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WHO ARE THE COMRADES OF THE COMRADES MARATHON?

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ABSTRACT

Marathon runners' motives vary, and differ from marathon to marathon depending on the type of race. This study determined the motives of Comrades Marathon runners in order to identify and profile the market segments competing in this ultra-marathon. Intrinsic achievement, exploration and competitiveness, family togetherness and escape, socialisation and commitment were identified as the five main motives, and from these two distinct segments were classified: recreational runners and serious runners. The research showed that the typical (real) comrade of the Comrades Marathon is a person who combines the attributes of the two clusters, serious and recreational athletes, where intrinsic achievement and commitment are key motives. The study, the first of its kind at an ultra-marathon in South Africa, fills a gap in the existing literature and contributes to the literature not only on sport events but also on marathons and ultra-marathon participants in particular. It corroborates the finding that motives for participating differ according to the sporting event, and supports the view that marketers and sports event organisers must understand that participants have different motives and so should not be regarded as a homogeneous group. This type of research is valuable to organisers, as it assists in making informed and cost-effective marketing and product development decisions.

Key words: Ultra-marathon; Comrades Marathon; Typology of motives; Marathon runner; Market segmentation; South Africa.

INTRODUCTION

Since the first 'urban tour' marathon, the 1976 New York City Marathon, marathon sport has exploded globally (Burfoot, 2007). Originally referring to a race of 42 kilometres (26 miles), the word 'marathon' has come to be used more broadly for a variety of long-distance races for runners. Once limited largely to the Olympics and primarily reserved for the elite athlete who trained for serious competition, these races are now held worldwide. Dozens of major cities organise marathons and despite significant personal and financial costs, many people take part each year, with some events attracting over 15 000 participants (Ogles & Masters, 2003). The Comrades Marathon is a world-renowned ultra-marathon of 89 kilometres (56 miles) that takes place between the cities of Pietermaritzburg and Durban in South Africa. The first Comrades took place on 24 May 1921, Empire Day, starting outside the City Hall in Pietermaritzburg with 34 runners. It has continued since then every year with the exception of the war years 1941–1945, with the direction alternating each year between the two cities, the so-called up- and down-runs. The Comrades Marathon is a cherished national treasure and attracts thousands of runners, spectators and television viewers every year. The 86th race took

place on Sunday 29 May 2011 and was an up-run starting in Durban and finishing in Pietermaritzburg, with over 14 000 runners participating.

Kurtzman (2005) points out that a wide variety of participants from different demographic, socio-economic and psychological groups are attracted to marathons such as the Comrades. This is because marathons can be seen as either a recreational or competitive environment, thus attracting young, old, male, female, competitive and non-competitive participants and their families as supporters, as well as businesses who wish to promote themselves and make money (Ogles & Masters, 2003). Kotze (2006) agrees that marathons can be regarded as a family affair, as often a whole family will travel to the city for the duration of the event and even extend their stay. However, Ogles and Masters (2003) point out that training for a marathon is a huge commitment, consisting of months of fitness training and long and frequent practice runs. This is a level of exercise well beyond what is required for basic health benefits. Participants can therefore have different motives for competing, which can be influenced by many factors (Shipway & Jones, 2008). The Comrades Marathon owes its beginnings to World War 1 veteran Vic Clapham. After being a soldier in the Great War, Clapham felt that all those who had fallen should be remembered and honoured in a unique way, where an individual's physical frailties could be put to the test and overcome. This history may inspire participants in the Comrades Marathon with their own personal reasons for competing in the race. These special motives may differ significantly from those of participants in less strenuous races. Participants of the Comrades can therefore not be regarded as homogeneous in terms of their motives for participating.

It is not only participants' motives that differ. Differences can also be identified between groups of participants in terms of demographic, training, performance and travel behaviour variables. Hudson (2003) explains that the more people that participate at a recreational level, the more sport equipment they tend to purchase; the more likely they are to continue to participate at a competitive level, and their propensity to watch sport may also increase. Ultimately, all of these increases related to participating, competing, and watching sport, affect the tourism industry in one way or another. It is thus important to identify the types of participants attracted to marathon races and their reasons for participating, since knowing their motives will give marketers a better understanding of participants' expectations, sport consumption behaviour and impact on the industry (LaChausse, 2006). Zhang *et al.* (2008) note that knowing these motives makes it possible to adapt the services provided, number of participants and length of the race (e.g. half marathon, standard marathon or ultra-marathon) so as to market the event cost effectively on the basis of participants' specific needs and desires. They also mention additional benefits, such as revenue for host communities, life-style upliftment for host residents and promotion of the area. The purpose of this study was to determine the motives of the Comrades Marathon runners, and on the basis of these motives, to identify and profile different market segments at the race.

LITERATURE REVIEW

Motives for participating in sport events

Brotherton and Himmetoglu (1997) and Cook *et al.* (2010) classify sport participants as a special interest group of travellers since they travel for a distinct and specific reason and

having interest-based motives for their travel to a sport event. Iso-Ahola (1982:230) defines motivation as "an internal factor that arouses, directs, and integrates a person's behaviour". According to Mannell and Kleiber (1997), motivation is an activation, drive and/or reason to engage in certain behaviours and to maintain those behaviours. As indicated by Cassidy and Pegg (2008:2), as well as Parrinello (1993), "motivation therefore determines the direction and strength or intensity of behaviour". Central to most content theories of motivation is the concept of needs (Hudson, 1999). Cassidy and Pegg (2008) state that needs are the driving force that arouses motivated behaviour and it can thus be assumed that, to understand human motivation, it is necessary to discover what needs people have and how they can be fulfilled. Sport participation also "entails primarily a set of motivational factors that are established in anticipation of the fulfilment of the desired needs" (Cassidy & Pegg, 2008:2).

