AN EMPIRICAL INVESTIGATION OF THE
RELATIONSHIP BETWEEN DEMOGRAPHICS AND THE
USAGE AND PERCEIVED CREDIBILITY OF SOURCES
OF INFORMATION ON ACCOMMODATION PROVIDERS

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Abstract:
The purpose of this paper is to investigate the relationship between the
usage and perceived credibility of several sources of information domestic
travelers take into consideration when gathering information on potential
accommodation providers, on one hand, and, respectively, travelers’
demographic characteristics, on the other hand. After analyzing data from an
online questionnaire based study conducted among a sample of 346 young
Romanian Facebook users (between 19 and 35 years old), the results
showed that, considering types of information sources usually taken into
consideration, personal sources and Facebook are more frequently found
among travelers with a lower income, travel agencies are more frequently
mentioned as usual sources of information among older travelers and among
those with a higher level of education, while women are more inclined than
men to use leaflets and booklets as sources of information on
accommodation providers. Moreover, the research showed that the higher
the income, the higher the level of perceived credibility of online portals is.
Also, travel agencies and personal sources are more frequently mentioned
among the most credible sources by women, than by men, while men are
slightly more confident than women in online banners and blogs. The findings
can be very useful and relevant from a practical perspective, especially for
communication and promotion purposes in the hospitality industry.

Keywords: hospitality industry; accommodation providers; information
sources; demographics; consumer behavior.

Introduction
Demographics can significantly influence any phase of the travel and
tourism consumer behavior. Middleton et al. (2009), for example, state that
turning travel and tourism motivations into action depend on the leisure time
and the disposable income that can be devoted to tourist activities, all these
being determined by socio-demographic factors such as occupation, income,
age, marital status, family commitments, and others.

Even though demographics represent objectively and easily measurable characteristics of a
population, investigating consumer behavior in the travel and tourism sector is particularly difficult due to the high
level of variability of tourism services, of consumption periods (ranging from a few minutes to several days and nights),
as well as of consumer wants and needs which are dependent on factors such as situation, circumstance,
expenditure and others (Williams, 2002).

During the last decades, understanding the nature of travel plans
and choices have been the subject of considerable attention from consumer
behavior and tourism marketing
researchers, one of the reasons of such research interest being the fact that such studies can provide tourism marketers relevant profiles of customer segments based on demographics, trip planning activities, trip behaviors, evaluations of trip services experienced, global evaluations of services and destinations and others (Kattiyapornpong and Miller, 2008).

When deciding on buying a travel and tourism product or service, just as in the case of any other product or service, a consumer typically passes through five stages: problem recognition, information search, alternatives assessment, purchase decision, and post-purchase behavior (Kotler and Keller, 2012).

The second stage of the process involves several sources of information, including the media, friends, relations or other significant influences, with external messages dominated by a range of marketing sources, including sales persons, point of sale material and other forms of advertising, etc. (Williams, 2002). The information gathering phase refers to both formal communication channels (aimed at persuading prospective buyers through paid-for advertising, brochures, sales promotion techniques, public relations activity, and the Internet), as well as to extensive information accessible to individuals informally through their family, friends and the groups of people with whom they interact at work and socially (Middleton et al., 2009).

The extent of the pre-purchase search behavior of travel and tourism consumers is determined by individual preference, availability and accessibility of the information, and the range of acceptable purchase options (Williams, 2002), while how potential visitors receive and process the stimuli will depend on a range of personal and social factors such as: needs, desires and motives, personality, personal and economic circumstances, and social and cultural influences (Middleton et al., 2009).

**Brief literature review**

The specialized literature comprises a large number of papers focusing on tourist information search behaviors and the perceived value/credibility of different information source types.

Crotts (1999) states that the informal channels of information, word of mouth, friends, and other reference groups are at least as influential on purchase decisions as the formal channels. Moreover, Murray (1991) suggests that consumers rely more on personal sources for decisions involving services, including travel and tourism services (nevertheless, the Internet was not relevant at the time of Murray’s study).

