

# *Behavioural Market Segments Among Surf Tourists: Investigating Past Destination Choice*

*Sara Dolnicar*

School of Management, Marketing and Employment Relations, University of Wollongong, Australia

*Martin Fluker*

School of Hospitality, Tourism and Marketing, Victoria University, Australia

---

## Abstract

Sport tourism, an example of which includes surf tourism, 'is a prevalent and growing phenomena'. Nevertheless, very few investigations of the surf tourism market exist. This paper extends the work of other researchers by investigating surf tourists from a behavioural perspective, with the main aim of the study being to gain an insight into the travel patterns of the surf tourism market. This is achieved in an empirical way by using unsupervised neural networks to partition a group of surfers into homogeneous segments based on their past surf destination choice. This binary information was gathered by means of an online survey that asked respondents questions indicating whether or not they have ever surfed in particular places. In addition, descriptive information is included in the dataset and is divided into 'surf-related questions', 'personal characteristics' and 'travel behaviour'. It was found that based on past destination choice, six market segments could be described, each with significantly different ages, surfing ability, length of stay, preferred wave type and regularity of undertaking surf trips. The results of these findings have implications for both surf destinations and the tourism industry that facilitates the experience.

## Introduction

The sport of surfing and the act of travelling are two behaviours well suited to each other. 'Searching for the perfect wave' is a creed shared by many in the surfing community and describes the willingness of surfers to undertake travel experiences so that they may ride these waves. Nat Young (1983: 189) referred to surfers as being 'a unique tribe of nomads who have wandered this planet in search of rideable waves'. These early surfing explorers have since opened up surfing destinations around the globe such as Bali, the Mentawai Islands, Fiji, the Maldives, Tahiti and South Africa, to name just a few. It is suggested that the surfers of today still travel to locations such as these, but for varying lengths of time, having different economic impacts, and are in search of different experiences. As surf tourism has evolved, so too have the types and ever-increasing numbers of surf tourists.

---

Can contemporary surf tourists be better understood based on past surf destination choice? If so, then surf destinations may be able to attract this market more effectively, leading to both increased profit for the local tourism industry and an improved experience for the tourist due to a better match of destination attributes and surfer expectations. The aim of this paper is to determine whether homogeneous subsets of surf tourists can be identified – and defined – based on information pertaining to particular destinations that individual surfers have surfed at in the past. If this is possible, and if such homogeneous subsets are distinctly different from each other with regard to descriptive characteristics, surf destinations can choose to focus on particular segments most suited to their offerings.

Underpinning this research is the definition of surf tourism as suggested by Fluker (2003: 7):

Surf tourism involves people travelling to either domestic locations for a period of time not exceeding 6 months, or international locations for a period of time not exceeding 12 months, who stay at least one night, and where the active participation in the sport of surfing, where the surfer relies on the power of the wave for forward momentum, is the primary motivation for destination selection.

This definition takes into account the understanding that surfing is, indeed, a sport as opposed to being a ‘form of play or game’ (Farmer, 1992: 242). The basis of this argument is that for an activity to be considered a sport, it must meet the three criteria of challenge, conditions imposed and response to the challenges and conditions (Standeven and De Knop, 1999). Surfing meets these criteria in that purposive interaction of the participant with the natural environment occurs, where the outcome of the activity rather than the competition, is of prime importance (Fluker, 2003: 6).

The definition also recognizes that as these surfers are travelling for a period of time of at least one night and not more than 12 months, they can be regarded as either domestic or international tourists. It should be noted that some of these surf tourists may be free independent travellers who organize their travel itinerary themselves and pay for services of providers such as airlines and accommodation outlets directly, while others rely on the indirect services of tour operators or retail travel agents to make these arrangements. While it is beyond the scope of this paper to investigate the ratio of these two groups, the findings should be of relevance to both ground operators as well as intermediaries in the travel distribution system.