Green and Chalip (1998) suggest that event planners should pay more attention to the expectations and experiences of the participants. If sport participation is a positive experience, individuals will continue to participate and become more committed to maintaining their level of involvement (Casper & Stellino, 2008). Other studies in the area of motivation for the sport participant show that motivators can be intrinsic in nature (to experience, to know, to accomplish and to be physically active) along with those based on self-determination (Gill *et al*., 1983; Ritchie & Adair, 2000; Shipway & Jones, 2008). Motivators may also be extrinsic, such as winning trophies and gaining social prestige (Hritz & Ramos, 2008).

Research into competitive versus non-competitive sport participation found a greater emphasis on the extrinsic motives of reinforcement and competing against others for competitive athletes (Ogles & Masters, 2003; Weed & Bull, 2004), while non-competitive athletes endorsed life's meaning, social and participation motives (LaChausse, 2006). McDonald *et al.* (2002) identify 13 motives for participating in a sports event: physical fitness, risk-taking, stress reduction, aggression, affiliation, social facilitation, self-esteem, competition, achievement, skill mastery, aesthetics, value development and self-actualisation. Gillett and Kelly (2006) identify similar motives: competition, extrinsic achievement, socialising, camaraderie and athletic identity.

Some may of course also participate in sport for the 'love of the game' and want their chosen sport to be fun and entertaining (Dann & Buchanan, 2006; Ko *et al*., 2008). LaChausse (2006) found that a combination of motives can lead to participation in a sport event, including health orientation, weight concern, goal achievement, competition, recognition, affiliation, coping, life-meaning and self-esteem. Participants can furthermore be motivated by the chance to spend more time with family members, friends and business associates, and in the sport setting their performance may be motivated by friendship, peer acceptance, family presence and social interaction (Weiss & Duncan, 1992; Jamber, 1999; McDonald *et al*., 2002).

Motives specific to marathons

The special nature of marathons (especially in terms of distance) means that these participants will have distinct types of motives. Among the possible motives are intrinsic rewards or goal achievement, self-esteem, competition, affiliation, socialisation and camaraderie. Marathons

can be classified into four types: shorter distance marathons; half marathons; full marathons; and ultra-marathons and the motives will be distributed differently among these types (Figure 1).

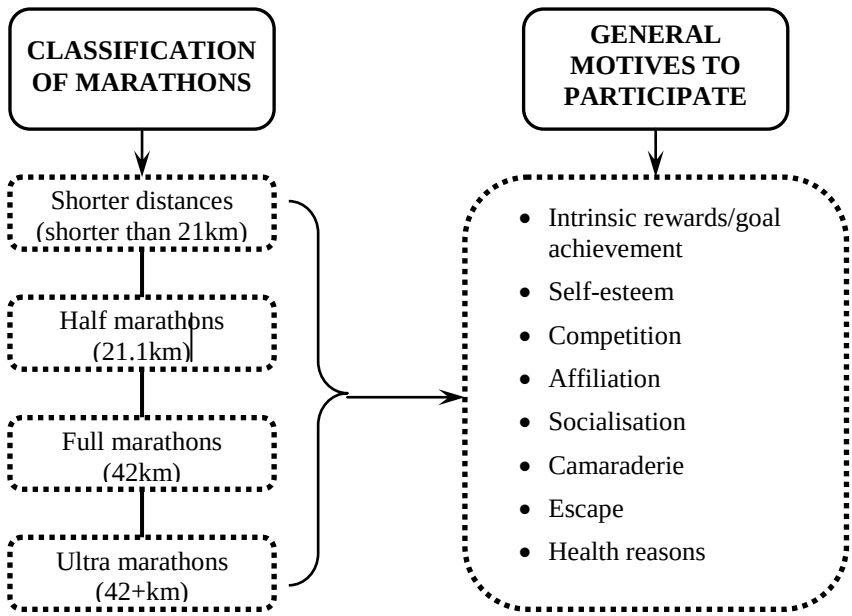

***FIGURE 1*: CLASSIFICATION OF MARATHONS**

Ultra marathons such as the Comrades are classified as 'endurance or ultra-races' (Jeffrey, 2010), that require perseverance, dedication and strenuous training programmes (Buman *et al*., 2008). Masters and Ogles (1995) and Stoll *et al.* (2000) found that the distance of the event trained for and participated in has a significant effect on athletes' reasons for running and McGehee *et al*. (2003) showed that individuals with high levels of enduring involvement in endurance running have an increase in the frequency of participation in running events, overnight travel to running events and spending on running related goods and services.

Funk *et al*. (2007) note that travelling to foreign countries and participating in endurance distance events, such as marathons, require considerable dedication and reflect long-lasting involvement with the sport. Marathon runners are thus, as Shipway and Jones (2008) call them, 'serious' participants. For a marathon event such as the Comrades, distance and endurance will therefore play a significant role in participants' motives for competing. Table 1 presents a summary of the various motives for participating in marathons, as identified by a variety of studies.

