A DIMENSIONAL ANALYSIS OF DESTINATION IMAGE VARIABLES IN A SOUTH AFRICAN CONTEXT: AN EXPLORATORY STUDY

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Abstract

It is generally accepted in tourism literature that destination image (DI), the importance of which is universally acknowledged, is often used as a significant element for local tourists in the choice of a vacation destination. The purpose of this study was to identify the dimensions that influence tourists’ perceptions of a destination. A comprehensive literature study of DI was undertaken. In addition, a questionnaire was developed to elicit information from a purposively selected sample of 350 participants who had visited the city of Durban in the KwaZulu-Natal province of South Africa during the past eight months prior to the data collection. Cronbach’s alpha coefficient was used to measure the reliability of the measurement scale. Descriptive statistics were used to describe the sample profile. Exploratory factor analysis was conducted to identify the dimensions influencing DI. Through this process seven dimensions, namely destination appreciation, weather and climate, tourism information, travel environment, shopping, community attitude and spatial layout were identified. Based on the findings, recommendations are made to develop strategies to improve and maintain the image of Durban so that tourists are attracted to the city. Implications for further research are also provided.

Key Words: Destination image, destination choice, visitors’ behaviours, satisfaction, tourism.

JEL: Classification: J53, M12, M54
1. INTRODUCTION

Destination image (DI) is an important factor to be considered in tourism development and destination marketing, as proper image development contributes to influencing tourists’ travel decision-making and choice (Tasci and Gartner, 2007). The main goal in most studies in tourism research was to identify factors that influence tourists’ decision to visit a destination (Vicol, 2012). Many such studies demonstrated the influence of DI on destination choice behaviour (Alcamiz, Sanchez and Blas, 2009; Hudson, Wang and Gil, 2011) and the relationship with future visits (Aksu, Caber and Albayrak, 2009). Therefore, it is not surprising to note that the image of a destination plays a pivotal role in influencing visitors’ behaviour with regard to quality of services, perceived value as well as behavioral intentions such as intentions to revisit and visitors’ willingness to recommend the destination to others through word-of-mouth (Bigne, Sanchez and Sanchez, 2001; Lee, Lee and Lee, 2005).

In understanding the dimensions that influence DI, marketers may be able to build an attractive image and improve their marketing efforts to maximise the use of their resources.

2. PURPOSE OF THE STUDY

The purpose of the study is to identify the different destination variables on tourists’ selection of a destination.

3. THEORETICAL FRAMEWORK AND LITERATURE REVIEW

DI emanates from the concept of brand image, which refers to a set of beliefs associated with a particular brand widely studied in marketing and consumer behaviour perspectives (Moreira and Iao, 2014). It has been conceptualised in various ways; however, the concept is frequently approached from two conceptualisations, namely as “the sum of beliefs, ideas and impressions that a person has on a decision” (Crompton, 1979:49) and “a person’s perception of available attributes or activities of a destination” (Gartner, 1986:636).

Furthermore, DI is described frequently as impressions of a place or perceptions of an area (Echtner and Ritchie, 2003) and as the mental image of the destination (Pan and Li, 2011). This study will adopt a combination of both conceptualisations, since both emphasise the mental image of a destination.

Gunn’s (1972) seven-stage theory explains tourists’ experiences on the basis of seven stages of imagery change, namely accumulation of mental images about a
vacation experience, change in those images, choosing to take a vacation, travel to the destination, participation at the destination, return travel and the new accumulation of images based on the travel experience. Consequently, tourist DIs can be tailored or altered over the seven stages.

There are three dominant theoretical explanations accounting for the DI formation or change process in a tourist. First, the prior perception theory postulates that the different stages of image formation are based on the different tourists’ perceptions and draw a distinction between perception a priori, perception in situ and perception a posteriori (Kersten, Mamassion, and Yuille 2004; Di Marino, 2008). Perception a priori refers to the mental construction an individual makes of a place without having a physical connection with the place. Perception in situ postulates tourists never arrive with a null perception because they already have previous image of the place they have not visited. With regards to perception, a posteriori, the tourists’ experience does not end up with the trip but they consume elements of their experiences in their daily lives.

