

## The impact of Blue Flag status on tourist decision-making when selecting a beach

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### Abstract

The Blue Flag programme holds many benefits when looking from a conservation point of view, such as preserving the natural environment. But what are the benefits when looking from a tourism perspective? In the literature it is stated that a beach's Blue Flag status has little to no impact on the decision making of visitors when selecting a beach at which to spend their holiday. The aim of this article is to determine the impact of Blue Flag status on visitors' decision-making when selecting a beach. Probability sampling was used with systematic sampling methods. A survey was conducted from between March and April, 2013 at six beaches across the Margate area. A total of 572 usable questionnaires were collected. The results showed whether or not a beach has Blue Flag status has little influence on the decision-making of beach visitors as little difference was found between the decision-making aspects of Blue Flag and non-Blue Flag beach visitors. It was noted that aspects of importance for decision-making for both groups of visitors form mostly part of the criteria set by the Blue Flag programme.

This article makes three main contributions to the current literature; firstly, new information was identified regarding the role of the Blue Flag programme and what visitors are looking for when selecting a beach. Secondly, important aspects considered by visitors selecting a beach, such as cleanliness, landscape and popularity are identified. Lastly, this was the first time such research was conducted within a South African setting.

**Keywords:** Wildlife tourism, marine tourism, decision making, Blue Flag, tourist behaviour

Source: [en.wikipedia.org](http://en.wikipedia.org)-



## INTRODUCTION

To benefit from the dynamic marine tourism industry, the Blue Flag programme was started in Europe along the French coastline in 1987 by the Foundation for Environmental Education (FEE). The purpose of this programme was to encourage beaches to comply with the Bathing Water Directive 76/160/EEC (Blue Flag, 2013). This directive states two minimum quality criteria in relation to water intended for bathing. The criteria relate to the limited values of substances that are considered to be indicators of pollution (such as pesticides) as well as the minimum sampling frequency and method of inspection and analysis of the water (European Union. Summaries of Legislation, 2013). In 2001, South Africa adopted this programme as a means of keeping the country's beaches up to international standards with regards to water and beach quality (SouthAfrica.info, 2013). Thus branding the Blue Flag programme is a means of conserving the marine environment and ensuring the cleanliness of both the beach and the water.

For a beach to be awarded a Blue Flag, certain criteria must be met. These criteria are divided into four sets, *water quality*, *environmental management*, *safety and security* and *environmental education and information* (Blue Flag, 2013). Firstly, *water quality* requires the beach to have visually clean water, no litter or oil in the water and water quality tests should be conducted every two weeks to ensure the cleanliness of the water. Secondly, *environmental management* requires beach management to ensure an adequate number of waste disposal bins on the beach, sources for drinking water as well as the cleanliness and health of coral reefs in the area. Thirdly, *safety and security* requires the beach to have an adequate number of lifeguards at the beach as well as a first aid kit on hand. Fourthly, *environmental education and information* requires the beach to offer at least five educational activities, display a

map of the beach and facilities as well as a display of information regarding the Blue Flag programme. A beach committee is established that oversees the implementation of these criteria (Blue Flag, 2013).

According to Schernewski (2000) Blue Flag status is an exclusive eco-label that ensures the quality of beaches and attracts visitors at the same time. In contrast though, Nahman and Rigby (2008) state that awareness regarding the Blue Flag programme is lacking. Beaches, with or without Blue Flag status, are vital revenue generators; they encompass an environment that offers leisure, relaxation and recreation to beach visitors. Beaches and coastal tourism supports the largest tourism trade globally and the sea is recognised as the most important environment for tourism (Nelson, Morgan, Williams & Wood, 2000). According to Fairweather, Maslin and Simmons (2005) beach awards serve only as an instrument for raising awareness and for businesses to operate within corporate promotional activities, rather than having an influence on the decision making of beach visitors.

From a conservation point of view, the Blue Flag programme helps ensure the safety of marine life and the environment. According to McKenna, Williams and Cooper (2011) the Blue Flag programme is seen as a symbol of clean, safe and environmental friendly coastal areas. Furthermore, the argument is raised that the Blue Flag programme holds many benefits for the community, such as an increase in visitor numbers, improved behaviour of beach visitors, raised property prices and high quality beaches (SouthAfrica.info, 2013). The question remains, however, does a beach's Blue Flag status encourage tourists to visit the beach and does it have an influence on the decisions made by tourists in selecting a beach?

