One year after legalized cannabis: Residents’ image, place attachment, and support of marijuana tourism in Colorado

Soo Kang

Jeff Miller Dr.
*Colorado State University - Fort Collins*

Joseph O’Leary Dr.
*Colorado State University - Fort Collins*

Follow this and additional works at: https://scholarworks.umass.edu/ttra

Kang, Soo; Miller, Jeff Dr.; and O’Leary, Joseph Dr., "One year after legalized cannabis: Residents’ image, place attachment, and support of marijuana tourism in Colorado" (2016). Travel and Tourism Research Association: Advancing Tourism Research Globally. 27. https://scholarworks.umass.edu/ttra/2016/Academic_Papers_Oral/27

This Event is brought to you for free and open access by ScholarWorks@UMass Amherst. It has been accepted for inclusion in Travel and Tourism Research Association: Advancing Tourism Research Globally by an authorized administrator of ScholarWorks@UMass Amherst. For more information, please contact scholarworks@library.umass.edu.
One year after legalized cannabis: 
Residents’ image, place attachment, and support of marijuana tourism in Colorado

Introduction

‘Happy host’ a term introduced by Snaith and Haley (1999, p.597), or destination communities’ support for tourism, is considered essential as the success and sustainability of the sector depends upon the goodwill of local residents (Jurowski and Gursoy, 2004; Perez and Nadal, 2005). How residents perceive the costs and benefits of tourism does strongly determine tourist satisfaction to their communities. If local communities consider the costs of tourism to outweigh the benefits, they are more likely to withdraw their support tourism; hence dooming the future success and development of the sector (Lawson, Williams, Young, and Cossens, 1998).

A great deal of research (e.g., Gursoy, Jurowski, and Uysal, 2002; Lindberg and Johnson, 1997; Ryan and Montgomery, 1994; Smith and Krannich, 1998) has focused on residents’ attitudes towards what may refer to as tourism development and the benefits/disbenefits that arise from it. This stream of the study is particularly prominent in the gambling studies as more communities around the world have encountered the legalization of gambling and its unprecedented impacts on the community and on its residents (e.g., Hsu, 2000; Lee, 2001; Long, 1996; Pizam and Pokela, 1985).

On November 6, 2012, Colorado Amendment 64 was passed for the legalization of recreational marijuana with 55.32% of the vote, making Colorado to be the first state in the country to legalize recreational cannabis. The passage of the Amendment 64 in Colorado has allowed the sale of recreational marijuana in the state as of January 2014 (Ferner, 2013). The primary support behind the legalization of recreational marijuana is tax benefits to the local and state constituents. Approximately, state tax rate of 25% will be levied in addition to the usual state sale tax of 2.9%, making recreational cannabis one of the most heavily taxed consumer products in Colorado. In 2015, projected state revenue was $125 million, which was three times of $44 million collected in 2014. As of September 2015, there are more than 400 retail dispensaries throughout the state and more than three-quarters of them are located in Denver.

Like other tourism development, after the legalized marijuana in the state of Colorado, new tourism ventures were proposed and added; Colorado cannabis tours, Denver 420 tours, ‘Bud and Breakfast’ inns, Private Marijuana tours, Cooking adventure, 420 Friendly hotels, and the Mile High, High Tour package, etc. According to a survey conducted by Colorado Tourism Office (CTO) in December 2015, 48% of summer travelers to Colorado were influenced by legal recreational pot, although the CTO office is prohibited to promote local marijuana sales in their tourism promotion materials (Blevins, 2015).

The impact and scope of the nature that legalized marijuana has for the tourism development can be comparable to that of legalized gambling. Like gambling, marijuana had been illegal and was only allowed for medical reason. Therefore, it would be interesting to compare the process and progress of research focus and directions between these two issues. Nonetheless, as witnessed in legalized gambling (Eadington, 1996), ongoing debates regarding legalization of recreational
marijuana can bring out exaggerated and inaccurate claims of economic benefits from proponents and of social costs from opponents.

Except for gambling, little has been known about residents’ place attachment and image perceptions especially when a new tourism venture, legalized marijuana tourism in this case, is initiated. It is important to understand how this new legalization will affect residents and visitors like other tourism planning and development studies have been conducted. The purpose of the study, therefore, was to examine residents’ perceptions of the state image, place attachment, benefit, and support for legalized marijuana tourism in the state of Colorado. Specifically, this study investigated the causal relationships between image, place attachment, benefit, and support of marijuana tourism in Colorado.