It should also be noted that surf tourism does not necessarily only include active surfing participants, but also spectators and non-surfing travel companions. For example, J. McGrath (Gold Coast Council, personal communication, 24 September 2002) reported that one of the aims in constructing the artificial surf reef at Narrow Neck in Queensland (Australia) was to attract tourists who could park nearby and simply watch the surfers. Dolnicar and Fluker (2003: 11) found that less than one fifth of surfers travelled alone (suggesting that many surfers travel with either friends, partners or family members who may or may not themselves be surfers. While these ancillary surf tourists may offer opportunities for the travel industry to provide experiences, the focus of this paper is on the past destination choice of the actual surfers who create the activity.

### **Prior Research Into Surf Tourism**

Prior research into surf tourism, generally, and descriptions of the market,

specifically, have been sparse. Poizat-Newcomb (1999) gives a largely historical and anecdotal account of surfing as a sports tourism activity in Puerto Rico but stops short of giving detailed and empirical descriptions of the surf tourism market. Farmer (1992) describes the motivations, values and culture of surfers in California, but uses a small sample size of 50 recreational surfers (Farmer, 1992: 245). It was found in this study that the biggest motivation for surfing among this group was for vertigo, that they do not value competition between individuals, and that surfing culture appears to closely resemble a 'scene' rather than a subculture. Of recent relevance to the specific research problem stated in this paper are the two papers by Buckley (2002a; 2002b) that consider the commercial surf tourism industry and carrying capacity issues to do with surf tourism in the Indo-Pacific Island region. These papers have been valuable in demonstrating 'that surf tourism has become a social phenomenon of sufficient economic, social and environmental significance to justify academic attention' (Buckley, 2002a: 406). Indeed Buckley estimates the economic scale of the surfing industry, including travel, surf-branded clothing and the manufacture of surfboards, to be in the order of \$US10 billion per annum and that there are some 10 million surfers world-wide (Buckley, 2002a: 407). The main value of the two Buckley papers is that they clearly describe the structure of the surf tourism industry in terms of the impacts caused to natural and cultural host environments, the distribution of the product, the main issue facing the industry (capacity management), as well as a general description of the market.

Since 1915, when the Hawaiian, Duke Kahanamoku, introduced the sport of surfing to Australia and New Zealand (Williamson, 2000; Pearson, 1979), the sport has grown 'to become, after swimming, the most popular water sport in the world' (Young, 1983: 19). It may be that as the sport of surfing has matured, elements of the demographic profile of surfers have also changed from the stereotypical 1970s surfer whom Pearson (1979: 59) describes as being

individualistic, independent, hedonistic, casual, anti-establishment, introverted, opposed to discipline or control over individual freedoms, slim physique – wearing board shorts on the beach and casual clothes away from the beach, have unconventional attitudes towards drugs, gather and surf in small groups and are very mobile in their search for surf.

A more contemporary description of surf tourists is provided by Dolnicar and Fluker (2003). They analysed the demographic and psychographic characteristics of 430 surfers. It was found that 42 percent of this male-dominated group (only 7% were female) had a relatively high weekly income of between \$A600 to \$A1,499 and an average age of 30 years, but were still found to be very mobile in their search for surf. This mobility was shown in that 73 percent of the surfers said that they prefer to move through a variety of areas within a destination once they arrive rather than surf at only one break. This generally describes the apparently very mobile, experience-gathering travel pattern of surf tourists. However, as mentioned before – and as it seems to be the case with all empirical studies into surf tourists – the respondents were convenience-sample based, which implies that the percentages have to be interpreted with caution.

In addition, Dolnicar and Fluker (2003) constructed surfer market segments based on the importance rating respondents stated to various surf destination attributes,

such as lack of crowds, level of personal safety and the quality of accommodation-available at the surf destination. A solution with five groups of surfers was chosen (the price-conscious safety seekers, the luxury surfers, the price conscious adventurers, the ambivalents and the radical adventurers). The most lucrative of these markets segments were the luxury surfers and the price-conscious safety seekers as they spend the most on their trips, with over half of them spending between \$A50 and \$A200 per day. Common attributes across all groups were personal safety and lack of crowds. Crowds present a great deal of frustration for many surfers and may, indeed, account for their willingness to travel in search of not only the perfect wave, but also the uncrowded wave.

This current study builds upon this work by using the same dataset, but this time investigating past destination visitation patterns as a segmentation base. This is assuming that past choice would be a relevant criterion for the division of surfers into homogeneous market segments.

