

Why keep on paddling? Evidence from a South African canoe marathon

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(Received: 21 June 2013; Revision Accepted: 23 July 2013)

Abstract

Despite the growth and potential future market for water-based recreation activities such as canoeing, to date research on the sport and its participants is sparse. Little is known about who canoeists are and why they choose canoeing as an outdoor activity, particularly in light of the burgeoning popularity of eco- and nature-based tourism. This study therefore profiled participants in the Dusi Canoe Marathon according to their motives for participating. A total of 250 self-administered questionnaires were distributed at the KwaZulu-Natal Canoe Club in Pietermaritzburg on the day of registration (13 February 2013), of which 220 were returned completed (an 88% return rate) and included in the analysis. A factor analysis indicated that the canoeists' main motives for paddling were *enjoyment and adventure* followed by *intrinsic achievement*. Based on these motives, the cluster analysis revealed three distinct segments, labelled Recreational, Intermediate and Serious canoeists. The results further confirm that several factors contribute to the differences between canoeists over and above their socio-demographic and behavioural characteristics: the setting of the event, whether river, lake or ocean, the level of fitness required and the duration of the activity. It corroborates the argument that motives for participating differ according to the sporting event, and supports the view that marketers and sports event organizers should not treat participants as a homogeneous group. These findings will assist sports event organizers in making informed and cost-effective marketing and product development decisions.

Keywords: Canoe tourism, sport tourism, canoeist, motives, segmentation.

How to cite this article:

Kruger, M. & Saayman, M. (2013). Why keep on paddling? Evidence from a South African canoe marathon. *African Journal for Physical, Health Education, Recreation and Dance*, 19(4:2), 1158-1173.

Introduction

The sport of canoeing takes place in many settings – wilderness areas, rivers, lakes and oceans – and has many categories, such as sprint racing, slalom marathon and white water racing (Arrey, 2006; Lee, Graefe & Li, 2007). Canoeing is popular in South Africa. Its formalization as a sport dates from the initiation of the Dusi Canoe Marathon in 1951 by conservationist Ian Player in commemoration of the fallen soldiers of World War II (Dusi Canoe, 2013). The first race had only eight entrants, paddling simple wood and canvas canoes. Ian Player himself was the only entrant to complete the race, six days later. Today

the Unlimited Dusi Canoe Marathon is considered the world's most prestigious three-day canoe race (Dusi Canoe, 2013). The race is held along the Msunduzi River, more commonly referred to as the Dusi, from Pietermaritzburg to Durban (Dusi Canoe, 2013). Competitors may compete in either a K1 (single) or K2 (double or tandem) canoe. Approximately 1,500 canoeists participate in the event each year, making it one of largest canoeing marathons in the country (Dusi Canoe, 2013). Canoeing has grown in popularity in the 10 years of South Africa's democracy and has considerable economic value since canoeing tourism involves a large amount of travelling and associated spending. In 2013, the event generated a total economic impact of R12.6 million excluding another R10 million from sponsorship spending in the host province, KwaZulu-Natal (Kruger, Myburgh, Saayman, Saayman & Scholtz, 2013).

Despite the growth and potential future market for water-based recreation activities such as canoeing, to date research on the sport and its participants is sparse. Little is known about who canoeists are and why they choose canoeing as an outdoor activity, particularly in light of the burgeoning popularity of eco- and nature-based tourism (Fennell, 1999; Holden & Sparrowhawk, 2002). This is also the case in South Africa, where sport research focuses mainly on the profile and motives of participants in the three major sport categories: swimming, cycling and running (Streicher & Saayman, 2010; Kruger, Saayman & Ellis, 2011, 2012; Kruger & Saayman, 2012; Kruger, Botha & Saayman, 2012).