***TABLE 1*: MOTIVES FOR PARTICIPATING IN MARATHONS**

Author(s)	Study	Motives identified
Carmack & Martens (1979) Curtis & McTeer (1981) Summers *et al*. (1983)	Motives of long-distance runners	• psychological (providing a sense of life meaning or aesthetics, maintaining or enhancing self-esteem and problem solving or psychological coping) • physical (general health benefits and weight concern) • social (the desire to affiliate with other runners and to receive recognition or approval from others) • achievement (personal goal achievement and competition with other runners)
Slabbert (1981)	An exploratory study of the correlation between sport participation, personality attributes and the performance of athletes	• pleasure • achievement • competition • aggression
Ogles & Masters (2000)	Motives of older and younger male marathon runners	• life meaning • self-esteem • psychological coping • weight concern • health orientation • recognition • affiliation • competition • personal goal achievement
Ogles & Masters (2003)	Typology of marathon runners based on cluster analysis of motivations	• passion • lifestyle • personal goal achievers • personal accomplishments • competitive ambition.
Kotze (2006)	Cape Town and the Two Oceans Marathon: The impact of sport tourism	• physical, • cultural • interpersonal • status and prestige • external forces such as family, friends, social peer groups • entrepreneurial media advertising.
Funk *et al.* (2007)	Motives of international sport participation	• social interaction • escape • prestige • relaxation • cultural experience • knowledge exploration • cultural learning inventory

***TABLE 1*: MOTIVES FOR PARTICIPATING IN MARATHONS (cont.)**

Author(s)	Study	Motives identified
Gillet & Kelly (2006); Liedl (2009)	Motives of active sport participants	• health orientation • personal goal achievement • psychological well-being • self-esteem • life-meaning • social • camaraderie
Kruger & Saayman (2011)	An analysis of first-time and repeat participants at the Two Oceans Marathon	• intrinsic achievement • family togetherness • escape and relaxation • socialisation and affiliation • event novelty • competitiveness

It is clear from the table that marathon runners' motives are heterogeneous. Since individual runners will have different motives for running and perhaps even multiple motives (Ogles & Masters, 2003; Shipway & Jones, 2008), profiles of their motives, in the form of motivational variables, can be used to examine and identify the different kinds of participant. However, regardless of the value of motives, few researchers have clustered marathon runners on the basis of their motives for participating. Masters and Ogles (1995), finding that these motives differ as a function of experience, distinguish three types of marathon runners: veteran; mid-level; and rookie. The most experienced group, the veterans, adopted a social identity as a marathon runner that included both competitive and health aspects. As expected, the mid-level runners were motivated primarily by personal performance enhancement and psychological rewards, whereas marathon identity played a secondary role. The rookies appeared less motivated by a marathon identity and since they had not yet completed a full marathon, they were less concerned with personal improvement.

In a later study, Ogles and Masters (2003), further categorise marathon runners into five types: running enthusiast (older participants, 50 years and older, attending many marathon events, more likely to run with other runners and disproportionately female), lifestyle manager (participants more likely to run alone, tending to run more slowly, training fewer kilometres and days, less likely to train twice in one day, and also disproportionately female), personal goal achievers (somewhat younger participants, with faster running times, training more kilometres, and disproportionately male), personal accomplishers (participants rated as average on training, running speed and attendance at marathons, and disproportionately male) and competitive achievers (predominantly younger, 20 to 28 years, faster runners, training more days, likely to also train twice a day, and disproportionately male).

To date only three other studies have been done to determine people's motives for participating in sporting events in South Africa. A study of cyclists in the Cape Argus Pick n

Pay Cycle Tour in Cape Town (Streicher & Saayman, 2010) revealed five motives: socialisation, event attractiveness, personal motivation, escape and relaxation and event attributes. The results showed that participants' motives were mainly intrinsic, such as personal motivation and escape and relaxation, while the event itself was also regarded as a major reason for participating. Kruger *et al*. (2011) identified three motives for swimmers at the Midmar Mile, near Pietermaritzburg: socialisation and escape; fun and entertainment; and intrinsic achievement, where the third was considered the most important. However, in addition to being goal-orientated, participants in the Midmar Mile are also driven by the need for social interaction and escape. These motives were used to categorise Midmar Mile participants into three distinct segments: devotees; aficionados; and recreationalists. In their study of participants at the Old Mutual Two Oceans Marathon, Cape Town, Kruger and Saayman (2011) identified six motives: intrinsic achievement; family togetherness; escape; and relaxation; socialisation and affiliation; event novelty; and competitiveness. On the basis of the results, it was suggested that all three events should combine the event attractiveness with achievement of personal (intrinsic) goals in their marketing campaigns. This supports the argument by Gill and Williams (2008) that understanding the motives of participants is critical, since it has implications for the development of marketing strategies, particularly when attempting to match the sports event offering with the motivational bundle being sought by the sport participants.

The present study attempts ultimately to identify the real 'comrades' of the Comrades Marathon, in other words the market(s) that marketers should target. As this approach has never been applied to endurance runners in South Africa, the research will also expand the limited knowledge and literature, an aim identified as important by Weed (2006).

