Reconciling a Theory-practice Discrepancy in Tourism Research

YEH Ryh-Wu, PENG Bin-Win
(Hsuan Chuang University)

Abstract: Occasionally, an inconsistency between theoretical foundation and empirical practice is emerged and accepted without question in research community. One of these inconsistencies or discrepancies is the measurement of the affective image of various destinations. The commonly-used affective image measure is two-dimensional in academic theory and unidimensional in research practice. This article attempts to reconcile this discrepancy theoretically and empirically. The results of statistical analysis suggest that a halo effect contaminates the data of this affective image measure. Implications of this finding in theoretical development and empirical practice are provided.

Keywords: Destination, Affective Image, Halo Effect

1. Research Background

The image of a destination is important in the travel decision process (Hunt, 1975, Garner, 1993). For many researchers in the field of destination image, the image model developed by Baloglu and McCleary (1999) is unquestionable. In its simplest form, this model suggests that both cognitive and affective images contribute to the formation of the overall image and the overall image is an important antecedent of visiting intention.

Beerli and Martin (2004) and Lin, Morais, Kerstetter and Hou (2007), among others, adopt this model in their empirical work without questions. Their results also reinforce the validity of this model. Although many problems in theory and measurement are possible, tourism researchers have not shown their concerns in the refinement of this model yet.

One possible problem is the measurement model of affective image. In their validation research, Baloglu and Brinberg (1997) adopt the measure of a renowned environment psychology literature and provide empirical evidences about its applicability in travel destination. The original measure is the PAD scale developed by Mehrabian and Russell (1974). Baloglu and Brinberg (1997) delete the Domination dimension and retain only two items in Pleasure (pleasant-unpleasant and relaxing-distressing) and Arousal (arousing-sleepy and exciting-gloomy) dimensions respectively.

The empirical works of Baloglu and Brinberg (1997) indicate that various destinations behave differently in the data of this measure. The results of multidimensional scaling technique suggest that the 4-item measure creates a circumflex model and various destinations position differently in the statistical space. Later, Baloglu and McCleary (1999), Beerli and Martin (2004),
and Lin, Morais, Kerstetter and Hou (2007) provide the reliability evidences of this measure. Therefore, a generally accepted research practice has been established.

However, this generally accepted research practice is contradicted with its theoretical foundation. The PAD framework is well-established in environment psychology literature. The omission of Domination dimension in the context of destination image is possibly debatable but the combination of Pleasure and Arousal dimensions into a unidimensional construct is apparently questionable.

Also, this generally accepted research practice is contradicted with the empirical results of Baloglu and Brinberg (1997). The circumflex model of affect suggests that the affective response is a multidimensional. The technique of multidimensional scaling positions various destinations on a two-dimensional space but retains their multidimensional nature. These results do not support the unidimensional hypothesis of affective image.

The reliability evidences of affective measure in Baloglu and McCleary (1999), Beerli and Martin (2004), and Lin, Morais, Kerstetter and Hou (2007) provide the necessary legitimacy to adopt this affective image measure. The contradiction between theoretically two-dimensional and empirically unidimensional of this measure represents a theory-practice discrepancy in tourism research.

In this article, we attempt to reconcile this discrepancy theoretically and empirically. The theoretically reconciliation is based on the tripartite model of attitude (Insko and Schopler, 1967; Bagozzi, Tybout, Craig and Sternthal, 1979). We proposed that the construct of overall image is a good approximation of general attitude toward a destination. The constructs of affective image and visiting intention are similar to the affective and behavioral components of attitude toward a destination. Therefore, the measure of affective image is contaminated by an attitudinal halo. This contamination inflates the covariations of Pleasure and Arousal items in the measure of affective image and results in the empirically unidimensional reliability evidences.

2. Research Design

To validate our proposed model, we conduct a competing models analysis via structural equation modeling. Figure 1 provides the framework of these models. The base model is an abridged version of the image model of Baloglu and McCleary (1999) - affective image contributes to the formation of the overall image and the overall image is an antecedent of visiting intention.

The alternative model in figure 1 indicates that both the measures of affective image and visiting intention are contaminated by an attitudinal halo and this attitudinal halo is approximated by overall image. Of course, the halo effect is exercised at the item level, not at the construct level. The simplest form of alternative model in figure 1 should not be misread.

A sample of 163 hospitality students in northern Taiwan is acquired. They are requested to respond in a survey. The focal destination is Kengting, a famous travel destination in southern Taiwan. The questionnaire comprises a 4-item overall image scale, a 4-item affective image scale, and a 4-item travel intention scale. The items in affective image scale are the same as Baloglu and McCleary (1999). The overall image and travel intention scales are self-developed (sample
Reconciling a Theory-practice Discrepancy in Tourism Research

items: I have a good image on Kengting; I intend to take a vacation at Kengting). All items in these 3 scales are anchored at 7-point.

1. Base Model

2. Alternative Model

3. Statistical Analysis

Table 1 provides the results of confirmatory analysis of our measurement model. The 12 values of standardized loading are all significant and higher than 0.7. The 3 values of variance extracted are all higher than 0.7 and the 3 values of composite reliability are all higher than 0.8. Although the value of $\chi^2$ is significant, other fitness indexes suggest that the measurement model is generally acceptable. Therefore, we do not make any adjustment. The 12-item measurement model is transformed into the default structural models in further analyses.

