

COMBINING PRIMARY DESTINATION IMAGE WITH ACQUIRED EXPERIENCE FOR EFFECTIVE MARKETING IN TOURISM AND TOUR OPERATING

OURANIA VITOUHADITI*

Technological Educational Institute of Athens

Abstract

Nowadays, Mediterranean destinations face intense competition. Consequently, the enhancement of their image is imperative. This paper concentrates on the primary aspect of the destination image (perceived after the visit,) as a basis for evaluating the acquired experience and as a tool which can indicate improvements that would result in a positive future assessment and enhancement of the image.

The paper uses as a case study Corfu island, a mature Mediterranean destination. The study implements descriptive statistics, factor analysis and logistic regression. The findings revealed the impact of several factors, in measurable terms, on the improvement of the overall acquired experience and destination image. Mostly though, revealed the way to convert a moderate “good” experience to an enthusiastic “very good”.

It suggests management priorities and targets for product differentiation, competitive advantage and supply improvements and the increase of product loyalty for both the tourism marketing authorities and the tourism entrepreneurs. The whole approach has not been applied to these types of destinations, being in that sense innovative.

JEL Classification: M31, M21, F23

Key words: Tourism destination image, primary image, factor analysis, logistic regression, experience, tour operators.

* *Corresponding address:* Ourania Vitouladiti, Department of Business Administration: Tourism and Hospitality Management, TEI of Athens, Agiou Spiridonos, str., 122 10 Egaleo, Attica, Greece, e-mail: ranivito@hol.gr, ranivito@teiath.gr

1. Introduction

Destinations compete, among other aspects, also on the basis of their perceived images. The growth of the tourism phenomenon in general and the existence of a large number of competing destinations in particular provide justification for seeking ways to strengthen a destination's perceived image and the performance of its attributes experienced through the visit.

It is therefore imperative, especially for destinations that have reached the mature or even the saturated stage of their life cycle (Butler, 1980, Kotler *et al.* 1996), to find ways to improve their image. This improvement is directly connected with the improvement of their offer and the actual experience acquired during the visit, the one that contributes, among other things, to the creation of the primary image. The tourists perceive primary image and experience as a mixture (Guthrie and Anderson, 2010).

Knowing that the image plays a crucial role in the final destination choice, any effort to identify the factors whose improvement would enhance the evaluation of the acquired experience is of great importance and could lead to future effective strategic decisions. The basic step, in order to accomplish this process, is to capture the visitors' perceptions. The comprehensive knowledge of their perception and the evaluation of their experience are vital for the implementation of effective strategies and the improvement of competitiveness. Because competitiveness can be enhanced through an exact matching between tourists' evaluations of supply (destinations' attributes) and tourism professionals' (stakeholders, entrepreneurs, local and international tour operators, travel agencies, authorities) relative responses and corrective actions.

Therefore, the general objective of this study is to evaluate the primary image and through this evaluation to indicate the factors whose improvement would contribute to the enhancement of the overall experience that is expected to lead to customer satisfaction, loyalty and recommendation to friends and relatives. An objective which is of great importance for both the tourism marketing authorities and the various tourism enterprises such as the accommodation sector, the travel businesses either at a national level (incoming tour operators and local agents) or at an international level (foreign outgoing tour operators).

Tour operators have realized that the number of mature destinations that can be considered by potential tourists is not unlimited. Also, they have noticed that today, more than ever before, their customers are more experienced tourists with higher standards and demands. Therefore, they are interested in focusing on destinations

that can offer an enhanced experience and have a beneficial image.

This kind of destination presents increased possibilities to be chosen by their clientele and enable them to offer profitable travel products and packages in the long term. Additionally, the local agents or incoming tour operators can sell a considerable number of travel products (excursions, accommodation, tours, tickets etc.) to the visitors who will choose the destination under consideration.

2. Primary and secondary tourism destination image

There are several definitions for image, some are the following: Crompton (1979) defines it as the sum of beliefs, ideas and impressions that a person has of a destination, while Hunt (1975) defines it as the impressions that a person holds about a region in which he or she does not reside. Echtner and Ritchie (1993) propose that image is not only the individual traits or qualities but also the total impression an entity makes on the minds of others. Furthermore, Milman and Pizam (1995) describe destination image as the visual or mental impression of a place or a product experienced by the general public.

The image concept has generally been considered as an attitudinal construct consisting of an individual's mental representation of knowledge (beliefs), feelings, and global impression about an object or destination (Baloglu, 2001). The potential tourists are likely to have developed a series of images of the destination. It is argued that potential tourists buy package tours not only for what is included but also for what this purchase means to them in terms of image (Vitouladiti, 2000). Behind the image that tourists have of their destination of choice, its products and services, lies a set of important needs, wants and motives (Vitouladiti, 2000).

There are also, many typologies concerning the formation of the image, Gartner's (1993) is one of the most important and suggests that images are formed throughout a continuum of eight stages that proceed from induced to organic agents, and concern the image perceived before experiencing the destination, which is called a secondary or naïve image according to Phelps' approach (1986). In contrast, the primary is formed by actually visiting and experiencing the destination. It is believed that the actual visit creates an image more realistic than that existing prior to visitation (Tasci and Gartner, 2007). The primary or reevaluated image is considered as the most dynamic kind because it incorporates the experience itself and because it is the basis on which the secondary image will be built. The second-

dary image represents the static element, since it is already shaped, because it has been based on several information agents.

A destination can be regarded as a combination (or even as a brand) of all products, services and ultimately experiences provided locally. Tourists “consume” destinations as a comprehensive experience, without often realising that each element of the product is produced and managed by individual players (Buhalis, 2000). Tourists’ overall impression of the destination’s experience develops their image of the destination after the visit, meaning the primary image. In the minds of the visitors image and experience are blended together (Guthrie and Anderson, 2010).

Moreover, certain studies (Gartner, 1993, Baloglu and Brinberg, 1997, Walmley and Young, 1998, Baloglu and McCleary, 1999a, Baloglu and McCleary, 1999b) assert that image incorporates two interrelated components, cognitive elements, referring to the individual’s own knowledge and beliefs about the object and affective elements relating to an individual’s feelings towards the object.