Individual motives for participating remain a central concern in leisure, recreation, sport and tourism research (Manfredo, Driver & Tarrant, 1996). Many reasons have been put forward for understanding sport participant motives: to manage visitors and resources (Hollenhorst, Schuett, Olson & Chavez, 1995; Weber, 2001; Holden & Sparrowhawk, 2002), to market destinations (Uysal, Chen & Williams, 1999; Weber, 2001; Bailey, 2006), to understand constraints to participating (Carroll & Alexandris, 1997; Alexandris, Tsorbatzoudis & Grouios, 2002) and to enhance participant outcomes (Ewert, 1993; Hollenhorst *et al.*, 1995; Weber, 2001; Holden & Sparrowhawk, 2002). Furthermore, understanding participants' various motives can help researchers to gain a better understanding of the underlying objectives that influence behaviour (Whiting, Pawelko, Green & Larson, 2011). Motivation has therefore been described as the "why" of behaviour (Mannell & Kleiber, 1997; Vallerand & Losier, 1999). It determines the direction and strength or intensity of behaviour (Parrinello, 1993; Cassidy & Pegg, 2008). Sport participation involves primarily a set of motivational factors established in anticipation of the fulfilment of the desired needs (Cassidy & Pegg, 2008). The concept of needs is therefore central to most theories of motivation (Hudson, 2003). Since needs are the driving force that motivates behaviour, understanding motivation means discovering people's needs.

The small but growing body of literature that has examined participation in canoeing suggests that the motive is often social (Schuett, 1994; Galloway, 2010). Whiting *et al.* (2011) support this notion and observe that the “kayaking ethos” that is understood and embraced by canoeists may be an intrinsic motive that allows individuals to relate to one another while providing meaning and importance to their participation. The individual challenge, however, provides a unique opportunity for self-discovery and motivates individuals to continue paddling in an attempt to refine their skills. An interesting observation is that some individuals participate simply to be seen (Whiting *et al.*, 2011). Many canoeists claim that some canoeists paddle merely to show off to each other and nearby community observers. Others, however, are self-effacing participants, less competitive, who simply enjoy interacting with others. Hence differing characteristics of canoeists often determine the extent of personal involvement and enjoyment in the canoeing community (Whiting *et al.*, 2011). Another source of motivation that has been identified is the environment (Brymer, Downey & Gray, 2010). The scenic beauty of the river, lake or ocean setting allows canoeists to interact with nature in a way others seldom have the opportunity to do (Whiting *et al.*, 2011). This is also why this activity is becoming more important as an ecotourism offering.

An early study found that veteran river recreationists ranked motives such as “to develop my skills” and “to test my abilities” much higher than novices did (Schreyer, Lime & Williams, 1984). Furthermore, with higher levels of experience, the structure of the motive factors became increasingly complex (Williams, Schreyer & Knof, 1990). Looking at participants’ histories, Kauffman (1984) observed that motives for canoeing changed as participants became more specialized. Differences between scores for the factors “nature”, “exploration”, “affiliation” and “temporary escape” suggested at least two levels of specialization, while even larger differences were found for three other expected rewards. It was found that highly specialized canoeists paddled for exercise, recognized the importance of their equipment to their experience, and gained a sense of achievement from their experience. Kuentzel and McDonald (1992) identified different relationships between past experience, commitment and lifestyle and canoeists’ motivations, and Schuett (1995) found that whitewater kayaking participants engaged in their activity for multiple reasons including thrill-seeking, excitement and socialization, and a sense of achievement.

In more recent studies, Lee *et al.* (2007) concluded that canoeists were motivated by challenge, curiosity or exploration, experiencing nature, relaxation, social contact and competition, to differing degrees of importance. Galloway (2010) found that whitewater canoeists were motivated by enjoying nature, learning, escaping, meeting similar people, autonomy or leadership, nostalgia, teaching or leading others, introspection, creativity, risk-taking and family togetherness.

