Tourist services online purchases in the context of the Theory of Planned Behaviour

Онлајн куповина туристичких услуга у контексту теорије планираног понашања

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Abstract: There can be identified a wide use of the Theory of Planned Behavior in understanding and predicting customer behavior. The topic of this paper is to explain intentions of online purchases of tourist services (concretely hotel accommodation) in the context of other variables used within the Theory of Planned Behavior - attitudes, subjective norms and perceived behavioral control. Data collection was performed in Serbia in April 2017 on a convenience sample of 500 respondents. The greatest influence on intention to buy hotel accommodation online is the one of the attitudes (especially for older and respondents with shorter experience with the Internet), followed by the impact of subjective norms (especially in the case of younger respondents) and finally of perceived behavioural control (especially for men). Managerial recommendations are provided, as well.

Keywords: Theory of Planned behaviour, attitudes, subjective norms, perceived behavioral control, intention to purchase, tourist services, hotel accommodation, Republic of Serbia

Introduction

There can be identified a wide use of the Theory of Planned Behavior in understanding and predicting customer behavior. According to those theory attitudes, subjective
norms and perceived behavioral control influence intention to purchase, which on the other hand (together with perceived behavioral control) determines actual customer behavior. The topic of this paper is to explain intentions of online purchases of tourist services (specifically, hotel accommodation) in the context of other variables used within the Theory of Planned Behavior.

The paper is organized in several sections. In the first one, theoretical foundations of the Theory of Planned Behavior will be explained. Furthermore, research dealing with the influence of variables from that theory on customer choices of online purchases will be presented. The second section of the paper will present design of the research conducted in domestic conditions. The third part of the paper will give the results of the implementation of structural equation modeling. In the fourth section discussion of the results and managerial recommendations will be provided. Finally, the last, fifth part of the paper will concisely present conclusions.

1. Theoretical background

According to the Theory of Planned Behaviour (Ajzen, 1991) attitude towards the behaviour, subjective norms and perceived behavioural control determine intention to perform behaviour, while consumer behaviour is predicted based on the intention to perform behaviour and perceived behavioural control. Hereby, attitudes arise from the correlation between beliefs and their evaluation, and have their cognitive and affective component. Subjective norms are the pressure of society on an individual to perform or not perform certain behavior. Perceived behavioural control is the perception of one’s own ability to perform certain behaviour.

The application of the previously described theory or some of its elements is present in regard to online choice of tourist services as well.

Verma and Chandra (2018) use the Theory of Planned Behavior in order to predict young Indian consumers’ intention to visit green hotels. Out of the variables from that theory, the authors point out to attitudes as significant for respondents’ intention to visit such hotels. Furthermore, the authors add considerations of moral reflectiveness and conscientiousness and thus improve the strength of the model.

A research from Malaysia investigated the influences of a number of variables – perceived price, trust, social influence, prior online purchase experience, and perceived risk on consumers’ intention in regard to performing online hotel reservations (Saw, Goh & Isa, 2015). The results suggest that all these variables except of social influence have a significant impact.

There is a possibility to identify some variables as moderators in regard to online reservations of hotels. Kim and Kim (2004) compare the respondents that perform such reservations online and those who do not do that. Hereby, the authors point out that the determinants of online reservation intentions are different in accordance to their past online purchasing experience.
The conceptual model of this research is presented on Picture 1.

Following hypotheses have been formulated:

H1: Attitudes in regard to online purchases of hotel accommodation have positive effect on intention to purchase it.

H2: Subjective norms in regard to online purchases of hotel accommodation have positive effect on intention to purchase it.

H3: Perceived behavioural control in regard to online purchases of hotel accommodation has positive effect on intention to purchase it.

H4: Gender moderates positive influence of attitudes in regard to online purchases of hotel accommodation on intention to purchase it.

H5: Gender moderates positive influence of subjective norms in regard to online purchases of hotel accommodation on intention to purchase it.

H6: Gender moderates positive influence of perceived behavioural control in regard to online purchases of hotel accommodation on intention to purchase it.

H7: Age moderates positive influence of attitudes in regard to online purchases of hotel accommodation on intention to purchase it.