Fairweather and Swaffield (2002) have claimed that the destination image sets criteria for even a negative evaluation. The image displayed in the media often focuses on a number of positive descriptions and experiences. If visitors encounter situations and experiences that differ markedly from their expectations, their evaluation can be very negative. It is clear, therefore, that the creation of image through promotion and thus the formation of the secondary image, as part of the overall image, needs much more than the mere use of advertising, brochures, internet etc. It needs complex information to guide effectively those responsible for the marketing of the destination. Furthermore, it needs the kind of information that would help avoid detachment from the desires of visitors. Meaning, the indication of elements whose improvement will result in a positive evaluation of the experience and therefore the satisfaction of visitors. This leads to a recurring selection of the destination from among its rivals, and to customer loyalty.

Bigne, Sanchez and Sanchez (2001) add at this point that an improved and therefore positive tourism image is a prerequisite for perceived quality, customer satisfaction, intention to repeat visit, recommendation to friends, and dedication to the destination and services offered. Facts which are of great importance for local authorities, tourism marketers and tour operators. Echtner and Ritchie (2003) are among those who argue that by visiting the destination, the image will be affected and altered by "first hand" information and experience. If we accept that experience affects the image and forms its primary dimension, then the experience acquires special and unique significance in image formation. Therefore, all efforts to en-

hance this experience will result in an improved image (Bigne, Sanchez and Sanchez, 2001). These efforts concern the identifying of the factors that would contribute to increased satisfaction and evaluation of destination services, products and their image.

The marketing, development, branding and management strategies in tourism are highly dependent on knowledge about tourist behaviour with respect to destination choice, preferences, standards etc. which in turn are inextricably connected with destination image attributes as perceived and assessed by tourists. Therefore, approaches to understanding the assessment and the enhancement of its components have high practical value. The various studies examine many perspectives of the crucial role of tourism destination image in marketing strategies, however they have not focused on the potential of the primary image to indicate factors, in measurable terms, whose improvement could contribute to the improvement of the overall experience acquired. The indication of these factors would have multiple benefits for tourism marketing, for the evaluation of tourism supply and in general for efficient regional tourism development strategies.

3. Tourism experience

According to Buhalis (2000) destinations are amalgams of tourism products, offering an integrated experience to consumers. According to Poon (2002), tourists generally perceive and evaluate their visit as a single experience, even though the various services are offered by different operators. Actually, their visit consists of a structured series of services and producers which operate separately.

According to Middleton and Clarke (2001), the overall tourism offering might be defined in terms of five main components, namely: destination attractions; destination facilities and services; accessibility of the destination (including transport); images, brands and perceptions; price to the visitor. Hence, a destination is a provider of experiences. As Soteriades (2012) indicates, the tourism offering is a “series of experiences” achieved through the combination of a diverse array of products and services. For visitors, the product is the total experience, covering the entire amalgam of all aspects and components of the product, including attitudes and expectations.

Academically, the contribution of an enhanced or improved experience, in the context of travel, has yet to be explored. It can be argued, logically, that for tourism

planners such as destination management organizations (DMOs), delivering an improved tourism experience is fundamental to long-term competitiveness and sustainability (Ritchie and Crouch, 2003). Several authorities have already invested in providing travellers with an enhanced experience. For example, the Canadian Tourism Commission (DMO), has identified the importance of delivering an improved experience as tomorrow's tourism product because it consistently creates superior value (Parks Canada, 2005). In a similar fashion, Hong Kong's Airport Authority emphasizes its commitment to providing travellers with a unique, pleasant and enhanced airport experience (Airport Authority Hong Kong, 2007). Singapore's Tourism Board has even established a new tourism award, dedicated to the tourism establishment that constantly reinvents itself to create and provide memorable experiences for families (Singapore Tourism Board, 2006).

Previous tourism research (Woodside, Caldwell and Albers-Miller, 2004) suggests that visitors' memories of their travel experience form one of the bases for competitive advantage. Several studies indicate that the memory of their prior travel experience is an important motivation for return visits and a primary source of positive word-of-mouth to family and friends who will later use that assessment when they make their own travel arrangements (Andereck and Caldwell, 1993). An evaluation of great importance for the tour operators, travel agencies, destination authorities and several kinds of entrepreneurs.

It must be understood that local authorities, DMO's and various enterprises cannot provide the enhanced experience directly. It is to be expected that different individuals will recall experiences differently even though tourism planners may have provided equivalent services, events, and activities due to the experiential nature of the tourism product (Ooi, 2005). However, their attempts should concentrate on enabling the enhanced experience and facilitating the positive evaluation.

Therefore, the visitor experience is the core of the tourism product of a destination (Vitterso *et al*, 2000, Swarbrook, 2002, Jennings and Nickerson, 2006) and businesses' successful operation depends on this recognition (Richards, 1999). The quality of a destination complex system is of vital importance to the destination performance. Beerli and Martin (2004) underline that the acquired experience presents, till now, an extensive and growing research interest, since it is considered a very good index of the tourist's needs, motivation, satisfaction and tourism market segmentation.

Practitioners worldwide have realized that they must elevate their tourism product (e.g. tourism supply attributes, package tours, accommodation etc.) to an en-

hanced experience. However, as several researchers point out, there has not been sufficient research on the issue of experience (Connell and Meyer, 2004, Larsen, 2007). Even less research has approached destinations from the aspect of the tourism experience provider and the formation of their primary image (Ryan, 1997, Lawson *et al.*, 1998, Mason and Cheyne, 2000).

4. Objectives of the study and development of basic hypotheses

The primary image is formulated in the tourist's mind, according to a series of elements-variables and characteristics of the destination, which deliver experiences. According to the detailed study of Gallarza, Gil Saura & Calderon Garcia (2001) the most common attributes used in destination image research include a multitude of variables. These were adapted and enriched to serve the purposes and objectives of this study. Specifically, the variables used are the following: availability of suitable accommodation for me, giving a feeling of prestige, local cuisine, developing friendships with others, quality of service personnel, cleanliness of sea and beaches, discovering new places/different cultures, availability of facilities for sports and activities, availability of entertainment, safety, unspoiled physical environment, having fun/being entertained, historical and cultural attractions, scenic beauty/natural attractions, relaxing physically and mentally, affordable/reasonable prices overall, being adventurous/being active, escaping from daily routine, sunbathing on the beach and doing nothing.