## **Methodology**

The dataset consisted of 430 respondents who completed an online-survey placed on the Internet by the Surf Travel Company, a Sydney-based travel agent specializing in surf travel. One block of questions centred on the surf destinations these surfers have visited in the past. This multivariate binary information on the travel behaviour of surf tourists is used as a starting point for the segmentation study.

The 'destination questions' consisted of 30 'yes' or 'no' statements with regard to whether the surfer has surfed at the following destinations listed in the questionnaire: Bali, Central Sumbawa, Central/South America, Fiji Islands, Garajagan, Hawaii, Hinako Islands, Lombok, Maldives, Mentawai Islands, Nias, North America, North Coast New South Wales, North Western Australia, Nusa Lembongan, Other Indonesia, Other Java, Philippines, Papua New Guinea, Queensland, South Africa, South Australia, South Western Australia, Sumatra, Tahiti, Telo Islands, Timor/Sumba, Tonga, Victoria and West Sumbawa. These destinations were chosen because they represent the most popular destinations based on trip-booking statistics of The Surf Travel Company.

In addition to this behavioural information, background information on the respondents was also collected. This included surf-related questions, personal characteristics and travel behaviour. Examples of surf-related questions are the preferred wave size, ranging from 2–3 feet through to more than 12 feet, and preferred type of wave, which are categorized as either 'fun beach breaks', 'easy points and reefs', 'challenging hollow waves' or the most dangerous 'thick grinding barrels'. Other surf-related questions included the regularity of surf travel undertaken, the surfing ability and the number of years the surfer had been involved in surfing. Personal characteristics included education and income level as well as age and gender. The category of travel behaviour was investigated by asking respondents to state how long they stayed, with which travel companions they travelled, how much money they spent at the destination per day, how important destination novelty was to them, and how much they moved within the destination during their stay. These background information variables were used to further describe the homogeneous groups of surf tourists after the actual segmentation analysis had been

conducted, thus providing the tourism industry with a more detailed understanding of the surf tourist market.

## Data Analysis

Unsupervised neural network algorithms were used to partition the empirical dataset in order to derive homogeneous sub-groups of consumers. In general, such neural network procedures function in the following manner. First, the number of segments to be revealed (Frank *et al.* 1972; Myers and Tauber, 1977) or constructed (Mazanec, 1997; Wedel and Kamakura, 1998) has to be defined. Next, starting vectors have to be chosen where the number of starting vectors (or prototypes) is equal to the number of segments and the dimensionality equals the number of variables (items, questions) used as the basis of segmentation. These starting vectors can be randomly picked from the dataset or could be the results of prior analysis. From here an iterative partitioning process is initiated: one case (the answer pattern of one respondent with regard to all variables included) is presented to the network. The closest prototype is computed, declared to be the 'winner' and allowed to adapt its vector values towards the values of the case presented to a predefined extent ('learning rate'). In addition to this winner, one or more neighbours of the winner are also allowed to adapt their vector values to a lower extent. By enabling the latter procedure, not only does a grouping result from the computation procedure, but neighbourhood relationship is also mirrored. This adaptive procedure as described above is repeated numerous times for the entire dataset, with a decreasing learning rate. This means that at the beginning a rough sorting and adaptation of the starting points occurs, at the end only fine tuning of the solution takes place. After this learning phase (training run), in which the network learns to represent the empirical data in the best way possible, a so-called recall run is performed. Here, all cases are presented to the network one more time. Based on the smallest distance, they are assigned as a member to one of the prototypes, thus leading to a deterministic grouping solution.

As compared to the most popular partitioning algorithm (Baumann, 2000; Dolnicar, 2002) for segmentation studies (*k*-means), unsupervised neural networks allow for neighbourhood learning that leads to topological arrangement along a predefined rectangular grid. Starting points were chosen on a best-of-1,000-draws basis. The entire dataset was presented to the networks 90 times for training purposes, with the learning rate decreasing from 0.01 to 0.0001. Software freely available at the homepage of the Institute of Tourism and Leisure Studies at the Vienna University of Economics and Business Administration (<http://charly.wu-wien.ac.at/software/>) was used.