O'Connell (2010) observed that sea canoeists were motivated mostly by enjoying nature, learning, being with similar people and achievement or stimulation. Kerr and Mackenzie (2012) concluded that canoeists' motivations evolved somewhat over time, their earlier days being characterized by the desire for adrenaline-producing activity, fitness, camaraderie and proving themselves by surmounting ever-increasing levels of risk and challenge, while connecting to novel natural surroundings. However, their motives changed as their canoeing careers progressed. Galloway (2012) found that river recreationists in New Zealand were motivated mainly by introspection, achievement, enjoying nature, spending time with similar people, family togetherness, physical fitness, escape, equipment and teaching others.

The aforementioned studies collectively show that canoeing participants are motivated by a variety of factors such as the type of event, the setting (ocean, lake or river), level of specialization (low, medium or high), social orientation and perceived level of risk. Given the diverse range of participants in the Dusi Canoe Marathon, we would expect them to be influenced not by a single motive but by a wide variety of motives (Gill & Williams, 2008). Non-competitive participants might be motivated by the desire to seek new and different experiences, to meet new people and to escape from routine, whereas competitive canoeists might be driven by the desire to win, to be with a team, or to improve their level of fitness (Hastings, Kurth, Schloder & Cyr, 1995; Weed & Bull, 2004).

This study therefore set out to identify the motives of the Dusi Canoe Marathon participants and to use these to identify and profile the various market segments at the race. It is the first study to provide insights into the motives and behaviour of competitive canoeing participants in the country.

For the purpose of this paper we use the term "canoeist" throughout, though strictly speaking the Dusi is a kayak and not canoe race.

Methodology

Survey and sampling method

Field workers distributed the questionnaire on-site at the KwaZulu-Natal Canoe Club in Pietermaritzburg on the day of registration (13 February 2013). Participants were selected after they had completed their registration and received their race packs. The field workers were trained to ensure that they understood the aim of the study and the questionnaire. Respondents were briefed about the purpose of the research beforehand. A total of 250 questionnaires were distributed, of which 220 were returned completed (an 88% return rate) and included in the analysis.

Instrument

A three-section structured questionnaire, based on the works of Lee *et al.* (2007), O'Connell (2010), Whiting *et al.* (2011), Galloway (2010; 2012), Kerr and Mackenzie (2012) and Buckley (2012), was used to collect the data. Section A captured demographic details (gender, home language, age, annual gross income, home province, marital status, level of education and mode of transport) and spending behaviour (number of persons paid for, length of stay and expenditure), Section B captured specific information about the race (entry details, initiator of participation, frequency of participation, repeat participation, other tourist attractions visited and information sources regarding the event). Section C captured the motivational factors for competing in the race by asking respondents to indicate the importance of 19 items on a five-point Likert scale, where 1 = not at all important, 2 = slightly important, 3 = important, 4 = very important and 5 = extremely important.

Statistical analysis

Microsoft Excel was used to capture the data and SPSS (2013) was used for data analysis. The analysis was done in three stages: a factor analysis, a cluster analysis and an analysis of significant differences between the motivational clusters.

First, a principal axis factor analysis, using an Oblimin rotation with Kaiser normalization, was performed on the 19 motivation items, to explain the variance-covariance structure of a set of variables through a few linear combinations of these variables. The Kaiser-Meyer-Olkin measure of sampling adequacy was used to determine whether the covariance matrix was suitable for factor analysis. Kaiser's criteria for the extraction of all factors with eigenvalues greater than one were used because they were considered to explain a significant amount of variation in the data. All items with a factor loading greater than 0.3 were considered as contributing to a factor, and all items with loadings less than 0.3 as not correlating significantly with this factor (Steyn, 2000). Any item that cross-loaded on two factors with factor loadings both greater than 0.3, was categorized in the factor where interpretability was best. A reliability coefficient (Cronbach's alpha) was computed for each factor to estimate its internal consistency. All factors with a reliability coefficient above 0.6 were considered acceptable in this study (Field, 2005). The average inter-item correlations were also computed as another measure of reliability – these, according to Clark and Watson (1995), should lie between 0.15 and 0.55.

