Data Article

Data on the relationship between traveller perceived value and traveller intention to revisit a destination

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ABSTRACT

Data was collected at the OR Tambo Airport in Johannesburg South Africa from 503 willing international tourists. The survey was self-administered over a two-month period. Due to the absence of a sampling frame, non-probability sampling was adopted in selecting participants. A unique conceptual model was developed to test the causal effect of traveller perceived value on cognitive and affective destination image as well as on traveller intention to revisit. In addition, the direct effect of cognitive and affective destination image on traveller intention to revisit was also measured. Analysis of data involved descriptive statistics and structural equation modeling conducted in the Statistical Package for the Social Sciences (SPSS) 25 and Analysis of Moment Structures (AMOS) 25 respectively. Descriptive statistics produced frequencies on gender, age, travels, purpose of trip and holidays associated with each respondent. Structural equation modeling was conducted following a two-step process. First, confirmatory factor analysis followed by hypothesis testing. Further research could assess the possibility of a link between affective and cognitive destination image.

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1. Data

The data is presented through four tables and one figure. Table 1 presents the sample profile showing demographic characteristics of the participants such as gender and age. Table 1 also shows the participants’ frequency of travels and the purposes of their trips as well as frequency of holidays. Table 2 presents the model fit criteria and the corresponding outcomes for each indicator. In Table 3, the accuracy analysis statistics are presented which include reliability and validity measures. Fig. 1, illustrates the structural model showing all the outcomes of the proposed hypotheses. Lastly, Table 4 presents the hypotheses results.

2. Experimental design, materials, and methods

The research was quantitative in nature adopting the survey methodology. Due to the difficulty in obtaining a sampling frame of international tourists passing through the airport non-probability convenience sampling was adopted in appropriately selecting suitable participants. Questionnaire design was based on past research and adaptations were made where necessary.
3. Theoretical basis of proposed model

The study's structural model is presented in Fig. 1. Traveller perceived value and overall satisfaction are associated with the intention to revisit and recommend a destination [1]. Intentions to revisit a destination within the next 2 years can be predicted by satisfaction with one’s last visit, perceived value of the last visit, and past behaviour Petrick et al. [2]. Perceived value mediates the relationship between destination image and revisit intention at the same time directly influencing revisit intention according to Cheng et al. [9]. Perceived Value has the potential to predict intentions to revisit [3]. Satisfaction is influenced by behavioral intention to revisit a destination, Kim et al. [4].
4. Structural equation modeling

Structural equation modeling was conducted using the two-step procedure proposed by [5], which assesses model fit comprising of confirmatory factor analysis (CFA) and hypotheses testing. Confirmatory factor analysis (CFA) was primarily performed to examine scale accuracy of the multiple-item construct measures using AMOS 25. Reliability checks were conducted in SPSS 25 in order to generate the Cronbach’s alpha (α), item totals, means and standard deviations. Table 2 below shows the model fit criteria used for the study as well as indicator values for each criteria.

The measurement model produced a ratio of chi-squared value over degree-of-freedom of 2.531 which is acceptable as it falls below the 3, recommended by [6]. Other model fit indices that included the GFI, CFI, IFI, NFI, RFI and TLI were 0.907, 0.948, 0.949, 0.918, 0.901 and 0.937 respectively. All these model fit measures were above the recommended threshold of 0.9. The RMSEA was 0.055, which fell below the threshold of 0.08, recommended by Hooper et al. [7]. The accuracy analysis statistics are presented in Table 3.

Table 3 above indicates that most of means ranged from 4, 721 to 5, 322, while all Cronbach’s alpha values were above the required 0.7. The standard deviation values were between 1 and 2 while all item totals were above 0.5. In addition, most CR values were above the recommended 0.6 while most of the AVE values were above the accepted level of 0.5. The AVE value of (TPV) is 0.560 which is greater that the square of the shared variance of (TPV) and (CGDI) which [(0.495)²] = 0.245. This therefore proves the existence of discriminate validity, [8]. Composite reliability (CR) values and average variance extracted (AVE) values for each construct were generated using the following the formulae:

\[ CR = \frac{(\Sigma \gamma)^2}{(\Sigma \gamma^2 + \Sigma \epsilon)} \]