H8: Age moderates positive influence of subjective norms in regard to online purchases of hotel accommodation on intention to purchase it.

H9: Age moderates positive influence of perceived behavioural control in regard to online purchases of hotel accommodation on intention to purchase it.

H10: Internet experience moderates positive influence of attitudes in regard to online purchases of hotel accommodation on intention to purchase it.

H11: Internet experience moderates positive influence of subjective norms in regard to online purchases of hotel accommodation on intention to purchase it.
H12: Internet experience moderates positive influence of perceived behavioral control in regard to online purchases of hotel accommodation on intention to purchase it.

All the hypotheses are formulated in accordance to graphical representation of conceptual model.

2. Materials and methods

2.1. Questionnaire

The questionnaire consisted of two parts. Several researchers from authors’ institution as well as themselves participated in its creation. It was implemented in wider research of online shopping behavior in Serbia. Only a part of that questionnaire was used within this paper.

The first part of the questionnaire was related to the elements of the Theory of Planned Behavior: Attitude, Subjective Norm, Perceived Behavioral Control, and Intention to Purchase. Their items were originally from Limayem, Khalifa and Frini (2000). They were rated on five-point Likert scales. It ranged from “strongly disagree” to “strongly agree”. During the translation of the questionnaire into Serbian, back-translation procedure was implemented.

The second part of the questionnaire was used for determining respondents’ gender, age, and number of years since performing the first online shopping.

2.2. Sample

In the first phase, for testing reliability and validity of the questionnaire, 300 answers were considered. In the second phase, 500 questionnaires were included in reliability and unidimensionality testings as well as in final analysis.

The sample of 300 respondents consisted of 44% of male and 56% of female. Their average age was 28.98 years (standard deviation 10.495). On the other hand, when it comes to the sample of 500 respondents there were 45% of male and 55% of female. They were 27.44 years old in average (standard deviation 10.130).

Structured interviews by personal communication with the respondent were implemented within the research method. Convenience sampling method was performed. The respondents needed 10 minutes on the average to fill in the part of the questionnaire referring to the topic of the paper. The precondition for a person to become a respondent was that he/she has bought anything online. Data collection was performed in April of 2017.

2.3. Procedures

In the first phase, in regard to responses of 300 customers, Cronbach’s alpha, Cronbach’s alpha if item deleted, and Corrected item-total correlation were calculated -
separately for each of the implemented scales. After that, adequacy of conducting factor analysis was tested by Kaiser-Meyer-Olkin (KMO) test and Bartlett’s Test of Sphericity. Exploratory factor analysis by Maximum likelihood factor analysis method and Varimax rotation method were implemented for testing scales validity. Hereby, the number of factors to be extracted was set to be equal to the number of implemented scales. The described procedure led to omitting several items from further analysis. In the second phase, regarding responses of 500 customers, Cronbach’s alpha, Cronbach’s alpha if item deleted, and Corrected item-total correlation were calculated. That led to exclusion of one more item as well. Furthermore, confirmatory factor analysis with Maximum likelihood method was used.

All previously described actions were performed in accordance to instructions of Churchill (1979), Anderson and Gerbing (1982), Danes and Mann (1984) and Steenkamp and van Trijp (1991).

To test the influence of the attitudes, subjective norms and perceived behavioral control on intention to purchase hotel accommodation services, structural equation modeling was used. Within the moderation analysis, it was investigated whether there were differences in influence of independent variables on dependent variables in the case of respondents of different gender, younger and older (older than the median for age) respondents as well as between less and more (more than the median for the number of years since performing the first online shopping) experienced online shoppers.

Data were processed in the SPSS and AMOS statistical packages, as well as in the Microsoft Office Excel.

