

Article

# A vacationer-driven approach to understand destination image: A Leximancer study

Journal of Vacation Marketing  
1–12  
© The Author(s) 2015  
Reprints and permission:  
[sagepub.co.uk/journalsPermissions.nav](http://sagepub.co.uk/journalsPermissions.nav)  
DOI: 10.1177/1356766714567796  
[jvm.sagepub.com](http://jvm.sagepub.com)



**Aaron Tkaczynski**

The University of Queensland, Australia

**Sharyn R Rundle-Thiele**

Griffith University, Australia

**Julia Cretchley**

The University of Queensland, Australia

## Abstract

Destination image studies have largely centred upon conceptualizing destination image through a variety of methods that are predominantly researcher driven. Whilst this has furthered our understanding of how vacationers perceive a destination(s) on key reference criteria, the researcher-driven process may artificially increase the salience of some attributes. The purpose of this study was to showcase how a vacationer-driven approach employing Leximancer may be used to understand destination image by enabling vacationers to drive the attributes and sentiments of importance. Based on a sample of 517 vacationers to the Fraser Coast, respondents were able to identify nine themes. Theoretical, methodological and practical implications are presented and recommendations and future research opportunities are outlined.

## Keywords

Destination image, Fraser Coast, Leximancer, salient attributes, vacationer views

## Introduction

Tourism represents an essential element of income generation and destination competitiveness for many countries. For example, in 2010–2011, tourism's direct contribution to Australia's gross domestic product was worth AU\$34.6 billion. Tourism contributed to 4.5% of total employment and 8.0% of total exports (Australian Bureau of Statistics, 2012). Recently, the World Economic Forum published 'The Travel & Tourism Competitiveness Report 2013', which identified that Australia was placed as the 11th most competitive international tourism destination. This high rating was largely attributed to Australia being ranked second for natural resource competitiveness, with the highest number of World Heritage natural sites in the world,

diverse fauna and a comparatively pristine natural environment (World Economic Forum, 2013).

To be competitive as a tourism destination, a country (e.g. Australia) needs to create a unique identity to differentiate itself from competitors at the same time as also being relevant to vacationers (Morgan et al., 2011; Pike, 2008). Whilst many destinations may have competitive attributes such as superb attractions, accommodation facilities and/or a unique culture and heritage

---

## Corresponding author:

Aaron Tkaczynski, Faculty of Business, Economics and Law, School of Tourism, The University of Queensland, Brisbane, Queensland 4072, Australia.  
Email: [a.tkaczynski@uq.edu.au](mailto:a.tkaczynski@uq.edu.au)

(Enright and Newton, 2005), these attributes alone may not be differentiators that successfully attract and retain vacationers. Rather, destination marketing organizations (DMOs) and government authorities need to identify what attributes of a tourism destination are most salient for vacationers (Hudson and Ritchie, 2009). Consequently, in a country such as Australia, whose core strength may be nature and fauna (Tourism Australia, 2010), these natural resources may be incongruent to a vacationer's perception of the destination's image and subsequent motivation to visit the destination. As tourism marketing is most effective when a customer viewpoint is taken (Hsu et al., 2004), it is essential that destination image studies be vacationer driven.

Destination image studies have centred upon conceptualizing the image of a destination through a variety of methods that are largely researcher driven. Whilst this has furthered our understanding of how vacationers perceive a destination(s) on key reference criteria, the researcher-driven process may artificially increase the salience of some attributes. In a world where electronic resources such as user-generated content that includes the Internet, mobile phones, instant messaging and blogs are making the sharing of information and opinions between customers easier than ever (e.g. Allsop et al., 2007; Rong et al., 2012), marketer-generated content may not always be considered by vacationers when gathering information about a destination. With the role of the vacationer moving from a passive consumer to an active participant and the destination product being modified to represent an individual experience (Cutler and Carmichael, 2010; Morgan et al., 2009), it is essential to identify the elements that are relevant for a vacationer in identifying a destination's image. This provides the impetus for this study. Specifically, the research will aim to determine how a vacationer-driven approach employing the content analysis tool, Leximancer, may assist destination marketers to uncover attributes that are highly salient to vacationers.

## Literature review

### *Destination image*

Destination image is one of the most frequently researched constructs within the tourism literature. Several critical analysis studies have been conducted to identify how this construct has been conceptualized and measured (e.g. Pike, 2002; Stepchenkova and Mills, 2010; Tasci

et al., 2007). Regardless of its popularity, destination image has been theorized and operationalized differently by various researchers due to its 'complexity, subjectivity and elusive nature' (Stepchenkova and Morrison, 2008: 549). Despite an initial focus on cognitive elements, it is widely acknowledged that individual affective (feelings) components should also be captured when measuring destination image (Baloglu and Brinberg, 1997; Del Bosque and Martin, 2008). It is argued that people develop both cognitive and affective responses and attachments to environments and places (Proshonsky et al., 1983). The affective considerations of image become operational during the evaluation stage of the destination selection process, whereas the cognitive component is important in the formation of the initial choice sets (Gartner, 1994; Russel et al., 1981). The combined cognitive-affective measurement of destination image greatly impacts upon destination satisfaction and conation (Pan et al., 2011; Pike and Ryan, 2004; Royo-Vela, 2009).

