Sport Motivation as Driver for Segmenting of Sport Tourists in Gheshm Island

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ABSTRACT

Background. Motivations of sport tourists are manifold. This also applies to the field of water sport tourism and the market for sport tourists is very diverse, which has not yet intensely been analyzed by researchers. In order to analyze motivations and to reach target groups such as water sport tourists adequately, market segmentation is necessary.

Objectives. The purpose of this paper is to investigate sport motivations of tourists during their holidays as well as the tourists’ participation in water sport activities, using the example of the German North Sea Island Sylt.

Methods. Thereby, consumer profiles will be established. A quantitative research paradigm was chosen. A survey was conducted using a standardized self-administered questionnaire. The sample comprised n =200 participants. Two indices, one for sport motivation and one for travel motivation were constructed. Factor, as well as cluster, analysis was applied to segment the sample. Furthermore, discriminate analysis was used to identify differences between the two clusters. Finally, cross tabulations underlined the differences between the clusters.

Results. The cluster analysis based on motivational factors revealed two groups, the casuals and the committed. Significant differences were detected between the groups with regard to sport and holiday consumption patterns and sport expenditures. However, there were no significant socio-demographic differences between the clusters.

Conclusion. The results of this research indicate the diverse nature of water sport tourists and their underlying motivations. It is shown that holiday sport motivation depends on the actual sports practiced by the travelers, implying that prior sport motivation and involvement influence travelers’ sport motivation. Overall, this research highlights the importance of segmenting sport tourists.

KEY WORDS: Expenditures, Consumer Behavior, Tourism, Water Sports.

INTRODUCTION

Sports tourism can be described as a heterogeneous phenomenon and therefore, travel behaviour is determined by a wide range of motivations, including different sports activities, e.g. water sports (1). Especially destinations at a coast offer tourist operators a good opportunity to reach the tourists’ needs by offering a range of water-based activities (2). Surfing tourism, for example, has become a global industry in the twenty-first century. The field of water sport tourism is not yet a deeply researched area. As the market for sport tourists is very diverse, market segmentation is necessary in order to reach certain target groups adequately, such as water sport tourists. Thereby, segmentation makes it easier to understand and target specific groups that have similar characteristics and behaviours. Segmentation is applied through
different approaches, which can basically be divided into two categories: objective or physical and subjective or behavioral attributes. The former group includes characteristics such as demographics (age and gender), socio-economics (income and education), and geographies (residence and area) (3). The latter includes psychographics (attitudes and values) and behavioral attributes (4). Moreover, motivational factors should be considered when segmenting tourism markets (5).

Traditionally, segmentation has been conducted on the basis of demographics and socio-economic variables. However, this approach has repeatedly been criticised and recently, segmentation based on subjective attributes has been regarded as more effective (3).

The purpose of this paper is to investigate sport motivations of tourists during their holidays as well as the tourist’s participation in water sport activities, using the example of the Iran Gheshm Island. Although sport tourism has attracted high attention among scholars and practitioners with regard to improving event and destination images and to differentiate the product and thereby attracting more tourists (6), the sport economic perspective on water sport tourism and especially visitor’s expenditures for water sports has only produced a very small body of literature, apart from economic impact studies (7).

O’Brien dealt with event leverages of surfing events in a more regional context as well as the benefit which can be generated for the host community using Challis’s general model for host community benefit (8). Apart from investigating different aspects of surfing, e.g. culture, motivation, and tourism, few studies have been conducted dealing with water sports although water sports provide an opportunity for physical exercise which goes along well with the trend of living a healthy lifestyle (2).

In an attempt to close this gap, Jennings provides a general overview of water-based tourism by dealing with sailing, surfing, fishing, diving, rafting, and kayaking. Apart from the mentioned literature, several studies dealt with segmentation in a sport or tourism context, expenditures and motives of sport tourists (9-11).

To add to the small body of literature for water sports, Dolnicar and Fluker conducted a study on behavioral market segments among surf tourists and found six segments. Differences in the segments, e.g. length of the stay, were determined by age of the surfers and experience. Worldwide surfers appeared to have the highest income level. No significant differences were detected for travel companions (one to four) and daily budget. For all groups there was a male dominance (between 90 per cent and 98 per cent). Surfing was among the first of the so-called extreme sports which focus on a combination of fun and risks. Participants of these sports formed a sub-cultural lifestyle, which was characterized by a high degree of individualism (12) and applied more to younger tourists. Regarding sailing, it was found that the majority of men and women were aged between 40 and 59, travelling without children, and had completed tertiary education (13).