METHODOLOGY

The questionnaire

A 3-section structured questionnaire, based on the work of McDonald *et al.* (2002), Ogles and Masters (2003) and LaChausse (2006), was used to collect the data. Section A captured demographic details (gender, home language, age, occupation, home province, marital status and preferred accommodation), and spending behaviour (number of persons paid for, length of stay and expenditure). Section B captured specific information about the race (initiator of participation, frequency of participation, repeat participation, other tourist attractions visited and information sources regarding the event), while Section C captured the motivational factors for competing in the race. In the motivation section, 24 items were measured on a 5-point Likert scale where respondents indicated how important they considered each item to be on a scale where 1=not at all important to 5=extremely important. This section also captured participants' marathon running history and how their participation in sport events influenced their holiday choice and travel behaviour. Eleven statements pertaining to the latter were measured on a 5-point Likert scale with 1=never, 2=almost never, 3=sometimes, 4=regularly and 5=always. For the purposes of this research, the information obtained from sections A, B and C was used predominantly.

Survey and sampling method

A destination-based survey was undertaken and questionnaires were handed out on-site at the Bonitas Comrades Expo in Durban during the registration period (27-29 May 2011).

Participants were selected after they had completed their registration. The field workers were trained to ensure that they understood the aim of the study as well as the questionnaire. Fieldworkers were also trained to assist respondents (especially foreign language participants) with the interpretation of the questionnaires. Respondents were briefed about the purpose of the research beforehand to ensure that they participated willingly and responded openly and honestly. A total of 450 questionnaires were distributed over a period of 3 days and 437 completed questionnaires were included in the analysis. According to Israel (2009:6), from a population of 100 000 (N), 398 respondents (n) are seen as representative and result in a 95% level of confidence. Since approximately 14 900 athletes participated in the race, the number of completed questionnaires is greater than the number required.

Statistical analysis

Microsoft© Excel© was used to capture the data and SPSS (2011) to analyse it. The analysis was done in 3 stages: 2 factor analyses; a cluster analysis; and an analysis of significant differences between the motivational clusters.

Firstly, two principal axis factor analyses, using an Oblimin rotation with Kaiser Normalisation, were performed on the 24 motivation items and the 11 holiday choice 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 larger 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 categorised 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 as acceptable in this study. 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.

Secondly, 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, of which the 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 *et al*., 2000). Hierarchical clustering makes no assumptions about the number of groups or group structure. Instead, the members are grouped together on the basis of their natural similarity (Johnson & Wichern, 2007). This research did not take a priori view of which data points 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 clusters were identified, multivariate statistics were used to examine any statistically significant differences between the motivational clusters. Two-way frequency tables and Chi-square tests were used to profile the clusters demographically, and t-tests to investigate any significant differences between clusters concerning socio-demographic and

behavioural variables. The study used demographic variables (age, gender, home language, province of origin, marital status, level of education) and behavioural variables (average spending per person, length of stay, repeat visit, category participated in, initiator of participation, other tourist attractions visited, type of accommodation) to examine whether statistically significant differences existed between different groups.

RESULTS

Factor analyses

The pattern matrix of the principal axis factor analyses using an Oblimin rotation with Kaiser normalisation identified 5 participant motivational factors and 2 holiday choice factors that were labelled according to similar characteristics (Tables 2 and Table 3).

***TABLE 2*: RESULTS OF FACTOR ANALYSIS OF COMRADES PARTICIPANTS**

Motivation factors and items	Factor loading	Mean value	Reliability coefficient	Average inter-item correlation
Factor 1: Intrinsic achievement		**3.94**	**0.90**	**0.46**
To feel proud of myself and to feel a sense of achievement	0.86			
The atmosphere of the Comrades	0.75			
Comrades is a major challenge	0.74			
It is a "must do" event	0.62			
Because I enjoy running	0.58			
It is an international event	0.56			
Because the event is well-organised	0.42			
To make my friends and family proud of me	0.41			
To compete against myself, to improve my running speed and/or to beat a certain time	0.40			
To improve my health	0.35			
To share group identity with other runners	0.28			
Factor 2: Exploration & competitiveness		**2.77**	**0.81**	**0.51**
To explore the area	0.69			
Reason to visit Pietermaritzburg/ Durban	0.67			
It is an international event	0.56			
To compete against some of the best runners in the country	0.53			
Factor 3: Family togetherness and escape		**3.10**	**0.71**	**0.38**
To spend time with family	0.64			
To relax	0.60			
Because the whole family can participate	0.59			
To get away from normal routine & stress	0.43			

***TABLE 2*: RESULTS OF FACTOR ANALYSIS OF COMRADES PARTICIPANTS (cont.)**

Motivation factors and items	Factor loading	Mean value	Reliability coefficient	Average inter-item correlation
Factor 4: Socialisation		**3.20**	**0.82**	**0.61**
To meet new people	0.80			
To socialise with other runners	0.79			
To spend time with friends	0.63			
Factor 5: Commitment		**3.44**	**0.66**	**0.50**
I do it annually	0.80			
I am pursuing a personal goal of participating in a certain number of marathons	0.44			
TOTAL VARIANCE EXPLAINED	**56%**			

These factors accounted for respectively 56 and 53% of the total variance. All had relatively high reliability coefficients, ranging from 0.66 (the lowest) to 0.90 (the highest) for the motivational factors and 0.45 (the lowest) to 0.86 (the highest) for the holiday choice factors. The average inter-item correlation coefficients with values between 0.38 and 0.51 for the motivational factors and 0.32 and 0.48 for the holiday choice factors, 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. The Kaiser-Meyer-Olkin measures of sampling adequacy of 0.89 for the motivational factors and 0.91 for the holiday choice factors also indicated that patterns of correlation were relatively compact and yield 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).