However, the important questions are, which of them contribute to the enhancement of the overall experience? All of them? None of them? Some of them? Which ones? Do they have an equal contribution to the improvement of the acquired experience and the enhancement of the product's image? Can they be measured and quantified in order to guide the implemented strategies? As far as the above questions haven't been answered through empirical research, only assumptions can be made about the variables' contribution to the improvement of the acquired experience.

Therefore, it is very important to examine if the improvement of these variables can affect positively the total evaluation and in what degree. As a result, all the above mentioned variables can formulate the basic question of this research and can also be transformed into groups of variables (factors) in order to examine their contribution to the enhancement of the overall experience. In other words we would like to detect if there are factors whose improvement will influence positively the

final evaluation of the experience acquired in the destination and the level of their contribution.

So, the objectives of the study are:

- 1) To find out the evaluation of the primary image.
- 2) To transform the individual variables of the primary image into basic factors-“experience factors”.
- 3) To examine the potential contribution of each basic factor’s improvement to the overall evaluation of the acquired experience at the destination.

Subsequently, the basic hypotheses of the study are as follows:

H0: improvement of the basic factors of the primary image doesn’t result in enhancement of the overall acquired experience.

H1: improvement of the basic factors of the primary image does result in enhancement of the overall acquired experience.

The objectives of the study and the testing of the hypotheses were fulfilled through the implementation of several statistical approaches. Specifically, descriptive statistics, factor analysis and logistic regression. The analytical research hypotheses to test are presented in section 7.3, after implementation of factor analysis which will allow the reduction of the above analytically mentioned variables and the creation of the basic factors (experience factors).

5. Research methodology

5.1. Research design and survey sites

In order to achieve the targets of the study, it was necessary to carry out primary quantitative research. It was decided that the implementation of the research and the collection of the primary data would take place in the tourism destination of Corfu Island. This destination could be considered as a miniature of Greek tourism. Also, it is a traditional destination for the British target market. So, the nationality chosen for the sampling population was British, since they represent the main target market of the island under consideration, displaying several fluctuations in arrivals over the years.

5.2. Sampling and data collection

Considering the fact that this research relates to an issue which concerns several destinations that have reached the maturity stage or a relative saturation in their lifecycle, it was essential that the sample should not be chosen by convenience in

order to be able to extract reliable results. The sample was to be stratified, because it is a probability sample and more representative. It should be noted that the majority of the respondents had booked their holidays via a tour operator or travel agent. The island is divided into three areas, North, Central and South. Since the boundaries of the areas were known, they were defined as strata. In every one of these strata, accommodation of every category was chosen by random sampling. The members of the sample were also chosen by random sampling in all the selected hotels and accommodation types.

5.3. Sample size

The final sample size obtained was 376 British first time visitors. This sample size ($n=376$) gives a statistical error ($e\approx 5\%$) which is considered very satisfactory (level of significance $\alpha=0,05$, level of confidence 95%). This sample size and statistical error could permit the generalisation of results.

5.4. Questionnaire design

The questionnaire was structured and self administrated. Its content was decided after studying the most common attributes used in destination image research as displayed in the detailed study by Gallarza, Gil Saura & Calderon Garcia (2001). The basic question, through which the visitors evaluated the vacationing experience in Corfu on the last day of their stay, contained 19 variables. The questionnaire comprised closed-end questions. The closed-end questions had a five-point rating scale. All the rating scales were labeled. For the statistical analysis and the interpretation of the results the five-point scale of the questions was coded from 1 to 5, considering 5 the best and 1 the worse rating, meaning the higher the better. Specifically, 5= "very good", 4= "good", 3= "neither good nor bad", 2= "poor", 1= "very poor".

6. Profile and description of the sample

Concerning the distribution of the sample by sex it is noted that both sexes had an almost equal participation in the survey. Female respondents represented 57%, or 216 persons, male respondents represented 43%, or 160 persons out of a total of 376.

Regarding age categories, 44% of the sample is between the ages of 35 and 54 years. An important element due to the fact that it concerns those ages that have increased possibility for tourist mobility and therefore have increased travel experience. The other age categories are represented with the percentages of 27% for the under 34 age group and 29% for the 55+ group.

Distribution by income demonstrates expected percentages. The income brackets “>£20.000” and “£20.000 -£40.000” are represented with 36% and 41% respectively. Their percentages are increased compared to the income bracket of “£40.000+”. This is an expected element which reassures the reliability of the sampling method, since it is known that the British market segment of Corfu belongs to the average income levels.

Table 1. Demographic characteristics of the respondents

Gender	%
Female	57%
Male	43%
Total	100%
Age	%
Under 34	27%
35 – 54	44%
55+	29%
Total	100%
Income	%
Under £20.000	36%
£20.000 - £40.000	41%
£40.001+	23%
Total	100%

The duration of stay for 50,5% of the sample is at least one week. While the duration of stay for 39,4% is two weeks. This element is very positive because it underlines that the sample had an extensive experience of the destination. This is a positive element in relation to the targets of the study.

62,2% of the respondents have traveled to several destinations, from 5 to 10 times, during the last 5 years. This indicates that the sample consists of experienced tourists who have the ability to recognize and judge the characteristics of a destination and also to compare destinations. This is considered another positive element in

relation to the goals of the study. In the following table, the image variables which are used in this study are presented along with their ratings (total sample).

Table 2. Evaluation of primary image

Image Variables	Descriptive Statistics	
	mean	Standard deviation
Availability of suitable accommodation for me	4,22	0,78
Giving a feeling of prestige	3,66	0,86
Local cuisine	4,22	0,76
Developing friendships with others	3,77	0,83
Quality of service personnel	4,31	0,69
Cleanliness of sea and beaches	4,01	0,98
Discovering new places/different cultures	4,04	0,77
Availability of facilities for sports and activities	3,78	0,80
Availability of entertainment	3,82	0,88
Safety	3,80	0,98
Unspoiled physical environment	3,88	0,93
Having fun/being entertained	3,72	0,86
Historical and cultural attractions	3,82	0,76
Scenic beauty/Natural attractions	4,27	0,75
Relaxing physically and mentally	4,50	0,62
Affordable/reasonable prices overall	4,02	0,88
Being adventurous/being active	3,62	0,76
Escaping from daily routine	4,51	0,59
Sunbathing on the beach and doing nothing	4,35	0,81

7. Implementation of factor analysis-correlation-findings

At this point we will present the implementation of factor analysis in order to detect the factors which “summarize” the total amount of the variables that describe the image after the visit (primary image). The resulting factors will be named experience-basic factors and will formulate the basis for the implementation of logistic regression and the test of the hypotheses.