## Results

Computations with segment numbers ranging from three to ten were conducted. All cluster numbers rendered similar stability results on the basis of 50 repetitions. Six segments were chosen because they represented a useful compromise between a too-rough grouping with sufficiently large clusters compared to a very detailed grouping with too few members to describe. Also, the six segment solution can be

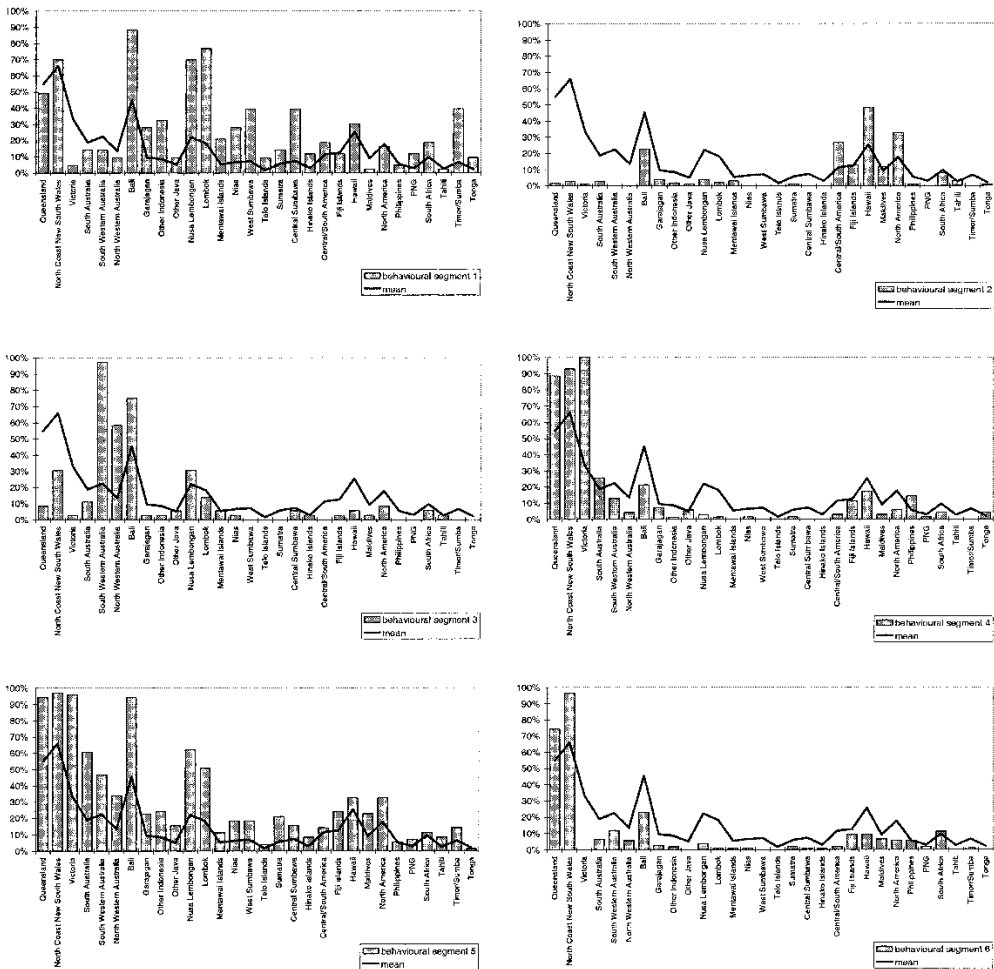


Figure 1 Behavioral surfer segments.

represented in a two dimensional SOFM (self organised feature map, Kohonen, 1984) grid. For this purpose, a grid with two columns and three rows was chosen as spatial representation.

The resulting segmentation solution is provided in Figure 1, where each bar chart represents one segment. The bars give the percentage of segment members that state they have already surfed this particular destination. The line provides reference to the mean score of the total sample (430 surfers) surveyed. Deviations from this line, thus, can be interpreted as being characteristic of a specific segment.