Second, a cluster analysis, using Ward's method with Euclidean distances, was performed on the scores of the motives for participating. A cluster analysis is a multivariate interdependence technique whose primary objective is to classify

objects into relatively homogeneous groups on the basis of the set of variables considered, and is mostly an exploratory technique (Hair, Bush & Ortinau, 2000). Hierarchical clustering makes no assumptions about the number of groups or group structure. Instead, the members are grouped on the basis of their natural similarity (Johnson & Wichern, 2007). This research did not take an *a priori* view of which data items should fall into which segment. Rather, a hierarchical cluster analysis was used to explore the natural structure of the data, by means of Ward's method with Euclidean distances.

Lastly, once the motivational clusters had been identified, multivariate statistics were used to examine any statistically significant differences between the clusters. Two-way frequency tables and chi-square tests were used to profile the clusters demographically, and ANOVAs to investigate any significant differences between clusters concerning socio-demographic and behavioural variables. The study used demographic variables (age) and behavioural variables (average spending per person, length of stay, repeat visit and events participated in per year) to examine whether statistically significant differences existed between different groups. Effect sizes were used to further measure differences between the clusters. The purpose of effect size is to establish whether any differences between clusters are significant, in this case in which combination of clusters the averages of the socio-demographic and behavioural variables had the smallest or largest effect. Cohen (1988), Ellis and Steyn (2003) and Steyn (2009) offer the following guidelines for interpreting effect sizes: small effect: $d=0.2$, medium effect: $d=0.5$ and large effect: $d=0.8$.

Results

The participants in the Dusi Canoe Marathon were mainly English-speaking (59%), male (85%), predominantly local (from KwaZulu-Natal – 75%) or from Gauteng (14%), well educated, with a diploma or degree (36%), married (51%), and had an average age of 35 years. They travelled mostly in groups of four, were financially responsible for one participant and two spectators, stayed one night in KwaZulu-Natal and spent R6,772 on their trip. Many of them were participating in this race for the seventh time in 2013 and some had completed all six of their previous races.

Factor analysis

The pattern matrix of the principal axis factor analyses using an Oblimin rotation with Kaiser normalization identified six motivational factors. These were labelled according to similar characteristics (see Table 1) and accounted for 67% of the total variance. All had relatively high reliability coefficients, ranging from 0.63 (the lowest) to 0.77 (the highest) and the average inter-item correlation coefficients with values between 0.37 and 0.48 also implied internal consistency

for all factors. Moreover, all items loaded on a factor with a loading greater than 0.3 and the relatively high factor loadings indicated a reasonably high correlation between the factors and their component items (Field, 2005). The Kaiser-Meyer-Olkin measure of sampling adequacy of 0.83 also indicated that patterns of correlation were relatively compact and yielded distinct and reliable factors (Field, 2005). Barlett’s test of sphericity also reached statistical significance ($p < 0.001$) in both cases, supporting the factorability of the correlation matrix (Pallant, 2007).

Table 1: Results of factor analysis of motives for competing in the Dusi Canoe Marathon

Motives for participating	1	2	3	4	5	6
<i>Factor 1: Intrinsic achievement</i>						
To feel proud of myself and to feel a sense of achievement	0.78					
The Dusi Canoe Marathon is a huge challenge	0.57					
The Dusi Canoe Marathon tests my level of fitness and endurance	0.50					
<i>Factor 2: Event novelty</i>						
I must participate in order to qualify for the Ironman/Biathlon		0.81				
It is an international event		0.80				
Because I am pursuing a personal goal of participating in a predetermined number of canoeing events		0.48				
To escape		0.27				
<i>Factor 3: Risk</i>						
Because of the risk involved			0.75			
<i>Factor 4: Socialization and group identity</i>						
It is a sociable event				0.69		
To meet new people				0.65		
To share group identity with other canoeists				0.43		
<i>Factor 5: Event attractiveness</i>						
It is a “must do” event					0.55	
Because the event is well-organized					0.53	
I do it annually					0.53	
<i>Factor 6: Enjoyment and adventure</i>						
Because I enjoy canoeing						0.69
Because it is stimulating and exciting						0.54
For the adventure of it						0.53
To enjoy this nature-based activity						0.40
To test my skills						0.28
Total variance explained	67%					
Reliability coefficient	0.69	0.71	n/a	0.72	0.63	0.77
Average inter-item correlation	0.43	0.39	n/a	0.48	0.37	0.40
Mean value	3.85	2.49	3.19	3.39	3.74	4.11