A further water-based activity, which was highly attractive for international tourism was scuba diving. From a global perspective, market characteristics were highly heterogeneous and the diving market had changed from a formerly male, experienced, rich or intrepid dominated market to a more dynamic environment. This was due to the growing number of people travelling for the purpose of diving and snorkeling (14).

Different empirical studies proved this heterogeneous profile. The average diver at the Mediterranean coast for example was described as middle-aged (31 to 45), male, of medium or high socio-economic level, and employed in middle- to high-level professional activities (15).

On the other hand, it was found that in Australia, visitor profiles to the Great Barrier Reef include various age groups (20-29; 30-39; 40-49). Moreover, half of the diving tourists were female. Regarding expenditures, the daily budget that surfers had at their disposal ranged from $A21 to $A100 (11) while the average total spending of Germans being on holidays amounts to e861, with an average of 12.3 days yearly of holidays. Motives of sport tourists were manifold and sport as well as travel motivation is likely to originate from the interaction of tourism and sport sources (10).
Such as destination image, prior sport motivation, gender (and cultural background. This was proved in a study on the motives of international participants taking part in an Australian hallmark running event (10).

It appeared that participation is mainly driven by prior running involvement, the desire to take part in organized running events, social interaction, favourable beliefs and feelings toward the host destination, perceived benefits of escape, relaxation, prestige, as well as cultural experiences (10).

MATERIALS AND METHODS

Data Collection. For this study, a quantitative research paradigm was chosen. A survey was undertaken on The Kish Island in Iran, using a standardised self-administered questionnaire, which was developed based on previous work in the field of travel and sport motives and sport expenditures (10). It contained 16 open as well as closed-ended questions and consisted of different sections investigating travel motives (using a five-point Likert scale), frequency of sport vacations, importance of sport during vacations, expenditures for sport activities, and further activities during the vacations. Moreover, socio-economic data of the respondents was gathered (age, gender, education, income).

The study population is comprised of sport tourists on Kish Island in Iran which was chosen because it is a well-established coastal destination and quite popular among water sport tourists in Iran. The survey was conducted from 2014 by two interviewers. These different sites were chosen to question a diverse range of tourists at the island and due to accessibility. Thus, a non-random convenience sample was used. The total sample comprised n = 200 participants.

Data Analysis. The data analysis was conducted by using SPSS 20. Two indices were constructed, one for sport motivation (based on ten items) and one for travel motivation (based on 15 items), each ranging from 0 (lowest motivation) to 100 (highest motivation). Both indices showed a good reliability, with Cronbach’s alpha being satisfactory (0.82 for the sport motivation index and 0.80 for the travel motivation index) and thereby being above the threshold of 0.6 or 0.7 which is frequently reported (16).

First, to enable further investigation of sport motivation, these items were factor analyzed using principal components with varimax rotation to determine the underlying components. Following the scree test and the Kaiser criterion, a two factor solution was suggested. Subsequently, the two strongest variables loading on the first factor and the three strongest variables loading on the second factor were used in the cluster analysis to segment the sport consumers. Two outliers were detected and excluded from the data analysis. The cluster analysis involved two steps. First, a hierarchical cluster analysis using Ward’s method was performed with half of the sample to determine the number of clusters. The dendograms suggested a two cluster solution being appropriate. Hereafter, the quick cluster technique based on k-means was conducted using the two clusters on the entire sample.

Moreover, the differences between the clusters were identified using discriminant analysis. The clusters served as dependent variable. Finally, the profiles of the sport tourists were further illuminated using cross tabulations with the chi square statistics indicating significant differences between the clusters.

RESULTS

The sample consists of 55 per cent male and 45 per cent female participants. The average age is 30 years and 25 per cent of the sample has a higher education (at least university entrance diploma). On average, participants go on two holiday trips per year, which include physical activities and the average length of a trip in Iran reaches 8 days. Sport tourists have three fellow travellers and 50 per cent of all questioned visitors stay in a hotel.

Different sport motives were measured, showing that sport is seen as valuable (3.70), important (3.50), needed (4.00), involving (3.20), and fascinating (3.50). Furthermore, there is evidence that people believe that sport on holidays is vitally important to them (3.40), they regret when they cannot take part in sport on holidays (3.40), and they are really interested in sport during holidays (3.50). These results are displayed in Table 1.