7.1. Factor analysis

The basic question, through which the visitors evaluate the vacationing experience in Corfu on the last day of their stay, contains 19 variables. For all these variables the means were examined. This indicated the points where the visitors expressed more or less satisfaction. But how are all these variables connected? Do they tend to shape groups? For these questions it is necessary to examine the correlations among the variables.

For the goals of the study, a data reduction was decided. The requirement, in this case, is the data reduction that can be achieved through the use of multivariate techniques. Specifically, the method implemented here is factor analysis. The basic prerequisite for the realization of factor analysis is the existence of correlations. The following table (table 3) demonstrates the correlations among the 19 variables, which are statistically significant ($\alpha = 0,05$) for all the interconnected pairs. In this table (table 3) the correlations which are higher than 0,40 are in grey color and this allows us to distinguish the groupings among the variables. In conclusion, the existence of statistically significant correlations and the arising groupings imply the existence of common factors and allow the implementation of factor analysis.

The factorability of the data is determined in two ways:

- The Bartlett's test of Sphericity, which tests the null hypothesis that the data are not correlated (non collinear). In our case this hypothesis is rejected. The data are correlated and $p=0,00$ ($p<0,0,5$).
- Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO) which tests the existence of common factors. Measured by the KMO statistics, sampling adequacy predicts if data are likely to factor well, based on correlation and partial correlation. If $KMO \approx 1,0$ the data are factorable. In our case $KMO = 0,896$ which is considered a very good result.

Table 3. Correlations among the 19 variables

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1		0,53	0,29	0,31	0,46	0,25	0,29	0,20	0,22	0,37	0,30	0,34	0,33	0,31	0,50	0,33	0,24	0,38	0,25
2	0,53		0,36	0,34	0,44	0,22	0,37	0,18	0,23	0,38	0,31	0,35	0,35	0,27	0,39	0,28	0,30	0,33	0,24
3	0,29	0,36		0,30	0,37	0,23	0,39	0,14	0,22	0,20	0,32	0,37	0,31	0,36	0,32	0,36	0,28	0,35	0,26
4	0,31	0,34	0,30		0,40	0,18	0,32	0,22	0,28	0,25	0,19	0,40	0,30	0,18	0,27	0,30	0,36	0,21	0,24
5	0,46	0,44	0,37	0,40		0,27	0,36	0,18	0,25	0,27	0,25	0,41	0,34	0,35	0,41	0,42	0,29	0,37	0,26
6	0,25	0,22	0,23	0,18	0,27		0,32	0,21	0,07	0,31	0,40	0,18	0,16	0,33	0,34	0,23	0,23	0,25	0,35
7	0,29	0,37	0,39	0,32	0,36	0,32		0,21	0,21	0,25	0,38	0,29	0,51	0,50	0,32	0,30	0,33	0,29	0,21
8	0,20	0,18	0,14	0,22	0,18	0,21	0,21		0,34	0,18	0,10	0,29	0,18	0,13	0,18	0,10	0,44	0,23	0,29
9	0,22	0,23	0,22	0,28	0,25	0,07	0,21	0,34		0,23	0,18	0,60	0,23	0,17	0,24	0,33	0,40	0,28	0,30
10	0,37	0,38	0,20	0,25	0,27	0,31	0,25	0,18	0,23		0,47	0,28	0,23	0,19	0,30	0,27	0,22	0,26	0,22
11	0,30	0,31	0,32	0,19	0,25	0,40	0,38	0,10	0,18	0,47		0,23	0,34	0,47	0,34	0,26	0,23	0,31	0,25
12	0,34	0,35	0,37	0,40	0,41	0,18	0,29	0,29	0,60	0,28	0,23		0,33	0,22	0,35	0,39	0,49	0,34	0,33
13	0,33	0,35	0,31	0,30	0,34	0,16	0,51	0,18	0,23	0,23	0,34	0,33		0,50	0,22	0,25	0,34	0,22	0,12
14	0,31	0,27	0,36	0,18	0,35	0,33	0,50	0,13	0,17	0,19	0,47	0,22	0,50		0,42	0,30	0,27	0,37	0,24
15	0,50	0,39	0,32	0,27	0,41	0,34	0,32	0,18	0,24	0,30	0,34	0,35	0,22	0,42		0,37	0,26	0,54	0,42
16	0,33	0,28	0,36	0,30	0,42	0,23	0,30	0,10	0,33	0,27	0,26	0,39	0,25	0,30	0,37		0,34	0,33	0,25
17	0,24	0,30	0,28	0,36	0,29	0,23	0,33	0,44	0,40	0,22	0,23	0,49	0,34	0,27	0,26	0,34		0,38	0,25
18	0,38	0,33	0,35	0,21	0,37	0,25	0,29	0,23	0,28	0,26	0,31	0,34	0,22	0,37	0,54	0,33	0,38		0,49
19	0,25	0,24	0,26	0,24	0,26	0,35	0,21	0,29	0,30	0,22	0,25	0,33	0,12	0,24	0,42	0,25	0,25	0,49	

- 1. Availability of suitable accommodation for me
- 4. Developing friendships with others
- 7. Discovering new places / different cultures
- 10. Safety
- 13. Historical and cultural attractions
- 16. Affordable/reasonable prices overall
- 19. Sunbathing on the beach and doing nothing

- 2. Giving a feeling of prestige
- 5. Quality of service personnel
- 8. Availability of facilities for sports and activities (e.g. surfing, sailing, water skiing, golf, tennis etc)
- 11. Unspoiled physical environment
- 14. Scenic beauty/Natural attractions
- 17. Being adventurous / being active

- 3. Local cuisine
- 6. Cleanliness of sea & beaches
- 9. Availability of entertainment (e.g. night life, discos, bars, pubs)
- 12. Having fun, being entertained
- 15. Relaxing physically and mentally
- 18. Escaping from daily routine

Bartlett's test of Sphericity $p = 0,000$ *Kaiser-Meyer-Olkin* = 0,896

Table 4. Extraction of common variables: Principal Component Analysis-Final Solution