Factor scores were calculated as the average of all items contributing to a specific factor in order to interpret them on the original five-point Likert scale of measurement. Table 1 shows the motives that were identified: *Intrinsic achievement* (Factor 1), *Event novelty* (Factor 2), *Risk* (Factor 3), *Socialization and group identity* (Factor 4), *Event attractiveness* (Factor 5) and *Enjoyment and adventure* (Factor 6). *Enjoyment and adventure* obtained the highest mean value

(4.11), was considered the most important motive for participating in the race, and had a reliability coefficient of 0.77 and an average inter-item correlation of 0.40. *Intrinsic achievement* had the second highest mean value (3.85), followed by *Event attractiveness* (3.74), *Socialization and group identity* (3.39) and *Risk* (3.19). *Event novelty* had the lowest mean value (2.49) and was rated the least important motive for participating in the race.

Cluster analysis

An exploratory cluster analysis based on all cases in the data was performed on the motivational factors. A hierarchical cluster analysis, using Ward's method of Euclidean distances, was used to determine the clusters' structures on the basis of the motivational factors. A three-cluster solution was selected as the most discriminatory (Figure 1). The results of the multivariate analyses were used to identify the three clusters and to discover whether significant differences existed between them ($p < 0.05$).

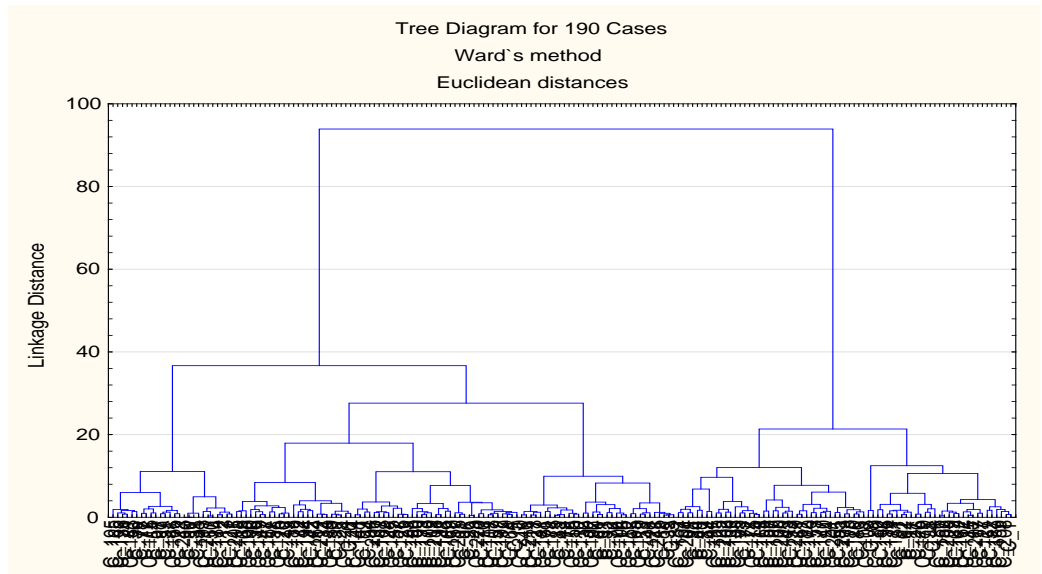


Figure 1: Three cluster solution: Ward's method with squared Euclidean distance measures