The second theory conceptualised by Gunn (1988) assumes that images are developed at two different levels, namely at the organic level, (i.e. images develop internally because of actual experience and visitation) and at the induced level (i.e. images are externally received and processed). The former relates to the image an individual holds of a destination, which arises from a long history of non-tourism specific information such as television reports. It is an incomplete image to which a tourist makes additions (Kim, 2010); while the latter arises from a conscious deliberation, regarding the destination is marketing efforts directed by tourism organisations. This can be built by information available at travel agencies, TV advertisements and other activities aimed at promoting the destination (Kim 2010).

The third theory argues that DI is a multifaceted, composite construct comprising interrelated cognitive, conative and affective evaluation of images woven into an overall impression of a destination (Stepchenkova and Morrison 2006). This assertion/model is congruent to Boulding’s (1956) study that states that an image consists of what one knows and thinks about an object (cognitive), feels about it (affective) and finally, how one responds using this information (conative). In this regard, cognitive DI relates to the individual’s beliefs or knowledge (conscious evaluation) about the attributes of the destination (Pike and Ryan, 2004; Chen and Uysal 2002; Xie and Lee 2013). The use of cognitive (intellectual or perceptual) components provides easily interpreted information to destination managers’ in
order to develop positioning strategies (Chen 2001). Conative or behaviourial components relate to the actions of the individuals, i.e. the probability of visiting/revisiting the destination and further recommending it to others (Byon and Zhang 2010; Stepchenkova and Mills 2010; Vicol 2012). Lastly, affective DIs describe an individual feeling aroused by the destination, which forms the evaluation stage (Kim and Richardson 2003; San Martin and Del Bosque 2008; Xie and Lee 2013).

DI researchers use various attributes to measure the DI. A review of the literature undertaken by Chi et al. (2008) reflects on nine dimensions, namely travel environment, natural attractions, entertainment and events, historic attractions, infrastructure, spatial layout, relaxation, outdoor activities, and price and value, which are linked closely to those explored in this study. In summary it therefore seems that DI is then formed as a result of the knowledge the tourist acquired about the destination (cognitive), the feelings or attachments developed towards the destination (affective) and intention or behaviour in the future (conative).

4. RESEARCH METHODOLOGY

4.1 Methodology

A quantitative research design was used in this study. This was deemed appropriate in order to use multivariate techniques to identify dimensions that may comprise DI in the context of the city of Durban. The cross sectional survey method was used in the empirical segment of the study because it allows the use of questionnaires to collect data and control bias, as respondents were required to relate their own perceptions free from researcher intervention (Maholtra, 2010). Furthermore, the survey method was selected because it easily facilitates the collection of data from large groups of respondents in a short period, is inclusive in the number of variables that can be studied, requires minimum investment to develop and administer and is relatively easy for generalising (Zikmund and Babin 2010).

4.2 Sample and data collection

The target population comprised tourists and visitors who had visited the city of Durban in the KwaZulu-Natal province of South Africa over March and April 2015. This period was chosen as the school vacations fall during this time and there is normally an influx of visitors from the other provinces in South Africa to Kwazulu-Natal. Since there was no sampling frame for the study, a non-
probability sampling procedure was adopted for this study to seek information from a purposively selected sample of 410 participants. The measuring instrument was adapted from Kim (2010) based on antecedents of destination loyalty. Trained fieldworkers assisted in collecting the data. The questionnaires were administered at strategic locations such as outside popular hotels and the beachfront. In most cases, the questionnaires were administered face-to-face to ensure that they were properly completed. Of the 410 questionnaires distributed, 350 were used in the final analysis.

4.3 Instrument

A two-section questionnaire was designed to collect data from the participants. Section A elicited general and biographical information about respondents. Section B requested participants’ perceptions of Durban as a tourist destination. The questions in Section B were adapted from previous studies conducted by Kim (2010). With the exception of Section A, all variables for Section B were on a seven-point Likert scale ranging from 1=strongly disagree to 7=strongly agree with larger values representing more favourable or stronger perceptions of each subscale item.