The aim of this chapter is to identify the influence of Blue Flag status on visitors' decision in selecting a beach and to

determine whether any statistically significant difference exist between the aspects considered by visitors when visiting a Blue Flag beach versus the aspects considered by visitors when visiting a non-Blue Flag beach. A comparison of the results for Blue Flag beaches and non-Blue Flag beaches will be conducted, thus determining whether Blue Flag status has an influence on visitors' decision-making process for a beach holiday. The article will be structured as follows: firstly, a literature discussion on the decision-making process of tourists, followed by the problem statement, methodology, the results obtained, findings and implications and lastly concluding remarks.

## LITERATURE REVIEW

Travelling to a beach for a vacation involves a variety of choices, ranging from selecting the destination, the mode of travel, accommodation, facilities, products offered, restaurants or food and recreational activities (Walls, Okumus & Wang, 2011). The decision to take a holiday at a specific destination can be explained by means of the decision-making process (Mair & Thompson, 2009). According to March and Woodside (2012, p. 855) the decision-making process can be described as a process often triggered by needs. They further suggest it drives tourists to collect and analyse information before and during the process of making a certain decision. Tourists follow different approaches to the decision-making process, based on personality, attitude towards the particular purchase as well as the characteristics and situation of the purchase (Ozdipciner, Li & Uysal, 2012).

Martin and Woodside (2012) describe the decision-making process as the collection of information in a concise manner and the tourist will, according to the information collected, choose one destination from a choice of alternatives. Many variables are taken into account that plays a significant role in the decisions of tourists (Martin & Woodside, 2012). Decrop (2006, p. 7)

identified three main variables that influence the decision-making process, socio-psychological processes (perception, learning, attitude, personal attributes), personal variables (motivation, involvement, personality, self-concept, lifestyle, emotions) and environmental variables (social and cultural influences, interpersonal variables, situational variables).

A funnel is used to describe the process of decision making. Tourists will collect information regarding a purchase consciously and, based on all alternatives, will narrow down the choices to a single and final choice (Martin & Woodside, 2012). The funnel is divided into five stages through which tourists move before a final choice is reached, as depicted in Figure 1. These stages consist of *problem recognition, information search, evaluation of alternatives, selection and purchase* and, finally, *post-purchase reflection/behaviour* (Martin & Woodside, 2012). Each of these stages is made up of specific steps.

Firstly, *problem recognition* is influenced by external stimuli where the tourist becomes aware of a certain need that has to be fulfilled (Mair & Thompson, 2009). For example, the tourist realises that he/she has a need to escape his/her daily routine (due to work stress or work load) to relax at a beach destination. Once this need has been identified the tourist spontaneously moves over to stage 2, namely *information search* (Saayman, 2006, p. 49). During this stage, a wide range of information is being collected from external sources but it can also be influenced by personal experience or friends and relatives (Saayman, 2006, p. 49). Typically the tourist will look at a variety of beach destinations which he/she would like to visit, including Blue Flag beaches and ordinary beaches, and will start collecting information regarding each of these destinations based on accommodation, facilities, method of travel, activities, costs and attractions (Saayman, 2007, p. 16). Martin and

Woodside (2012) state that the process of searching for relevant information requires significant impacts from socio-environmental stimuli and symbolic stimuli. The third stage, *evaluation of alternatives*, is where the tourist evaluates each of the alternatives based on the information collected (Mair & Thompson, 2009). For example, the tourist has collected information regarding all alternative beaches and will evaluate each based on aspects of importance, such as cleanliness and cost effectiveness of accommodation and the beach planned to visit, purpose of visit for example surfing (big waves or safe swimming area for children) and catering (restaurants) and shops in the area. The quality and quantity

of the information collected has a significant influence on the final decision (Duman & Tarrisevdi, 2011). The fourth stage, *selection and purchase*, consists of the tourist making the final decision. Here the tourist might select a Blue Flag beach based on the beach's status regarding cleanliness and safety. This is greatly influenced by the price, variety, quality, image and reputation of the destination (Saayman, 200, p. 49). The last stage of the decision-making process, *post-purchase/reflection*, is where the tourist looks back on the experience and results of his/her decision. Either satisfaction or dissatisfaction can be felt regarding the holiday destination, depending on whether his needs were met (Mair & Thompson, 2009). This will influence future decisions in selecting a tourist destination.

