

We collected the final data from December 2002 to September 2003. During this time there were some events that attracted many tourists to Portugal, such as the World Handball Championship and the European Football Championship. Tourists were randomly selected in loco across 19 hotels that agreed to participate in the study. Hotel receptionists delivered the questionnaires (together with a presentation letter explaining the goal of the study) to the tourists at the moment they were leaving the hotel. This allowed us to ensure that the data were not biased and that tourists had significant knowledge about the topic. We obtained a final sample of 350 questionnaires.

10.4. Profile of respondents

The Portuguese tourist market consists primarily of European consumers. Tourists from many countries participated in the survey. Over 60% of the respondents were Portuguese tourists. The rest of the sample was composed mostly of European tourists from Spain (11%), Germany (10%), France (5%) and the United Kingdom (5%). Other less represented countries in the sample include Italy (2%), Belgium (1%), USA (1%), Greenland (1%), Austria and Sweden (1%), as well as countries with a single tourist (Australia, Brazil, Bulgaria, Denmark, the Netherlands, Iceland, Ireland, Israel and Qatar).

Most of the tourists were single (19%) or married with children (60%). More than 40% of the respondents had university education and almost 40% had completed high school. Also, the respondents indicated how often they undertook vacation travel: 45% responded once per year, 37% twice and 14% three times. Tourists in the sample usually spent 2–5 nights away on these trips (two nights—11%, three nights—28%, four nights—10%, five nights—20%). They also indicated how many business trips they made in the year on average and the duration of those trips. The answers ranged between 0 (31.1%), 1–5 times (33.9%), 6–10 (6%), 11–15 (10.6%), and more than 16 times (18.4%); and regarding the number of nights, 30.6% of the respondents indicated that they usually spent zero nights, 11.4% spent one night, 31.4% two, 13.1% three,
7.1% four and 6.3% more than 5 nights. We asked for their answers to the same questions with regard to leisure trips. A large part of the sample responded that on average they have two leisure trips (34.9%), 19.1% have one, 18.6% more than four, 17.7% three and only 9.7% of the subjects had no such trips. The respondents usually spend 2–5 nights away on these trips (three—28%, five—19.7%, two—10.9% and four—10.3%). A large percentage of the tourists had visited this destination more than 10 times in the previous 3 years (45.9%), 33% had visited fewer than 10 times, and 21.1% were visiting Portugal for the first time. Concluding, one might say that these tourists vacationed at least once a year, many with 1–4 night business trips, 1–5 times, and mostly two short leisure trips on average per year.

The respondents were also asked to indicate the mode of transportation (over 50% of the sample traveled by car and many came by plane), and the purpose of this trip (30% were on business, and about 50% were on leisure, came to visit specific tourist attractions, monuments or to attend a special event or to know this destination—23%, 17% and 11%, respectively).

For almost 50% of the tourists this was a long trip (43.6% of the respondents stayed more than 6 nights). When we asked how long they spent planning this trip almost 60% responded that they needed 1–10 days, while 12.6% did not need to plan this trip at all. The sample was made up mostly of leisure tourists who came in their own car or by plane to visit this destination especially or to participate in a specific event. These tourists did not need much time to plan this trip.

11. Results

11.1. Confirmatory factor analysis

In order to assess the validity of the measures we subjected, the items were subjected to a confirmatory factor analysis, using full-information maximum likelihood (FIML) estimation procedures in LISREL 8.3 (Jöreskog & Sörbom, 1993). In this model, each item is restricted to load on its pre-specified factor, with the seven factors allowed to correlate freely. The chi-square for this model is significant ($X^2 = 708.38$, 168 df, $p < 0.00$). Since the chi-square statistic is sensitive to sample size, we also assessed additional fit indices: the Comparative Fit Index (CFI), the Incremental Fit Index (IFI), and the Tucker–Lewis Fit Index (TLI). The CFI, IFI and TLI of this model are 0.91, 0.88, and 0.89, respectively.