A. Variance explained		Component	Final Solution (Varimax Rotation)				
			Eigenvalue	Rotation Sums of Squared Loadings			
				% of Variance	Cumulative %		
			1	2,78	14,64	14,64	
2	2,45	12,89	27,53				
3	2,37	12,49	40,02				
4	2,19	11,51	51,53				
5	1,67	8,81	60,34				
		B. Basic factors – Principal components					
Variables		<i>Communality</i>	Quality of human res. & services	Natural & cultural attractions	Entertainment & activities	Relaxation/ Rest	Conservation of natural env. & safety
1. Availability of suitable accommodation for me	accommodation	61%	0,68	0,10	0,04	0,24	0,29
2. Giving a feeling of prestige	prestige	59%	0,68	0,17	0,11	0,08	0,30
3. Local cuisine	cuisine	46%	0,37	0,47	0,13	0,29	-0,05
4. Developing friendships with others	friendships	45%	0,52	0,17	0,38	-0,01	0,06
5. Quality of service personnel	personnel	56%	0,63	0,27	0,13	0,26	0,02
6. Cleanliness of sea & beaches	clean sea	56%	-0,02	0,24	0,07	0,38	0,59
7. Discovering new places / different cultures	new/different	64%	0,20	0,72	0,18	0,08	0,20
8. Availability of facilities for sports and activities	sport facilities	60%	-0,09	0,03	0,71	0,13	0,27
9. Availability of entertainment	entertainment	60%	0,25	0,05	0,71	0,15	-0,05
10. Safety	safety	72%	0,41	-0,01	0,17	0,01	0,73

11. Unspoiled physical environment	unspoiled environment	63%	0,14	0,44	0,03	0,19	0,62
12. Having fun, being entertained	fun	66%	0,45	0,14	0,63	0,19	-0,04
13. Historical and cultural attractions	historical attractions	67%	0,27	0,72	0,23	-0,12	0,11
14. Scenic beauty/Natural attractions	natural beauty	72%	0,09	0,76	0,00	0,33	0,16
15. Relaxing physically and mentally	relaxing	65%	0,41	0,16	0,04	0,65	0,18
16. Affordable/reasonable prices overall	prices	44%	0,47	0,25	0,19	0,33	-0,07
17. Being adventurous / being active	adventure	60%	0,14	0,28	0,69	0,15	0,08
18. Escaping from daily routine	escape routine	65%	0,24	0,18	0,19	0,72	0,08
19. Sunbathing on the beach and doing nothing	sunbathing	65%	0,05	0,00	0,31	0,72	0,20

7.2. Findings of the Factor analysis (Principal Component Analysis)

Among the several approaches of factor analysis the method of Principal Component Analysis was chosen. The final solution gave 5 basic components which are identical with the common factors. The percentage of variance explained is 61%. All the variables are represented satisfactorily with percentages (communalities) between 44% and 72%. Therefore, there is no reason to exclude any variable from the analysis. The results of the final solution are presented in table 4.

In part A of the table, the 5 basic components, the eigenvalues and the percentages of the variants explained are presented. In part B of the table, the loadings of the variables are presented. Solutions with a larger number of components were rejected because their meaning and their explanation become difficult due to the fact that the variables tend to share their loadings with more than one component. For the final solution the Varimax method was chosen as the one that makes the explanation of the factors easier.

Therefore, the principal components that were extracted by the method described above and are presented in part B of table 4, are the final solution since they are identical with the requested common factors. Specifically, the 5 common factors (basic factors or components) are described as follows:

- The first one is named “Quality of human resources and services” and refers mostly to the quality of hospitality and service personnel.
- The second one is named “Natural and cultural attractions” and refers mostly to local physical and cultural attractions, directly associated with the desire to know other cultures and regions.
- The third one is named “Entertainment and activities” and refers mostly to the availability of infrastructure for entertainment, sports and activities, also to the desire for fun and adventure.
- The fourth one is named “Physical and mental relaxation” and refers mostly to the desire for rest in a summer tourist destination, without the need for any physical activity.
- The fifth one is named “Conservation of natural environment and safety” and refers to the cleanliness of the sea the conservation of the environment and safety. In this study the visitors associated the term safety with issues of transportation (pedestrian and automotive).

In conclusion the factor analysis reduced significantly the number of the data (from 19 variables to 5) and simultaneously revealed the hidden aspects of the data structure, distinguishing 5 dimensions that were not directly measured. These dimensions concern general issues that evaluate a tourism destination and determine the correlations among the data.

7.3. Development of analytical hypotheses Z1, Z2, Z3, Z4, Z5

Therefore, the general hypothesis to test is “Improvement of the basic factors of the primary image results in enhancement of the overall acquired experience”.

In order to formulate the specific hypotheses, we stipulate the names of the basic factors, as they resulted from the factor analysis. These are:

- Quality of human resources and services
- Natural and cultural attractions
- Entertainment and activities
- Physical and mental relaxation
- Conservation of natural environment and safety

Specifically, the analytical research hypotheses to test are:

Z1. Improvement of the quality of human resources and services results in enhancement of the overall acquired experience.

Z2. Improvement of the natural and cultural attractions results in enhancement of the overall acquired experience.

Z3. Improvement of the entertainment and activities results in enhancement of the overall acquired experience.

Z4. Improvement of physical and mental relaxation results in enhancement of the overall acquired experience.

Z5. Improvement of the conservation of natural environment and safety results in enhancement of the overall acquired experience.

In order to test the above general hypothesis and its analytical statements the study focused on creating a logit model (logistic regression) where the formulation of the total evaluation is defined by the above 5 basic factors-components.

7.4. Implementation of logistic regression – logit model

The overall evaluation of the visit to Corfu (which results from the corresponding question “How do you rate the overall experience”) is very positive with an overwhelming majority of 93%. Specifically, 53% of the respondents rate the visit as “very good” while 40% as “good”. From the rest of the respondents a percentage of 6% rates the visit as “neither good nor bad” and a percentage of 1% gives negative answers. The last two categories give a percentage of 7% and a sample size of 26 persons which means that any analysis based on these numbers would be unreliable. Therefore, excluding this 7% of the sample which gave negative answers, the analysis focused on the exploration of the modification from a moderate rate

(“good”) to an enthusiastic rate (“very good”) of the overall experience. For the evaluation of the overall experience we use the above mentioned five basic factors which resulted from the factor analysis.