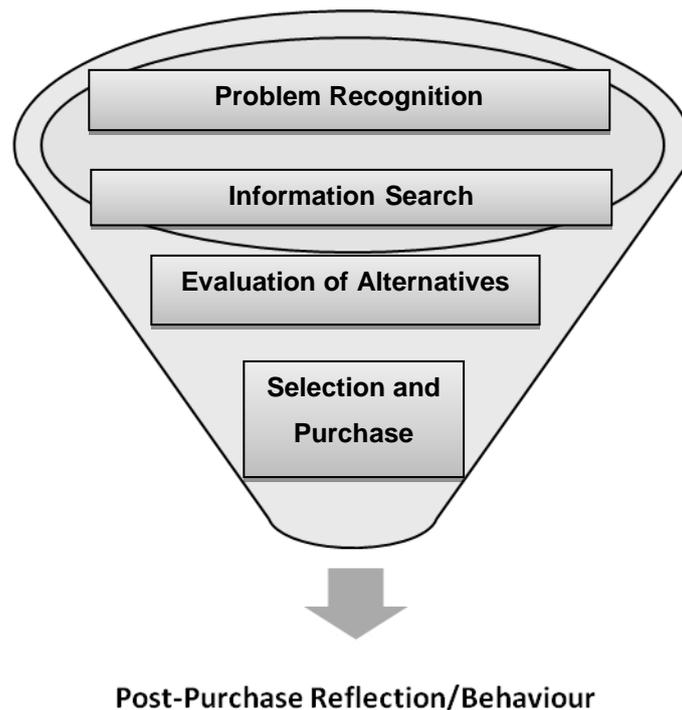


Figure 1: The decision-making process] (Source: March & Woodside, 2012, p. 855)

The effects on this process and the way in which tourists move through the stages is dependent on the nature of the purchase or holiday trip (Duman & Tarrisevdi, 2011). Differences in the way in which tourists make choices can be explained by two variables, the type of involvement and

the level of decision making (Duman & Tarrisevdi, 2011). The “level of involvement” refers to the concern or interest the tourist shows in the process which is triggered by the need to consider a particular purchase (Sirakaya & Woodside, 2005). Three aspects play a

role in the level of involvement showed by the tourist, individuality (personality of the tourist), product (the type of destination under consideration, for the purposes of this study it is Blue Flag beaches) and situational characteristics (type of holiday) (Hawkins, Best & Coney, 1995, p. 328). The level of decision making can be explained by habitual, limited and extensive problem solving behaviour. The higher the level of decision making and involvement, the more extensive the problem solving effort will be (Hawkins *et al.*, 1995, p. 328).

To develop effective methods for sustainable tourism and marketing activities, the decision-making process and the influencers on the process need to be understood by tourism product owners (Richins & Pearce, 2000). Several aspects of decision making have been receiving extensive attention in the literature and were identified as the major influencers (Ritchins & Pearce, 20008). These include the formal versus informal nature of the decision-making process, influence and behaviour in decision making, the participants in the process, variability and dynamic nature of tourists' decisions, the openness of the process and the major factors involved in understanding how people relate and interact (Richins & Pearce, 2000). Understanding the decision-making process, its background, history and influencers holds the most important tool for potential management of developments and coastal regions (Richins & Pearce, 2000).

Martin and Woodside (2012) identified ten concepts which can be regarded as variables that will influence the decision-making process of tourists. These variables include:

- Tourists' demographics and lifestyles
- Unexpected and unplanned events occur which have an impact on choices
- External and internal personal influences

- Features and perceived benefits of the destination (for example Blue Flag beaches)
- Information collected can affect choices regarding the destination
- Opinions and references from friends and relatives
- Concrete plans and pre-trip activities influence key activities
- Key activity drivers affect the planning of the trip as well as what has already been done
- Visitors interpret events and activities while at the destination
- Activities already taken part in, as well as to still be taken part in, affect the attitudes and intentions as a result from visiting the destination.

Furthermore, Kinnear, Bernhardt and Krentler (1995, p. 180) suggest that the underlying factors making up travel behaviour have a significant influence on the decisions made by tourists. These aspects include internal/psychological factors, external/social factors, situational factors, demographic details and marketing mix factors (product, price, place and promotion). Each of these factors must be taken into account when analysing the decision-making process of tourists as these factors aid in understanding why certain decisions are being made (Kinnear *et al.*, 1995, p. 180).

According to Saayman (2006, p. 15) and Suh and Gartner (2004) there are certain tangible and intangible aspects that must be considered in beach tourism. Tangible aspects include everything that can be touched, seen and felt by the tourist, including transport, entertainment, waves and shopping malls. Intangible aspects, however, refer to those aspects which cannot be touched, seen or felt. This includes the image (reputation) of the beach, and the atmosphere and popularity of the beach.

According to Sirakaya and Woodside (2005) tourists tend to focus on aspects such as time and situational factors

(availability of information and safety and security of the destination). Different segments of the tourism market will have different methods of approaching the decision-making process. For example, a leisure tourist planning a trip to a destination for the first time will have a different approach to the business traveller visiting the same destination. He will, for example, focus on high involvement and high perceived risk as this is a trip which the tourist has never taken before (Sirakaya & Woodside, 2005).