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11.2. Structural model estimation

We simultaneously estimated the conceptual framework of Fig. 1 in a structural equation model using FIML estimation procedures in LISREL 8.3. Specifically, this model contains seven constructs, 21 observable indicators, measurement and latent variable errors, and inter-correlations between the latent constructs. Specifically, the correlations between similar constructs (e.g., commercial brochures, institutional brochures, travel agents and internet) were freely estimated. Fig. 2 shows the estimation results for the significant structural paths. This model has a chi-square of 708.38 (168 df, $p < 0.00$); the fit indices suggest a good fit of the model to the data (CFI = 0.91, IFI = 0.91, TLI = 0.88, RMSEA = 0.096).

11.3. Test of hypotheses

An examination of the individual paths in Table 1 indicates that institutional brochures exert no significant effect on expectations fulfillment regarding region characteristics (H1a is not supported). However, institutional brochures have a significant positive direct impact on expectations fulfillment of local infrastructure and entertainment structures ($\gamma^{21} = 0.21, t = 2.61$). Hence, H2a is supported. Contradicting H1b and H2b, commercial brochures have a negative and highly significant effect on expectations fulfillment of regional characteristics ($\gamma^{12} = -0.55, t = -3.13$) and no significant impact on local infrastructure and entertainment structures. Travel agents have a significant and positive impact on expectations fulfillment concerning the characteristics of the region ($\gamma^{13} = 0.70, t = 4.20$) and local infrastructure ($\gamma^{23} = 0.37, t = 2.36$). Thus, there is support for H1c and H2c. As predicted by H1d and H2d, the internet has a significant and positive impact on expectations fulfillment of the characteristics of the region ($\gamma^{14} = 0.18, t = 2.62$) and local infrastructure and entertainment structures ($\gamma^{24} = 0.20, t = 3.04$) (Table 2).

When testing H3a, we found no significant relationship between expectations fulfillment regarding regional characteristics and the future use of mass media information sources. However, consistent with H3b, we conclude that there is a significant impact of expectations fulfillment of local infrastructure on the future use of mass media information sources ($\beta^{32} = 0.43, t = 6.55$).
Consistent with H4, the results support that the use of institutional brochures in the past positively affects future use of mass media information sources ($\gamma_{31} = 0.42$, $t = 5.82$). When testing H5 and H6, we found no significant effect of commercial brochures' and travel agents' usage on the use of mass media information sources for future trip planning. Surprisingly, when testing H7 we found that past internet usage positively affects future use of mass media information sources in future trip planning ($\gamma_{34} = 0.15$, $t = 2.69$).

12. **Relative importance of each variable and indirect effects**

One of the key advantages of using a path model is the possibility of estimating not only the direct effects, but also the indirect and total effects among latent variables (Lages & Lages, 2004; Lages & Montgomery, 2005). Table 1 shows that two out of the four possible indirect effects are statistically significant. We find both the direct ($\gamma_{31} = 0.42$, $t = 5.82$) and indirect (0.09, $t = 2.55$) impact of institutional brochures on the future use of mass media information sources are found to be positively statistically significant. Consequently, the indirect relationship strengthens the total effect (0.51, $t = 6.42$). We also find that both the direct ($\gamma_{34} = 0.15$, $t = 2.69$) and indirect (0.08, $t = 2.77$) impact of internet usage on the future use of mass media information sources are positively statistically significant, strengthening the total effect (0.24, $t = 3.83$).

When comparing the standardized coefficients effects among variables (see Table 1), we found that the main determinant of expectations fulfillment of regional characteristics is the use of travel agents ($\gamma_{13} = 0.70$, $t = 4.20$), followed in relative importance by a negative impact of commercial brochures ($\gamma_{12} = -0.55$, $t = -3.13$) and positively by the Internet ($\gamma_{14} = 0.18$, $t = 2.62$).

