Stakeholders willingness to apply sustainable adventure tourism indicators: a case of Waterval Boven in South Africa

N. N. Tshipala*, W. J.L. Coetzee & M. Potgieter

Tshwane University of Technology, Department of Tourism Management, Pretoria,
Republic of South Africa
Private Bag X680 Pretoria 0001
Fax: 0123824611
*Corresponding author: tshipalann@tut.ac.za

Abstract

In South Africa and across the globe, the development of adventure tourism industry has resulted in a multitude of different types of activities, destinations, risks, impacts and unsustainable practices. The development of adventure tourism in many destinations has boosted many economies across rural communities and countries. The added benefits of developing adventure tourism in a sustainable manner include the promotion of responsible investment, infrastructure development and a host of other positive economic, social and environmental impacts. This study investigates the stakeholders will to utilise sustainable adventure tourism indicators from residents, tourists, business owners and government employees at Waterval Boven if made available. Descriptive statistics were presented; Cronbach Alpha and Chi-square tests were also applied. In general, the respondents perceived the indicators positively and felt they could assist in the sustainable development of adventure tourism. The study contributes towards the development of sustainable adventure tourism destinations that can make a significant contribution towards poverty alleviation by maximising social and economic benefits for locals, enhancing cultural heritage and reducing any negative impacts on the environment.

Key words: Adventure tourism, Sustainable tourism; sustainable tourism indicators; Waterval Boven.

INTRODUCTION

Adventure tourism is a big business on a global scale and many tourists are participating in activities that fall under the 'adventure' umbrella. Furthermore, there are numerous business enterprises in the adventure tourism sector. This can be attributed to the fact that outdoor adventure pursuits have become increasingly popular and also fashionable (Gyimothy & Mykletun, 2004:855).

Of all African destinations, South Africa has proved to have the best developed adventure tourism market (Rogerson, 2007). Its strength is underpinned by a large and robust domestic market, as well as a growing stream of international adventure tourists (Visser & Hoogendoorn, 2012). South Africa boasts 3 000 kilometres of coastline along with breath-

taking scenery, often side by side. The country's diverse terrain, together with an ideal climate for outdoor activities, makes it a rich playground for adrenalin seekers. South Africa also offers world-class climbing, surfing, diving, hiking, horseback safaris, mountain biking, river rafting and just about any other extreme activity imaginable (SouthAfrica.info, 2012).

According to Greffrath and Roux (2012), the substantial growth of adventure tourism in South Africa is quickly becoming an unregulated industry. Concerns have been raised about the impact adventure tourism could also have on the environment and the surrounding communities. There is a need to investigate the industry's significance according to Greffrath and Roux (2012) in terms of its economic, recreation and leisure-related value. Uncontrolled

adventure tourism raises critical issues, such as over-commercialisation, over-capacity and sustainability, risk litigation, accreditation issues, and long-term market sustainability problems. Indeed, some of these can already be noticed in adventure destinations such as the Vredefort Dome World Heritage Site.

One major challenge in this regard is that all stakeholders should help to bring about a transition towards a broader based, adventure destinations rural economy with the help of indicators that provide substantial benefits for the local population but which are more clearly rooted in or complementary to the sustainable use of the areas' special natural qualities.

LITERATURE ANALYSIS

"Adventure tourism is what tourism should be today and definitely what tourism will be tomorrow" – this is the current state of affairs, according to Secretary-General of the World Tourism Organisation (UNWTO), Mr. Taleb Rifai. He added, during the Adventure Travel World Summit in 2012, that there will be inevitable shifts in the leisure tourism market towards more experience-based, responsible and lower-impact environmental as well as cultural travel in the future (ATTA, 2012.

Adventure tourism can provide opportunities in this regard. However, one should work towards ensuring that adventure tourism not only benefits adventure businesses, but also the local communities and the environment upon which it is built. Responsible experiences that are environmentally, economically and socially cognisant can be a type of model for adventure tourism and destinations on a global scale. In order to address the concept of sustainable adventure tourism, it is necessary to take a closer look at sustainable development as the basis for sustainable tourism.

While there have been calls for more balanced public participation in tourism development, in practice this has proved difficult to achieve. Local governments and policy makers should take into account the views of stakeholders and ensure that these groups support the development (Gursoy & Kendall, 2006; Ntloko & Swart, 2008).