With regards to previous literature on tourist decision making, McKenna *et al.* (2011) conducted a study on whether or not beach awards have an influence on the decision making of beach visitors. This study took place in Wales, Turkey, Ireland and the USA. The results showed that beach awards do not have an influence on visitors when selecting a beach, with results based on beach visitors who are aware of the beach's status and those who are not. Further investigation of this study showed that beach cleanliness and proximity are the most important aspects influencing the decision making of visitors to these selected destinations (McKenna *et al.*, 2011).

Duck, Phillips, Williams and Wadham (2009) conducted an extensive survey where 37 UK beaches were included. Their results identified that beach visitors value a litter free environment and clean water highest, while beach awards have little to no impact on visitors' decisions. McKenna *et al.* (2011) state that beach cleanliness as criterion has been reported extensively in literature surrounding marine research

Nelson *et al.* (2000) conducted research on beach awards and management at two UK resorts (Whitmore Bay and Weston-Super-Mare on the coast of Wales) regarding the three beach awards. In their study they measured the awareness of beach visitors of beach awards, visitors' opinions regarding beach awards, influence of the awards on decision

making and the relevance of the award criteria to beach visitors. According to this research, beach visitors rated the quality of landscape/scenery at the beach as the most important variable when deciding on a beach destination, followed by the safety of the beach and water quality. Also included was the absence of litter and sewage, industrial odours and noise, oil and traffic fumes (Nelson *et al.*, 2000). In other words, aspects that contribute to conserving nature or which have a positive impact on nature. These aspects can also be classified as tangible aspects seeing as objects such as litter and oil can be touched and felt (Saayman, 2006, p. 15).

## **PROBLEM STATEMENT**

The process of ascertaining a Blue Flag award is both costly and time consuming. The beach manager is given a specific time frame in which the criteria must be met (Blue Flag South Africa, 2013). When a beach is awarded with Blue Flag status, it becomes subject to control visits by members of Wildlife and Environmental Society of South Africa (WESSA) or Denmark's international Blue Flag management team. These visits can be unannounced and when a beach does not meet the requirements the award is taken away partially. If, after a 10 day grace period, standards are still not met the award is taken away completely. The whole process should then be repeated to regain Blue Flag status if the standards are not met (Blue Flag South Africa, 2013). The Blue Flag programme is a constant and costly process where beach management should conduct water tests and ensure a clean beach throughout the season (Blue Flag South Africa, 2013). The financial implications associated with this process are thus great (Nahman & Rigby, 2008). A study conducted by Nahman and Rigby (2008) found the costs associated with the loss of Blue Flag status to be between R17-R25 million p.a. It thus becomes important to determine whether or not Blue Flag status of a beach has any influence on the visitors' decisions in selecting a beach. Thus the problem

that arises is whether Blue Flag status is worth having as seen from a tourism perspective?

## METHODOLOGY

In the process of determining the aspects that have an influence on the decision making of beach visitors when selecting a beach, a survey was conducted. The

survey took place from 28 March to 4 April 2013 at six beaches in KwaZulu-Natal. Three of the selected beaches have Blue Flag status and three were without Blue Flag status. These beaches were chosen based on close proximity to each other and popularity. The fact that the beaches are closely situated eliminates factors such as weather conditions and beach composition. The beaches that were chosen are:

**Table 1: Summation of beaches included in this research**

| BEACH               | STATUS    | NUMBER OF QUESTIONNAIRES |
|---------------------|-----------|--------------------------|
| Margate Main Beach  | No status | 95                       |
| Lucien Beach        | Blue Flag | 99                       |
| Uvongo Beach        | No status | 92                       |
| Marina Beach        | Blue Flag | 96                       |
| St. Michaels On Sea | No Status | 95                       |
| Ramsgate Beach      | Blue Flag | 95                       |

The type of research conducted for this study is quantitative by nature with probability sampling methods. The method of research used was systematic sampling, meaning every second individual or group of people on the beach was approached and asked to complete a questionnaire. The questionnaire was developed by TREES (Tourism Research in Economic, Environs and Society), and was based on work previously conducted by McKenna *et al.* (2011) and Van der Merwe, Slabbert and Saayman (2011). Section A comprises the demographic details of the respondents used to determine the profile of beach visitors, Section B comprises economic impact aspects; Section C comprises the decision-making aspects and travel motives while section D comprises awareness aspects. For the purposes of this study, only section C was used, namely the decision-making factors. Respondents were asked to rate the aspects of importance to them when making a decision about which beach to

visit according to a six-point Likert scale, where 1 is not at all important, 5 is extremely important and 6 is not applicable. The questionnaires were distributed amongst respondents by four fieldworkers. These fieldworkers were briefed regarding the study details beforehand, which they explained to respondents. A total of 572 usable questionnaires were collected from a sample of 600 beach visitors.