Regarding the main determinants of expectations fulfillment of local infrastructure and entertainment structures, we found that the most important determinant is travel agents' use ($\gamma_{23} = 0.37$, $t = 2.36$), followed in relative importance by a negative impact of commercial brochures ($\gamma_{22} = -0.28$, $t = -1.66$) and the Internet ($\gamma_{24} = 0.20$, $t = 3.04$), which have a similar impact on expectations fulfillment of local infrastructure and entertainment structures.
Table 2
Effects of exogenous and prior endogenous constructs (maximum likelihood estimation, \(N = 350\))

<table>
<thead>
<tr>
<th>Effect of/ on</th>
<th>(\eta_1) expectations fulfillment regarding characteristics of the region</th>
<th>(\eta_2) expectations fulfillment regarding local infrastructure and entertainment structures</th>
<th>(\eta_3) future use of mass media information sources</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Direct Indirect Total</td>
<td>Direct Indirect Total</td>
<td>Direct Indirect Total</td>
</tr>
<tr>
<td>(\xi_1) institutional brochure</td>
<td>0.01 (0.08)</td>
<td>0.01 (0.08)</td>
<td>0.21** (2.61)</td>
</tr>
<tr>
<td>H1a</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(\xi_2) commercial brochures</td>
<td>-0.55** (-3.13)</td>
<td>-0.55** (-3.13)</td>
<td>-0.28 (-1.66)</td>
</tr>
<tr>
<td>H1b</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(\xi_3) travel agents</td>
<td>0.70** (4.20)</td>
<td>0.70** (4.20)</td>
<td>0.37* (2.36)</td>
</tr>
<tr>
<td>H1c</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(\xi_4) Internet</td>
<td>0.18** (2.62)</td>
<td>0.18** (2.62)</td>
<td>0.20** (3.04)</td>
</tr>
<tr>
<td>H1d</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(\eta_1) characteristics of the region</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H1a</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(\eta_2) local infrastructure and entertainment structures</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H3a</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes: Values in upper rows are completely standardized estimates. Values in lower rows are \(t\)-values.

\(p < 0.05, **p < 0.01\) (two-tailed test).

Because of rounding, sometimes the “total effect” is not the same as “the direct effect plus the indirect effect”.

The signs for the expected indirect and total effects were established by implication. We assume that if all the direct relationships involved in an indirect relationship are positive, the final indirect relationship is also expected to be positive. The same principle applies to the total effects. If both direct and indirect effects are expected to be positive, then the sign for the total effect is also expected to be positive (Lages & Montgomery, 2005).

Regarding the main determinants of future use of mass media information sources, we found that the two most important determinants are expectations fulfillment of local infrastructure and entertainment structures (\(\beta_{12} = 0.43, t = 6.55\)) and institutional brochures usage (\(\gamma_{11} = 0.42, t = 5.82\)), which are approximately three times more important than the Internet (\(\gamma_{14} = 0.15, t = 2.69\)).

13. Managerial implications

Existing models of tourist information search offer a restrictive vision of the issue. These models consider information search only as a pre-purchase phase, namely in destination choice and trip planning. Our model gives a more extended and integrated vision of tourist information search in all phases of tourist decision-making. Information sources are an important channel for reducing the uncertainty about tourists’ destinations and creating and fulfilling tourists’ expectations. When marketers understand how consumers search for information, they can create more effective campaigns to influence consumers’ expectations (McColl-Kennedy & Fetter Jr., 1999).

Along these lines we can state that tourist organizations marketers should use the more informative and personal non-media information sources, namely institutional brochures, travel agents and Internet, because they contribute positively to tourist destination expectations fulfillment. Commercial brochures are an information source to avoid. They have a negative impact on expectations fulfillment. As a complement, marketers should also use mass media information sources. Tourists in our sample showed that they use non-media information sources to plan their trip, more specifically to find information about lodging, routes and activities; however they also pay attention to information in mass media information sources about the destinations. We can state that mass media are an important information source to “catch” tourists’ attention to a destination before the buying decision. However, when tourists are planning their stay, they use non-media information sources. On the other hand, communication campaigns should not be restricted to information about local infrastructure, but should also include information related to more general characteristics about regions. Finally, tourist organizations should use Internet and institutional brochures, taking into account that these information sources have a positive influence on future use of mass media information sources.
14. Limitations and directions for future research

There are some limitations of the research to be considered. The first limitation is that the final instrument (i.e. the questionnaire) may have created common method variance that could have inflated construct relationships. This could be particularly threatening if the respondents were aware of the conceptual framework of interest. However, they were not told the specific purpose of the study, and all of the construct items were separated and mixed so that respondents would not be able to detect which items were affecting which factors.