**Literature Review**

**Image**

Destination image is defined as “the sum of beliefs, ideas, and impressions that a person has of a destination” (Crompton, 1979, p.18) and has been a popular subject addressed in the tourism literature (Beerli and Martin, 2014). Destination image has been studied at the individual level (Crompton, 1979) or from the group perception of a place (Jenkins, 1999). The popularity is mainly driven by the research findings that the positive image of destinations not only attracts potential visitors, but also encourages repeat visitations (e.g., Fakeye and Cromtpon, 1999; Jeong, Holland, Jun, and Gibson, 2012).

Numerous studies have employed cognitive and affective image components to measure destination image (Baloglu and Brinberg, 1997; Chen, 2001; Kim and Perdue, 2011; Walmsley and Jenkins, 1992; Wang and Hsu, 2010). The cognitive image, known as evaluative image, is referred to beliefs and knowledge about the physical attributes of a destination and the way people evaluate places (Crompton, 1979). Alternatively, the affective image is referred to the emotional feelings about the destination attributes and its surrounding environment (Baloglu and McCleary, 1999). Furthermore, Gunn (1988) suggested images were developed at two levels, organic and induced. The organic image is formed based on one’s everyday assimilation of information such as newspapers, periodicals, and books. On the other hand, the induced image is shaped through the influence of tourism promotions directed by marketers.

**Place attachment**

In the tourism literature, place attachment has been frequently studied to draw a relationship between visitors and destinations (Smith, Siderelis, and Moore, 2010). Place attachment is defined as the emotional and psychological bonds formed between an individual and a particular place (Tsai, 2012). While a multi-dimensional approach in understanding place attachment is more popular in the extant literature, Hammit, Kyle, and Oh (2009) clarified the compositional dimensionality of place attachment with an overarching framework and treat the concept as a single-factor construct with only one dimension. This approach conceptualizes place attachment as a substantive construct accounting for the correlated entity of several dimensional components. Additionally, Jorgensen and Stedman (2001, 2006) reported that place dependence, affective attachment, and place identity, which are popular sub-components of place attachment, form the single factor of place attachment by treating these components as a correlated entity.
Relationship between Image and Place Attachment
In delineating the causal antecedents of place attachment, the destination-attribute approach is popular adopted (Echtner and Ritchie, 1991; Warzecha and Lime, 2001). Warzecha and Lime (2001), for instance, concluded that the tangible and intangible attributes of the destination influenced significantly on nurturing place attachment; tangible attribute hinges on the physical setting and functional quality of the destination, whereas intangible attributes rely on the delectable atmosphere and emotional gratification rendered by the destination.

Numerous studies empirically proved that destination image as antecedents had a significant impact on place attachment in the tourism settings (Lee, Busser, and Yang, 2015; Prayag and Ryan, 2012; Tsai, 2012). For instance, Tsai (2012) compared two approaches of identifying the antecedents of place attachment: (1) the tourist involvement approach and (2) the destination attribute approach. The tourist involvement approach incorporates the consumer involvement theory with place attachment (e.g., Gross and Brown, 2008; Kyle, Graefe, Manning, and Bacon, 2003). In particular, the causal relationships among destination image, place attachment, and overall satisfaction have been actively investigated. Prayag and Ryan (2012) and Fan and Qui (2004) provided empirical supports for explanatory power of destination image on place attachment and, in turn, the impact of place attachment on loyalty among international visitors to the island of Mauritius and to China, respectively. By the same context, Tsai (2012) supported that place attachment did play a strong role in predicting a visitation frequency among international visitors to Singapore.

All these studies aforementioned, unfortunately, were examined from visitors’ perspectives; scant research has been conducted on how destination image affects place attachment from a residents’ perspective. It is imperative to investigate this causal relationship as did with visitors to understand how resident stakeholders form their perceptions of benefit and support for a new tourism venture. Taking into account the preceding discussion, this study posits the following hypotheses:

H1: Residents’ affective image has a positive impact on place attachment in the state of Colorado.
H2: Residents’ organic image has a positive impact on place attachment in the state of Colorado.
H3: Residents’ cognitive image has a positive impact on place attachment in the state of Colorado.
H4: Place attachment has a positive impact on benefit of marijuana tourism in the state of Colorado.
H5: Place attachment has a positive impact on support of marijuana tourism in the state of Colorado.
H6: Benefit has a positive impact on support of marijuana tourism in the state of Colorado.

Methodology
Research instrument and data collection
The research instrument was developed based on the current tourism literature on place attachment, image, benefit, and support of tourism endeavors (e.g., Lee et al., 2015; Prayag and Ryan, 2012; Tsai, 2012). All questions were asked with a five-point Likert scale, 1 being
strongly disagree and 5 being strongly agree. At the end of the survey, a series of demographic questions were asked.