Factor scores were calculated as the average of all items contributing to a specific factor in order to interpret them on the original 5-point Likert scale of measurement. As Table 2 shows, the following motives for the Comrades participants were identified: intrinsic achievement (Factor 1); exploration and competitiveness (Factor 2); family togetherness and escape (Factor 3); socialisation (Factor 4); and commitment (Factor 5). Intrinsic achievement obtained the highest mean value (3.94), was considered the most important motive for participating in the race, and had a reliability coefficient of 0.90 and an average inter-item correlation of 0.46. Commitment had the second highest mean value (3.44), followed by socialisation (3.20) and family togetherness and escape (3.10). Exploration and competitiveness had the lowest mean value (2.77) and was rated as the least important motive for participating in the race.

***TABLE 3*: RESULTS OF FACTOR ANALYSIS OF THE INFLUENCE OF SPORT PARTICIPATION ON HOLIDAY CHOICE AND TRAVEL BEHAVIOUR**

Holiday choice and travel behaviour items	Factor loading	Mean value	Reliability coefficient	Average inter-item correlation
Factor 1: Primary influences		**3.22**	**0.86**	**0.48**
My sport participation gives me the opportunity to explore the country	0.91			
I plan my sport participation in order to see different places and destinations	0.82			
Participation in sport gives me the opportunity to travel	0.73			
I also take a holiday during my participation in marathons	0.71			
Participation in sport allows me to take my family and friends along on the trip	0.57			
I take a holiday in the town or area where I have participated	0.50			
My sport participation gives me the opportunity to travel overseas	0.44			
Factor 2: Secondary influences		**3.14**	**0.45**	**0.32**
I prefer to go on holiday at a different destination than where I have participated – at least once a year	0.68			
My sport participation and holiday destination differ	0.58			
I prefer not to spend a lot of time at the destination where I participate in a particular sport	0.40			
My holiday destination needs to give me the opportunity to train	0.22			
TOTAL VARIANCE EXPLAINED	**53%**			

When comparing the results with previous research on sport events motives in general, as well as marathon motives, 'intrinsic achievement' as a motive is supported by Ogles and Masters (2000; 2003), Kruger *et al*. (2011) and Saayman and Kruger (2011), while Ogles and Masters (2000), Gillet and Kelly (2006), Dann and Buchanan (2006), Ko *et al*. (2008), and Saayman and Kruger (2011) identified 'competitiveness'. However, 'exploration' has not yet been identified as a motive. The motives 'family togetherness' and 'escape' have also been identified by Weiss and Duncan (1992), Jamber (1999), McDonald *et al*. (2002), Kruger *et al*.

(2011) and Saayman and Kruger (2011), and 'socialisation' by Funk *et al*. (2007), Streicher and Saayman (2010), Kruger *et al.* (2011) and Saayman and Kruger (2011). 'Commitment' has also not been identified in previous research as a motive for competing in marathon races. Furthermore, a comparison of the South African studies shows that swimmers, cyclists and runners have significantly different motives for participating in their respective sports.

With regard to the influence of participation in sport on participants' holiday choice and travel behaviour (Table 3), 2 factors were identified: 'primary influences' (Factor 1) and 'secondary influences' (Factor 2). 'Primary influences' obtained the higher mean value (3.22) of the 2 factors, indicating that participants felt that their participation in sport *sometimes* influenced their holiday choice and travel behaviour. However, the mean value of 'secondary influences' (3.14) indicated that participants also felt that they prefered to take a holiday at a destination other than where they had to participate.

Results of the 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 motivation factors. A 2-cluster solution was selected as the most discriminatory (Figure 2). The results of the multivariate analyses were used to identify the 2 clusters and to discover whether significant differences existed between them ($p<0.05$).

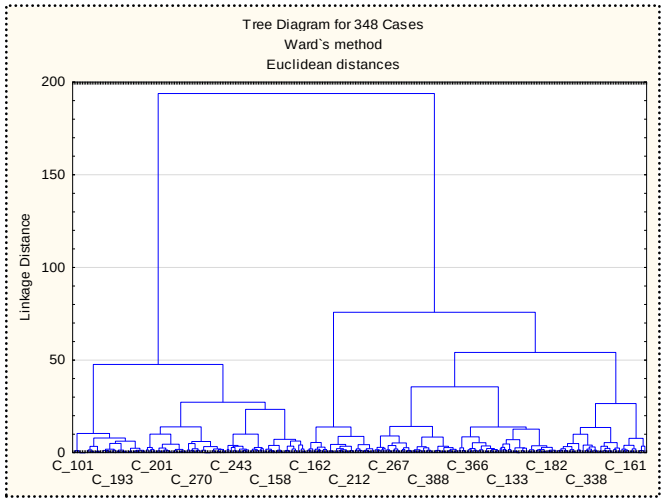

***FIGURE 2*: TWO CLUSTER SOLUTION: WARD'S METHOD WITH SQUARED EUCLIDEAN DISTANCE MEASURES**

Identification of segmented clusters

As Table 4 shows, t-tests indicated that all 5 motivational factors contributed to differentiating between the 2 motivational clusters ($p<0.05$).