5. RESULTS

5.1 Sample composition

Of the 350 participants in this study, 67 percent (n=186) were male while 33 percent (n=164) were female. The majority of the participants indicated being 18-25 years of age (48%: n=168), and single individuals (70%: n=245). The longest duration of stay in Durban recorded by participants was 5-6 days and most participants travelled with friends (40%: n=140) and had been accommodated in guesthouses (38%: n=133).

5.2 Exploratory factor analysis (EFA)

Exploratory factor analysis (EFA) with varimax rotation with principal component analysis was applied to examine the underlying dimensions of DI constructs influencing tourist behaviour. Prior to factor analysis, the Kaiser-Meyer-Olkin (KMO) measure and the Bartlett’s test of sphericity were computed to confirm whether the data were suitable for factor analysis. Both results displayed in Table 1 affirmed that the data is satisfactory for factor analysis (Kaiser, 1974).
The number of factors extracted were determined using four criteria, namely factor loading, the percentage of variance, eigenvalues and the scree plot. Items were considered markers of a component if the factor loading values were at least 0.50. The cumulative percentage of variance explained extracted from the data set was 67 percent, which according to Malhotra (2010), is satisfactory. According to the eigenvalue criterion, seven factors were extracted in order to capture the dimensions of DI. Seven factors were also extracted using the scree plot criterion and were named destination appreciation, weather and climate, tourism information, travel environment, shopping, community attitude and spatial layout. The rotated factor matrix, which shows the factors and their items as well as the factor loadings, is reported in Table 1.

Table 1: Exploratory Factor Analysis

<table>
<thead>
<tr>
<th>No</th>
<th>Subscale items</th>
<th>Factor loadings</th>
<th>Eigenvalue</th>
<th>Cronbach’s alpha</th>
<th>Composite means</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Destination appreciation</strong></td>
<td></td>
<td>6.348</td>
<td>0.780</td>
<td>5.745</td>
<td>1.075</td>
</tr>
<tr>
<td>1</td>
<td>Durban is an exciting travel destination</td>
<td>.666</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Durban is a good place to travel</td>
<td>.568</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Durban is an enjoyable destination</td>
<td>.741</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>4</td>
<td>Durban is an enjoyable travel destination</td>
<td>.770</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>A holiday in Durban is a real adventure</td>
<td>.659</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Weather and climate</strong></td>
<td></td>
<td>1.756</td>
<td>0.714</td>
<td>5.435</td>
<td>1.110</td>
</tr>
<tr>
<td>6</td>
<td>The weather in Durban is pleasant</td>
<td>.535</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Durban has likeable weather</td>
<td>.804</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>The temperature in Durban is pleasant</td>
<td>.715</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Tourism information</strong></td>
<td></td>
<td>1.672</td>
<td>0.745</td>
<td>5.505</td>
<td>1.072</td>
</tr>
<tr>
<td>9</td>
<td>Durban offered easily accessible tourism information</td>
<td>.786</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Durban offered good tourism information</td>
<td>.832</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Durban offered various events information</td>
<td>.660</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Travel environment</strong></td>
<td></td>
<td>1.347</td>
<td>0.701</td>
<td>5.609</td>
<td>0.998</td>
</tr>
</tbody>
</table>

195
No Subscale items Factor loadings Eigenvalue Cronbach’s alpha Composite means SD

12 Durban is an advanced and developed city .526
13 Durban has high standards for sanitation and cleanliness .653
14 Durban has suitable accommodation .533
15 Durban has a high standard of living .711

**Shopping experience**

<p>| | | | | |</p>
<table>
<thead>
<tr>
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<tbody>
<tr>
<td>16</td>
<td>Durban is a good place to shop</td>
<td>.555</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>Durban offered a wide variety of shops</td>
<td>.796</td>
<td></td>
<td></td>
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<tr>
<td>18</td>
<td>Durban offers convenient shopping</td>
<td>.502</td>
<td></td>
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**Community attitude**

<p>| | | | | |</p>
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<tbody>
<tr>
<td>19</td>
<td>Local people were helpful</td>
<td>.775</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>Durban is a family-oriented destination</td>
<td>.602</td>
<td></td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>Local people were friendly</td>
<td>.763</td>
<td></td>
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</table>

**Spatial layout**

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</tr>
</thead>
<tbody>
<tr>
<td>22</td>
<td>Durban was crowded</td>
<td>.804</td>
<td></td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>Durban has limited parking area</td>
<td>.835</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Kaiser-Meyer-Olkin measure of sampling adequacy=0.842; Bartlett’s test of sphericity was significant at p<0.000, with chi-square=1850.69 and 253 degrees of freedom. Cumulative explained variance with a seven dimension structure = 63%.