The data was captured using Microsoft™ Excel™ and analysed with SPSS (Statistical Package for Social Sciences, version 21) (SPSS, 2013). A Principal Axis factoring analyses with Oblimin and Kaiser Normalisation on all six beaches was conducted to determine the aspects of influence on visitor decision making to beaches in the Margate area. The total variance explained is 52%.

Furthermore, to determine whether any significant differences exist in the decision-making aspects of visitors to Blue

Flag beaches and non-Blue Flag beaches, a linear mixed-effects model analysis was carried out. This analysis enables on to fit linear mixed-effects models to data samples from normal distributions (SPSS, 2005). P-values and effect sizes were used to determine the statistical difference between the two groups of beach visitors.

## RESULTS

The results for this study are divided into three sections. Firstly, the profile of beach visitors was determined using the demographic details.

Secondly, a factor analysis on all six beaches determined the aspects that have an influence on the decision making of beach visitors.

Thirdly, the aspects of importance to visitors' decision making for Blue Flag beaches and non-Blue Flag beaches are compared.

### Profile of beach visitors

The profile of beach visitors showed that the greatest portion of beach visitors are female (62%) with an average age of 39 years. They are mostly married (69%), followed by single (13%) and originate from Gauteng (53%) or North-West and KwaZulu-Natal (12%). These individuals have a diploma or degree from a tertiary institute (41%) or a Grade 12 (matric) certificate (28%). They are the type of visitors who will stay overnight for an average of 8 nights in the Margate area. The group sizes they travel in range from four to six people and they visit the area between one and three times a year. The average number of people whom they are financially responsible for is four people.

### Aspects influencing decision making

A factor analysis was conducted to determine the aspects of importance when beach visitors decide at which beach they wish to spend their time. Table 2 is a summation of the factors analysis for all six beaches. The total variance explained for this factor analysis is 52%.

**Table 2: Factor analysis: aspects of importance when selecting a beach (N=579)**

|                                                                       | FACTORS                 |                   |             |           |            |
|-----------------------------------------------------------------------|-------------------------|-------------------|-------------|-----------|------------|
|                                                                       | Environmental education | Safety and access | Cleanliness | Landscape | Popularity |
| Mean value                                                            | 3.58                    | 4.25              | 4.37        | 3.97      | 3.05       |
| Cronbach's Alpha                                                      | 0.864                   | 0.802             | 0.825       | 0.710     | 0.683      |
| 1. Algae vegetation or natural debris must be left on the beach       | 0.337                   |                   |             |           |            |
| 2. Information on water quality and management                        | 0.735                   |                   |             |           |            |
| 3. Information on the importance of preserving the marine environment | 0.800                   |                   |             |           |            |
| 4. More wildlife on the beach                                         | 0.690                   |                   |             |           |            |
| 5. Beaches must be more                                               | 0.733                   |                   |             |           |            |

|                                                                                                  |       |       |       |  |  |
|--------------------------------------------------------------------------------------------------|-------|-------|-------|--|--|
| "natural" (more dunes and plants)                                                                |       |       |       |  |  |
| 6. Educational activities regarding marine life must be offered on the beach                     | 0.769 |       |       |  |  |
| 7. A map of the beach must be displayed                                                          | 0.693 |       |       |  |  |
| 8. Rules and regulations for beach users must be displayed                                       | 0.727 |       |       |  |  |
| 9. Information boards portraying marine life and habitats                                        | 0.798 |       |       |  |  |
| 10. Good access to the beach and bathing area                                                    |       | 0.653 |       |  |  |
| 11. It is important to have wheelchair access to the beach                                       |       | 0.641 |       |  |  |
| 12. The beach is close to my accommodation                                                       |       | 0.450 |       |  |  |
| 13. Safe parking                                                                                 |       | 0.696 |       |  |  |
| 14. An adequate number of lifeguards                                                             |       | 0.817 |       |  |  |
| 15. Constant beach patrol                                                                        |       | 0.746 |       |  |  |
| 16. Safety nets for sharks                                                                       |       | 0.673 |       |  |  |
| 17. Child friendly (safe, rock pools)                                                            |       | 0.662 |       |  |  |
| 18. The water must be visually clean                                                             |       |       | 0.600 |  |  |
| 19. No litter on the beach                                                                       |       |       | 0.775 |  |  |
| 20. No oil on the beach or in the water                                                          |       |       | 0.713 |  |  |
| 21. No excessive commercial/industrial noise                                                     |       |       | 0.475 |  |  |
| 22. Good general facilities (toilets, kiosk, restaurants)                                        |       |       | 0.648 |  |  |
| 23. Buildings in the vicinity must be properly maintained                                        |       |       | 0.721 |  |  |
| 24. Coral reefs and marine life in the area of the beach must be well monitored and looked after |       |       | 0.645 |  |  |
| 25. No camping or driving on the beach must be                                                   |       |       | 0.493 |  |  |