3. Results

The model fit of the final model: Chi-square/df= 2.069, p value of the model= 0.000, CFI=0.981, GFI=0.966, AGFI=0.944, SRMR=0.055, RMSEA=0.046 , PCLOSE=0.679 points out to it being acceptable. The results of structural equation modeling are shown in Table 1.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Attitudes</th>
<th>Subjective norms</th>
<th>Perceived behavioural control</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intention to buy hotel accommodation online</td>
<td>0.391***</td>
<td>0.331***</td>
<td>0.244***</td>
</tr>
</tbody>
</table>

Source: Authors’ analysis
Note: *** statistically significant

As it can be seen from the Table, the influence of all independent variables is statistically significant. The greatest influence on intention to buy hotel accommodation online is the one of the attitudes (0.391). That estimate shows that
when attitude increases for one standard deviation, intention rises for 0.391 standard deviations. This influence is followed by the impact of subjective norms (0.331) and finally of perceived behavioural control (0.244).

The comparison between men and women is presented in Table 2.

### Table 2: Moderation analysis (gender)

<table>
<thead>
<tr>
<th>Influences</th>
<th>Male Estimate</th>
<th>Male p</th>
<th>Female Estimate</th>
<th>Female p</th>
<th>z-score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intention &lt;--- Attitudes</td>
<td>0.320</td>
<td>0.000</td>
<td>0.450</td>
<td>0.000</td>
<td>1.030</td>
</tr>
<tr>
<td>Intention &lt;--- Subjective norms</td>
<td>0.360</td>
<td>0.040</td>
<td>0.450</td>
<td>0.000</td>
<td>0.400</td>
</tr>
<tr>
<td>Intention &lt;--- Perceived behavioural control</td>
<td>0.560</td>
<td>0.000</td>
<td>0.230</td>
<td>0.000</td>
<td>-2.43**</td>
</tr>
</tbody>
</table>

Source: Authors’ analysis
Note: ** p-value < 0.05

The results suggest that when it comes to the influence of attitudes as well as of subjective norms on intention, there are no statistically significant differences between men and women. When it comes to the influence of perceived behavioural control on intention these respondents statistically significantly differ, in a manner that in the case of men, that impact is stronger.

The comparison between respondents older than the median for age of all respondents and respondents younger than or as old as the median for age of all respondents is presented in Table 3.

### Table 3: Moderation analysis (age)

<table>
<thead>
<tr>
<th>Influences</th>
<th>Younger Estimate</th>
<th>Younger p</th>
<th>Older Estimate</th>
<th>Older p</th>
<th>z-score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intention &lt;--- Attitudes</td>
<td>0.230</td>
<td>0.040</td>
<td>0.500</td>
<td>0.000</td>
<td>1.91*</td>
</tr>
<tr>
<td>Intention &lt;--- Subjective norms</td>
<td>0.850</td>
<td>0.000</td>
<td>0.120</td>
<td>0.220</td>
<td>-3.16***</td>
</tr>
<tr>
<td>Intention &lt;--- Perceived behavioural control</td>
<td>0.350</td>
<td>0.000</td>
<td>0.400</td>
<td>0.000</td>
<td>0.360</td>
</tr>
</tbody>
</table>

Source: Authors’ analysis
Note: * p-value < 0.10; *** p-value < 0.01

The results suggest that when it comes to the influence of attitudes as well as of subjective norms on intention, there are statistically significant differences between younger and older respondents. Hereby, the first impact is stronger in the case of older people, while the second in the case of younger people. When it comes to the influence
of perceived behavioural control on intention, these respondents do not statistically significantly differ.

Finally, the comparison between respondents experienced more than the median for the number of years of online shopping experience of all respondents and respondents less experienced than or as long experienced as the median for that variable is shown in Table 4.

Table 4: Moderation analysis (internet experience)

<table>
<thead>
<tr>
<th>Influences</th>
<th>Less experienced</th>
<th>More experienced</th>
<th>z-score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intention &lt;--- Attitudes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Estimate</td>
<td>p</td>
<td>Estimate</td>
<td>p</td>
</tr>
<tr>
<td>0.530</td>
<td>0.000</td>
<td>0.260</td>
<td>0.000</td>
</tr>
<tr>
<td>Intention &lt;--- Subjective norms</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.310</td>
<td>0.000</td>
<td>0.550</td>
<td>0.010</td>
</tr>
<tr>
<td>Intention &lt;--- Perceived behavioural control</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.240</td>
<td>0.000</td>
<td>0.460</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Source: Authors’ analysis

Note: ** p-value < 0.05

The results point out that when it comes to the influence of attitudes on intention, there is statistically significant difference between less and more experienced users of Internet, in a manner that it is stronger for the first segment. When it comes to the influence of subjective norms and perceived behavioural control on intention, these respondents do not statistically significantly differ.