Over time, researchers have incorporated a variety of methodologies to measure destination image. In spite of their diversification, concerns about the applicability of widely used methodologies have been documented (e.g. Deslanders et al., 2006; Stepchenkova and Mills, 2010). Two different methodological approaches dominate. Firstly, researchers have drawn on attributes identified as being important in destination image by previous researchers (Echtner and Ritchie, 1991; Gallarza et al., 2002; Gartner, 1989). These studies are researcher driven with questions proposed to vacationers involving structured techniques incorporating items and formats built on past research findings. However, applying researcher-driven approaches designed on standardized or modified instruments may simply be confirming what is already known. Stepchenkova and Mills (2010), in a recent review of 152 destination image studies, concluded that regardless of the benefits of this approach, the numerous modifications to predetermined scales employed by seminal authors (e.g. Baloglu and McCleary, 1999; Echtner and Ritchie, 1991, 1993) produced inconsistent results when applied to different destinations. For example, this approach could artificially increase the salience of some attributes that otherwise would not be chosen by vacationers.

Secondly, researchers are increasingly employing content analysis to measure destination image through published material such as websites (e.g. blogs) or brochures (e.g. Govers et al.,

2007; Pan and Li, 2011; Stepchenkova and Morrison, 2006). The move to techniques such as content analysis may be largely due to the increasing adoption of technology by both DMOs (e.g. websites, social media and mobile marketing) and vacationers (e.g. blogs, virtual communities and social networks) as a form of communication. By analysing a plethora of user- and marketer-generated content from website(s), content analysis packages allow effective identification of destination image variables as perceived by vacationers that can be clustered into image themes (Choi et al., 2007; Pan and Li, 2011; Stepchenkova et al., 2009). Although the outlined approaches have provided a wealth of information on destination image formation, a key limitation relates to the use of secondary sources of data which, once again, may overlook key attributes that are salient to vacationers experiencing the destination and cannot capture perceptions of vacationers who do not use social media and online channels to communicate. Therefore, there are opportunities for researchers to employ content analysis tools to quantify vacationers' understanding of a destination's image via intercept surveys.

A common criticism of DMOs is that they have traditionally focused primarily on their destination's physical attributes, despite tourism being increasingly more about the vacation experience, which produces excitement, fulfilment and rejuvenation (King, 2002). Consumers increasingly play an essential role in defining society and economic conditions (Morgan et al., 2009) and their interests, desires and needs should be the focus of destination marketing campaigns (Morgan et al., 2009; Scott et al., 2010; Volo, 2010). It is now understood that the destination is essentially the marketplace, and vacationers provide the mental place where their vacation happens (e.g. Morgan et al., 2009; Scott et al., 2010; Volo, 2010). As a consequence, destinations are marketed as vacation experiences that are unique and personal to the individual consumer (Volo, 2010). Identifying the salient attributes enables the DMOs to position their destination to more effectively meet the needs and wants of vacationers.

A vacationer's initial perception of a destination's image can be modified after their destination experience (Chon, 1991; Woodside and Lysonski, 1989). Therefore, it is essential to consider whether vacationers at different stages of their vacation perceive the image of a destination differently. Although cognitive elements

may influence a vacationer's initial choice of which destination to consider to fulfil their vacation desires, the affective elements such as excitement or despair may become more apparent during later stages of the vacation experience (Gartner, 1994; Oppermann and Chon, 1997). This post vacation experience could potentially influence loyalty and word-of-mouth communication in a positive or negative way (Baloglu and Brinberg, 1997; Del Bosque and Martin, 2008).

Based on the importance of a vacationer-driven view to understand destination image and the potential for this view to differ based on the stage of a vacation experience, this research will aim to identify the image of a destination as perceived by vacationers at two key stages, namely, during and post vacation. The content analysis tool, Leximancer, will be employed, allowing respondents to drive the sentiments and attributes of importance at different stages of the vacation experience.

### Case study

The Fraser Coast, a regional tourism destination in Queensland, Australia, was chosen as the case study. This destination was deemed appropriate as tourism is important economically to the Fraser Coast (Tourism Research Australia, 2012). For example, tourism accounts for 5.5% of the region's economy compared with 3.5% for Queensland and 3% for the nation's average (Tourism Research Australia, 2011). The Fraser Coast is located approximately 300 km or a 45-min flight north of the state's capital city, Brisbane. The Fraser Coast encompasses many regions such as the coastal city of Hervey Bay, the rural city of Maryborough and the World Heritage-listed Fraser Island. The region is unofficially known as the 'whale watching capital of Australia'. The World Heritage-listed Fraser Island is a major attraction for domestic and international vacationers and is frequently identified as a key attraction that drives visitation to the region (Tourism Queensland, 2012).

The Fraser Coast is marketed as a destination where people are able to connect in a friendly, down-to-earth and easy-going environment at their own leisurely pace (Tourism and Events Queensland, 2013b). At the time of writing, the Fraser Coast was positioned as 'where nature comes alive' (Visit Fraser Coast, 2013) and the major features that were promoted by the DMO included the following: (1) World Heritage-listed Fraser Island; (2) warm, sunny weather;

(3) fishing; (4) whale and bird watching; (5) four-wheel drive adventures and (6) the opportunity for beach island and country experiences (Tourism Queensland, 2012).

### Methodology

This study is part of a larger research project that aimed to identify the types of vacationers who visit the Fraser Coast. The sample population for this study comprised of adults who had spent at least one night in the Fraser Coast and were on holiday. To identify whether the image of the Fraser Coast differed based on the stage of the vacation, respondents were defined as either *during* or *post* vacationers. If a vacationer had finished their holiday and they were leaving the Fraser Coast to return to their usual place of residence, they were classed as a 'post' vacation respondent. All other vacationers were categorized as 'during' vacation respondents.