As can be seen from the profile charts, the segments derived from this high-dimensional database are surprisingly distinct. Behavioural segment number 1 (B1) has a very strong focus on Indonesia as surf destination and includes 10 percent of the respondents. B2-members (24% of the sample) are above average in stating to have surfed in US destinations. The segment B3 (8%) is characterized by a combination of Western Australian and Indonesian destinations. B4 (16%) represents a group of surfers that almost only surfs Australia (besides Australian destinations only the Philippines are mentioned by this segment more often than by the average). Surfers

assigned to B5 (17%) state they have surfed anywhere in the world more often than the average. This, of course, might either be true or an answer tendency, which unfortunately the authors cannot determine *ex post*. Therefore, the segment should be interpreted with care. Finally, B6-surfers (25%) have so far surfed in Queensland and the north coast of New South Wales and, thus, represent a second group of Australia-surfers.

The arrangement within the grid mirrors geographical preferences of the behavioural segments. The top left region is Indonesia-centred, the top right prototype represents the America-surfers and the bottom right region is strongly Australia-focused.

In addition to the segmentation base, descriptive information was available in the dataset, which is used to further describe the segments and investigate whether the grouping chosen actually represents distinct groups. As can be seen in Table 1, a number of significant differences between the behavioural surfer segments can be revealed. Table 1 includes (except for age) the percentages of all groups for the descriptive variables used, the *p*-value of the statistical tests applied, which is stated in the last column, the Bonferroni-corrected significance value accounting for the fact that a number of tests were conducted on the basis of the same dataset and one column stating whether the result can be considered as significant at the 95 percent significance level.

The average age varies significantly from 27 to 33 years, with surfers in groups B2 (American breaks) and B5 (surf breaks world-wide) representing the oldest groups. Also, the years of surf experience significantly distinguish the behavioural segments: again, the B2 and B5 groups have the most experienced surfers, whereas the surfers visiting Indonesia and Western Australia (B3), as well as the NSW/Queensland (B6) group, are the least experienced, although this is not significantly mirrored in their self assessment of surfing ability.

There are no significant differences in the preferred wave size among all the surfers, with most preferring them to be between four and six feet high. However, there are significant differences in the type of wave preferred, as it is apparent that groups B2 (America) and B6 (Queensland and New South Wales) prefer fun beach breaks when given the choice of four wave types. These types of waves usually present low levels of risk as they are typically formed on smooth sand bars as opposed to the more dangerous sharp and hard coral or rock reefs often found with challenging hollow waves. It can be seen that these challenging hollow waves are preferred most by the B1 (Indonesia) and B5 (surf breaks world-wide) groups.

With regard to the length of stay, Indonesia-surfers (B1) stay the longest, with 23 percent stating that they stay between 5 and 8 weeks at the destination. The America-surfers (B2), the Indonesia and Western Australia segment (B3), as well as the NSW/Queensland group (B6), have the shortest lengths of stay, with about two-thirds staying less than two weeks.

Further significant criteria of distinction include the regularity of undertaking surf trips, the interest in destination novelty, education level and income. It can be seen that the B3 (Indonesia and Western Australia) and the B5 (surf breaks world-wide) groups undertake surf tourism experiences the most often, and that the majority of all groups except for B6 (NSW/Queensland) prefer to seek new countries and breaks. The B5 (surf breaks world-wide) group appear to have the highest proportion of surfers with a trade certificate and also the highest income. No significant differences exist in the number of travelling companions (between 1 and 4 persons), daily budget (mostly between \$A21 and \$A100 per day), degree of movement within a destination

Table 1 Describing and contrasting behavioural segments using background variables