Many researchers have analyzed tourist preferences in using specific information channels in relation to their demographic and socio-economic characteristics (Fall, 2000; Gursoy, 2000; Luo et al., 2004; Kim et al., 2007). From this point of view, income has been one of the most analyzed socio-demographic characteristic, even since the 80s. Raaij (1986) found that travelers at lower income levels might be expected to engage in more search to offset their relatively greater perceived risk. At the same time, Gitelson and Crompton (1983) found that higher income levels have been found to be positively associated with greater levels of information search including the use of destination specific sources. Testing the effects of tourist characteristics on information search by travelers, Fodness and Murray (1999) revealed that there would be statistically significant differences among leisure travelers classified by their information search strategy with respect to their income.

In a relatively recent study, aiming to cluster tourists on information
foraging across multiple sources, Murphy and Olaru (2009) confirmed and reinforced the fact that information gathering relates to consumer demographics.

Starting from the end of the 90s (Marcussen, 1997; Bonn et al., 1998), the importance of the Internet as a commercial channel in the context of tourist information search has been widely acknowledged, even in the context of demographics' influence. Moreover, Cai et al. (2004) found a significant relationship between tourist purchase decision involvement and tourist perceived value of each type of information source: thus, tourists with high involvement were found to be more likely to use the internet than those at the medium and low.

Even though internationally the specialized literature includes many papers focusing on investigating the information gathering phase of travel and tourism services purchase decision, the subject relative to Romanian domestic travelers is rather poorly analyzed, most often within practical market studies performed by professional, and rarely within scientific papers.

A market research conducted in August 2009 by INSOMAR among 2502 Romanian respondents, using printed questionnaires, applied face to face, revealed that friends and acquaintances’ recommendations (38.4% of respondents) and, respectively, the Internet (26.6%) represent the most used sources of information when deciding on travel and tourism products and service, followed by TV, radio, papers and magazines (9.3%), direct contact with travel agencies’ representatives (9.2%), and, respectively, travel agencies’ leaflets and booklets (6.4%).

A more recent survey conducted online in September 2012 by ivox among a representative sample of 7661 Romanian respondents, showed that the most important information source regarding travel and tourism offers is represented by the Internet (one third of the respondents), followed, in this order, by friends and acquaintances’ recommendations, leaflets and booklets, and, respectively, direct contact with travel agencies’ representatives, while sources such as TV, radio, papers and magazines being much less used.

An even more recent survey conducted online by SEO monitor (SMARK, 2013) revealed that around 80% of the survey’s respondents declared that they start the information gathering phase of the travel and tourism products purchase decision process by searching for information online. Moreover, 99% of the respondents use, more or less, the internet for gathering information on travel and tourism offers, the most used online tools being Google search engine and online portals gathering travel and tourism offers, as well as opinions of other travelers.

Methodology

The purpose of this paper is to investigate the relationship between the usage and perceived credibility of several sources of information travelers take into consideration when gathering information on potential accommodation providers, on one hand, and, respectively, travelers' demographic characteristics, on the other hand.

The data analyzed in this paper represent a part of an online questionnaire based study conducted during the summer of 2012 among young Romanian Facebook users (between 19 and 35 years old), in order to analyze and profile them as domestic tourism consumers.

According to Internet World Stats (www.internetworldstats.com), one of the most popular websites for international Internet usage statistics, at the end of the first semester of 2012, the Internet penetration rate relative to
the total population was of 34.3% considering the whole world, 63.2% in Europe, and, respectively, 44.1% in Romania (a total of 9,642,383 Romanian Internet users). Moreover, according to a recent survey conducted by GfK Romania about Internet usage in Romania over two years (2010 and 2012), the incidence among people aged over 15 years was 48.7% in 2012, a growth of 8.4% compared to 2010. About 83% of people aged 15-24 years use the Internet, 71% of those between 25 and 34 years, and, respectively, 62% of those between 35 and 44 years (a significant increase of 8% between 2010 and 2012 being also recorded for the age range of 45-54 years).

Therefore, it can be said that an online survey conducted among a probabilistic sample of Romanian Internet users has a significant chance to cover a large part of the overall Romanian population, while an online survey conducted among 19 to 35 years old Romanian Internet users has a significant chance of covering the majority of all Romanian Internet users.

Moreover, according to a Romanian trustworthy Facebook pages monitoring service (www.facebrands.ro), on the 3rd of October 2012, there were 5,084,260 Facebook users, among which 30.2% between 18-24 years old, and 30.4% between 25-34.