A self-administered questionnaire delivered on-site was employed to limit researcher bias. Two open-ended questions relating to (1) the Fraser Coast's features and (2) destination image were presented. These questions were described in present and past tense for during and post vacationers, respectively. These two questions were designed as open-ended to ensure unaided recall. Unaided recall means that attributes are elicited from a customer's memory without any cues presented to them by the researcher and, as a result, a strong or sticky destination attribute is more likely to be recalled. This procedure also allowed each respondent to provide a free description of the image of the destination. Here, no efforts were made to treat image as cognitive and/or affective. The destination image questions were asked just before starting the survey. The other questions included in the questionnaire aimed to provide a profile of respondents.

A non-probability sampling method in the form of quota sampling was used. Although research bias is a concern (Jennings, 2010), probability sampling was impossible as a list of sampling units with a known probability was unable to be identified on-site. The questionnaires were collected over a 7-month period (July to January) to ensure that data were collected in the peak and off-peak seasons. For example, questionnaires were collected in July and October, which represented the peak period for whale watching on the Fraser Coast. In addition, November, which is a traditionally slow

month for tourism on the Fraser Coast, was also included to maximize seasonal variation.

Questionnaires were collected at 10 locations throughout the Fraser Coast. This included six accommodation places (two caravan parks, a backpacker hostel, a self-contained apartment, a four-star resort and a five-star resort), a tourist information centre and three transport locations (bus terminal, ferry terminal to Fraser Island and the airport). This process was required as vacationers who arrived and departed the Fraser Coast via the three most frequent modes of transportation, namely, car (42%), bus/coach (37%) and airplane (6%), could be targeted (Tourism and Events Queensland, 2013a). By choosing many locations, it is confirmed that a dominant spot was not chosen, which may have biased results (Jennings, 2010). This process also ensured that respondents could be grouped into the two different stages of the vacation. For example, whilst collecting surveys in departure lounges of airports could be beneficial due to the ease of access and respondent availability, this would clearly bias the results to the post experience stage of the vacation. By also targeting a variety of accommodation places, the researcher was able to collect questionnaires from a wide variety of vacationer types. No preference was given to collecting day or time of a calendar week. Consequently, all times and days from Monday to Sunday were considered.

The respondents were identified utilizing a 'first-past-the-post' sampling method (McKercher and Wong, 2004). Thus, people who were there at the time were approached by the researcher to complete an on-site survey. A minimum of 50 responses were collected from each location to ensure that a specific type of vacationer who was the most easily accessible did not dominate the results. In total, 84.9% of vacationers approached chose to participate in this study.

### Leximancer

Leximancer, a text analytics tool that analyses natural language text in electronic format, was employed for this study. Leximancer uses word association information to automatically identify collections of words that co-occur frequently in the data and suggests these to the analyst as potential concepts (Smith and Humphreys, 2006). This method applies inductive identification of 'themes' through the observation of phenomena, analysis of patterns and themes, formulation of relationships and development of

theory with minimal manual intervention (Cavana et al., 2001). Leximancer has recently been applied within vacation-related literature (e.g. Darcy and Pegg, 2011; Scott and Smith, 2005; Wu et al., 2014). It has been argued that Leximancer has an advantage over other qualitative content analysis techniques that require the analyst to derive the list of codes and rules for attaching these to the data and are thus researcher driven, which could introduce error (Cretchley et al., 2010; Dann, 2010).

Concepts that are retained (or added) by the analyst are then developed via a thesaurus learning process, in which associated terminology is included in the concept definition (Smith and Humphreys, 2006). This approach is based on the corpus linguistics observation that the terms used around a word give away its meaning. The goal is to boost recall by allowing indicative terminology to trigger the coding of concepts. This copes with the possibility that respondents sometimes refer to a phenomenon without naming it explicitly (using a keyword). Words that are used often where the concept is mentioned, and very seldom where it is not, attract a stronger evidence weighting and contribute more strongly to the coding of concepts (Leximancer, 2009).

Once the set of concepts is determined, and their definitions are finalized, the software attaches concept codes to individual pieces of text. The analyst can control the coding resolution. In this study, the automatic setting of two sentences per coding block was applied. The evidence weights of all words associated with the concept are added within a coding block, and the concept is considered to be present if there is enough evidence to suggest it. The software keeps a record of which concepts are coded together and presents this information to the analyst in the results' phase. Leximancer produces a visual concept map, in which the concepts are clustered according to the relationships between them. Concepts that are mentioned together often attract one another strongly and so tend to settle near each other in the map space (Hepworth and Paxton, 2007). Circles are superimposed to capture clusters of concepts that represent major themes among the content. The co-occurrence data are also presented in statistical format (Cummings and Daellenbach, 2009) and the map is linked to a text browser that allows the researcher to query concepts and read representative excerpts.

The data were compiled in a Microsoft Excel spreadsheet, with a row for each respondent and

their responses recorded prior to importing into Leximancer. An extra column was included to indicate whether the comments were made during or after a visit to the destination. The researchers allowed a set of concepts to be discovered automatically by the software, then reviewed and edited the emergent list. It is important to note that researcher edits were kept to a minimum. However, to align results with theoretical understanding of destination image (Pike, 2002; Pike and Ryan, 2004; Stepchenkova and Mills, 2010), both cognitive and affective dimensions of destination image were seeded to facilitate understanding and interpretation of results for readers not familiar with Leximancer. This researcher intervention was strictly limited to tagging a concept as either rational (e.g. cognitive) or emotional (e.g. affective) elements as defined within the destination image literature. This tagging (or labelling) of concepts occurred post analysis and did not have any influence on the output that used co-occurrence of words in vacationer responses to two open-ended questions as the basis for theme formation. Tagging simply allows a researcher to illustrate terms on a map, ensuring the vacationer view is not compromised beyond labels applied.