Segmented clusters

As Table 2 shows, ANOVAs indicated that all six motivational factors contributed to differentiating between the three motivational clusters ($p < 0.05$). Cluster 1 contained the second largest sample of respondents (71) and had the lowest mean values for all six of the motives. Cluster 2 contained 93 respondents and had the second highest mean values for the six motives. Cluster 3 was the smallest cluster with only 26 respondents and had the highest mean values across the motivational factors. The clusters were labelled according to the

characteristics of each cluster: respectively *Recreational*, *Intermediate* and *Serious* canoeists.

Table 2: ANOVA and Tukey’s post hoc multiple comparison results for motivational factors in three clusters of Dusi Canoe Marathon participants

Motives to compete	Recreational canoeists (n=71)	Intermediate canoeists (n=93)	Serious canoeists (n=26)	F-ratio	Sig. level
Intrinsic achievement	3.25 ^a	4.12 ^b	4.36 ^b	38.701	<0.05
Event novelty	2.00 ^a	2.31 ^a	4.20 ^b	88.649	<0.05
Risk	2.15 ^a	3.66 ^b	4.31 ^c	72.584	<0.05
Socialization and group identity	2.67 ^a	3.63 ^b	4.19 ^c	46.691	<0.05
Event attractiveness	3.64 ^a	4.29 ^b	4.56 ^c	36.398	<0.05
Enjoyment and adventure	3.00 ^a	4.06 ^b	4.50 ^c	50.722	<0.05

^a Group differs significantly from type (in row) where ^b and ^c are indicated.

ANOVAs and Tukey’s multiple comparisons

Table 3 shows that there were significant differences between the three clusters of canoeists based on group size ($p = 0.002$), total spending ($p = 0.027$) (although Tukey’s tests and multiple comparisons indicated no statistically significant difference) and number of days spent in the area where the canoeing events were held ($p = 0.001$). *Serious canoeists* travelled in larger groups (an average of five persons), and stayed more days in the area (an average of six days) while *Intermediate canoeists* had the highest average total spending (an average of R7296).

Looking at the effect sizes, it is clear that age ($d=0.50$), group size ($d=0.53$), number of participants paid for ($d=0.40$) and number of nights spent in Pietermaritzburg and Durban and other towns along the route ($d=0.48$) had medium effect size differences between the *Recreational canoeists* and the *Serious canoeists*. The *Recreational canoeists* were the oldest participants (average age of 36) and the *Serious canoeists* the youngest (average age of 30). The *Serious canoeists* furthermore travelled in larger groups (an average of five people – perhaps because they had more seconds helping them along the route), were financially responsible for more participants during the event (an average of two people) and spent significantly more nights in the cities and towns along the route (an average of six nights) than *Recreational canoeists* did. There were furthermore medium effect size differences between the *Intermediate canoeists* and the *Serious canoeists* based on spending per person (participants paid for – $d=0.44$; spectators paid for – $d=0.58$) and number of nights spent in the cities and towns along the route ($d=0.41$). The *Intermediate canoeists* spent considerably more than the *Serious canoeists* (an average of R5,057 and R2,908 respectively)

and, like the *Recreational canoeists*, the *Intermediate canoeists* spent fewer days in the cities and towns along the route.