***TABLE 4*: T-TEST RESULTS FOR MOTIVATIONAL FACTORS IN TWO CLUSTERS OF COMRADES PARTICIPANTS**

	Cluster 1 Recreational runners			Cluster 2 Serious runners			t-	
Travel motives	**Mean**	**SD**	***N***	**Mean**	**SD.**	***N***	**value**	**p**
Intrinsic achievement	3.60	0.86	205	4.46	0.45	142	10.84	< 0.05
Exploration and competitiveness	2.22	0.88	205	3.55	0.97	142	13.28	< 0.05
Family together-ness and escape	2.63	0.90	205	3.68	0.91	142	10.64	< 0.05
Socialisation	2.58	0.94	205	4.07	0.69	142	16.16	< 0.05
Commitment	2.84	1.26	205	4.29	0.83	142	11.94	< 0.05

Cluster 1 contained the largest sample of respondents (205) and had the lowest mean values for all 5 of the motives. This cluster was thus labelled 'recreational runners'. Cluster 2 was labelled 'serious runners' and contained 142 respondents. This second cluster had the highest mean scores across the 5 motivation factors especially for 'intrinsic achievement', 'commitment' and 'socialisation'.

Results from the independent t-test

Independent t-tests were conducted to determine whether there were significant differences between the 2 clusters of participants at the Comrades Marathon. The significant results are discussed in this section.

***TABLE 5*: DIFFERENCES BETWEEN MOTIVATIONAL CLUSTERS (t-Test)**

	Cluster 1 Recreational runners			Cluster 2 Serious runners			t-	
Variables	Mean	SD	N	Mean	SD	N	**value**	**p**
Age	42.04	9.32	199	43.22	9.19	140	-1.155	0.249
Group size	5.96	10.28	204	12.77	27.12	139	-3.236	0.001**
No. people paid for	2.34	3.63	198	2.40	4.66	135	-0.135	0.892
nights in Durban/ Pietermaritzburg	4.30	2.43	179	4.12	2.55	122	0.594	0.553
Times participated in Comrades	4.87	5.07	204	6.15	5.17	137	-2.172	0.031**
Average marathons in lifetime	28.19	60.17	187	32.18	52.54	131	-0.614	0.540
Average marathons per year	3.43	2.49	197	4.54	4.04	131	-3.079	0.002**

***TABLE 5*: DIFFERENCES BETWEEN MOTIVATIONAL CLUSTERS (t-Test) (*cont.*)**

Variables	Cluster 1 Recreational runners			Cluster 2 Serious runners			t-value	p
	Mean	SD	N	Mean	SD	N		
Spending categories	Rand			Rand				
Entry fees	528.91	375.38	205	794.59	417.51	142	-0.593	0.554
Accommodation	8004.70	2504.73	205	3755.10	2139.10	142	0.507	0.613
Transport	5686.16	2080.12	205	1978.79	1373.00	142	1.423	0.156
Running gear	1508.08	1168.39	205	2703.50	1519.75	142	-1.546	0.123
Food & restaurants	1735.42	1028.20	205	1753.12	1086.90	142	-0.309	0.758
Beverages	552.65	276.07	205	572.36	285.70	142	-0.159	0.874
Medicines	298.81	159.24	205	381.88	203.45	142	-1.208	0.228
Souvenirs	565.60	287.41	205	467.19	269.61	142	0.309	0.757
Spending per person	10330.37	5695.91	186	4710.23	4417.19	129	1.314	0.190
Holiday choice behaviour								
Primary influences	2.92	0.89	194	3.66	0.87	134	-7.361	0.001**
Secondary influences	2.91	0.74	194	3.47	0.92	134	-6.041	0.001**
Days spent in area where marathon is held	2.49	1.76	182	2.70	1.93	122	-0.943	0.346

** Significance at the 5% level

As Table 5 shows, there were significant differences between the 2 clusters of runners based on group size (p=0.001), times participated in the Comrades (p=0.031), average marathons per year (p=0.002) and the holiday choice behaviour factors, primary influences (p=0.001) and secondary influences (p=0.001). Serious runners travelled in larger groups (an average of 13 persons), had participated in the race more times (an average of 6 times) and competed in more marathons per year (an average of 5 marathons) than recreational runners, who travelled in smaller groups (an average of 6 persons), had participated in the Comrades fewer times (an average of 5 times) and competed in fewer races per year (an average of 3 races). With regard to holiday choice behaviour, serious runners' participation *regularly* influenced their travel behaviour, while this was only *sometimes* the case for recreational runners. Sport participation, however, also *sometimes* had a lesser influence on serious runners' travel behaviour, indicating that these participants were inclined to travel irrespective of their sport participation to destinations other than those where they compete.

No significant differences were found between the 2 clusters as regards to other socio-demographic and behavioural determinants. Both groups of runners were in their early forties, were financially responsible for 2 persons during the event, stayed an average of 4 nights in Durban or Pietermaritzburg, had completed between 28 and 32 marathons in their lifetime and spent from 2 to 3 days in the area where the marathons they competed in were held.