Descriptions of terms that appeared at least three times describing how the vacationers felt were identified. An additional step was conducted in which two parent concepts reflecting *favourable* and *unfavourable* sentiments were added to capture tone. This was achieved by aggregating the hand-seeded emotive terms. For example, the *bad* and *boring* concepts were merged under the label of unfavourable tone and *fun*, *relaxing* and *sensational* were grouped to indicate favourable tone. Finally, the researchers added metadata 'tags' as pinpoints on the map to contrast the comments made by vacationers at the two stages of their vacation. The tags were clustered on the map nearest the concepts that were more characteristic of that vacation stage.

## Results

A total of 517 respondents completed the questionnaire (see Table 1 for key vacationer characteristics). The sample included slightly more post (268 comments, 52.1%) than during vacationers (246 comments, 47.9%). Almost half of the sample was aged *under 35* years and gender was relatively equal. Approximately a quarter of respondents earned over AU\$120,000 per annum and the highest percentage stayed

**Table 1.** Fraser Coast respondent characteristics.

Variable	Frequency	Valid per cent
<b>Age</b>		
18–24	103	20.1
25–34	138	27.0
35–44	68	13.3
45–54	77	15.0
55–64	77	15.0
65+	49	9.6
<b>Gender</b>		
Male	235	46.0
Female	276	54.0
<b>Income</b>		
<AUS\$20,000	89	19.7
AUS\$20,000– AUS\$39,999	59	13.1
AUS\$40,000– AUS\$59,999	63	13.9
AUS\$60,000– AUS\$79,999	46	10.2
AUS\$80,000– AUS\$99,999	75	16.6
>AUS\$100,000+	120	26.5
<b>Length of stay</b>		
1 Night	28	5.7
2 Nights	93	19.0
3 Nights	104	21.2
4 Nights	96	19.6
5 Nights	46	9.4
6 Nights	16	3.3
7 Nights	51	10.4
>7 Nights	56	11.4
<b>Origin</b>		
North America	37	7.4
Europe	169	33.6
Asia Pacific	15	3.0
Queensland	80	15.9
New South Wales	114	22.7
Victoria	62	12.3
Australia (not specified)	26	5.2
<b>Travel party</b>		
By myself	48	9.6
Couple	215	42.8
Family	87	17.3
Adult group	142	28.3
Other	10	2.0

between *two* and *four* nights. Internationally, most respondents visited from *Europe*, whereas domestically *New South Wales* was the most popular place of origin. Most respondents travelled with *others*, with a *couple* and *adult group* being the most frequently identified options.

Table 2 lists the frequency of occurrence of concepts overall in the data and also provides ranked lists of concepts for during versus post vacation experience respondents. The numbers in the *count* column describe the number of

comments referring to each concept. The scores in the *likelihood* column give the proportion of comments relating to that concept in that particular time frame. For example, accommodation and fishing were much more likely to be mentioned when describing the Fraser Coast post vacation experience. From viewing Table 2, it can be concluded that ‘Fraser Island’ was the top-ranked concept within all three models and was, therefore, most relevant in vacationers’ consideration of the Fraser Coast’s destination image.

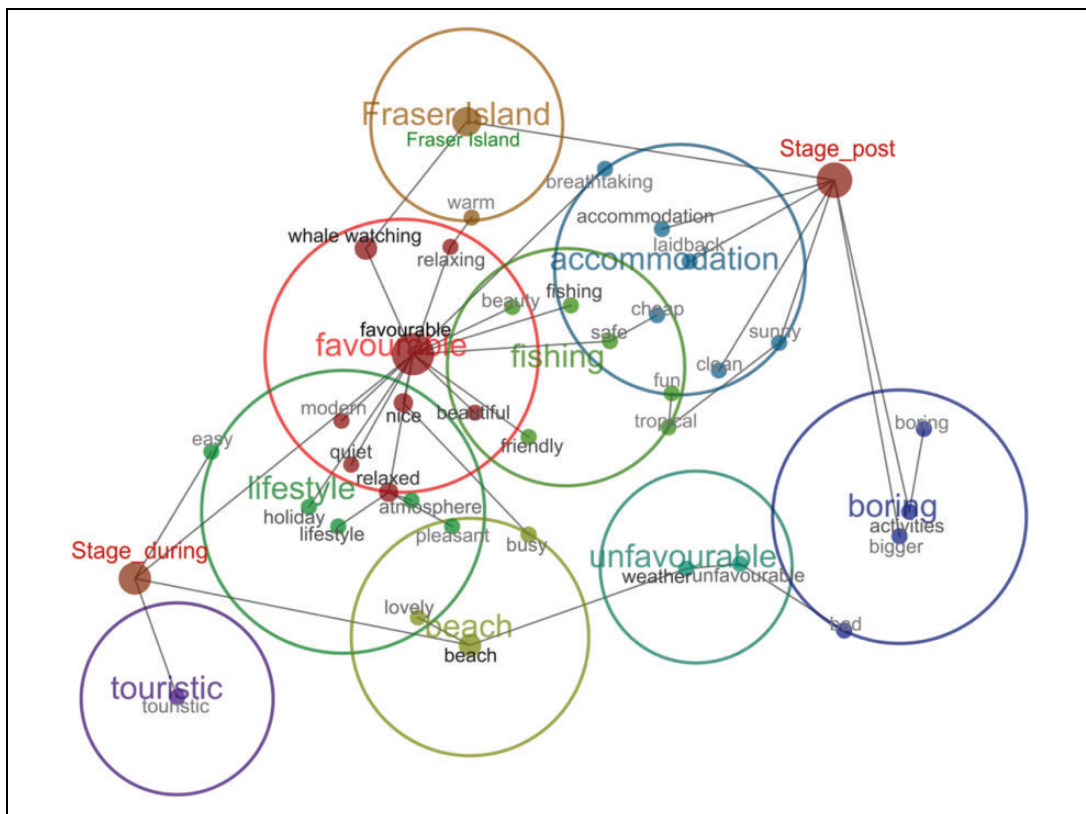
Figure 1 depicted the themes and concepts among respondents’ descriptions of the Fraser Coast. Nine themes were identified. Themes and concepts lying towards the during visit (*Stage\_during*) tag were destination images perceived by respondents whilst experiencing the Fraser Coast. These included ‘touristic’, which comprised responses relating to the image of vacation facilities and attractions; ‘lifestyle’, which contained the concepts *easy*, *holiday*, *atmosphere* and *pleasant*; and ‘beach’, which comprised the concepts *lovely* and *busy*. Reviewing these comments confirmed that during the early stages of their vacation experience, the relaxed atmosphere and beach lifestyle of the Fraser Coast were top of mind for respondents. Most of the comments were clearly favourable in tone.