Table 3: ANOVA results: Differences between motivational clusters

Characteristics	Recreational canoeists (n=71)	Intermediate canoeists (n=93)	Serious canoeists (n=26)	F-ratio	Sig. level	Effect sizes		
						Cluster 1 and 2	Cluster 1 and 3	Cluster 2 and 3
Age	36.31	33.63	30.14	2.187	0.115	0.20	0.50**	0.27
Group size	3.37 ^a	3.78 ^a	4.96 ^b	6.537	0.002*	0.22	0.53**	0.39
Number of people paid for (participants)	1.40	1.48	1.81	2.017	0.136	0.08	0.40**	0.33
Number of people paid for (spectators)	1.53	1.53	2.10	1.364	0.259	0.00	0.25	0.26
Nights in area	1.28	1.40	1.40	0.063	0.939	0.05	0.05	0.00
Total spending	R4832.99	R7296.27	R4836.92	3.700	0.027*	0.33	0.00	0.33
Spending per person (paid for participants) ^o	R3674.04	R5056.77	R3135.47	2.970	0.054	0.31	0.14	0.44**
Spending per person (paid for spectators)	R4101.92	R5673.52	R2908.13	2.736	0.070	0.33	0.27	0.58**
Times participated	6.79	7.16	5.73	0.380	0.684	0.05	0.15	0.20
Times finished	6.12	6.53	5.29	0.285	0.752	0.06	0.12	0.17
Canoeing events per year	5.37	5.76	9.23	2.091	0.127	0.04	0.35	0.31
Number of nights spent in city/town where canoeing events are held	2.38 ^a	2.88 ^a	5.81 ^b	8.470	0.001*	0.18	0.48**	0.41**

^oExpenditure per person, calculated by summing the respondent's spending on the various components and dividing the total by the number of people for whom respondent was financially responsible.

* Statistically significant difference: $p \leq 0.05$

^a Group differs significantly from type (in row) where ^b is indicated.

Effect sizes: medium effect: ** $d=0.5$

Discussion

The first finding from this research is that motives for participation indeed differed from one type of canoeing event to the next. Six motives for participating in the Dusi Canoe Marathon were identified: *Intrinsic achievement*, *Event novelty*, *Risk*, *Socialization and group identity*, *Event attractiveness* and *Enjoyment and adventure*. *Enjoyment and adventure* was regarded as the most important motive for competing in the event, followed by *Intrinsic achievement*. The canoeists in this race were therefore motivated more by intrinsic than extrinsic motives. Some similarities with previous research were found, especially pertaining to *Intrinsic achievement*, *Socialization and group identity*,

supporting several findings (Lee *et al.*, 2007; Galloway, 2010; O'Connell, 2010; Buckley, 2012; Galloway, 2012); however, the combinations and importance of the motives differed significantly. The present study revealed two unique motives not previously found in canoeing literature, namely *Enjoyment and adventure* and *Event attractiveness*. This finding therefore supports the notion that canoeists' motives are influenced by factors such as the type of event and setting (in this case a river event). It furthermore corroborates the findings of Gill and Williams (2008) that canoeists are influenced not by a single motive but rather by a number of motives. These findings should be taken into consideration when marketing the event.

Secondly, different markets exist among canoeists and the cluster analysis revealed three distinct segments, labelled *Recreational*, *Intermediate* and *Serious* canoeists. Contradicting the results of the factor analysis, all three clusters regarded *Event attractiveness* as the most important motive for participating, consistent with the expectancy-value theory, which states that motivation is determined by the attractiveness of the outcomes and the expectation that participation will result in the desired outcomes (Todd *et al.*, 2002b). Participants therefore regard the Dusi Canoe Marathon as an event they want to participate in because of its characteristics and favourable reputation. For the *Serious canoeists* this was followed by *Enjoyment and adventure*, while the *Recreational* and *Intermediate canoeists* were motivated more by *Intrinsic achievement*. These results are consistent with the self-determination theory, which states that people are pushed to achieve goals through intrinsic pressures, which leads to more positive experiences (Vallerand & Lossier, 1999). This finding also supports the observation by Kauffman (1984), Williams *et al.* (1990) and Kerr and McKenzie (2012) that canoeists' motives evolve as they progress with their careers as canoeists. However, looking at the characteristics of each cluster and how they rated the motives, the present study found that the *Recreational canoeists* (the oldest and the ones who had participated more often) emphasised *Intrinsic achievement*, while the *Serious canoeists* (the youngest and the ones who had participated fewer times), emphasised *Event attractiveness* and *Enjoyment and adventure*, thus contradicting the finding by Kerr and McKenzie (2012) that canoeists' earlier days are characterized by the desire to prove themselves. This finding furthermore contradicts the theory of specialization, which states that the more serious participants are, the more important intrinsic rewards and competence become (Bryan, 1997, 2000, 2001; Ewert & Hollenhorst, 1989; Todd, Anderson *et al.*, 2002a; Todd, Graefe & Mann, 2002b; Buckley, 2012). However, it supports the finding by Kerr and McKenzie (2012) that canoeists in the early stage of their careers (*Serious canoeists*) are motivated more by the desire for adrenaline-producing activity while connecting with natural surroundings. This finding also supports Schreyer *et al.* (1984) in that veteran canoeists rate developing their skills and testing their abilities much higher than novices do.