### 5.3 Correlations among variables

In order to establish the relationship between image destination dimensions, non-parametric Spearman correlations tests were computed to evaluate the existence of such relationship. The results of the correlation analysis are reported in Table 2.

**Table 2: Correlations – Image Destination Dimensions (Inter-correlation Matrix)**

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Factor 1</th>
<th>Factor 2</th>
<th>Factor 3</th>
<th>Factor 4</th>
<th>Factor 5</th>
<th>Factor 6</th>
<th>Factor 7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Destination appreciation</td>
<td>1.000</td>
<td>.279**</td>
<td>.365**</td>
<td>.422**</td>
<td>.417**</td>
<td>.067</td>
<td>.366**</td>
</tr>
<tr>
<td>Weather and climate</td>
<td>.279**</td>
<td>1.000</td>
<td>.297**</td>
<td>.407**</td>
<td>.319**</td>
<td>.252**</td>
<td>.375**</td>
</tr>
<tr>
<td>Tourism information</td>
<td>.365**</td>
<td>.297**</td>
<td>1.000</td>
<td>.288**</td>
<td>.407**</td>
<td>.124</td>
<td>.299**</td>
</tr>
</tbody>
</table>
Table 2 indicates that the majority of the marked correlations are positive and either significant at p<0.01 or p<0.05, with coefficients ranging from r=0.124 at p<0.05 to r=0.436 at p<0.01. However, there are insignificant weak correlations between destination appreciation and community attitude (r=0.067; p>0.05) and between shopping experience and community attitude (r=0.084; p>0.05).

6. RELIABILITY AND VALIDITY

The Cronbach alpha values for all the items were satisfactory (>0.70) with the exception of the shopping experience and the spatial layout dimensions, which were >0.60 but <0.70 and considered marginally acceptable for exploratory studies (Pallant 2013). Moreover, the pre-testing and piloting of the questionnaire attest to the content validity of the instrument (Malhotra, 2011).

In Table 1, an individual item loading for the research constructs ranged from 0.502 to 0.835 and, therefore, above the recommended value of 0.50 (Anderson and Gerbing 1988) indicating an acceptable individual item convergence as 50 percent or more of each item’s variance was shared with its respective construct. Discriminant validity was established by checking if the correlation between the research constructs was not >0.80 (Hulland 1999). Since none of the correlations were >0.80, an adequate level of discriminant validity was achieved. Convergent validity was accessed through the computation of correlation analysis. The results show moderate correlations between the constructs thus providing evidence of convergence.

7. DISCUSSION

All the mean scores returned for the items were above the score of five (based on the seven-point Likert scales) suggesting that the respondents agree that these items were the main underlying dimensions of DI. The standard deviations are also very similar across the factors relative to the means. Seven factors, namely destination appreciation, weather and climate, tourism information, travel environment, shopping, community attitude and spatial layout were identified through exploratory factor analysis. The items that loaded on the first factor
labelled destination appreciation, relate to the natural environment and atmosphere that Durban as a tourist destination possesses. This dimension in destination variable research, confirmed that destination appreciation is regarded as a predominant factor in determining DI and destination choice (Bigne, Sanchez and Sanchez, 2001; Heide, Laerdal and Gronhaug, 2007; Royo-Vela, 2009; Mansouri, Moayyed and Soleimani, 2012; Jafari, Ghasemi and Shalikar, 2015).