The themes and concepts nearer the post vacation (*Stage\_post*) tag reflected content more characteristic of respondents who had experienced more of the destination. These included ‘Fraser Island’ where vacationers highlighted trips to the island and whale watching as key features. The ‘accommodation’ theme contained the concepts *breathhtaking*, *scenery*, *laid-back*, *cheap*, *clean* and *sunny*. These concepts were closely related to each other and related to respondents’ perceptions of the Fraser Coast’s accommodation. Essentially, these concepts captured positive reviews of the accommodation experienced during the stay. Accommodation was much more likely to be mentioned in the post vacation stage. ‘Fishing’, which comprised the concepts *beauty*, *safe*, *fun*, *tropical* and *friendly*, was another strong post visit theme. This theme and its strongly related concepts were located in the middle of the concept map indicating its importance to respondents’ perception of the Fraser Coast’s destination image.

The ‘boring’ theme consisted of the concepts *bigger*, *activities* and boring and also lay nearer the post vacation experience stage. Reading some example excerpts revealed complaints about bad weather and the mention of limited

**Table 2.** Concept counts and probabilities.

During	Likelihood		Post	Likelihood		Overall concept frequencies	Relevance	
	Count	(%)		Count	(%)		Count	(%)
Fraser Island	140	43	Fraser Island	187	57	Fraser Island	327	60
Lifestyle	12	67	Accommodation	11	92	Whale watching	143	26
Nature	14	67	People	8	80	Beach	141	26
Holiday	9	64	Fishing	17	74	Good	75	14
Beach	73	52	Activities	9	69	Relaxed	67	12
Quiet	18	51	Weather	32	68	Nice	63	11
Whale watching	72	50	Friendly	19	61	Weather	47	9
Relaxed	32	48	Beautiful	18	56	Quiet	35	6
Nice	30	48	Good	40	53	Beautiful	32	6
Great	9	47	Great	10	53	Friendly	31	6
Good	35	47	Nice	33	52	Nature	21	4
Beautiful	14	44	Relaxed	35	52	Great	19	3
Friendly	12	39	Whale watching	71	50	Lifestyle	18	3
Weather	15	32	Quiet	17	49	Holiday	14	3
Activities	4	31	Beach	68	48	Activities	13	2
Fishing	6	26	Holiday	5	36	Accommodation	12	2
People	2	20	Lifestyle	6	33	People	10	2
Accommodation	1	8	Nature	7	33	–	–	–



**Figure 1.** Concepts and sentiments from respondents' perception of the Fraser Coast image during and post vacation experience.

activities. These comments were mostly unfavourable in tone. Therefore, the concepts also settled near the unfavourable theme. Overall, there were few unfavourable descriptions of the

destination by respondents either during or post vacation experience stages. However, a greater proportion of the unfavourable comments were made in the post vacation experience time frame.

The analysis revealed some key features of the Fraser Coast, which respondents tended to describe using favourable tones. These include opportunities to (1) fish, (2) watch whales and (3) visit Fraser Island. Respondents appeared to appreciate the relaxed beach atmosphere of the Fraser Coast and the tranquillity and beauty of the coastline. Respondents were also generally pleased with the range and quality of accommodation after their stay. When the weather was good, this also featured among the favourable respondents reviews, but, equally, bad weather was a key feature in unfavourable comments.

## Conclusions

Destination image is a largely complex, subjective construct that has been extensively conceptualized and measured within the tourism literature. This research has contributed to the research field of destination image and tourism in general by enabling the vacationers to identify salient destination attributes. The content analysis tool, Leximancer, permits researchers to impose tags, allowing comparison of the tone and content of vacationer descriptions of the destination provided by the vacationers during and after their experience. Tags served to label the Leximancer map and do not represent researchers influencing theme formation. Initial theme formation is based on word co-occurrence.

The first conclusion from this study is that nine vacationer image themes were identified by Fraser Coast vacationers during and post vacation experience. These themes represented both cognitive and affective elements. Specially, six of the following themes are cognitive: (1) touristic, (2) lifestyle, (3) beach, (4) fishing, (5) Fraser Island and (6) accommodation. The remaining three are affective, namely, (1) favourable, (2) boring and (3) unfavourable. This finding supported the literature that both cognitive and affective elements represented destination image (e.g. Pan et al., 2011; Roya-Vela, 2009). As these vacationers have also travelled to and experienced the Fraser Coast, prior research suggests that perceived image has influenced their satisfaction and loyalty (Roya-Vela, 2009).