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Moreover, the main travel motive of a holiday trip is to relax (5.15) and to leave the normal life behind (5.18). The overall sport motivation is moderate (65.00) whereas travel motivation is slightly higher (70.00). Of the sample 40.1 per cent takes part in water sports (including swimming). Apart from swimming, surfing reaches the highest participation rate among water sports.

Table 1. Summary statistics

| Variable                                      | Mean  | SD  |
|-----------------------------------------------|-------|-----|
| Age                                           | 30    | 15.832 |
| Female (in %)                                 | 0.450 | 0.420 |
| Higher education (in %)                       | 0.250 | 0.432 |
| Net income: €0-e1,000                         | 0.323 | 0.543 |
| Net income: €1,001-e2,000                    | 0.322 | 0.234 |
| Net income: > €2,001                          | 0.354 | 0.556 |
| Mundane – fascinating                         | 3.50  | 0.762 |
| Worthless – valuable                          | 3.70  | 0.872 |
| Not needed – needed                           | 4.00  | 0.453 |
| Not involving – involving                     | 3.20  | 0.654 |
| Not important – important                     | 3.50  | 0.765 |
| I regret when I am unable to participate in sports while being on vacations | 0.043 | 0.980 |
| I feel that participating in sport while being on vacations events is vitally important to me | 0.024 | 0.893 |
| I am really interested in participating in sports while being on vacations | 0.035 | 0.912 |
| I feel that spending time participating doing sports while being on vacations is more worthwhile than spending time participating in other leisure activities | 0.347 | 0.972 |
| Even when participating in sports while being on vacations is events is inconvenient, I still try to participate | 0.037 | 0.987 |
| Sport motivation                              | 0.650 | 15.728 |
| Total motivation holiday trip                  | 0.700 | 11.453 |
| Sport expenditures                            | 0.524 | 12.087 |
| Kite-surfing (in %)                            | 0.187 | 87.007 |
| Sailing (in %)                                 | 0.223 |     |
| Surfing (in %)                                 | 0.321 |     |
| Swimming (in %)                                | 0.265 |     |
| Diving (in %)                                  | 0.432 |     |
| Non-water sports (in %)                        | 0.401 | 0.631 |
| No. of holiday trips per year (3 + )           | 0.543 |     |
| n                                             | 200   |     |

The results of the factor analysis suggest a two-factor solution: running involvement and strength of running motivation (see Table 2) form the two factors. The items loading on involvement were fascinating, valuable, needed, involving, and important with the latter three variables loading strongest on involvement. The remaining five variables loaded all on strength of running motivation. The eigenvalue of the first factor amounted to 4.212 and for the second factor to 1.421, explaining overall a cumulated variance of 61.23 per cent. The rather average quality of explained variance could be permitted, if other quality criteria are satisfied. As the factor loadings of all variables are over 0.4 qualities can be ensured (Pohlman, 2004).

Based on the most predominating sport motivation variables, the sample was clustered into two groups (see Table 3). The first cluster encompasses those people who believe that sport is one what needed and important, are medium involved with sports, feel that sport during holidays is rather important, and are somewhat interested in sports while being on vacations.
Table 2. Results of the exploratory factor analysis

| Variable | Strength of sport motivation | Involvement |
|----------|------------------------------|-------------|
| Mundane – fascinating | 0.523 | - |
| Worthless – valuable | 0.506 | - |
| Not needed – needed | 0.654 | - |
| Not involving – involving | 0.673 | - |
| Not important – important | 0.711 | - |
| I regret when I am unable to participate in sports while being on vacations | 0.543 | - |
| I feel that participating in sport while being on vacations events is vitally important to me | 0.654 | - |
| I am really interested in participating in sports while being on vacations | 0.687 | - |
| I feel that spending time participating doing sports while being on vacations is more worthwhile than spending time participating in other leisure activities | 0.621 | - |
| Even when participating in sports while being on vacations is events is inconvenient, I still try to participate | 0.498 | - |
| Eigen value | 5.865 | 1.032 |
| Variance explained in % | 61.23 | 14.087 |
| KMO | 0.897 | - |
| Bartlett’s Test for Sphericity | $x^2=1,012.108^*$ | - |