Second, this model should be more developed with regard to expectations fulfillment and future search behaviors. Namely, another construct should be introduced and tested that might have a strong impact on information search behaviors—information search credibility.

A third limitation is related to sample characteristics that may limit the generalization of the results to some degree. The research context includes domestic tourists in Portugal, some of them with experience in the tourist destination. Future studies with larger samples could allow for a comparison between national and foreign tourist behavior as well as between experienced and non-experienced tourists.

The industry would benefit from further research to better understand tourists’ decisions. Unconscious factors and information sources that are not strictly tourism-related (e.g. arts, novels, movies) may also influence decisions. Since consumers make decisions based on factors that they are not even consciously aware of, future research should use qualitative methodologies to better understand this phenomenon. Moreover, we need further research on the antecedents and consequences of non-media information sources usage. We suggest investigating how these customized sources are associated with other variables, such as type of tourists, services performance, and sources’ credibility. Finally, we encourage an application of the conceptual model to other services and other regions around the globe.

15. Conclusions and research implications

The results also show that using non-media information sources on tourist trip planning influences expectations fulfillment. The use of non-media information sources also has a direct impact on the future use of mass media information sources for future tourist trip planning, as well as an indirect impact through expectations fulfillment.

In the tourist’s travel planning phase, consumers actively search for information from many sources, namely institutional and commercial brochures, travel agents and the Internet. We expect the use of these information sources to have an impact on expectations fulfillment. Tourists who have more information would be in a better position to create more realistic expectations about tourist destinations related to two specific aspects: region characteristics (inhabitants’ friendliness, city/regional beauty and dining quality) and monuments, local attractions and events. We found that the main determinant of expectations fulfillment of regional characteristics is the use of travel agents, followed in relative importance by a negative impact of commercial brochures and positively by the Internet. We also found that expectations fulfillment of local infrastructure and travel agents, institutional brochures and, lastly, the Internet, influence entertainment structures at the outset.

Finally, we concluded that the determinant of future use of mass media information sources is expectations fulfillment of local infrastructure and entertainment structures, followed by previous use of institutional brochures and past use of the Internet.

The results showed that institutional brochures influence only expectations fulfillment related to local infrastructure and entertainment. There was no support to establish a relationship between the use of institutional brochures and regional characteristics expectations fulfillment. This partial result is probably due to the fact that these types of brochures usually have information about local tourist structures, more than regional characteristics.

Commercial brochures surprisingly showed only a significant and negative relationship with expectation fulfillment regarding characteristics of the region. A possible explanation is that these brochures show partial information about places. Tourist firms and organizations that depict a more colorful image of their structures create commercial brochures. When tourists arrive at destinations they can be faced with other realities.

Regarding travel agents and the Internet, the results showed that they have a positive impact on destination expectations fulfillment. Travel agents, as suggested in other investigations (Mitra et al., 1999; Murray, 1991), are a credible and reliable personal information source. The Internet, as a complete and powerful information source, allows consumers to collect more and varied information about destinations.

Regarding the influence of expectations fulfillment in the future use of mass media information sources in future trip planning, the results showed a partial relationship. We did not discover a significant relationship between regional characteristics expectations fulfillment and future use of mass media information sources. This result could be linked to the fact that tourists consider that mass media cannot give sufficient information about these factors because of their type and format of messages. However, local infrastructure expectations fulfillment has a positive impact on future use of mass media information sources, perhaps because this kind of information is frequent in mass media that is more appealing, especially television.