This article confirmed the literature, with evidence supporting the idea that a vacationer's perceived image of a destination can be modified during the experience (Chon, 1991; Woodside and Lysonski, 1989). Vacationers at the beginning of (or during) the vacation perceived the touristic, lifestyle and beach themes as relevant,

whereas post vacationers emphasized boring and accommodation. Consideration of vacationer views during or at the end of the vacationer experience ensured DMOs can extend their understanding beyond the destination(s) physical attributes to build a wider understanding of the vacation experience. Interestingly, despite the affective theme of favourable being rated as relevant for both during and post experience vacationers, the other elements of boring and unfavourable were highly important for post vacation experience respondents. Therefore, this further supported the destination image formation process that cognitive elements are most relevant prior to an experience (Gartner, 1994; Gunn, 1972), whereas the affective elements related closely to post consumption ratings of satisfaction and loyalty (e.g. Pan et al., 2011; Roya-Vela, 2009).

A further methodological contribution is that the themes that represented destination image were largely not mutually exclusive. The larger circles that captured clusters of concepts that represented major themes (e.g. fishing, lifestyle and favourable) mostly grouped under two different themes. This, therefore, suggested that vacationer-driven concepts can clearly represent specific elements of destination image. For example, the item *relaxed* was portrayed as part of both the favourable and the lifestyle themes. Consequently, although this element is not critically important to both themes as it is not within the middle of the circle, these results would suggest that having a relaxed lifestyle was deemed as relevant for a vacationer's perception of the Fraser Coast's destination image. Furthermore, items such as fishing may have been perceived as favourable due to the friendliness of people (e.g. vacationers and/or residents) and the perceived beauty of the destination.

## Managerial implications

This study has managerial implications as it outlined how a vacationer perceived the Fraser Coast. Through the application of this content analysis tool, comparisons to the current marketing campaign can be made. A major positive finding is that several of the key attractions (cognitive attributes) that are advertised in the current marketing material by the DMO are identified by vacationers as core constructs of the Fraser Coast's destination image. Three of the key attractions, namely, Fraser Island, whale watching and beach, were identified as high in



relevancy by vacationers in determining the destination's image. Importantly, many of these themes such as Fraser Island, fishing and lifestyle were also perceived favourably by vacationers at both stages of their vacation experience. Consequently, it can be concluded that the Fraser Coast's key competitive advantage of nature is highly salient for vacationers.

As respondents in the early stages of their vacation experience perceived the destination image favourably, DMOs should maintain this focus. A negative managerial implication that needs addressing is the boring concept that was identified at the end of the destination experience. Whilst vacationers may be attracted to experience the nature attractions such as the World Heritage-listed Fraser Island and whale watching, it appeared that additional activities needed to be developed or actively communicated more heavily to provide a more satisfying experience for vacationers. As the Fraser Coast is specifically known for its nature and relaxation, it is recommended that activities such as bushwalking, camping, bird watching, jet-skiing and snorkelling that are available at the destination be more extensively promoted. This will further enhance the nature theme that is advertised in marketing material and satisfy potential nature-based vacationers (e.g. connectors) who will be initially attracted to the destination.

Market-based assets, which include (but are not restricted to) brand image, provide destination marketers with a source of competitive advantage. By focusing on the strengths of a destination, DMOs can attract and retain vacationers. Nature and relaxation are two strengths that the Fraser Coast destination marketers can use to attract and retain vacationers to the destination. It is important to note that DMOs need to spread visitation to areas less known or with excess capacity. Co-promotion based on insights gained during image studies such as this offers one means for destination marketers to spread visitation. For example, vacationers attracted by Fraser Island (a nature-based offering) could be offered a promotional deal (e.g. package including a country experience offering an alternate nature-based experience) to extend their stay, thereby spreading visitation. In time, vacationers enjoying a favourable nature-based country experience would lead to word-of-mouth traffic further spreading visitation and building economic opportunities in other parts of the region. Spreading visitation by leveraging off current market-based assets would also serve to

ensure environmental impact on currently popular visit sites is contained to current levels.

### Limitations and opportunities for future research

The first limitation of this research is the single (regional) Australian destination focus and the locations used to collect data. Future research is recommended to extend our understanding beyond this single destination and to broaden the data collection locations. Research asking vacationers to write down their thoughts relating to a destination's image will vary considerably depending on the situational factors at the point where the questionnaire is administered. Extending the data collection locations will assist researchers to maximize diversity. Second, data were collected on-site capturing vacationers during and end of their stay on the Fraser Coast, which would capture top of mind recall. Future research is recommended to capture views using the same method outlined in this article post holiday experience (e.g. 3 or 6 months) to extend our understanding beyond top of mind recall.

A third limitation of this study arises from the on-site survey method employed in this study. The use of an on-site survey method did not permit pre-vacationers to be captured, and this represents an opportunity for future research. Chon (1991) and Pike (2006, 2009) targeted vacationers before and after their holiday employing methods such as mail surveys, indicating the methods that researchers can use to capture vacationers before they travel. A potential opportunity for research is to conduct a longitudinal study based on specific key geographic markets to capture pre-trip vacationers. Our study identified how vacationers' perception of a destination may have changed based on their lived experience with clear differences noted between during and post vacationer groups. Longitudinal study designs are recommended to capture pre-vacation and to compare and contrast their images of the destination with during and post vacationers.