At this point a basic hypothesis of the study is underlined. This hypothesis concerns the impacts of the experience (visit) as this is defined from the above mentioned five basic factors. In order to answer the above hypothesis the study focused on the construction of a logistic regression model, where the formation of the overall evaluation is defined by the five basic factors. Since the overall experience is expressed as two value result, meaning that it accepts only two values (“good” – “very good”), the binary logistic regression model is used.

Binary or binomial logistic regression is a form of regression which is used when the dependent is a dichotomy and the independents are of any type. The regression equation is

$$\ln\left(\frac{p}{1-p}\right) = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \dots + \beta_k x_k$$

where

- $\ln(p/1-p)$ = log odds ratio or logit
- p is the predicted probability of the event which is coded with one, $1-p$ is the predicted probability of the other decision which is coded with 0
- $x_1 \dots x_k$ are the predictor variables
- β_0 is the constant
- $\beta_1 \dots \beta_k$ are the logistic regression coefficients, also called parameter estimates

In our case the binary logistic regression is used in order to check the impact (or the effect size) of the five basic factors (independent variables) on the formation of the overall experience (dependent variables), where this is defined as a two value result “good” – “very good”.

In this study the event of the logistic model with the predicted probability p is the occurrence of “very good” is coded with 1 and is called “success” whereas the predicted probability $p-1$ is the occurrence of “good” is coded with 0 and is called “failure”. The predictor factors are the above 5 basic factors.

So, the form of the logit model is

$$\text{logit}(p) = \beta_0 + \beta_1 F_1 + \beta_2 F_2 + \beta_3 F_3 + \beta_4 F_4 + \beta_5 F_5$$

where F_1 to F_5 are the basic factors. Like in the linear regression the contribution of a predictor factor is significant if $\beta \neq 0$.

have been proposed, called as *pseudo-R²*, which offer approximate interpretation of the percent of the variance explained. This analysis uses two of the most common *R²-like* measures: Cox and Snell and Nagelkerke. Their measures range from 0 to 1. Nagelkerke's *R²* will normally be higher than the Cox and Snell measure.

- Finally Cook's influence criterion was implemented in order to test for outliers and keeping the rule that for all cases this criterion is lower than one.

7.5. Findings and support of hypotheses Z1, Z2, Z3, Z4, Z5

The analysis of the data follows:

Table 5. Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	210,312	5	,000
	Block	210,312	5	,000
	Model	210,312	5	,000

Table 6. Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	308,586(a)	,429	,573

Table 7. Hosmer and Lemeshow Test

Step	Chi-square	df	Sig.
1	9,659	8	,290

Table 8. Variables in the Equation

Basic Factors		B	S.E.	Wald	Df	Sig.	Exp(B)	95,0% CI. for EXP(B)	
								Lower	Upper
Step 1(a)	F1	1,542	,197	61,042	1	,000	4,672	3,174	6,878
	F2	,939	,166	31,932	1	,000	2,558	1,847	3,543
	F3	,742	,154	23,213	1	,000	2,100	1,553	2,840
	F4	1,030	,154	44,910	1	,000	2,801	2,073	3,786
	F5	1,025	,164	39,219	1	,000	2,787	2,022	3,841
	Constant	,130	,143	,816	1	,366	1,138		

a Variable(s) entered on step 1: F1, F2, F3, F4, F5

According to the analysis, the hypotheses H_{0i} which assume that the contribution of the “experience factors” to the modification of the overall experience is *zero* are rejected ($\alpha=5\%$). Therefore, all the basic factors F1 – F5, do affect significantly the modification of the overall experience from “good” to “very good”.

As a consequence, the hypotheses Z1 to Z5 are supported. All the impacts are positive, meaning increase in any one of these increases the possibility of total evaluation’s formation from “good” to “very good”.

Specifically, the classification rates and goodness of fit indices are:

- The Hosmer and Lemeshow test shows that the model fits the data, meaning that the predicted values do not differ significantly from the observed values.
- The *pseudo-R²* of Cox and Snell and Nagelkerke have a range from 0,43 and 0,58 respectively. So, the model explains the 58% of the overall experience, which is considered satisfactory. Or according to a more conservative assessment, explains at least 43% of the overall experience.
- Finally, outliers were not detected (Cook’s influence).

The classification indices of the model are very satisfactory

- The sensitivity, meaning the ability for the correct prediction of the “successes”, is 82,7%. Therefore, the model predicts correctly the occurrence of the answer “very good” with a probability of 82,7%.
- The specificity, meaning the ability for the correct prediction of the “failures”, is 82,6%.
- The overall success rate of the model is 82,7%.

7.6. Results regarding hypotheses Z1, Z2, Z3, Z4, Z5

According to the above analysis the results regarding the hypotheses Z1 – Z5 (logit model) are (table 8):

- Increase in the basic factor “quality of human resources and services” by one unit increases the possibilities for “very good” evaluation for 4,67 times. This increase refers to Exp (B). While for confidence interval 95% the lower bound is 3,17 and the upper bound is 6,88, meaning 3 to 7 times.
- Increase in the basic factor “natural and cultural attractions” by 1 unit increases the possibilities for “very good” evaluation 2,56. This increase refers to Exp (B). While for confidence interval 95% the lower bound is 1,85 and the upper bound is 3,54.

- Therefore, it is obvious that “quality of human resources and services” is the factor that affects the formulation of the overall evaluation more than all the other basic factors.
- The factor with the lesser contribution to the formation of a “very good” evaluation is “entertainment and activities”. Specifically, increase in one unit in this factor increases the possibilities for a “very good” evaluation by 2,10 times. While the lower bound is 1,55 and the upper bound is 2,84.
- Increase in the factor “physical and mental relaxation” by one unit increases the possibilities for a “very good” evaluation 2,80 times, while the lower bound is 2,07 and the upper bound is 3,79.
- Finally increase in the factor “conservation of natural environment and safety” by one unit increases the possibilities for “very good” evaluation 2,79 times, while the lower bound is 2,02 and the upper bound 3,84.

At this point we have to repeat that the above basic factors are complex variables which have resulted from factor analysis, meaning a transformation of the 19 evaluation variables. Therefore, they represent the “underlying structure” of the 19 evaluation variables, the label and the meaning of which was decided after the implementation of factor analysis. As a result they are useful as relative and not as absolute measures.