Notes: Principal components analysis with varimax rotation; *p < 0.001

Table 3. Sport motivation variable means among clusters

| Variable | Cluster1: Casuals | Cluster2: Committed | F        | p        |
|----------|------------------|---------------------|----------|----------|
| Not needed – Needed | 3.023 | 4.622 | 85.967 | 0.000 |
| Not involving – Involving | 3.065 | 4.376 | 120.654 | 0.000 |
| Not important – Important | 3.087 | 4.598 | 164.432 | 0.000 |
| I feel that participating in sport while being on vacations events is vitally important to me | 3.080 | 4.432 | 156.098 | 0.000 |
| I am really interested in participating in sports while being on vacations | 2.987 | 4.387 | 212.824 | 0.000 |
| n | 98 | 102 | - | - |

This cluster is called Casuals. In contrast, the second cluster is named Committed as the mean values for all variables integrated into the cluster analysis exceed 4.3. Significant differences between the clusters were detected through an ANOVA. The largest F-value was reached for being interested in sports while being on vacations ($F = 212.824$, $p = 0.000$), which shows that the clusters differ most on this variable. All items were significant between the clusters.

The results of the discriminate analysis confirm the two cluster solution. The eigenvalue of function 1 amounted to 2.332 and this function has a canonic correlation of 0.733 (Wilks’ Lambda=0.317, $p=0.000$). Therefore, the differences between the clusters are confirmed. The classification matrix revealed that 96 per cent of all cases were categorized correctly.

The clusters were tested for differences with regard to the socio-demographic and sport profile. The results (see Table 4) suggest that the socio-demographic profile does not differ significantly between the two clusters. However, the sport consumption differs significantly between the Casuals and the Committed. The Committed tend to go more sailing, surfing, and kite-surfing while the Casuals are more involved with swimming, diving and non-water sports. Moreover, the Committed go significantly more often annually on holidays and have higher sport expenditures.
Table 4. Demographic and sport profile of the two clusters of sport tourists (in percentage)

| Variable                  | Cluster 1: Casuals | Cluster 2: Committed | x²  | p-value |
|---------------------------|--------------------|-----------------------|-----|---------|
| Gender                    |                    |                       |     |         |
| Male                      | 42.7               | 48.9                  |     | 2.098   | 0.087   |
| Female                    | 56.9               | 52.8                  |     |         |         |
| Age                       |                    |                       |     |         |
| Up to 15                  | 30.0               | 20.9                  |     | 3.576   | 0.476   |
| 15-25                     | 15.4               | 16.6                  |     |         |         |
| 26-34                     | 18.9               | 22.3                  |     |         |         |
| 35-44                     | 22.7               | 17.8                  |     |         |         |
| 45+                       | 13                 | 22.4                  |     |         |         |
| Higher education          |                    |                       |     |         |
| Basic compulsory schools  | 12.9               | 16.8                  |     | 5.984   | 0.158   |
| Secondary school          | 51.9               | 30.8                  |     |         |         |
| Secondary school with 6th form | 12.8         | 16.8                  |     |         |         |
| A-levels (university entrance diploma) | 11.8     | 19.5                  |     |         |         |
| University degree         | 20.0               | 16.1                  |     |         |         |
| Net income (£)            |                    |                       |     |         |
| 0-1,000                   | 40.6               |                       |     | 4.876   | 0.321   |
| 1,001-2,000               | 21.6               |                       |     |         |         |
| >2,001                    | 20.7               |                       |     |         |         |
| Missing                   | 17.1               |                       |     |         |         |
| Sports                    |                    |                       |     | 20.123  | 0.004   |
| Kite-surfing              | 16.1               | 6.7                   |     |         |         |
| Sailing                   | 0                  | 7.6                   |     |         |         |
| Surfing                   | 10.7               | 17.9                  |     |         |         |
| Swimming                  | 33.8               | 21.2                  |     |         |         |
| Diving                    | 2.9                | 0.1                   |     |         |         |
| Non-water sports          | 36.5               | 46.8                  |     |         |         |
| No. of holidays per year  |                    |                       |     | 7.981   | 0.003   |
| Up to 2                   | 88                 | 59.6                  |     |         |         |
| 3 +                       | 22                 | 40.4                  |     |         |         |
| Sport expenditures (£)    |                    |                       |     | 12.342  | 0.006   |
| Up to 40                  | 88.0               | 77.3                  |     |         |         |
| 41 +                      | 12.0               | 22.7                  |     |         |         |