<table>
<thead>
<tr>
<th></th>
<th>Standardized Loading*</th>
<th>Variance Extracted</th>
<th>Composite Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Affective Image</td>
<td>.793~.899</td>
<td>.706</td>
<td>.905</td>
</tr>
<tr>
<td>Overall Image</td>
<td>.795~.920</td>
<td>.741</td>
<td>.910</td>
</tr>
<tr>
<td>Travel Intention</td>
<td>.766~.971</td>
<td>.817</td>
<td>.947</td>
</tr>
</tbody>
</table>

Fitness Index:
$\chi^2=169.8$, df=51, $p=.000$, $\chi^2$/df=3.33, GFI=.861, CFI=.937, RMR=.109

* Significant at .001.

We conduct two structural equation analyses to compare the relative fitness of the base
model and alternative model. Figure 2 provides a summary of the results of the base model. In terms of the standardized loadings, path coefficients, and various fitness indexes, these data suggest that the base model supported and the 4-item measure of affective image is unidimensional.

Figure 3 provides a summary of the results of our proposed model. The chi-square difference test indicate that the alternative model is superior to the base model ($\Delta \chi^2=61.8$, $\Delta df=7$, $p<.005$). Other fitness indexes in figure 2 and 3 suggest the same conclusion. The path coefficient between affective image and visiting intention drops to a low level, but remains significant. All items of affective image and travel intention are double loaded on both their supposed constructs and the overall image. The standardized loadings of these items suggest that the trait variance of affective image is lower than the halo effect and the trait variance of travel intention is higher than the halo effect. Overall, these empirical results consistently support our halo model. The measures of affective image and visiting intention are contaminated by an attitudinal halo.

**Fitness Index:**

$\chi^2=174.5$, df=52, $p=.000$, $\chi^2$/df=3.36, GFI=.858, CFI=.935, RMR=.122

![Model Diagram](image.png)

*Fig. 2 Summary of Base Model*

However, our effort to reconcile the theory-practice discrepancy does not arrive at the final destination. The 8 standardized loadings of affective image do indicate that this measure is contaminated by an overall image halo, but do not suggest that this measure comprises a Pleasure dimension and an Arousal dimension. The 4 standardized loadings on their supposed construct do indicate that the removal of the halo results in a less reliable and unacceptable measure, but do not signify that a two-dimensional solution is preferable. Therefore, we conduct the third analysis to test the appropriateness of the two-dimensional solution.

This decomposition of affective image measure is unidentified in confirmatory factor analysis. The three-step exploratory factor analysis is a possible alternative. First, we conduct a principal analysis on the items of overall image to extract the possible halo. Next, we partial out the halo effect from the items of affective image using the technique of simple regression. Finally, we conduct another principal analysis on the standardized residuals in previous step to explore their factor structure. Table 2 provides the results in the third step. The Pearson correlation coefficient between the two underlined factors is 0.353.
Reconciling a Theory-practice Discrepancy in Tourism Research

Fitness Index:

\[
\chi^2 = 112.7, \ df = 45, \ p = .000, \ \frac{\chi^2}{df} = 2.51, \ GFI = .897, \ CFI = .964, \ RMR = .053
\]

Fig. 3 Summary of Alternative Model

Table 2 Factor Structure of Standardized Residuals

<table>
<thead>
<tr>
<th>Items</th>
<th>Factor 1</th>
<th>Factor 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>pleasant-unpleasant</td>
<td>.976</td>
<td>-.200</td>
</tr>
<tr>
<td>exciting-gloomy</td>
<td>-.036</td>
<td>.969</td>
</tr>
<tr>
<td>relaxing-distressing</td>
<td>.724</td>
<td>.251</td>
</tr>
<tr>
<td>arousing-sleepy</td>
<td>.569</td>
<td>.492</td>
</tr>
</tbody>
</table>

Although the solution in Table 2 is not a clean one, these results suggest that a two-dimensional solution is possible. That is, the removal of the overall image halo brings the measure of affective image into a result close to its theoretically two-dimensional structure.

4. Conclusions

This article attempts to reconcile the theory-practice discrepancy of a commonly-used measure of affective image. We proposed that affective image is comparable to the affective component of the attitude toward a destination and overall image is a good approximation of the attitudinal halo toward a destination. Our empirical results suggest that the commonly-used measure of affective image is contaminated by this attitudinal halo and the removal of this halo brings the measure to a situation close to its theoretically two-dimensional structure.
The implications of these findings in academic research are clear. Researchers in destination image should take the attitudinal halo into account and conduct various replication studies to retest the image model of Baloglu and McCleary (1999). Also, the dimensionality of the commonly-used measure of affective image should be subject to further investigation.

For practitioners, our empirical results suggest that the affect image of a destination is not a major concern. The trait variance of affective image is lower than the overall image halo. The removal of halo effect brings the impact of affective image on visiting intention to a small effect. Therefore, the efforts to enhance affective image is less fruitful than the efforts to enhance overall image directly.

Reference