	B1	B2	B3	B4	B5	B6	p-value	p value (Bonferroni corrected)	95% significance level	Tested using
Age (years)	27	33	27	27	33	29	0.000	0.000	Significant	ANOVA
Years surfing										
<2	7	12	8	11	4	16				
3-5	9	27	25	24	4	13				
6-10	26	8	28	20	10	28				
11-15	23	14	17	13	37	24				
16-20	19	9	8	14	10	5				
>20	16	31	14	17	35	15	0.000	0.000	Significant	Chi2
Surfing ability										
Beginner	7	7	17	6	1	12				
Intermediate	47	40	42	44	30	46				
Advanced	42	46	36	47	65	37				
Highly advanced	5	6	6	3	4	6				
Preferred wave size (ft)										
2-3	5	13	17	7	3	13	0.086	1.201	Not significant	Chi2
4-6	49	54	64	69	58	63				
6-8	35	31	19	21	35	20				
8-10	9	1			4	4				
10-12		1								
>12	2			3						
Travelling companions										
Alone	19	12	17	19	13	13	0.020	0.276	Not significant	Chi2
Partner	12	23	11	23	14	13				
Family	5	11	3	10	11	11				
1 friend	23	19	36	20	17	14				
2-4 friends	30	21	31	14	32	32				
5 or more friends	12	7	3	4	13	6	0.012	0.174	Not significant	Chi2
Length of stay (weeks)										
<2	12	64	69	45	46	70				
2-4	56	29	22	39	42	24				
5-8	23	2	6	6	4	2				
>8	9	5	3	10	7	5	0.000	0.000	Significant	Chi2
Daily budget (\$A)										
<20	7	21	11	13	10	19				



21–50	63	28	42	40	34	32				
51–100	23	23	25	21	32	28				
101–200	7	22	19	21	15	17				
201–400		5	3	4	6	1				
>400		2	19	17	9	19	0.067	0.939	Not significant	Chi2
Fun beach breaks	2	19	17	9	7	19				
Easy points and reefs	30	49	64	47	41	46				
Challenging hollow waves	67	33	19	41	52	34				
Thick, grinding barrels				3		1	0.000	0.004	Significant	Chi2
Regularly, more than once per year	40	34	58	37	59	30				
Regularly, once per year	33	27	19	21	30	20				
Regularly once every 2–3 years	19	11	8	10	8	11				
Irregularly	9	28	14	31	3	38	0.000	0.001	Significant	Chi2
Return to favourite spot	21	24	25	29	14	42				
New breaks, familiar country	30	19	33	20	31	23				
New countries, new breaks	49	57	42	51	54	35	0.003	0.048	Significant	Chi2
Stay in one area	21	28	26	36	16	28				
Move through a variety of areas	79	72	74	64	84	72	0.131	1.828	Not significant	Chi2
Education level	Yr 10	28	38	36	24	15				
Yr 12	19	8	36	27	28	19	39			
TAFE Certificate	40	39	8	36	34	26				
Trade Certificate	14	16	19	13	23	17	0.001	0.010	Significant	Chi2
Up to 399	28	20	31	21	3	23				
400–599	16	14	25	10	17	14				
600–799	26	21	17	20	24	17				
800–1499	21	15	17	24	23	30				
>1500		13	6	1	18	6				
No response	9	18	6	23	15	10	0.000	0.006	Significant	Chi2
Male	98	90	92	96	94	91				
Female	2	10	8	4	6	9	0.485	6.786	Not significant	Chi2

B1, Indonesia; B2, America; B3, Western Australia/Indonesia; B4, Queensland/New South Wales/Victoria; B5, All over; B6, Queensland/New South Wales

(most move to a variety of areas) and gender (males account for between 90% and 98% of all groups).

## **Conclusions**

The purpose of this paper was to determine if surf tourists could be understood better by revealing or defining segments of surf tourists with homogeneous patterns of past destination choice to the benefit of both the surfers (whose needs could be catered for better) and the tourism industry (that could increase profits from attracting more surf tourists from a particular segment or from higher numbers of repeat visitors).

Six behavioural segments were constructed that demonstrate distinct profiles. This knowledge can be used in strategic marketing initiatives. For example, while surfers such as those represented in the B1 group (Indonesia) spend a similar amount of money per day compared with other groups, they stay longer, with 23 percent of the segment members staying between 5 and 8 weeks. Thus, the total expenditures of this group make it a highly attractive market segment to target. Regional tourism authorities, such as those in under-represented destinations in the South Pacific, such as Fiji or Tonga, need to consider and promote their natural resources such as wave type and size in order to attract this market.