Note: *p<0.01

DISCUSSION

The descriptive results confirm prior research insofar as the sport tourist market is very heterogeneous (e.g. Mundet and Ribera, 2001; Shafer et al., 1998) and encompasses various age groups, depending on the actual sports practiced. The average age of this sample is 30 years, but the age range goes from 10 to 70 years. This might imply that sports such as sailing might be predominantly practiced by committed sportspersons who are middle aged and older people whereas surfing is preferred by a younger generation which is also committed to sports while being on holidays (cluster 2). This is confirmed in prior studies. It cannot be confirmed that sport tourists are predominantly male, as in the study of Dolnicar and Fluker, since 51 per cent are female within this study (11). Nevertheless, this might be ascribed to the fact that Dolnicar and Fluker only dealt with surfing, not with water sports in general. Insofar, the second cluster fits to the outcomes of the surfing study, as members of this cluster are male and take part in surfing amongst other sports.

The results of the factor analysis support the findings of prior research with regard to a two factor structure labeled involvement and strength of motivation, although tested on a sample of runners instead of water sport tourist and employing confirmatory factor analysis (10). Yet, the prevalence of involvement and strength of motivation as important factors of sport tourists is obvious and confirms Funk’s work (2007).
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Apparently, the involvement and the strength of motivation are higher for one of the clusters, cluster 2, which was therefore named Committed. Yet, even for the Casuals, sport plays some role while being on holidays, indicating the importance of that type of leisure activities.

Moreover, this result fits well to what was found by Jennings, namely that people with a higher socio-economic status can afford to take part in water sports, particularly sailing and surfing (cluster 2). Contrary to the results of Funk et al (2007), gender did not have a significant influence on sport motivation. Thereby, it could be inferred that motives of water sport tourists might differ from other sport tourists. The significant differences among the clusters for sport expenditure can be attributed to the different involvement and strength of motivation. A person that is higher involved (and has more money at his/her disposal) is more likely to spend more (cluster 2).

A limitation of this study is the fact that the survey took only place on Suitable island in Iran. Thus, to make generalisations, investigations in further coastal regions would be needed. Nevertheless, what can be stated is that taking part in surfing, hiking, and other non-water sport such as Bowling, cycling, car actually do influence the sport motivation of tourists which might be transferable to other islands or coastlines where these sports are offered. This could be explained by the fact that these sports are particularly practiced during vacations and are therefore main motives of tourists. Another limitation is the non-random sample. Yet, the summary statistics suggest that the sample is very diverse. The values for total expenditure and average length of travel correspond with previous findings (Wiegand et al., 2011), which applies as well to the socio-demographics (Funk et al., 2007) indicating that a representative sample was drawn.

CONCLUSION

The aim of this study was to identify market segments of tourists with regard to their holiday sport motivation and participation in different types of sports in coastal regions. Through cluster analysis, two consumer segments were identified. This shows that tourists in coastal regions differ in their motives and the sport they perform during their vacation.

Several implications arise based on the results. On the one hand, with regard to practice it is shown that a segmentation of travelers is useful in order to reach the different target groups and offer unique products and services, depending on, e.g. age and sport preferences. An example pertaining to the second cluster could be to offer medium-aged and older travelers the opportunity to stay in good accommodation, close the waterfront where surfing programs are offered, swimming is possible, and sailing opportunities exist. In contrast, swimming seems to be of particular importance for the Casuals and in targeting this group, this activity should be highlighted as well as non-water sport activities. This could be done using adequate visuals that portray these leisure opportunities and the particular ambiance and atmosphere associated with them. Moreover, the results implicate for theory that holiday sport motivation depends on the actual sports practiced by the travelers. This also means that prior sport motivation and involvement certainly do influence the sport motivation of travelers. Thus, sport offers of coastal destinations should be adapted to what the different tourists are seeking. Future research should thus look into the diverse water sport activities and collect data from a wider sport tourist population and different coastal regions to permit eneralisability.

APPLICABLE REMARKS

- Tourists in coastal regions differ in their motives and the sport they perform during their vacation in Gheshm Island.
- The results of the factor analysis suggest a two-factor solution: running involvement and strength of running motivation in Gheshm Island.
- The results implicate for theory that holiday sport motivation depends on the actual sports practiced by the travelers in Gheshm Island.
- Prior sport motivation and involvement certainly do influence the sport motivation of travelers. Thus, sport offers of coastal destinations should be adapted to what the different tourists are seeking.

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