A contribution from this study is that it showcased how Leximancer can determine how a destination's image is perceived by on-site vacationers at different stages of their experience. Several seminal articles (e.g. Govers et al., 2007; Pan and Li, 2011; Stepchenkova and Morrison, 2008) have showcased how content analysis tools such as CATPAC and WOR-DER can be used to identify a destination's

image based on (1) online and/or offline marketing material and/or (2) vacationer-generated online content. Although all content analysis tools have their advantages and disadvantages, an opportunity for future research is to compare and contrast the different packages such as Leximancer, CATPAC and WORDER based on the data collection procedure that has been outlined within this study. This process could accurately determine whether the different analysis tools produce a similar or different representation of a destination(s).

## References

- Allsop DT, Bassett BR and Hoskins JA (2007) Word-of-mouth research: principles and applications. *Journal of Advertising Research* 47: 398–411.
- Australian Bureau of Statistics (2012) Tourism Satellite Account (ABS Cat. 5249.0). OpenDocument. Available at: <http://www.abs.gov.au/ausstats/abs@.nsf/mf/5249.0?>
- Baloglu S and Brinberg D (1997) Affective images of tourism destination. *Journal of Travel Research* 35: 11–15.
- Baloglu S and McCleary KW (1999) U.S. International pleasure travellers' images of four Mediterranean destinations: a comparison of visitors and nonvisitors. *Journal of Travel Research* 38: 144–152.
- Cavana RY, Delahaye BL and Sekaran U (2001) *Applied Business Research: Qualitative and Quantitative Methods*. Milton: John Wiley & Sons Australia Ltd.
- Choi S, Lehto XY and Morrison AM (2007) Destination image representation on the web: content analysis of Macau travel related websites. *Tourism Management* 28: 118–129.
- Chon K-S (1991) Tourism destination image modification process: marketing implications. *Tourism Management* 12: 68–72.
- Cretchley J, Gallois C, Chenery H, et al. (2010) Conversations between carers and people with Schizophrenia: a qualitative analysis using Leximancer. *Qualitative Health research* 20: 1611–1628.
- Cummings S and Daellenbach U (2009) A guide to the future of strategy? The history of long range planning. *Long Range Planning* 42: 234–263.
- Cutler SQ and Carmichael BA (2010) The dimensions of the tourism experience. In: Morgan M, Lugosi P and Ritchie JRB (eds) *The Tourism and Leisure Experience: Consumer and Managerial Perspectives*. Bristol: Channel View Publications, pp. 3–26.
- Dann S (2010) Redefining social marketing with contemporary commercial marketing definitions. *Journal of Business Research* 63: 147–153.
- Darcy S and Pegg S (2011) Toward strategic intent: perceptions of disability service provision amongst hotel accommodation managers. *International Journal of Contemporary Hospitality Management* 30: 468–476.
- Del Bosque IAR and Martin HS (2008) Tourist satisfaction: a cognitive-affective model. *Annals of Tourism Research* 35: 551–573.
- Deslanders DD, Goldsmith RE, Bonn M, et al. (2006) Measuring destination image: do the existing scales work? *Tourism Review International* 10: 141–153.
- Echtner CM and Ritchie JRB (1991) The meaning and measurement of destination image. *Journal of Tourism Studies* 2: 2–12.
- Echtner CM and Ritchie JRB (1993) The measurement of destination image: an empirical assessment. *Journal of Travel Research* 31: 3–13.
- Enright MJ and Newton J (2005) Determinants of tourism destination competitiveness in Asia Pacific: comprehensiveness and universality. *Journal of Travel Research* 43: 339–350.
- Gallarza MG, Saura IG and Garcia HC (2002) Destination image: towards a conceptual framework. *Annals of Tourism Research* 29: 56–78.
- Gartner WC (1989) Tourism image: attribute measurement of state tourism products using multidimensional scaling techniques. *Journal of Travel Research* 28: 16–20.
- Gartner WC (1994) Image formation process. *Journal of Travel & Tourism Marketing* 2: 191–216.
- Govers R, Go FM and Kumar K (2007) Virtual destination image: a new measurement approach. *Annals of Tourism Research* 34: 977–997.
- Gunn C (1972) *Vacationscape: Designing Tourist Regions*. Austin: University of Texas.
- Hepworth N and Paxton SJ (2007) Pathways to help-seeking in bulimia nervosa and binge eating problems: a concept mapping approach. *International Journal of Eating Disorders* 40: 493–504.
- Hsu CHC, Wolke K and Kang SK (2004) Image assessment for a destination with limited comparative advantages. *Tourism Management* 25: 121–126.
- Hudson S and Ritchie JRB (2009) Branding a memorable destination experience. The case of 'Brand Canada'. *International Journal of Tourism Research* 11: 217–228.
- Jennings G (2010) *Tourism Research*. Milton: John Wiley & Sons Australia Ltd.
- King J (2002) Destination marketing organisations: connecting the experience rather than promoting the place. *Journal of Vacation Marketing* 8: 105–108.
- Leximancer (2009) *Leximancer Manual*. Available at: [www.leximancer.com](http://www.leximancer.com) (accessed 8 May 2009).