Thirdly, the relative lack of emphasis on *risk* by all the clusters contradicts the finding by Galloway (2010) that *risk taking* is an important reason for participating in canoeing activities. A possible explanation for this could be that these participants were familiar with the route and knew what to expect. The high ratings for environmental factors (scenic beauty and nature) as well as skill development, on the other hand, support the findings by O'Connell (2010), Whiting *et al.* (2011), Buckley (2012) and Galloway (2012).

An interesting finding was that *Intermediate canoeists* had the highest average and total spending and were the most loyal participants, making them the most lucrative market segment to attract and retain. However, the *Serious canoeists* travelled in larger groups, participated in more canoeing events per year and stayed longer in the cities and towns along the route, while the *Recreational canoeists* had the second highest spending per person. The implication is that marketers of the Dusi Canoe Marathon should attempt to attract participants from all clusters equally, so that the event will have a greater economic impact in the region and benefit more people. As repeat participation is also imperative for the continued success of this race, there is need to retain current loyal participants and, most importantly, to encourage others to return. One way to do this could be to introduce a "loyalty club", where members can accumulate discounts on, for example, registration fees and accommodation, based on the number of times they have participated in the event. Since this event attracts mostly canoeists from KwaZulu-Natal, marketing campaigns should be expanded to surrounding provinces in order to attract more non-local participants. The race should be intensively marketed at other sporting events, other canoe events, canoe clubs and schools to increase awareness of the event and consequently its economic value. In order to increase the risk factor of the event, organizers could consider biennially alternating the route of the event.

Conclusion

This study identified the motives of canoeists participating in the Dusi Canoe Marathon and profiled the participants according to these motives. This was the first time this kind of research has been done at a canoe event in South Africa. The study established that the main reason why these canoeists paddle is because of *Enjoyment and adventure*, followed by *Intrinsic achievement*. It fills a gap in the existing literature, not only of sport events but particularly of canoeing events in South Africa. The findings corroborate the argument that motives for participating differ according to the sporting event and support the view that marketers and sports event organizers must understand that participants have different motives and not regard them as a homogeneous group. In fact, this study shows not only that motives for participating in canoe events (in this case a river event), differ from those for participating in other types of canoe events, but also that the combinations of motives differ. The results from this study confirm

that a variety of factors, over and above socio-demographic and behavioural characteristics, account for the differences between participants in canoeing events. These factors include the event's setting (river, lake or ocean), distance, duration and level of fitness required. This type of research is valuable to sports event organizers, as it assists in making informed and cost-effective marketing and product development decisions. It is thus recommended that similar research – comparing participants' motives and assessing whether they are primarily intrinsic, extrinsic or a combination of the two – be undertaken for other canoe events as well as for other South African sporting events.

Acknowledgments

The authors gratefully acknowledge the NRF for their financial support for this project. The authors would also like to thank the organiser of the Unlimited Dusi Canoe Marathon, Brett Austen Smith for allowing this research to be conducted at the race as well as all the fieldworkers and respondents who participated in the survey.

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