|                                                              |  |  |       |       |       |
|--------------------------------------------------------------|--|--|-------|-------|-------|
| allowed                                                      |  |  |       |       |       |
| 26. Waste disposal bins and/or recycle bins must be provided |  |  | 0.716 |       |       |
| 27. The sand must be clean                                   |  |  | 0.660 |       |       |
| 28. Good waves for swimming and surfing                      |  |  |       | 0.774 |       |
| 29. Pleasant view and scenery                                |  |  |       | 0.540 |       |
| 30. The weather                                              |  |  |       | 0.756 |       |
| 31. The sea must be calm                                     |  |  |       | 0.638 |       |
| 32. This beach is important to my holiday                    |  |  |       | 0.682 |       |
| 33. The beach must be new to me                              |  |  |       |       | 0.744 |
| 34. The beach must be popular                                |  |  |       |       | 0.846 |
| 35. Beach activities and entertainment must be offered       |  |  |       |       | 0.760 |
| 36. The beach must have a Blue Flag award                    |  |  |       |       | 0.600 |
| 37. Pets are allowed on the beach                            |  |  |       |       | 0.365 |

Five factors were identified from the factor analysis which makes up the aspects influencing the decision-making of tourists. These factors include *environmental education, safety and access, cleanliness, landscape* and *popularity*. Each factor is discussed below.

#### *Factor 1: Environmental education*

The first factor includes aspects that fall in the category of conservation and education. Aspects included are *algae vegetation or natural debris must be left on the beach, information on water quality and management, information on the importance of preserving the marine environment, more wildlife on the beach, more "natural" beaches, educational activities* as well as *a display of a beach map, rules and regulations and information boards*. This factor scored a mean value of 3.58 and a Cronbach's Alpha of 0.864, which is highly acceptable and making this the fourth most important

factor. Mckenna *et al.* (2011) found that environmental education played a significant role in the decision making of beach visitors who were aware of the fact that the particular beach has Blue Flag status.

#### *Factor 2: Safety and access*

The second factor rated as the second most important decision-making variable for beach visitors. *Safety and access* includes the aspects, *good beach access, access for wheelchairs, safe parking area, adequate number of lifeguards, constant beach patrol, close to my accommodation, presence of shark nets and the beach must be child friendly and safe*. This factor scored a mean value of 4.25 and a Cronbach's Alpha of 0.802, which is also a highly acceptable rating. This factor had the second highest mean value, making it the second most important factor. and an intangible aspect. In a study conducted by Nelson *et al.* (2000) it was identified that

beach safety played an important part in the decision making of beach visitors to beaches on the coast of Wales.

#### *Factor 3: Cleanliness*

This factor includes the aspects *clean water, no litter on the beach, no oil, no commercial/industrial noise, good general facilities, coral reefs must be kept up to standards, no camping or driving on the beach, waste disposal bins on the beach, buildings in the vicinity must be maintained and cleanliness of the sand*. This factor scored a mean value of 4.37 (highest mean value), which rates this as the most important decision-making variable for beach visitors, and a Cronbach's Alpha of 0.825, which is also a highly acceptable rating. This factor had the highest mean value, making it the most important factor. This factor is classified as a tangible aspect and is supported by a number of previous research studies (McKenna *et al.*, 2011; Nelson *et al.*, 2000; Morgan & Williams, 1995). McKenna *et al.* (2000) found that the cleanliness of water and the beach was the most important variable for decision making amongst beach visitors to Ireland, Wales, Turkey and the USA.

#### *Factor 4: Landscape*

This factor comprises aspects such as *good waves at the beach, pleasant view and scenery, the weather, a calm sea and the beach is important to my holiday*. This factor scored a mean value of 3.97 and a Cronbach's Alpha of 0.710, which is an acceptable rating and had the third highest mean value, making it the third most important factor. A study supporting this factor is that of Nelson *et al.* (2000) where beach visitors rated *landscape and scenery* as the most important influencing factor on their decision of which beach destination to visit.