Therefore, due to the fact that the survey was conducted exclusively among Romanian Facebook users with ages between 19-35 years (approximately 3 million persons), it can be said that such a survey could be, if a probabilistic sampling procedure was applied, representative for more than 60% of Romanian Facebook users, and, respectively, for almost a third of the Romanian Internet users.

Nevertheless, the sampling procedure used for data collection consisted of a mixed empirical (not probabilistic) procedure (voluntary, convenience and chain sampling), capitalizing on the power of Facebook online social networking. Thus, during the summer of 2012 (July-August), the invitation to voluntarily complete the questionnaire, alongside with a short description of the survey’s objectives, and the corresponding access link, was regularly posted on Facebook, until the end of August, when the occurrence of full completed questionnaires accounted for a valid sample of 346 respondents.

One of the most important advantages of collecting data using a popular online social media platform as Facebook was the fact that recruited subjects were easily involved in further recruiting other respondents by “sharing” the invitation to participate among their own Facebook “friends”.

The demographic characteristics that were taken into consideration and included in the study consisted of gender, education, age, and, respectively, income (see table 1).
Table 1

Frequency statistics regarding sample demographics

<table>
<thead>
<tr>
<th>Gender:</th>
<th>Highest graduated education level:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Men</td>
<td>High-school, similar or lower</td>
</tr>
<tr>
<td></td>
<td>College, bachelor or similar</td>
</tr>
<tr>
<td></td>
<td>Master, PhD, similar or higher</td>
</tr>
<tr>
<td>Women</td>
<td>128</td>
</tr>
<tr>
<td></td>
<td>155</td>
</tr>
<tr>
<td></td>
<td>146</td>
</tr>
<tr>
<td>Age:</td>
<td>Individual monthly net total income:</td>
</tr>
<tr>
<td>19-22 years</td>
<td>Up to 1000 lei</td>
</tr>
<tr>
<td>23-25 years</td>
<td>1001 - 2000 lei</td>
</tr>
<tr>
<td>26-30 years</td>
<td>2001 - 4000 lei</td>
</tr>
<tr>
<td>31-35 years</td>
<td>More than 4000 lei</td>
</tr>
<tr>
<td></td>
<td>82</td>
</tr>
<tr>
<td></td>
<td>101</td>
</tr>
<tr>
<td></td>
<td>83</td>
</tr>
<tr>
<td></td>
<td>80</td>
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<tr>
<td></td>
<td>79</td>
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<tr>
<td></td>
<td>104</td>
</tr>
<tr>
<td></td>
<td>106</td>
</tr>
<tr>
<td></td>
<td>57</td>
</tr>
</tbody>
</table>

In order to investigate the sources of information travelers take into consideration when gathering information on potential accommodation providers, respondents were asked to select (from a list, with multiple choice enabling) the types of sources they usually consider when put in the hypothetical situation of having to plan a travel and to collect data regarding potential accommodation providers, as well as to select, from the same list, those sources that they considered as being among the most credible (see table 2).

Table 2

Frequency statistics regarding sources of information on accommodation providers (used and, respectively, considered credible)

<table>
<thead>
<tr>
<th>Source</th>
<th>Usually used</th>
<th>Considered among the most credible</th>
</tr>
</thead>
<tbody>
<tr>
<td>Travel agencies</td>
<td>103 (29,77%)</td>
<td>147 (42,49%)</td>
</tr>
<tr>
<td>Leaflets and booklets</td>
<td>69 (19,94%)</td>
<td>27 (7,8%)</td>
</tr>
<tr>
<td>Friends, acquaintances and colleagues</td>
<td>223 (64,45%)</td>
<td>236 (68,21%)</td>
</tr>
<tr>
<td>TV, radio or print advertising</td>
<td>16 (4,62%)</td>
<td>8 (2,31%)</td>
</tr>
<tr>
<td>TV, radio or print news, articles and reports</td>
<td>23 (6,65%)</td>
<td>29 (8,38%)</td>
</tr>
<tr>
<td>Online banners</td>
<td>60 (17,34%)</td>
<td>10 (2,89%)</td>
</tr>
<tr>
<td>Blog entries/articles</td>
<td>69 (19,94%)</td>
<td>88 (25,43%)</td>
</tr>
<tr>
<td>Facebook</td>
<td>36 (10,4%)</td>
<td>12 (3,47%)</td>
</tr>
<tr>
<td>Online portals gathering accommodation offers</td>
<td>232 (67,05%)</td>
<td>133 (38,44%)</td>
</tr>
<tr>
<td>Accommodation providers own websites</td>
<td>168 (48,55%)</td>
<td>111 (32,08%)</td>
</tr>
</tbody>
</table>