| Research Construct | Descriptive Statistics | Cronbach’s Test | C.R. Value | AVE Value | Highest Shared Variance | Factor Loading |
|--------------------|------------------------|----------------|-----------|-----------|--------------------------|---------------|
| TPV                |                        |                |           |           |                          |               |
| TPV1               | 4.648                  | 4.721          | 1.617     | 1.593     | 0.692                    | 0.833         | 0.833 | 0.560 | 0.245 | 0.741 |
| TPV2               | 4.761                  | 1.520          | 0.705     |           |                          |               |
| TPV3               | 4.853                  | 1.543          | 0.689     |           |                          |               |
| TPV4               | 4.620                  | 1.692          | 0.575     |           |                          |               |
| CGDI               |                        |                |           |           |                          |               |
| CGDI1              | 5.177                  | 5.024          | 1.527     | 1.537     | 0.620                    | 0.888         | 0.890 | 0.451 | 0.245 | 0.701 |
| CGDI2              | 4.748                  | 1.645          |           |           | 0.600                    |               |
| CGDI3              | 4.932                  | 1.532          |           |           | 0.645                    |               |
| CGDI4              | 4.630                  | 1.639          |           |           | 0.567                    |               |
| CGDI5              | 5.205                  | 1.454          |           |           | 0.702                    |               |
| CGDI6              | 4.899                  | 1.521          |           |           | 0.590                    |               |
| CGDI7              | 4.873                  | 1.639          |           |           | 0.517                    |               |
| CGDI8              | 5.368                  | 1.450          |           |           | 0.684                    |               |
| CGDI9              | 5.201                  | 1.465          |           |           | 0.700                    |               |
| CGDI10             | 5.209                  | 1.496          |           |           | 0.645                    |               |
| ADI                |                        |                |           |           |                          |               |
| ADI1               | 5.354                  | 5.322          | 1.382     | 1.405     | 0.717                    | 0.914         | 0.912 | 0.597 | 0.582 | 0.735 |
| ADI2               | 5.378                  | 1.374          |           |           | 0.708                    |               |
| ADI3               | 5.252                  | 1.419          |           |           | 0.711                    |               |
| ADI4               | 5.161                  | 1.475          |           |           | 0.739                    |               |
| ADI5               | 5.398                  | 1.383          |           |           | 0.814                    |               |
| ADI6               | 5.316                  | 1.386          |           |           | 0.753                    |               |
| ADI7               | 5.396                  | 1.412          |           |           | 0.727                    |               |
| TIR                |                        |                |           |           |                          |               |
| TIR1               | 5.091                  | 5.127          | 1.723     | 1.594     | 0.745                    | 0.917         | 0.918 | 0.652 | 0.621 | 0.781 |
| TIR2               | 5.056                  | 1.675          |           |           | 0.775                    |               |
| TIR3               | 5.408                  | 1.489          |           |           | 0.761                    |               |
| TIR4               | 5.175                  | 1.524          |           |           | 0.898                    |               |
| TIR5               | 4.940                  | 1.579          |           |           | 0.773                    |               |
| TIR6               | 5.089                  | 1.575          |           |           | 0.772                    |               |

Key: TPV; Traveller perceived value, CGDI; Cognitive destination image, ADI; Affective destination image, TIR; Traveller intention to revisit, CR: Composite reliability, AVE: Average variance extracted.
Where

\[ \text{CR}_\eta = \text{Composite reliability, } (\Sigma \lambda y_i)^2 = \text{Square of the summation of the factor loadings;} \]
\[ (\Sigma \varepsilon_i) = \text{Summation of error variances.} \]

\[ V_\eta = \Sigma \lambda y_i^2 / (\Sigma \lambda y_i^2 + \Sigma \varepsilon_i) \]

Where

\[ V_\eta = \text{Average Variance Extracted (AVE); } \Sigma \lambda y_i^2 = \text{Summation of the squared of factor loadings;} \]
\[ \Sigma \varepsilon_i = \text{Summation of error variances".} \]

Table 4 presents results of hypothesis testing. H1 (Traveller perceived value and cognitive destination image, was supported and significant at \( p < 0.01 \) having \( \beta = 0.52 \)). H2 (Traveller perceived value and traveller intention to revisit), was not supported and insignificant at \( \beta = -0.04 \). H3 (Traveller
perceived value and affective destination image), was also supported at ($\beta = 0.43$). Lastly, H4 and H5 indicated that traveler perceived value is related to both affective and cognitive destination image at ($\beta = 0.43$) and ($\beta = 0.56$) respectively.

5. Ethical considerations

All surveys were anonymous. Permission to collect data on site at the OR Tambo International airport was granted by Airports Company South Africa while ethics clearance to conduct the research was awarded by the University of the Witwatersrand, Johannesburg.

Acknowledgments

The author would like to thank the research firm that collected the data, Ratile Research Services, the National Research Foundation of South Africa for the Scholarship that enabled the researcher to conduct the research and most importantly all the participants involved in the research.

Conflict of interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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