#### *Factor 5: Popularity*

Aspects included in this factor are *activities and entertainment offered at the beach, the popularity of the beach, whether or not the beach has Blue Flag status, the beach is new to me and pets are allowed on the beach*. The mean value for this factor is 3.05 (lowest mean value) and the Cronbach's Alpha is 0.683, making this an acceptable rating. The fact that the Blue Flag award has little to no influence on the decision making of beach visitors can be supported by research conducted by McKenna *et al.* (2011) and Nelson *et al.* (2000). In both of these studies it was found that beach visitors have little knowledge regarding beach awards and that it does not play a significant role in the decision of visitors regarding the choice of beach destination.

#### **Blue Flag visitors versus non-Blue Flag visitors when selecting a beach**

A linear mixed-effect model analysis was carried out to determine whether there are any significant differences in the decision making of Blue Flag beach visitors and non-Blue Flag beach visitors. Mixed models use both fixed and random effects which correspond to a hierarchy of levels with the repeated, correlated measurement occurring among all of the lower level units for each particular upper level unit (SPSS, 2005). To determine the differences between the two categories, the *p*-values and effect sizes was determined. The *p*-value is a criterion used to show that the results are significant. A small *p*-value (smaller than 0.05) can be considered as sufficient evidence that the results are statistically significant (Ellis & Steyn, 2003). Effect size measures the practical significance between two groups/populations. In other words, it measures the difference between the two means, divided by the estimate of standard deviation (residual estimate) (Ellis & Steyn, 2003).

**Table 3: Results of the mixed-effect model analysis for Blue Flag and non-Blue Flag beach visitors (N=579)**

| FACTOR                     | MEAN VALUE:<br>BLUE FLAG | MEAN VALUE:<br>NON-BLUE<br>FLAG | RESIDUAL<br>ESTIMATE | P-VALUE (SIG) | EFFECT SIZE |
|----------------------------|--------------------------|---------------------------------|----------------------|---------------|-------------|
| 1. Environmental education | 3.60                     | 3.55                            | 0.687                | 0.505         | 0.07        |
| 2. Safety and access       | 4.19                     | 4.31                            | 0.784                | 0.102         | 0.15        |
| 3. Cleanliness             | 4.37                     | 4.37                            | 0.634                | 0.961         | 0.00        |
| 4. Landscape               | 3.95                     | 3.99                            | 0.583                | 0.534         | 0.07        |
| 5. Popularity              | 2.93                     | 3.17                            | 0.830                | 0.002         | 0.29        |

There was a statistically significant difference found for only one factor, *popularity* ( $p = 0.002$ ). Furthermore, the mean value for visitors to non-Blue Flag beaches (3.99) was higher than that of Blue Flag beach visitors (3.95) for this factor, which is interesting seeing as the concept regarding the Blue Flag status of the beach is included in this factor. The other factors do not show any statistically significant differences. The decision-making aspects of both groups of beach visitors are similar in the sense that *cleanliness* remains the most important aspect considered by beach visitors when choosing a beach.

### FINDINGS AND IMPLICATIONS

The results of this chapter have the following findings and implications.

Firstly, the fact that a beach has a Blue Flag status does not influence the decision-making of beach visitors to select a beach. Little difference was found between the selections of a beach of visitors to a Blue Flag beach versus that of visitors to beaches without Blue Flag status. The following aspects were of importance when selecting a beach by both groups when deciding on a beach: there is some form of environmental education that takes place on the beach, safety and access, cleanliness of the

beach and facilities and landscape of the beach. What is interesting about these results is that these aspects which are of importance to visitors (both groups) when selecting a beach form mostly part of the criteria set by the Blue Flag programme, namely water quality, environmental management, safety and security and environmental education and information. It is thus clear that beach visitors are looking for these aspects in a beach when they make their decisions. Even though Blue Flag status does not have any impact on the visitors' decision-making, the underlying criteria of the programme is of importance to them. It also seems as though the tangible aspects (sand, water and facilities) weigh slightly more than the intangible aspects (atmosphere and climate) in visitors decision-making when selecting a beach.

This implies that managers of Blue Flag beaches need to advertise the programme with specific reference to the criteria that Blue Flag beaches are based on. This will cause visitors to be more aware of the positive aspects of Blue Flag beaches and what they represent. Marketing of the programme by towns and cities that have beaches with Blue Flag status and the programme itself will implicate higher awareness amongst the public; thereby making beaches with this particular status

stand out from other beaches without Blue Flag status.