- McKercher B and Wong DYY (2004) Understanding tourism behaviour: examining the combined effects of prior visitation history and destination status. *Journal of Travel Research* 43: 171–179.
- Morgan M, Elbe J and de Esteban Curiel J (2009) Has the experience economy arrived? The views of destination managers on three visitor-dependent areas. *International Journal of Tourism Research* 11: 201–216.
- Morgan N, Pritchard A and Pride R (2011) *Destination Brands: Managing Place Reputation*. Oxford: Butterworth-Heinemann.
- Oppermann M and Chon K-S (1997) Convention participation decision-making process. *Annals of Tourism Research* 24: 178–191.
- Pan B and Li X (2011) The long tail of destination image and online marketing. *Annals of Tourism Research* 38: 132–152.
- Pan S, Tsai H and Lee J (2011) Framing New Zealand: understanding tourism TV commercials. *Tourism Management* 32: 596–603.
- Pike S (2002) Destination image analysis – a review of 142 papers from 1973 to 2000. *Tourism Management* 23: 541–549.
- Pike S (2006) Destination decision sets: A longitudinal comparison of stated destination preferences and actual travel. *Journal of Vacation Marketing* 12: 319–328.
- Pike S (2008) *Destination Marketing: An Integrated Marketing Communication*. Amsterdam: Elsevier.
- Pike S (2009) Destination brand positions of a competitive set of near-home destinations. *Tourism Management* 30: 857–866.
- Pike S and Ryan C (2004) Destination positioning analysis through a comparison of cognitive, affective, and conative perceptions. *Journal of Travel Research* 42: 333–342.
- Proshonsky HM, Fabian AK and Kaminoff R (1983) Place-identity: physical world socialization of the self. *Journal of Environmental Psychology* 3: 57–83.
- Rong J, Quan VH, Law R, et al. (2012) A behavioural analysis of web sharers and browsers in Hong Kong using targeted association rule mining. *Tourism Management* 33: 731–740.
- Roya-Vela M (2009) Rural-cultural excursion conceptualization: a local tourism marketing management model based on tourist destination image measurement. *Tourism Management* 30: 419–428.
- Russel JA, Ward LM and Pratt G (1981) Affective quality attributed to environments: a factor analytic study. *Environment and Behavior* 13: 259–288.
- Scott N and Smith AE (2005) Use of automated content analysis techniques for event image assessment. *Tourism Recreation Research* 30: 87–91.
- Scott N, Laws E and Boksberger P (2010) Introduction. In: Scott N, Laws E and Boksberger P (eds) *Marketing of Tourism Experiences*. New York: Routledge, pp. 1–12.
- Smith AE and Humphreys MS (2006) Evaluation of unsupervised semantic mapping of natural language with Leximancer concept mapping. *Behavior Research Methods* 38: 262–279.
- Stepchenkova S and Mills JE (2010) Destination image: a meta-analysis of 2000–2007 research. *Journal of Hospitality Marketing & Management* 19: 575–609.
- Stepchenkova S and Morrison AM (2006) The destination image of Russia: from the online induced perspective. *Tourism Management* 27: 943–956.
- Stepchenkova S and Morrison AM (2008) Russia's destination image among America pleasure travelers: revising Ecther and Ritchie. *Tourism Management* 29: 548–560.
- Stepchenkova S, Kirilenko AP and Morrison AM (2009) Facilitating content analysis in tourism research. *Journal of Travel Research* 47: 454–469.
- Tasci ADA, Gartner WC and Cavusgil ST (2007) Conceptualization and operationalization of destination image. *Journal of Hospitality & Tourism Research* 31: 194–223.
- Tourism and Events Queensland (2013a) *Fraser Coast Tourism Profile: Average annual data from year ending December 2009 to December 2012*. Available at: <http://teq.queensland.com/~media/Corporate/Research/Tourism%20Profiles%202013/Fraser-Coast-Tourism-Profile.ashx> (accessed 27 July 2014).
- Tourism and Events Queensland (2013b) Understanding our consumers – TEQ domestic market segmentation. Available at: [http://www.tq.com.au/tqcorp\\_06/marketing/understanding-our-consumer—tq-domestic-market-segmentation/connectors.cfm](http://www.tq.com.au/tqcorp_06/marketing/understanding-our-consumer—tq-domestic-market-segmentation/connectors.cfm) (accessed 2 March 2013).
- Tourism Australia (2010) *Australian Experiences: Australian Nature*. Available at: [http://www.media.australia.com/en-au/factsheets/3321\\_2122.aspx](http://www.media.australia.com/en-au/factsheets/3321_2122.aspx) (accessed 1 May 2013).
- Tourism Queensland (2012) *Fraser Coast*. Available at: [http://www.tq.com.au/destinations/sunshine-and-fraser-coast-zone/fraser-coast/fraser-coast\\_home.cfm](http://www.tq.com.au/destinations/sunshine-and-fraser-coast-zone/fraser-coast/fraser-coast_home.cfm) (accessed 23 April 2012).
- Tourism Research Australia (2011) *The Economic Importance of Tourism in Australia's Regions*. Canberra: Tourism Research Australia.
- Tourism Research Australia (2012) *Tourism Industry Facts & Figures at a Glance: September 2012*. Canberra: Department of Resources, Energy and Tourism, Tourism Research Australia.
- Visit Fraser Coast (2013) *Fraser Coast Queensland Where Nature Comes Alive*. Available at: <http://www.visitfrasercoast.com/> (accessed 11 October 2013).

- Volo S (2010) Conceptualizing experience: a tourist based approach. In: Scott N, Laws E and Boksberger P (eds) *Marketing of Tourism Experiences*. New York: Routledge, pp. 13–28.
- Woodside A and Lysonski S (1989) A general model of traveler decision choice. *Journal of Travel Research* 27: 8–14.
- World Economic Forum (2013) *The Travel & Tourism Competitiveness Report 2013: Reducing Barriers to Economic Growth and Job Creation*. Geneva: World Economic Forum.
- Wu M-Y, Wall G and Pearce PL (2014) Shopping experiences: international tourists in Beijing's silk market. *Tourism Management* 41: 96–106.