The data was collected from 279 undergraduate students who were studying hospitality management and global tourism management at a land grant university in Colorado, USA. Students were informed of the study purpose and confidentiality; only those who agreed to participate in the study filled out the questionnaire. Of the 279 questionnaires returned, 29 incomplete and unengaging questionnaires were removed, and thus 250 questionnaires were used for the data analyses. The sample size of 250 deems appropriate as Bentler and Chou (1987) recommended the ratio of sample size to the number of parameters to be 5 to 1 and a minimum of 200 as a goal for a SEM analysis.

Data analysis
A confirmatory factor analysis (CFA) was conducted to identify the relationships between the observed and latent variables and to examine the reliability and validity of the constructs. Then, structural equation modeling (SEM) was carried out to examine the hypothesized relationships in the proposed model. The maximum likelihood method of estimation was employed to test the model (Anderson and Berbing, 1998). To adequately assess the goodness-of-fit and parsimony of the model, a series of indices, including chi-square values, the goodness-of-fit index (GFI), the normed fit index (NFI), the comparative fit index (CFI), and the root mean square error of approximation (RMSEA), were examined.

Results
Measurement model
CFA resulted in three factors from 13 observed image indicators. The measurement model was estimated prior to the structural model (Anderson and Gerbing, 1988). The measurement model presents a satisfactory level of fit on all goodness-of-fit indices from the CFA. The results confirmed that the proposed measurement model fit data well: $\chi^2 = 634.41$, $p<.001$, NFI = 0.92, NNFI = 0.95, CFI = 0.96, GFI = 0.87, and RMSEA = 0.05. Consequently, three factors were named ‘affective image,’ ‘organic image,’ and ‘cognitive image.’

As presented in Table 1, the composite reliability (CR) values generated by the CFA in estimating the reliability scores of the multi-item scales are 0.92 for affective image, 0.86 for organic image, and 0.82 for cognitive image. All alpha coefficients were above the cut-off thread of 0.70, showing an acceptable level of reliability for each factor (Nunnally and Bernstein, 1994).

<table>
<thead>
<tr>
<th>Table 1. Overall measurement model (CFA)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Factors and items</strong></td>
</tr>
<tr>
<td><strong>Images</strong></td>
</tr>
<tr>
<td><strong>Factor 1: Affective image</strong></td>
</tr>
<tr>
<td>Say positive things about Colorado as a tourism destination</td>
</tr>
<tr>
<td>Recommend people to visit Colorado</td>
</tr>
<tr>
<td>A popular tourist destination</td>
</tr>
<tr>
<td>Like to live in Colorado</td>
</tr>
</tbody>
</table>
Convergent and discriminant validity statistics were examined in Table 2. All average variance extracted (AVE) and CR values for the multi-item scales were greater than the minimum criteria of 0.5 and 0.7, respectively. It shows a sufficient level of convergent validity for the measurement model (Hair et al., 2010). Also, the discriminant validity was proven because all square roots of AVE were greater than inter-construct correlations (Fornell and Larcker, 1981).

Table 2. Construct inter-correlations and discriminant validity

<table>
<thead>
<tr>
<th>Measures</th>
<th>Affective</th>
<th>Organic</th>
<th>Cognitive</th>
<th>PA</th>
<th>Benefit</th>
<th>Support</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Affective</td>
<td>(0.79)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4.62</td>
<td>0.78</td>
</tr>
<tr>
<td>Organic</td>
<td>0.50</td>
<td>(0.77)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3.33</td>
<td>1.41</td>
</tr>
<tr>
<td>Cognitive</td>
<td>0.34</td>
<td>0.25</td>
<td>(0.76)</td>
<td></td>
<td></td>
<td></td>
<td>4.26</td>
<td>0.85</td>
</tr>
<tr>
<td>Place attachment</td>
<td>0.62</td>
<td>0.11</td>
<td>0.19</td>
<td>(0.84)</td>
<td></td>
<td></td>
<td>4.35</td>
<td>0.94</td>
</tr>
<tr>
<td>Benefit</td>
<td>0.18</td>
<td>0.63</td>
<td>0.17</td>
<td>0.22</td>
<td>(0.83)</td>
<td></td>
<td>3.12</td>
<td>1.15</td>
</tr>
</tbody>
</table>
Structural model with hypothesis testing

After confirming the fit in the measurement model, the SEM was performed to estimate model structure and a causal path pattern. A goodness of fit index statistics and causal path parameters were estimated and compared in detail. The structural model provides the good fit to the data: \( \chi^2 = 681.24, p < .001, \) GFI = 0.97, NFI = 0.93, CFI = 0.96, and RMSEA = 0.04.