The purpose of the paper and the research objectives derived from it implied the formulation of the following hypotheses:

$H_1 [(a),(b),(c),(d)]: \text{There is a significant relationship between travelers [(a) income / (b) education / (c) age / (d) gender] and the type of sources of information on accommodation providers they usually take into consideration.}$

$H_2 [(a),(b),(c),(d)]: \text{There is a significant relationship between travelers [(a) income / (b) education / (c) age / (d) gender] and the perceived credibility of available sources of information on accommodation providers.}$
Results and discussion

Hypothesis $H_{1(a)}$ regarding individual monthly net total income was firstly tested. Chi-square tests did not reveal any significant relationship between respondents’ income level and, respectively, using sources of information such as travel agencies, leaflets and booklets, TV, radio or print advertising, TV, radio or print news, articles and reports, online banners, blog entries/articles, online portals gathering accommodation offers, or accommodation providers own websites. Therefore, there is no significant difference in using the above mentioned information sources among different travelers when it comes to gathering information on potential accommodation providers, if income based segments/categories are considered.

Nevertheless, the results in figure 1 reveal the fact that there is a significant relationship between income and, respectively, using personal sources (friends, acquaintances and colleagues) as sources of information. As it can be seen, personal sources are significantly less used by travelers with a higher income, while they are in a larger proportion considered by those positioned in lower income segments.

![Figure 1. Cross-tabulation between income and the usage of personal sources of information on accommodation providers](image)

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Pearson Chi-Square</td>
<td>11.804$^a$</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Likelihood Ratio</td>
<td>11.878</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Linear-by-Linear</td>
<td>7.574</td>
<td>1</td>
</tr>
</tbody>
</table>

$^a$ = 0 cells have expected count less than 5

Moreover, figure 2 shows a significant relationship between income and, respectively, using Facebook as a source of information on accommodation providers. Thus, Facebook is more used by those with individual monthly net income of up to 2000 lei, while less used by those with income levels between 2001-4000 lei, and even less by those who earn more than 4000 lei/month. Facebook is therefore a more frequent source of information among travelers with a lower income.
In what concerns hypothesis $H_{2(a)}$ the data analysis didn’t suggest any relationship between travelers income level and, respectively, the level of perceived credibility of information sources, except for online portals specialized in gathering accommodation offers (see figure 3). Thus, as results show, the higher the income, the higher the level of perceived credibility of such online portals is. Some might think that this is due to the correlation between age, education and income, but, as further results show age and education don’t have any influence on the proportion in which online portals are used as sources of information on accommodation providers.

The hypotheses concerning travelers’ highest graduated education level – $H_{1(b)}$ and $H_{2(b)}$ – were further tested and were rejected in all cases, except for the usage of travel agencies as sources of information on accommodation providers. Thus, the results shown in figure 4 prove that there is a significant difference in using this type of information source among differently educated respondents, travel agencies being more frequently mentioned as usually considered among respondents with a higher level of education (least used by those with high-school, similar or lower studies). Nevertheless, neither the usage in all other cases, nor the perceived credibility in all case, are affected by travelers level of education.
Figure 4. Cross-tabulation between education and the usage of travel agencies as sources of information on accommodation providers

Hypotheses $H_{1(c)}$ and $H_{2(c)}$ (concerning travelers' age) were also tested and were not confirmed in none of the cases, except (again) for the usage of travel agencies as sources of information on accommodation providers. The results in figure 5 show that there is a significant difference in using travel agencies for gathering information on accommodation providers among respondents from different age categories, travel agencies being more frequently mentioned as usually considered among older respondents. However, this result is consistent with the previous one (regarding education level and usage of travel agencies as information sources), as the two variables regarding age and education level are correlated.