In many rural tourism destinations the indigenous populations form a key element in the tourism product and as such their participation and co-operation is highly desirable, if not essential (Inskeep, 1991). Because broad community support is a key element in successful tourism development (Western Rural Development Centre, 1996; Saayman, 2013), tourism planners and others concerned with developing tourism have sought to incorporate stakeholder's views into development plans.

As Murphy (1985) points out, 'it is the citizens who must live with the cumulative outcome of such developments and needs to have greater input into how his community is packaged and sold as a tourist product (Murphy, 1985:16). While the principle of community participation in tourism development is widely accepted, in practice it has proven difficult to achieve. Furthermore, it is also imperative to examine the benefits of sustainable tourism to all those who adhere to it.

Uses and benefits of sustainable tourism indicators

One important element of sustainable tourism indicators refers to its use. There is mounting evidence, as indicated by Pfiser and Tierney (2008) that human and business activities have profound effects on the natural environment on a global scale. It is also recognised that tourism is not as clean as it was once believed to be. In fact, tourism is causing environmental concerns ranging from global warming to the adverse impacts of tourism on host cultures. With all the negative impacts that are being attributed to tourism, the use of indicators becomes paramount to planners in the tourism industry.

The use of indicators, according to Choi and Sirikaya (2006:1276), is widespread and their uses have been expanded to include broad technical and discipline-

based indicators such as economic indicators, social indicators, tourism or psychological indicators.

According to Dymond (1997:280), the use of indicators of sustainable tourism provides an operational and cost-effective means of supplying tourism managers with the information they need for decision-making purposes. The GSTC council (2012:1) notes that specific knowledge is required to understand the link between tourism activities and its impacts on the natural, built, socio-cultural, and economic surroundings. Based on this knowledge, changes can be

monitored and decisions made with a view to reduce risks to the business and the destination.

The benefits of using indicators have been summarised in other studies and are based on that of the United Nations World Tourism Organisation. Table 1 indicates the main benefits of indicators as presented by Delisle (2000:3), Miller (2001:353) and The United Nations World Tourism Organisation (2004:9). Among these benefits are some that also feature within the GSTC and these are indicated by an asterisk in the table.

Table 1:   Benefits of using indicators

Delisle (2000)	Miller (2001)	United Nations World Tourism Organisation (2004)
Assess current state of tourism (Grant, 2000) Analyse development of tourism (Ceron & Dubois, 2003) Support policy and strategy decisions (Tourism Queensland, 2013)	Formation of policies Public awareness/ problem acknowledgement * (GSTC, 2012) Problem identification (Grant, 2000) Policy evaluation Policy implementation * (GSTC, 2012)	Better decision-making * (GSTC, 2012, Tourism Queensland, 2013, Younis 2004 & 2006) Identification of emerging issues * (GSTC, 2012) Identification of impacts * (GSTC, 2012) Performance measurement of the implementation of plans and management activities * (GSTC, 2012 & Younis 2004,2006) Reduced risk of planning mistakes * (GSTC, 2012, Younis 2004 & 2006)

Note: (*) = GSTC (2012)

Using indicators can provide greater benefits because indicators can assist in identifying problems and they also assist in forming policies. In tourism, many problems can arise or may indeed already exist at a number of destinations.

The use of indicators would enable the monitoring of the current state of tourism, together with anticipated development. Performance management is paramount to tourism development; furthermore, monitoring of tourism impacts through indicators that can minimise risks and also assist in decision-making.

METHODOLOGY

This study is based on a quantitative approach and a self-completing questionnaire was utilised as the research instrument. Data collection was conducted among the following stakeholders: (1) residents, (2) government employees, (3) tourists and (4) business owners at Waterval Boven. A trained team of four fieldworkers from Emkhazeni FET college studying tourism with an assistance of a field coordinator (a lecturer at TUT) administered the surveys in major areas of Watervval Boven in Mpumalanga Province South Africa.

A total of N=500 responses were envisaged but only 462 were obtained.

Research instrument

A fixed-choice self-administered questionnaire was used across areas of Waterval Boven. The questionnaire was printed in three languages (Seswati, English and Afrikaans) and developed to examine respondents' ratings regarding the importance placed on sustainable tourism indicators which could be used to advocate the development of sustainable adventure tourism at Waterval Boven. A Likert scale was utilised for the respondents' answers in section two, which dealt with the global sustainable tourism criteria statements. For this section, two types of Likert scale were used: Likert scale one with a five-point scale from 1 = (not important at all) to 5 = (extremely important). The second Likert scale ranged from 1 = (strongly disagree) to 5 = (strongly agree). Regarding Section C and D, participants were requested to respond with a 'Yes' or 'No' to a set of statements dealing with sustainable tourism. These statements were derived from a review of the United Nations Millennium Development goals, The International Ecotourism Society and the Global Sustainable Tourism Criteria. For the purpose of this study, eight grouped indicators were utilised for the analysis.