Secondly, the Blue Flag programme contributes to the conservation of beaches and the marine environment. This is supported by McKenna *et al.* (2011) who state that the Blue Flag programme plays a great role in the conservation of beaches and the marine environment as it is a symbol of cleanliness, safety and environmental friendly coastal areas. These aspects mentioned by McKenna *et al.* (2011) and which also form part of the criteria of Blue Flag status do attract visitors. It is clear that the benefits delivered by the programme for both the public and the environment are extensive. The Blue Flag programme not only contributes to keeping the environment safe, clean and healthy, but it also contributes to the expectations of clean, safe and environmental friendly beaches of visitors when they visit the beach.

To enhance the image of the Blue Flag programme and to ensure that the public is aware of its benefits, it is perhaps necessary that municipalities having Blue Flag beaches advertise the programme on a wider basis rather than only at the particular beach. By increasing marketing outputs of the programme, the benefits of Blue Flag beach status for the local community, beach visitors and the environment will be brought to light. This will increase awareness of Blue Flag and thereby more visitors will choose Blue Flag beaches over ordinary beaches. Another benefit is that an increase in visitor numbers will lead to a higher income for local businesses as well as for the municipality. In the marketing efforts of beaches, such as television advertisements and brochures, the Blue Flag programme should be mentioned and the benefits highlighted. Visual media such as photos and video clips should be included, which will enhance the idea of a Blue Flag beach and its overall quality.

Thirdly, the research found that being part of international and national accreditation

systems such as TGCSA (Tourism Grading Council South Africa) and TIES (the International Ecotourism Society) benefits towns and product owners of tourism related businesses as this leads to improved standards of product delivery. The Blue Flag programme, which is an international accreditation system for beaches, has all of these benefits as well as the fact that it places emphasis on environmental friendly tourism. Tourists today are becoming more aware of the conservation aspects, green aspects and being environmentally friendly.

The implication is that, in the future, conservation and environment-friendly aspects will become more important to tourists and therefore will be expected by them when visiting a destination. Tourism destinations should thus focus their energy and capital available to meet the criteria of the programme, thereby raising beach competitiveness as the standards of the beach will be raised as well as conservation of the environment. As a result, the competitiveness of beaches across South Africa will also be raised, thereby expanding the market for beach tourists to international markets and generating more foreign exchange.

## CONCLUSION

The aim of this study was to determine whether the Blue Flag programme has an impact on the decision making of beach visitors when selecting a beach. The answer to this is no. The Blue Flag programme has no direct impact on the decision-making aspects of beach visitors. However, the four criteria with which the programme requires the beach to comply are proven to be the most important aspects for visitors when selecting a beach. Even though beach visitors do not take the Blue Flag status into account when choosing a beach, they will consider the cleanliness, safety, environmental education and activities offered at the beach when deciding.

Even though the factor *popularity* was rated as the least important decision-making aspect for visitors, it still plays a big role as it is the only factor where a statistically significant difference was determined. In order to enhance a beach's popularity extensive marketing is necessary. The mean value (Table 3) of this factor for non-Blue Flag beaches was higher (3.17) than that of Blue Flag beaches (2.93), which proves that people will still choose the more popular beach rather than the Blue Flag beach. Therefore the marketing of Blue Flag beaches needs to be improved as this is the drive force behind the popularity of a beach and therefore higher tourist numbers.

Furthermore, the Blue Flag status of a beach plays an indirect role in the tourism industry seeing as visitors will choose clean and safe beaches. Through the conservation role played by the programme, the visitor numbers of beaches with Blue Flag status is raised. This positively answers the question as to whether or not Blue Flag status is worth having as seen from a tourism perspective. Seeing as the costs associated with establishing a Blue Flag beach are high, it is important that these expenditures do not go to waste. Marketing and promotion of the programme will aid in raising awareness of the programme and its benefits to both the community and beach visitors.

The results from this study are in agreement with previous studies that have been conducted across the world (Nelson *et al.*, 2000; McKenna *et al.*, 2005; Fairweather *et al.*, 2005). Even though studies have been conducted on the Blue Flag beaches of South Africa (Nahman & Rigby, 2008), there are still opportunities for further research in this field. Further research can be conducted on correlations between previous studies and future studies to determine whether awareness was raised. Researchers can also conduct studies on correlations between the demographic details of beach visitors and their awareness of the Blue Flag

programme to determine which generation is more attentive to the protection and conservation of beaches and which generation needs to be targeted to raise awareness about the Blue Flag programme.

This research contributes to the literature regarding beach tourism. This research revealed the aspects considered by visitors when selecting a beach (cleanliness, landscape, popularity, environmental education and safety and access). It also contributes to South Africa's beach tourism industry seeing as more knowledge is gained as to the decision-making aspects of the market for beach tourism. Furthermore, more knowledge and understanding is gained regarding the Blue Flag programme which can be used as a cornerstone for further research on the topic as well as other rating systems in the tourism industry.

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