The length of stay for all other groups was mostly less than four weeks, with some groups such as B2 (America), B3 (Western Australia and Indonesia) and B6 (Queensland and New South Wales) preferring trips of less than two weeks. This is most likely to be the length of time these people can take off work for a dedicated surf holiday. Tour operators need to design surf tours that create a good match in terms of this time frame, but also in terms of the type of waves that are available in certain destinations. For example, most (64%) of the B3 group (Western Australia and Indonesia) prefer easy points and reefs. It would not be wise to offer them packages to locations known either for fun beach breaks or thick grinding barrels. Indeed, it would be unwise to offer any packages offering thick grinding barrels, as very few of the 430 surfers selected this as their wave of choice. One opportunity that does exist is to present current surf tourism customers tours to new destinations, as nearly half of all groups are interested in going to new countries and seeking new breaks.

Future work should include a replication of this study with a larger sample size and include the investigation of surf tourist heterogeneity with regard to criteria other than destination choice, as well as an integrated taxonomy-development of surfers based on multiple sets of criteria. In addition, the competitive relationship between destinations would be an interesting area of further investigation.

## **Acknowledgements**

This research was supported by the Austrian Science Foundation (FWF) under grant SFB#010 ('Adaptive Information Systems and Modelling in Economics and Management Science'). The authors also thank Jess Ponting and The Surf Travel Company for providing the data.

## References

- Baumann, R. 2000. *Marktsegmentierung in den Sozial- und Wirtschaftswissenschaften: eine Metaanalyse der Zielsetzungen und Zugänge*. Diploma thesis at Vienna University of Economics and Management Science, Vienna.
- Buckley, R. 2002a. Surf tourism and sustainable development in Indo-Pacific island: I. the industry and the islands. *Journal of Sustainable Tourism* 10(5): 405–24.
- Buckley, R. 2002b. Surf tourism and sustainable development in Indo-Pacific island: II. Recreational capacity management and case study. *Journal of Sustainable Tourism* 10(5): 425–42.
- Dolnicar, S. 2002. Review of data-driven market segmentation in tourism. *Journal of Travel and Tourism Marketing* 12(1): 1–22.
- Dolnicar, S. and Fluker, M. 2003. Who's riding the wave? An investigation into demographic and psychographic characteristics of surf tourists. *Proceedings of the 13<sup>th</sup> International Research Conference of the Council for Australian University Tourism and Hospitality Education (CAUTHE)*, Coffs Harbour, 5–8 February [CD-ROM].
- Farmer, R. J. 1992. Surfing: motivations, values, and culture. *Journal of Sport Behaviour* 15(3): 241–58.
- Fluker, M. 2003. Riding the wave: defining surf tourism. *Proceedings of the 13<sup>th</sup> International Research Conference of the Council for Australian University Tourism and Hospitality Education (CAUTHE)*, Coffs Harbour, 5–8 February [CD-ROM].
- Frank, R. E., Massy, W. F. and Wind, Y. 1972. *Market Segmentation*. Engelwood Cliff: Prentice-Hall.
- Kohonen, T. 1984. *Self Organisation and Associative Memory*. New York: Springer-Verlag.
- Mazanec, J. 1997. Segmenting city tourists into vacation styles. In *International City Tourism: Analysis and Strategy*, ed. J. Mazanec, pp. 114–28. London: Pinter.
- Myers, J. H. and Tauber E. 1977. *Market Structure Analysis*. Chicago: American Marketing Association.
- Pearson, K. 1979. *Surfing Subcultures of Australia and New Zealand*. St Lucia, Queensland: University of Queensland Press.
- Poizat-Newcomb, S. 1999. The genesis of a sports tourism activity: surfing (Part I). *Journal of Sports Tourism* 5(4): 6–16.
- Ponting, J. 2000. Strategy analysis: the surf travel company. Unpublished Master of Management (Tourism Management) Project, University of Technology, Sydney.
- Standeven, J. and De Knop, P. 1999. *Sport Tourism*. Leeds: Human Kinetics.
- Wedel, M. and Kamakura W. 1998. *Market Segmentation: Conceptual and Methodological Foundations*. Boston: Kluwer Academic Publishers.
- Williamson, L. 2000. *Gone Surfing: The Golden Years of Surfing in New Zealand, 1950–1970*. New Zealand: Penguin Books.
- Young, N. 1983. *The History of Surfing*. Angourie, Australia: Palm Beach Press.

Copyright of Journal of Sport Tourism is the property of Taylor & Francis Ltd and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.