Analysis of data

Microsoft© Excel© was used for data capturing while SAS (SAS Institute Inc. 2001) was used for the analysis of data. This study involved Descriptive statistics, a Cronbach Alpha analysis and Chi-square tests.

Descriptive statistics

The descriptive statistics conducted in this study indicates how each indicator was rated based on the demographic factors in the questionnaire. According to Statistics.laerd (2013:1), descriptive statistics is the term given to the analysis of data that helps describe, show or summarise data in a meaningful way such that, for example, patterns might emerge from the data. Descriptive statistics do not, however, allow researchers to make conclusions beyond the data that has been analysed or to reach conclusions regarding any hypotheses made. They are simply a way of describing the data.

Descriptive statistics is significant because if data is simply presented in its raw state, it would be hard to visualise what the data was showing, especially if there was a great deal of data, as was the case with this study. Descriptive statistics therefore enabled the presentation of data in a more meaningful way, which allowed for a simpler interpretation of the data. Typically, there are two general types of statistic used to describe the data for this study:

- **Measures of central tendency:** these are ways of describing the central position of a frequency distribution for a group of data. In this case, the frequency distribution is simply the distribution and pattern of marks scored by the respondents at Waterval Boven from the lowest to the highest. These describe the central position using a number of statistics, including the mode, median, and mean.

- **Measures of spread:** these are ways of summarising a chunk of data by describing how widely spread the scores are. For example, the mean score of 100% of the respondents may be 65% out of 100. However, not all respondents will have scored 65%. Rather, their scores will be spread out. Some will be lower and others higher. Measures of spread help to summarise how widely spread these scores are. To describe this spread, a number of statistics are available to a researcher, including the range, quartiles, absolute deviation, variance and standard deviation.

Cronbach Alpha

The Cronbach Alpha is, according to Tavakol and Dennick (2011:53), a measure of the internal consistency or reliability of a

set of items. This is a measure based on the correlations between different items on the same scale. As a rule of thumb, an Alpha of between 0.6 and 0.7 is regarded as acceptable reliability and 0.8 or higher indicate good reliability. A reliable instrument (questionnaire) is one with scores on similar items to be internally consistent, but each of the items is still required to contribute unique information to the proposed construct.

The item analysis of the Cronbach Alpha recalculates the Cronbach Alpha by deleting one variable at a time from the construct in order to see the effect (positive or negative) on the Cronbach Alpha. If a variable is deleted from the analysis and the Cronbach Alpha increases significantly, it suggests that that the specific variable does not correlate well with the rest of the variables in the construct and it is usually an indication that the variable should be excluded from the construct.

All individual variables in the construct should also have a correlation with the total construct of more than 0.3. An indicator description will be used in the tables.

Chi-squared test for independence

The Chi-squared tests for independence were used to determine whether different variables listed in a two-way table were dependent on one another. According to Sharp (s.a.), as adapted from Maben (s.a.), the Chi-square test is used to determine whether there is a significant difference between the expected frequencies and the observed frequencies in one or more categories. The Chi-square test is also used to answer some of the following:

- Do the numbers of individuals or objects that fall in each category differ significantly from the number expected?

- Is this difference between the expected and observed due to sampling error, or is it a real difference?

The explanation followed for the purpose of this study regarding Chi-squares is:

- H_0: Cluster representation is independent of demographic description.

- H_1: Cluster representation is dependent on demographic description.

When testing at a 5% level of significance, the rule of thumb used was that if the *p-value* of the test is less than 0.05, the null hypothesis is rejected, but if the *p-value* > 0.05 the null hypothesis is not rejected. For the Chi-square test to be valid and relevant, the following requirements for the purpose of this study were taken into account:

(1) Quantitative data.
(2) One or more categories.
(3) Independent observations.
(4) Adequate sample size (at least 10).
(5) Simple random sample.
(6) Data in frequency form.
(7) All observations must be used.

FINDINGS

Internal consistency and reliability on sustainable tourism indicators

A Cronbach Alpha analysis was conducted on all the indicators in the questionnaire. The findings regarding internal consistency or reliability for all indicators are based on the correlations between the different items on the same scale.