Recreational runners spent more during the race (an average of R5696) than serious runners (an average of R4417), especially on accommodation and transport.

Cross-tabulations and chi-square test results

Table 6 shows that there were statistical significant differences between recreational and serious runners with regard to high-income occupation (p=0.026), level of education (p=0.023), repeat participation (p=0.005), television (p=0.036) and magazines (p=0.047) as sources of information, decisions made to attend (p=0.001), other tourist attractions visited (p=0.050) and participation in other sport activities (p=0.014). At the 10% level of significance, foreign and African languages (p=0.087), clubs (p=0.066) as an initiator of participation and word of mouth (p=0.077), as a source of information also indicated significant differences.

***TABLE 6*: CHI-SQUARE TEST RESULTS OF PARTICIPANT CHARACTERISTICS**

Characteristics (n=437)	**MOTIVATIONAL CLUSTERS** Cluster 1 Recreation runners	Cluster 2 Serious runners	**Chi Square Value**	**df**	**p**	**Phi-Value**
Gender			1.539	1	0.215	-0.068
Male	73%	79%				
Female	27%	21%				
Home language						
English	Yes=37%	Yes=32%	0.607	1	0.436	-0.042
Afrikaans	Yes=46%	Yes=42%	0.429	1	0.513	-0.035
Foreign & African	Yes=18%;	Yes=25%	2.936	1	0.087*	0.092
Occupation						
High income	Yes=48%	Yes=36%	4.966	1	0.026**	-0.120
Medium income	Yes=40%	Yes=45%	0.850	1	0.357	0.050
Low income	Yes= 7%	Yes= 6%	0.392	1	0.531	-0.034
Province						
KwaZulu-Natal	Yes=16%	Yes=21%	1.471	1	0.225	0.066
Gauteng	Yes=40%	Yes=40%	0.001	1	0.979	0.001
Level of education			13.034	5	0.023**	0.195
No school	1%	5%				
Matric	28%	32%				
Diploma, degree	34%	35%				
Postgraduate	27%	16%				
Professional	9%	9%				
Other	2%	4%				
Marital status			7.538	4	0.110	0.148
Married	64%	67%				
Not married	19%	24%				
Divorced	9%	7%				
Widow/er	2%	1%				
Living together	6%	1%				

***TABLE 6*: CHI-SQUARE TEST RESULTS OF PARTICIPANT CHARACTERISTICS (n=437) (*cont.*)**

Characteristics	MOTIVATIONAL CLUSTERS Cluster 1 Recreation runners	Cluster 2 Serious runners	Chi Square Value	df	p	Phi-Value
Initiator of attendance						
Self	Yes=62%	Yes=63%	0.131	1	0.717	0.019
Spouse	Yes= 9%	Yes=10%	0.034	1	0.854	0.010
Media	Yes= 3%	Yes= 4%	0.424	1	0.515	0.035
Friends	Yes=30%	Yes=25%	0.808	1	0.369	-0.048
Children	Yes= 4%	Yes= 3%	0.296	1	0.586	-0.029
Family	Yes=13%	Yes= 9%	1.327	1	0.249	-0.062
Club	Yes=11%	Yes=18%	3.385	1	0.066*	0.099
Organisation	Yes= 2%	Yes= 3%	0.279	1	0.597	0.028
Preferred type of accommodation			0.015	1	0.901	-0.007
Paid accom.	Yes=69%	Yes=70%				
Participate again			10.709	2	0.005**	0.177
Yes, definitely	66%	82%				
No, definitely not	7%	2%				
Perhaps	27%	16%				
Main sources of information						
Television	Yes=40%	Yes=51%	4.418	1	0.036**	0.113
Radio	Yes=18%	Yes=14%	0.960	1	0.327	-0.053
Website	Yes=10%	Yes=10%	0.001	1	0.975	0.002
Email	Yes=10%	Yes= 7%	0.376	1	0.376	-0.047
Magazines	Yes=17%	Yes= 9%	3.955	1	0.047**	-0.107
Newspapers	Yes=13%	Yes=11%	0.158	1	0.691	-0.021
Word of mouth	Yes=38%	Yes=29%	3.134	1	0.077*	-0.095
Club	Yes=31%	Yes=30%	0.107	1	0.744	-0.018
Decision made to participate			14.155	2	0.001**	0.205
Spontaneously	37%	56%				
More than a month ago	53%	41%				
Other	10%	3%				
Other tourist attractions visited	Yes=46%	Yes=57%	3.843	1	0.050**	0.105
Participate in other sport act.	Yes=54%	Yes=39%	6.032	1	0.014**	0.139

** Significance at the 5% level and * indicates significance at the 10% level

The significant differences are discussed and presented below.

- More serious runners were foreign participants or participants who speak African languages.
- More recreational runners were in high-income occupations and had a higher level of education, which could explain their higher spending at the race.
- Significantly more serious runners said they would definitely compete in the Comrades again, while more recreational runners were unsure about this.
- More serious runners had heard about the race from television, while recreational runners consulted magazines. More recreational runners had heard about the event through word-of-mouth recommendations.
- Their affiliated club had initiated more serious runners' participation.
- Surprisingly, more recreational runners had made their decision to participate in the race well in advance, while more serious runners had made their decision to compete 'spontaneously'.
- More serious runners had visited other tourist attractions in the area coincidentally with the race.
- Significantly more recreational runners participated in other sport activities, while serious runners were not likely to participate in sport activities other than marathon running.