The conclusion that results from the observation of the model is that some factors are more influential than others. The factor “quality of human resources and services” is presented as the most influential by far, while the factor “entertainment and activities” has the least impact. The factors “natural and cultural attractions”, “physical and mental relaxation” and “conservation of natural environment and safety” are placed in a medium level, the least effective of the three being “natural and cultural attractions”. The implementation of statistical analysis supports the model and the hypotheses.

8. Conclusions, implications and recommendations

The findings are consistent with existing studies on the significance of the primary image and experience (Bigne, Sanchez and Sanchez, 2001, Echtner and Ritchie, 2003, Beerli and Martin, 2004). Specifically, they display the potential of primary image to become a useful index of the tourists’ wants and satisfaction. The findings also indicate factors whose improvement would contribute to a considerably higher rating of the overall experience and the destination image.

Furthermore, the findings bear three important implications, especially for Mediterranean destinations, similar to the one under consideration. Firstly, this research paper indicates the factors whose improvement would contribute to the improvement of the overall experience. Knowing such information may enable more appropriate allocation of the always limited marketing and promotional budgets. Secondly, the methodology of this research paper and the developed logit model, indicate the impact of each factor in measurable terms (the effect size) on the improvement of the overall experience and offer insights into variables capable of increasing substantially the positive future evaluation of a destination.

Thirdly, the findings offer guidelines for investment priorities and targeted marketing and development activities, able to improve the performance of the destination attributes. These findings are considered as very important, since the positive evaluation of experience and increase in satisfaction could lead to customer loyalty (Bosque, Martin, Collado, 2005). Consumer loyalty is crucial, also, to those responsible for designing the trips (tour operators) (Campo and Yague, 2008). Tour operators sell varied products and destinations. If they obtain loyal consumers, they increase the probability that these consumers will use their services in the future. Therefore, from the findings of this study also result guidelines and practical implications.

The quality of human resources and services stands out as the most influential factor, for destinations that have reached maturity in their life cycle, like the one under consideration, as well as similar ones. Quality perceived by the tourist is the variable that exerts the most impact on tourist loyalty (Campo and Yague, 2008).

This clearly indicates the need for immediate actions for systematic professional training and specialization in the tourism labor market, through collaborative programs of the state and the private sector. The study proved that well trained employees are a critical factor. That is in accordance with the statement of Nolan (2002 in Wang, 2006), who underlines that there is a growing interest in relying on human resources to achieve competitive advantages. Additionally, Dedousopoulos (2007), claims that investment in employees' training, education and development of skills is imperative. Moreover, Velissariou and Zagkotsi (2007) underline that the quality of services provided and resulting customer satisfaction depends to a large degree on the personnel providing the services.

Additionally, the authorities could design a regional master plan for infrastructure improvements and upgrading of the physical environment which will incorporate as priorities the target market's indications. It must be noted that when there is

a reference to tourism destinations' competitiveness, the sustainability of the local resources that ensure the maintenance of long term success as well as the achievement of equitable returns-on-resources utilised to satisfy all stakeholders, is of prime importance (Buhalis, 2000). The rating given by the respondents to the factor "natural and cultural attractions" is indicative of the importance given to issues associated with environment.

The materialization of the proposed improvements will offer the opportunity of a progressive diversification of the tourism product. Their subsequent communication, could be part of a new promotional strategy, focused on the factors which have been rated as the more influential on the positive assessment of the overall experience (as perceived and indicated by the client). A strategy capable of building competitive advantages and differentiation from the competitors.

Specifically, for the tour operators it is obvious that they will obtain better entrepreneurial results, in the long term, if they design package tours with differentiated tourism products. Destinations that offer competitive advantages facilitate their marketing strategies. Considering that package tours are still the main vehicle used by tourists to travel to destinations, similar to the one described, the local marketing authorities should work with the tour operators promoting the destination in order to indicate to them the incorporated improvements.

The value of these guidelines and their implementation rests with the impact they will have on the image formation cycle, meaning the development and communication of a secondary image, compatible with the customer's desires. Consequently, as a primary image, it will be able to satisfy the visitors since it will have been formed according to their perceptions and suggestions. Understanding what factors increase the interest of the potential travel markets and facilitate the selection of a particular destination is critical to destination planning and marketing. Therefore, marketing strategies could assist potential travellers to choose a particular destination through the benefits or advantages presentation and promotional process.

Future studies could test the model in destinations which are at different stages in their lifecycle. Also, they could insert demographic variables and investigate their influence on the model. The concept and methodology of this study offered answers to significant questions concerning the tourism destination image and the adaptation of marketing, development and management efforts to the demands of an era characterized by changes in the needs of tourists and continuous competition.

The research approach of this study could create a methodology able to be adopted by both private tourism enterprises and public tourism organizations which have the resources for the implementation of effective research contributing to feasible strategic plans which stimulate demand, improve supply and lead to specialized promotional campaigns.

References

- Airport Authority Hong Kong. 2007. "HKIA Named World's Best Airport." Retrieved from the Worldwide Web on December 1, 2008, http://www.hongkongairport.com/eng/media/press-releases/pr_880.html.
- Andereck, K.L. and Caldwell, L.L. 1993. "The Influence of Tourists' Characteristics on Ratings of Information Sources for an Attraction." *Journal of Travel and Tourism Marketing*, 2(2): 171-89.
- Baloglu, S. 2001. Image Variations of Turkey by Familiarity Index: Informational and Experiential Dimensions. *Tourism Management*, 22, 127-133. Baloglu, S. and Brinberg, D., 1997. Affective images of tourism destinations. *Journal of Travel Research*, 35 (4), 11-15.
- Baloglu, S., and McCleary, K. W., 1999. A Model of Destination Image Formation. *Annals of Tourism Research*, 26, 868-897.
- Beerli, A. and Martin, J., 2004. Factors influencing destination image. *Annals of Tourism Research*, 31(3): 657-681.
- Bigne, E., Sanchez M. and Sanchez, J., 2001. Tourism image, evaluation variables and after purchase behaviour: inter-relationship. *Tourism Management*, 22, 607-616.
- Bosque, I.A.R., Martin, H.S. and Collado, J., 2005. The role of expectations in the consumer satisfaction formation process: Empirical evidence in the travel agency sector. *Tourism Management*, March 2005.
- Buhalis, D. 2000. Marketing the competitive destination of the future. *Tourism Management*, 21, 97-116.
- Butler, R., 1980. The concept of a tourism area cycle of evolution: Implications for resources. *Canadian Geographer* 24: 1, pp. 5-12.
- Campo, S. and Yague, M.J., 2008. Tourist Loyalty to Tour Operator: effects of Price Promotions and Tourist Effort. *Journal of Travel Research*, 46, 318-326.
- Chi, C. and Qu, H., 2007. Examining the structural relationships of destination image, tourist satisfaction and destination loyalty: an integrated approach. *Tourism Management*.
- Crompton, J. L., 1979. An Assessment of the Image of Mexico as a Vacation Destination and the Influence of Geographical Location upon the Image. *Journal of Travel Research* 18(4), 18-23.
- Dedousopoulos, A. 2007. Economic Policy of the labor market. Part 2, Chapter 3, e-book. Panteion University, Athens, Greece.
- Echtner, C. M. and Ritchie, J. R. B., 2003. The Meaning and Measurement of Destination Image. *Journal of Tourism Studies*, 14(1), 37-48.