Table 2: Internal consistency and reliability of sustainable tourism indicators

Indicator	Cronbach Coefficient Alpha
Sustainable tourism criteria	**0.861855**
Socio-economic	**0.833805**
Conservation of resources	**0.710705**
Culture and heritage	**0.718055**
Pollution reduction	**0.715880**
Conserving biodiversity, ecosystems and landscapes	**0.757438**
Millennium Development Goals	**0.845526**
The International Ecotourism Society	**0.829285**

The Cronbach Alpha reliability coefficient tests for all indicators in the eight groupings were conducted using the Cronbach Alpha reliability coefficient. The findings revealed that all of the indicators presented an acceptable measurement of reliability and consistency with reference to the explanation under the methodology section.

Respondents' willingness to consider applying sustainable adventure tourism indicators

Respondents were requested to state whether they would consider applying sustainable adventure tourism indicators if these were made available to them in the future. To answer this question, respondents had to select whether they would do that occasionally or frequently and seldom or never.
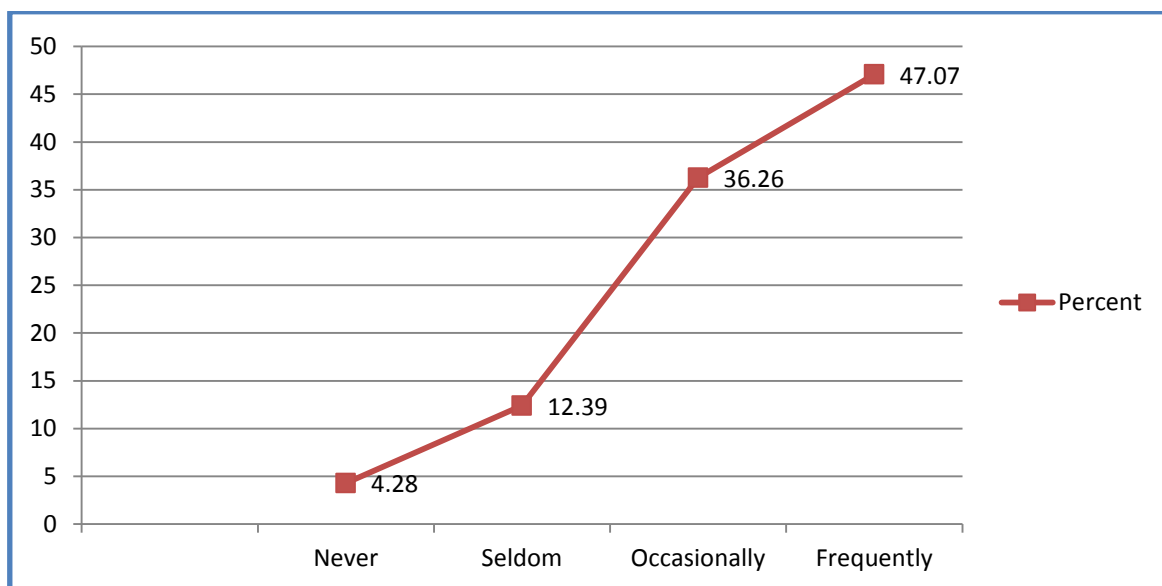

Figure 1:Respondents' willingness to consider **applying sustainable adventure tourism indicators**

Just less than half (47.07%) of the respondents, as illustrated in Figure 1, indicated that they would frequently use sustainable adventure tourism indicators if these were made available to them. Over thirty six per cent (36.26%) also stated they would occasionally make use of the indicators, whilst 12.39% respondents stated that they would seldom make use of these. There was also a small percentage (4.28%) of respondents who stated that they will never use sustainable adventure tourism indicators even if these were made available to them. The findings are an indication that a relatively high percentage of the various types of respondents are willing to occasionally and frequently consider applying sustainable adventure tourism indicators. This suggests a good indication of willingness to work towards sustainability within the industry at Waterval Boven.

Cross-comparisons were drawn between respondents' willingness to consider the use of sustainable adventure tourism indicators versus the types of respondents, level of education and the occupational status of the respondents; these are presented next. To understand the distribution of percentages, circles are used to highlight the important row percentages in tables.