There were no statistically significant differences between the 2 clusters as regards other variables. Both clusters were predominantly male, married, Afrikaans-speaking, from Gauteng Province, made use of paid accommodation during the race and initiated their participation in the race themselves.

FINDINGS AND IMPLICATIONS

The results of this study show that the ultra-marathon runners surveyed were motivated by intrinsic achievement, exploration and competitiveness, family togetherness and escape, socialisation and commitment. The cluster analysis, which segmented runners according to these motives, revealed two distinct segments that were labelled recreational runners and serious runners. The study found that these ultra-marathon runners were mainly motivated by intrinsic achievement and this applied for both clusters. Commitment was also identified as a primary motive for the first time. In comparison with previous studies, it was clear that a different combination of motives was at play. An interesting finding was that in addition to being goal-orientated, participants were also driven by the need for social interaction, family togetherness and escape. By corroborating the findings by Ogles and Masters (2003) and Shipway and Jones (2008), these two clusters differed in terms of not only their motives but also their socio-demographic variables. These clusters furthermore differed significantly from the clusters of runners identified by Ogles and Masters (2003). The two clusters of Comrades runners in this study did, however, show some similarities with the veteran marathon runners and mid-level runners identified by Masters and Ogles (1995) and the clusters of swimmers (devotees, aficionados and recreationalists) identified by Kruger *et al*. (2011). The results furthermore corroborate the finding that motives, and therefore clusters of participants, differ

from one event to another, which means that what attracts participants to one event may not necessarily work for another. The results also indicated that the combination of intrinsic motives seemed to be more intense than that of other categories of marathon runners, which may perhaps be explained by the emphasis on comradeship in the history and title of the race.

The findings of this study suggest the following implications. Firstly, the typical (real) comrade of the Comrades Marathon is a person who combines the attributes of the two clusters, serious and recreational athletes, where intrinsic achievement and commitment are key motives. Recreational runners spend more per person and they are also more in numbers; hence they are a good market to attract if the event is to increase its economic contribution to the region. The finding that recreational runners spent more (an average of R5696) than serious runners (an average of R4417), is also an interesting contradiction of the findings by McGehee *et al*. (2003) and Kruger *et al*. (2011), that the more serious athletes were inclined to spend more.

However, the serious runners seem to visit more tourist attractions and therefore from a tourism point of view they are also an important market. This supports the finding by McGehee *et al.* (2003) and Funk *et al.* (2007) that participants with high levels of involvement in endurance running do more travelling to running events and destinations where events are held. Marketers of the Comrades Marathon should therefore follow a two-pronged approach, focusing on both recreational and serious runners. Recreational runners can be targeted by means of magazines and serious runners by means of clubs. In the case of the serious runners, club competitions could also lead to a greater number of participants. The important role of clubs is also evident in the recreational runners' decision-making process and larger group sizes. Both marketing campaigns must combine the appeal to achievement of personal (intrinsic) goals with socialisation and escape.

Secondly, it seems that since serious runners are running more marathons than recreational runners, they take less time to decide whether to participate. One possible reason for this is that they know they will qualify since they compete in more marathons; therefore they are prepared for the race. Recreational runners plan longer in advance in order to be ready. Event organisers could use other marathon events to market or attract more serious runners.

Lastly, events such as these have a clear impact on tourism and travel behaviour. Participation in sport of this nature exposes runners to travel and this can become a habit or even a lifestyle (Shipway & Jones, 2008). This is confirmed by the fact that serious runners compete more regularly in marathons and these marathons take place all across the country, as well as in other countries. Therefore, marathons, especially the Comrades, create an 'extension effect', which implies that in order to qualify for one event, one needs to compete in other marathons. Hence, the Comrades Marathon influences participation at other events. Seeing that these events take place on existing infrastructure, it is no wonder that cities are keen to host them.

CONCLUSION

This study determined the motives of runners for participating in the Comrades Marathon and clustered the participants according to these motives. This type of research was conducted for the first time at an ultra-marathon in South Africa and the profile and motives of these

athletes have been identified. With these results, gaps in the existing literature have been filled, since this research contributes to the literature not only of sport events but also of marathons and specifically ultra-marathon participants. The study corroborates the argument that motives for participating differ according to the sporting event, and supports the view that marketers and sport event organisers must understand that participants have different motives and so should not be regarded as a homogeneous group (Hinch & Higham, 2004; Weed & Bull, 2004; Weed, 2006). In fact, this study showed not only that motives for participating in ultra-marathons differ from those participating in other types of marathons, but also that the combination of motives differed.

The study in addition showed that participation in sport has a definite impact on a participant's travel behaviour and that there is a significant relationship between sport and tourism. This type of research is valuable to sport event organisers, as it assists in making informed and cost-effective marketing and product development decisions. The typical (real) comrade has the attributes as indicated in the two clusters. It is thus recommended that similar research, comparing participants' motives and whether they are primarily intrinsic, extrinsic or a combination, be undertaken for other marathon events, as well as other South African sporting events. Further research should also investigate whether travel motives, and especially intrinsic motives, are a driving force for travel and tourism.

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