The items that loaded on the second factor labelled, weather and climate, relate to the climatic conditions of Durban as a tourist destination. Studies by Klenosky (2002) and Martin (2005) also revealed that climate acts as a pull attribute to allure tourists to specific destinations. Zhou (2005), in the same vein, attests that weather and climate can significantly influence tourists’ activities and behaviour as they are deemed as the natural conditions that usually form part of the product/service attribute in destination marketing.

Factor three, labelled tourism information, relates to tourism marketing information. Research has demonstrated that tourist information is a valuable concept in understanding DI (Gursoy and McCleary, 2004). This is consistent with the notion that tourism information about the different destinations forms the basis for different image and experience expectations (Molina et al., 2010; Mohamad, Ghani, Mamat and Mamat, 2014).

The items that loaded on the fourth factor, travel environment, encapsulate travel environment that meets tourist’s expectations. Rajesh (2013) alluded to the importance of travel environment in determining the overall DI while taking decisions for strategic marketing of tourism destination.

The items that loaded onto the fifth factor, shopping, expose tourists’ perceptions towards shopping experience in Durban. Pertinent to the literature review on tourist’s shopping, studies conducted by Barutcu, Dogan and Unguren (2011) revealed the existence of significant differences in positive and negative perceptions to shopping experience as a contributing factor towards DI and choice.

The items that loaded onto the sixth factor labelled community attitude, relate to community attitude towards Durban as a destination of choice. This construct corroborates with the findings of Thomas (2013) who affirmed that community involvement and participation is key in any tourism-related initiative. Furthermore, Wang and Pfister (2008) as well as Rastegar (2010) assert that residents’ attitude towards tourism is one of the important indicators for sustainable tourism development. These assertions further corroborate with the
findings of Sharma and Dyer’s (2009) study that community attitude towards tourism plays a prominent role for sustainable management of tourist’s destination.

Factor seven, labelled spatial layout, refers to the ability to access and benefit from a system or entity. Zhang and Lam’s (1999) studies showed that spatial layout is one of the top three significant pull attributes attracting tourists to destinations. In addition, Rajesh (2013) maintains that spatial layout affects DI and includes the relative difference in the time, cost, distance or effort required to access different destinations.

8. RECOMMENDATIONS

In the light of the findings/results, it is recommended that an understanding of how tourists perceive holiday destinations would be helpful for tourism planners and marketers to better structure their tourism resources and activities. The success of an effective DI development strategy lies in a unique marketing strategy. To this end, image marketing (promoting the sense of place) and destination marketing (selling the product) strategies are imperative. In addition, the valuation of customer perception relating to dimensions of DI is critical as it allows management to modify strategies in order to increase tourists to various destinations. The findings of the study suggest that all the mentioned dimensions are necessary for managerial interventions and ought to be prioritised in the development of a strategy of DI improvement.

9. LIMITATIONS AND IMPLICATIONS FOR FURTHER RESEARCH

The results of this study needs to be qualified in light of the limitations. First, Durban is a seasonal destination, the study was conducted over March and April 2015, therefore, findings are limited to this season. Thus, seasonality restricts the generalisability of these research findings. Hence, conducting the same research at a different season will help validate the findings of this research. Another limitation of the study is that it focused only on tourists and visitors who had visited the city of Durban in the KwaZulu-Natal Province of South Africa. It may be interesting to replicate the study in other holiday destinations within South Africa as well and compare the findings. Furthermore, the study was a cross-sectional study. A longitudinal study during the same period may assist marketing and destination marketing to evaluate whether these DI constructs change over time.

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10. CONCLUSION

Destinations with strong positive images are more likely to be considered and chosen in the travel decision-making process and, therefore, DI has a critical role to play in the decision-making regarding development of various models of travel decision making. By providing an analysis of the dimensions of DI, this study contributes meaningfully to an overall understanding of what influences the travel decisions of tourists. An understanding of the dimensions that constitute DI may be key to tourism authorities and marketers in ensuring effective planning activities to attract tourists. Resources for improving DI collectively or in specific areas of tourism and marketing may then be allocated strategically. Finally, based on the analysis of the results, DI is not only the perception of individuals’ destination attributes but also encompasses holistic impressions made by the destination itself.

REFERENCES