(1) Cross-comparison of the willingness to consider applying sustainable adventure tourism indicators versus types of respondents

Table 3: **Cross-comparison of willingness to consider applying sustainable adventure tourism indicators versus types of respondents**

Statistics	Consideration	Tourist	Resident	Business owner	Government employee	Total
Frequency	Never and seldom	7	46	4	12	69 17.12
Per cent		1.74	1.41	0.99	2.98	
Row		10.14	66.67	5.80	17.39	
Frequency	Occasionally and frequently	90	155	43	46	33 82.88
Per cent		22.33	38.46	10.67	11.41	
Row		26.95	46.41	12.87	13.77	
Total (n)		97	201	47	58	403
Total (%)		24.07	49.88	11.66	14.39	100.00
	Statistic					
Chi-Square				3	14.3889	0.0024

The results as indicated in Table 3 indicates that, more residents followed by government employees, tourists and then business owners would never or seldom use sustainable adventure tourism indicators. It is noticeable that a relatively good proportion across the various types of respondents is willing to occasionally and frequently consider applying sustainable adventure tourism indicators. This confirms the good indication of willingness to work towards sustainability in the industry in the area as found in Figure 1.

As indicated in Table 3, the level of willingness to consider applying sustainable adventure tourism indicators differs statistically significantly based types of respondents (Chi-Square value=14.3889; p-value=0.0024).

(2) Cross-comparison of the willingness to consider applying sustainable adventure tourism indicators versus level of education

The level of willingness to consider applying sustainable adventure tourism indicators differs statistically significantly based on the level of education of the respondents (Chi-Square value=6.2734; p-value=0.0434) as indicated in Table 4.

Table 4:   **Cross-comparison of willingness to consider applying utilising sustainable adventure tourism indicators versus level of education**

Statistics	Consideration	Never, primary and other	High school	College or Varsity	Total
Frequency	Never and seldom	23	26	25	74 16.70
Per cent		5.19	5.87	5.64	
Row		31.08	35.14	33.78	
Frequency	Occasionally and frequently	73	121	175 all similar	369 83.30
Per cent		16.48	27.31	39.50	
Row		19.78	32.79	47.43 all similar	
Total (n)		9	147	200	443
Total (%)		21.67	33.18	45.15	100.00
	Statistic				
Chi-Square			2	6.2734	0.0434

It is notable that a higher percentage of those who stated that they would occasionally or frequently apply sustainable tourism indicators have been exposed to college or university. No exceptional difference was found in terms of education among those who responded that they would never or seldom apply sustainable adventure tourism indicators. A substantial difference in the percentages was found among the level of education of those who responded that they would occasionally and frequently apply sustainable adventure tourism indicators, as indicated on the row percentages in Table 4.

(3) Cross-comparison of the willingness to consider applying utilising sustainable adventure tourism indicators versus occupational status

There was no statistically significant difference based on the occupational status of the respondents (Square value=5.4660; p-value=0.1407) as indicated Table 5 regarding whether respondents would consider applying sustainable adventure tourism indicators.

Table 5:   **Cross-comparison of willingness to consider applying utilising sustainable adventure tourism indicators versus occupational status**

Statistics	Consideration	Student	Employed	Own business	Unemployed, retired & other	Total
Frequency	Never and seldom	22	27	4	21	74 17.05
Per cent		5.07	6.22	0.92	4.81	
Row		29.73	36.49	5.41	28.38	
Frequency	Occasionally and frequently	78	128	51	103	360 82.95
Per cent		17.97	29.49	11.75	23.75	
Row		21.67	35.56	14.17	28.61	
Total (n)		100	155	55	124	434
Total (%)		23.04	35.71	12.67	28.57	100.00
	Statistic					
Chi-Square				3	5.4660	0.1407

Virtually the same number of respondents featured among those who stated that they would never and seldom consider, versus those who would occasionally and frequently consider applying sustainable adventure tourism indicators. These findings could be attributed to the fact that the unemployed and retired might not be interested nor understand why sustainable adventure tourism indicators would be important in an area such as Waterval Boven. It is also important to note that a low percentage of business owners mentioned that they will occasionally and frequently consider applying sustainable adventure tourism indicators.

DISCUSSIONS

Cronbach Alpha

It can be concluded that according to the statistical analysis (Table 2), four of the indicators had a Cronbach Alpha reliability coefficient of larger than 0.8 and are therefore very reliable, whilst four of the indicators had a Cronbach Alpha reliability coefficient larger than 0.7, which is an acceptable reliability. The Cronbach Alpha reliability coefficient tests for all indicators in the eight groupings were conducted using the Cronbach Alpha reliability coefficient as explained in the methodology section. The findings revealed that all of the indicators presented an acceptable measurement of reliability and consistency.