- Echtner, C. M., and Ritchie, J. R. B., 1993. The Measurement of Destination Image: An Empirical Assessment. *Journal of Travel Research* 31(4), 3-13.
- Fairweather, J.R. and Swaffield, S.R., 2002. Visitors' and Locals' Experiences of Rotorua, New Zealand. *International Journal of Tourism Research*, 4(4), 283-297.
- Gallarza, M., Saura, I. and Garcia, H., 2002. Destination Image. Towards a Conceptual Framework. *Annals of Tourism Research*, 29(1), 56-78.
- Gartner, W. C., 1993. Image Formation Process. *Journal of Travel and Tourism Marketing* 2(2/3), 191-215.
- Guthrie, C. and Anderson, A., 2010. Visitor narratives: researching and illuminating actual destination experience. *Qualitative Market Research: An International Journal* Vol. 13 No. 2, pp. 110-129.
- Hunt, J. D., 1975. Image as a Factor in Tourism Development. *Journal of Travel Research*, 13(3), 1-7.
- Jennings, G. and Nickerson, N.P., 2006. *Quality Tourism Experiences*. Elsevier Butterworth-Heinemann, Burlington, MA.
- Kotler, Ph., Bowen, J. and Makens J., 1996. *Marketing for Hospitality and Tourism*. U.S.A. Prentice-Hall Inc.
- Lawson, R.W., Williams, J., Young, T. and Cossens, J., 1998. A Comparison of Residents Attitudes Towards Tourism in 10 New Zealand Destinations. *Tourism Management*, 19, 3, 247-256
- Mason, P. and Cheyne, J., 2000. Residents' Attitudes to proposed Tourism Development. *Annals of Tourism Research*, 27, 2, 391-411.
- Middleton, V.T.C. and Clarke, J., 2001. *Marketing in Travel and Tourism*, 3rd ed., Butterworth-Heinemann, Oxford.
- Milman, A. and Pizam, A., 1995. The role of awareness and familiarity with a destination: the Central Florida Case. *Journal of Travel Research*, 33(2), 21-27.
- Phelps, A., 1986. Holiday Destination Image: The problem of Assessment. An example developed in Menorca. *Tourism Management*, 7(3), 168-180.
- Tasci, A.D. and Gartner, W.C., 2007. Destination Image and its Functional Relationships. *Journal of Travel Research*, 45(4), 413-425.
- Ooi, C.S., 2005. A Theory of Tourism Experiences: The Management of Attention." In Parks Canada, 2005. *Facilitate Tourist Experience. Minister's Round Table on Parks Canada*.
- Poon, A., 2002. *Tourism, Technology and Competitive Strategies*, 4th ed., CAB International, Oxford.
- Richards, G., 1999. European Cultural Tourism: Patterns and prospects, in Dodd, D. and Van Hemel, A. (eds.) *Planning Cultural Tourism in Europe*. Boekman Foundation, Amsterdam, pp 16-32.
- Ritchie, J.R. Brent and Geoffrey I. Crouch., 2003. *The Competitive Destination: A Sustainable Tourism Perspective*. Cambridge, MA: CAB I Publishing.
- Ryan, C., 1997. *The Tourist Experience: A new introduction*. Cassell, London.
- Singapore Tourism Board., 2006. New Tourism Awards Categories to Boost STB's Drive Towards it's Tourism 2015 Vision. Retrieved from the Worldwide Web on February 22, 2008, http://www.tourismawards.com/press_2006_news1.htm.

- Soteriades, M., 2012. Tourism destination marketing: approaches improving effectiveness and efficiency. *Journal of Hospitality and Tourism Technology*, Vol. 3 No. 2, pp. 107-120.
- Swarbrooke, J., 2002. *The Development and Management of Visitor Attractions*. Butterworth Heinemann, Oxford.
- Velissariou E., Zagkotsi S., 2009. Employment and Characteristics of Personnel in the Hotel Sector in Greece. In *HOTEL-link. A Hotel, Restaurant and Gastronomy Business Journal* (pp. 1017-1025). Vol. 10 Nr 13-14. Year 6. Beograd.
- Vitouladiti, Ou., 2000. *Marketing of tour operators and travel agents*. Greek Open University, Patras (In Greek).
- Vitouladiti, Ou., 2000. *Management of tour operators and travel agents*. Greek Open University, Patras (In Greek).
- Vitterso, J., Vorkinn, M., Vistad, O. and Vaagland, J., 2000. Tourist Experiences and Attraction. *Annals of Tourism Research*, 27, 2, 432-450.
- Walmsley, D. J. and Young, M., 1998. Evaluative Images and Tourism: The Use of Personal Constructs to Describe the Structure of Destination Images. *Journal of Travel Research*, 36 (3), 65-69.
- Wang, Y., 2006. Strategic Employee Training and Development in Chinese Luxury Hotels. *Tourismos: An International Multidisciplinary Journal of Tourism*, 1(1), 111-118.
- Woodside, A.G., Caldwell, M. and Albers-Miller, N.B., 2004. Broadening the Study of Tourism: Introduction to the Special Issue on the Consumer Psychology of Travel/Tourism Behavior. *Journal of Travel and Tourism Marketing*, 17(1): 1-7.
- Yuan, J. and Jang, S., 2008. The effects of Quality and Satisfaction on Awareness and Behavioral Intentions: Exploring the Role of a Wine Festival. *Journal of Travel Research*, 46, 279-288.