Figure 5. Cross-tabulation between age and the usage of travel agencies as sources of information on accommodation providers

Finally, hypotheses regarding travelers' gender – $H_{1(d)}$ and $H_{2(d)}$ – were tested, and the results were rather surprising. Thus, even though $H_{1(d)}$ was only confirmed in the case of using leaflets and booklets as sources of information on accommodation providers, women being more inclined than men to use this type of source (see figure 6), hypothesis $H_{2(d)}$ regarding perceived credibility confirmed in the case of four types of information sources: travel agencies, personal sources, online banners, and blogs (see figures 7, 8, 9 and 10).
Figure 6. Cross-tabulation between gender and the usage of leaflets and booklets as sources of information on accommodation providers

Figure 7 shows a significant difference between men and women when it comes to the perceived credibility of travel agencies as sources of information regarding accommodation providers. Thus, travel agencies are more frequently mentioned among the most credible sources by women, than by men.

Figure 7. Cross-tabulation between gender and the perceived credibility of travel agencies as sources of information on accommodation providers

Moreover, figure 8 reveals a slight but significant relationship between travelers’ gender and the perceived credibility of personal sources of information when it comes to collecting information on accommodation providers. Women show a higher level of perceived credibility assigned to personal sources of information, in comparison to men.

Figure 8. Cross-tabulation between gender and the perceived credibility of personal sources of information on accommodation providers
However, as figure 9 shows, even though online banners are not generally included among the most credible sources of information, men are slightly more confident than women in this type of information source.

![Figure 9. Cross-tabulation between gender and the perceived credibility of online banners as sources of information on accommodation providers](image)

Finally, as it can be seen in figure 10 a significantly larger percentage of men included blogs among the most credible sources of information regarding accommodation providers. Therefore, it can be stated that there is a significant relationship between travelers’ gender and the perceived credibility of blogs as sources of information in this context.

![Figure 10. Cross-tabulation between gender and the perceived credibility of blogs as sources of information on accommodation providers](image)

Conclusions, research limitation and future research directions

As results showed, there are several significant relationships between the demographic characteristics of travelers, on one hand, and, respectively, the types of information sources they use in order to gather information regarding accommodation providers, as well as the perceived credibility of these types of sources.

Thus, considering types of information sources usually taken into consideration, personal sources (friends, acquaintances, and colleagues) and Facebook are more frequently found among travelers with a lower income. Moreover, travel agencies are more frequently mentioned as usual sources of information among older travelers and among those with a higher level of
education. Last, but not least, women are more inclined than men to use leaflets and booklets as sources of information on accommodation providers.

Regarding their perceived credibility, the research showed that the higher the income, the higher the level of perceived credibility of online portals (which gather accommodation offers) is. Moreover, travel agencies and personal sources are more frequently mentioned among the most credible sources by women, than by men, while men are slightly more confident than women in online banners and blogs.

Due to the fact that the communication mix plays a very important role in marketing any company involved in the hospitality industry (especially accommodation providers), and that in order to attract new customers the information search phase of the buying decision process is crucial, the findings of this paper can be very useful and relevant from a practical perspective, especially for communication and promotion purposes in the hospitality industry.

However, the empirical nature of the study, as well as the non-probability sampling procedure must be acknowledged as minuses, as they do not confer the statistically representativeness necessary in order to extrapolate the results to the entire investigated population. Nevertheless, the findings generate a series of possible hypothesis that might be tested in a future research based on a probabilistic sampling procedure.

Reducing the investigated population to a certain age interval (19-35 years) and to respondents using a certain type of online social media platform represents another limit of the research, the possibility of applying the findings in a marketing communication strategy addressed at conquering older consumers or Internet users, in general, being limited. Nevertheless, this limit suggests the opportunity of a future research that should be aimed at covering all age segments and all Internet users.

Last, but not least, the list of sources of information included in the study (potentially used in order to search for information regarding accommodation providers), as well as the analyzed demographics, are not exhaustive. Thus, any future research should take into consideration more demographic variables and, especially, more items in the list of potential sources of information.

REFERENCES


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***, http://www.facebrands.ro/demografice.html