In terms of hypothesis testing, hypotheses 1 posited that affective image has a positive effect on place attachment. The predictor (\( \beta_{AI \rightarrow PA} = 0.41, t = 4.83, p < 0.001 \)) exerted a positive impact on place attachment, thus supporting H1. On the other hand, organic and cognitive image predictors did not show a significant impact on place attachment, rejecting H2 and H3.

The relationships related to place attachment, benefit, and support were tested. The relationship between place attachment and benefit was significant (\( \beta_{PA \rightarrow BF} = 0.28, t = 3.91, p < 0.001 \)), supporting H4. However, place attachment and support did not show any significant relationship, rejecting H5. Lastly, benefit was significant for predicting support (\( \beta_{BF \rightarrow SPT} = 0.92, t = 12.46, p < 0.001 \)), thus fully supporting H6. Based on these results, Table 3 and Figure 1 show the results of the hypothesis testing of the proposed model.

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>H1: Residents’ affective image has a positive impact on place attachment in the state of Colorado.</strong></td>
<td>Supported</td>
</tr>
<tr>
<td><strong>H2: Residents’ organic image has a positive impact on place attachment in the state of Colorado.</strong></td>
<td>Rejected</td>
</tr>
<tr>
<td><strong>H3: Residents’ cognitive image has a positive impact on place attachment in the state of Colorado.</strong></td>
<td>Rejected</td>
</tr>
<tr>
<td><strong>H4: Place attachment has a positive impact on benefit of marijuana tourism in the state of Colorado.</strong></td>
<td>Supported</td>
</tr>
<tr>
<td><strong>H5: Place attachment has a positive impact on support of marijuana tourism in the state of Colorado.</strong></td>
<td>Rejected</td>
</tr>
<tr>
<td><strong>H6: Benefit has a positive impact on support of marijuana tourism in the state of Colorado.</strong></td>
<td>Supported</td>
</tr>
</tbody>
</table>

**Conclusion and Discussion**

A preponderance of research concerning place attachment and image has been conducted from a visitor’s perspective. This current study examined the causal relationship between place image, place attachment, benefit, and support among Colorado residents in conjunction with legalization of recreational marijuana. Findings of the study support that affective image exerted a significant impact on place attachment. The more positive affective image the respondents had, the higher the place attachment they showed for the state. This finding is in consistent with the previous study, supporting the emotional feelings about the destination attributes and surrounding environment are a powerful antecedent of place attachment, not only among visitors but also for
residents. This finding may be ascribed to the fact that more than three-quarters (80%) of the respondents were Colorado natives as the length of residency and the place attachment had a strong association (Hildago and Hernandez, 2001). In the similar context, the insignificant relationship between organic and cognitive image factors and place attachment can be explained by the social representation of the respondents in that the respondents are young and are more likely to take a liberal view on cannabis, which has little to do with their perception with place attachment. Furthermore, the data was collected a year after the legalization. Therefore, there were few problems or negative consequences reported and known that prompted the respondents to view the legalization with more critical judgement. In summary, the findings of the study conclude that affective image and place attachment, which are both pertinent to one’s emotional and psychosocial aspects, are strongly correlated, whereas cognitive image which are objective and evaluative in nature is irrelevant to place attachment.

The strong relationship between benefit and support was evident in this study, supporting the current literature (e.g., Hsu, 2000). However, the insignificant relationship between place attachment and support warrants that the future study should test the role of benefit as a mediator between place attachment and support in the tourism development.

Lastly, in order to take appropriate strategic actions to put the notion of place attachment to best use for tourism development, a longitudinal study examining the changes of image, attitude, place attachment, and support as the legalization evolves would provide valuable insight for policy makers, visitors, and resident in the state of Colorado.
Figure 1. Structural Model

Affective Image

Organic Image

Cognitive Image

Place Attachment

Benefit

Support

Paths and Coefficients:
- Affective Image → Place Attachment: 0.41*** (t=4.83)
- Organic Image → Place Attachment: 0.08 (t=1.24)
- Cognitive Image → Place Attachment: 0.20 (t=2.28)
- Place Attachment → Benefit: 0.28*** (t=3.91)
- Place Attachment → Support: 0.92*** (t=12.46)

Significance Levels:
- **: p < 0.001
- ***: p < 0.001
- *: p < 0.05
References