4. Discussion and recommendations

The results of the research point out that the greatest influence on intention to buy hotel accommodation online have respondents’ attitudes. That suggests that the most important for them is their own opinion and feeling about performing such action. This is especially the case for older respondents as well as for respondents with shorter experience with using Internet. These two groups do not correspond to each other (Pearson correlation coefficient for respondents age and number of years since performing the first online purchase is positive and statistically significant (r=0.171, p=0.000)). There might be the question whether the number of years since performing the first online purchase is the best measure of the level of experience with Internet since it could be measured by frequency of online purchases, as well. However, considering the low level of domestic online purchases, as well as the fact that precondition for becoming a respondent was performing such purchases before, it can be accepted that the number of years since performing the first online purchase is an adequate measure. The implications for the hotels attempting to increase online purchases of their services is that it is of the greatest importance to make (if targeting
these two segments) them feel and think that online purchases is a good idea. The education in regard to it, as well as defining its advantages, is a step that can be undertaken.

Although to some extent weaker, the influence of subjective norms (i.e. what is suggested to respondents by their friends, families and media) is also very important. This is especially the case of younger respondents and can be partly interpreted as their consumer socialization. Accordingly, if targeting this segment, media, electronic word of mouth, opinion leaders and similar factors for creating subjective norms can be of the greatest importance.

The smallest, but still statistically significant, is the positive influence of perceived behavioural control on intention to purchase hotel accommodation online. It is connected with respondents’ capabilities of using Internet as well as their assessment of certain websites for online purchases. This can be the consequence of the higher level of respondents’ skills in regard to Internet and appropriate features of websites, but it should be taken into account that this factor is also important, especially in the case of men. Having in mind the great influence of women in purchase decision process in general, and especially in the case of tourist services, this factor can be further considered as at some extent less important.

The hypotheses in regard to influences in regard to Theory of Planned Behaviour are proven to be correct. However, the effects of moderators are present only in some cases.

Conclusions

The topic of the paper was to explain intentions of online purchases of tourist services (concretely hotel accommodation) in the context of other variables used within the Theory of Planned Behavior - attitudes, subjective norms and perceived behavioral control. The results showed that the greatest influence have respondents’ attitudes. On the second place are subjective norms, while perceived behavioural control is on the last place, but also with positive and statistically significant influence.

Moderation analysis showed that although these influences are statistically significant for almost all examined groups (men and women: younger and older (older than the median for age) respondents; less and more (more than the median for the number of years since performing the first online shopping) experienced online shoppers), there are still statistically significant differences among them when it comes to the strength of these influences. Hereby, the influence of attitudes is especially strong in the case of older and respondents with shorter experience with Internet; the impact of subjective norms especially for younger respondents; while the influence of perceived behavioural control especially in the case of men.
The paper also provides certain managerial recommendations. Future researches can distinguish between different motives of buying hotel accommodation and consider additional variables as well.

**Literature**


**Summary**

According to the Theory of Planned Behaviour attitude towards the behaviour, subjective norms and perceived behavioural control determine intention to perform behaviour, while consumer behaviour is predicted based on the intention to perform behaviour and perceived behavioural control. Hereby, attitudes arise from the correlation between beliefs and their evaluation, and have their cognitive and affective
component. Subjective norms are the pressure of society on an individual to perform or not perform certain behavior. Perceived behavioural control is the perception of one’s own ability to perform certain behaviour. The application of previously described theory or some of its elements is present in regard to online choice of tourist services as well.

The topic of the paper was to explain intentions of online purchases of tourist services (concretely hotel accommodation) in the context of other variables used within the Theory of Planned Behavior. Data collection was performed in Serbia in April of 2017 on convenience sample of 500 respondents. The greatest influence on intention to buy hotel accommodation online is the one of the attitudes (especially for older and respondents with shorter experience with Internet), followed by the impact of subjective norms (especially in the case of younger respondents) and finally of perceived behavioural control (especially for men).