As far as the relationship between use of non-media information sources in trip planning and future use of mass
media information sources in trip planning is concerned, the results were surprising. The use of institutional brochures has a positive impact on future use of mass media information sources, perhaps because they are more appealing. The relationship between commercial brochures and future use of mass media information sources was not proved, perhaps because those types of information sources are similar, substituting one for the other. The results did not prove the negative relationship between travel agents use and mass media information sources in the future. But surprisingly, Internet usage has a positive influence on mass media information sources on future trip planning. This could be due to the fact that the Internet gives information similar to that of the mass media, so this information source enhances the use of mass media information sources.

Acknowledgments

This research was funded by a research grant from BOLSA NOVA FORUM to Luis Filipe Lages. An early version of this paper was finalist for best paper award at the EuroChrie 2004 (Turkey) conference. The authors acknowledge the three anonymous reviewers for their feedback on previous versions of the article as well as the comments on earlier versions of the manuscript from reviewers and participants the EuroChrie 2004 (Turkey) conference, 10th International Conference on Corporate and Marketing Communications 2005 (Cyprus), Theoretical Advances in Tourism Economics, 2005 (Portugal) and Fourth International Conference—Iberoamerican & Academy of Management, 2005 (Portugal).

Appendix A

Constructs, scale items and reliabilities are shown in Table A1.

Table A1 (continued)

<table>
<thead>
<tr>
<th>Importance of information from travel agents$^c$ (z = 0.95)</th>
<th>Std. Coefficients values</th>
</tr>
</thead>
<tbody>
<tr>
<td>V7 Importance of travel agents to route selection 0.86</td>
<td>19.95</td>
</tr>
<tr>
<td>V8 Importance of travel agents to accommodation selection 0.97</td>
<td>24.95</td>
</tr>
<tr>
<td>V9 Importance of travel agents to activities selection 0.95</td>
<td>23.63</td>
</tr>
<tr>
<td>Importance of information from internet$^d$ (z = 0.93)</td>
<td></td>
</tr>
<tr>
<td>V10 Importance of internet to route selection 0.81</td>
<td>18.05</td>
</tr>
<tr>
<td>V11 Importance of internet to accommodation selection 0.95</td>
<td>23.37</td>
</tr>
<tr>
<td>V12 Importance of internet to activities selection 0.94</td>
<td>22.97</td>
</tr>
<tr>
<td>Expectations fulfillment</td>
<td></td>
</tr>
<tr>
<td>(Scale 1 = It didn’t come up to any of your expectations/7 = It was really beyond your expectations)</td>
<td></td>
</tr>
<tr>
<td>Tourist destination region characteristics$^e$ (z = 0.80)</td>
<td></td>
</tr>
<tr>
<td>V13 Inhabitants’ friendliness 0.82</td>
<td>16.59</td>
</tr>
<tr>
<td>V14 City/region beauty 0.69</td>
<td>13.36</td>
</tr>
<tr>
<td>V15 Restaurant quality 0.78</td>
<td>15.59</td>
</tr>
<tr>
<td>Local infrastructure and entertainment$^e$ (z = 0.88)</td>
<td></td>
</tr>
<tr>
<td>V16 Local infrastructure 0.72</td>
<td>14.90</td>
</tr>
<tr>
<td>V17 Events 0.79</td>
<td>17.17</td>
</tr>
<tr>
<td>V18 Monuments 0.82</td>
<td>18.22</td>
</tr>
<tr>
<td>V19 Local Attractions 0.90</td>
<td>20.76</td>
</tr>
<tr>
<td>Future use of mass media information sources</td>
<td></td>
</tr>
<tr>
<td>(Scale 1 = Not important/7 = Extremely important)</td>
<td></td>
</tr>
<tr>
<td>V20 Advertising on mass media 0.83</td>
<td>17.05</td>
</tr>
<tr>
<td>V21 Reports in broadcast media 0.94</td>
<td>20.22</td>
</tr>
</tbody>
</table>

Notes: z, internal reliability (Cronbach, 1951).
$^a$Adapted from: Fodness and Murray (1999), Nolan (1976), Snepenger (1987), Snepenger et al. (1990), Raitz and Dakhil (1989).
$^b$Adapted from: Bieger et al. (2000).

References