Respondents' willingness to consider applying sustainable adventure tourism indicators

From the (Figure 1) result, the inference can be drawn that there are more people who are prepared to frequently and occasionally make use of the indicators in their businesses, in their communities, in government and in everyday living. This inference can contribute towards sustainable adventure tourism development in Waterval Boven, and also in South Africa. Additional efforts are still required to convince those who indicated that they never and seldom make use of sustainable adventure tourism indicators, about the advantages of being sustainable. Such positions can also be attributed to a lack of knowledge regarding the advantages of utilising sustainable adventure tourism indicators.

Cross-comparisons between respondents' of their willingness to consider the use of sustainable adventure tourism indicators versus the types of respondents, level of

education and the occupational status of the respondents.

As indicated in Table 3, the level of willingness to consider applying sustainable adventure tourism indicators differs statistically significantly based types of respondents (Chi-Square value=14.3889; p-value=0.0024). By looking at these finding, it is interesting to note that residents are most likely to use sustainable tourism indicators whilst one may initially have felt that these sentiments actually belonged with people involved with tourism who develop businesses and facilities such as adventure tourism.

The level of willingness to consider applying sustainable adventure tourism indicators differs significantly statistically based on the levels of education of the respondents (Chi-Square value=6.2734; p-value=0.0434) as indicated in Table 4. This could be a confirmation of the notion that the more educated people are, the better they would fare in terms of their understating of sustainability issues. It can also be concluded that the types of respondents (more residents, government employees, tourists, and business owners) and level of education have an influence on the willingness to utilise sustainable adventure tourism indicators.

Regarding no statistically significant difference based on the occupational status of the respondents (Square value=5.4660; p-value=0.1407) as indicated Table 5, it could be as a result of business owners' lack of knowledge of the benefits of sustainable practices, or one may here simple see a rejection of the unknown.

CONCLUSIONS

It is important for authorities to administer the willingness of stakeholder to use sustainable adventure tourism indicators before such indicators are implemented. The findings regarding the respondents or stakeholder willingness can lead to sound decision making towards a sustainable adventure tourism destination.

More studies need to be conducted on the issue of sustainable adventure tourism indicators in other adventure tourism destinations in South Africa. It can also be concluded that issues of sustainability seem to depend on the type of respondents as well the level of education of the respondents and thus improving these two demographic factors can go a long way in improving the will to use sustainable adventure tourism indicators in the future.

REFERENCE S

Adventure Travel and Trade Association. 2012. [Online]. Available from: Available fromhttp://www.\adventure travel.biz/about/. [Accessed: 3/21/2012].

Ceron, J. & Dubois, G. 2003. Tourism and Sustainable Development Indicators: the gap between theoretical demands and practical achievements. *Current issues in tourism,* 6(1): 54-74.

Choi, H.S. & Sirikaya, E. 2006. Sustainability indicators for managing community tourism. *Tourism management*, 27:1274-1289.

Delisle, J. 2000. The Canadian national tourism indicators: a dynamic picture of the satellite account. Statistics Canada, Income and expenditure accounts division.

Dymond, S.J. 2010. Indicators of sustainable tourism in New Zealand: A local government perspective, *Journal of sustainable tourism*, 5(4):279-293.

Global Sustainable Tourism Creteria (GSTC). 2009. [Online]. Available from: Available from: http://www.sustainabletourismcriteria.org/index.php?option=com_content& task=view&id=58&Itemid=188 [Accessed: 2/4/2011].

Grant, M. 2000. Sustainable tourism indicators – their importance at a national level. [Online]. Available from: Tourism insights. Available from: http://www.insights.org.uk/

articleitem.aspx?title=Sustainable+Touris m+Indicators++their+Importance+at+a+Lo cal+Level [Accessed: 11/09/2013].

Greffrath, G. & Roux, C. 2012. The Vredefort Dome World Heritage Site: client satisfaction with commercial whitewater rafting. *African journal for physical, health education, recreation and dance.* 18 (1) March:39-54

Gyimothy, S. & Mykletun, R.J. 2004. Play in adventure tourism: The case of Artic Trekking. *Annals of Tourism Research*, 31(4):855-878.

Gursoy, D. & Kendall, K.W., (2006), "Hosting Mega Events: Modelling Locals" Support", *Annals of Tourism Research*, 33 (3), pp. 603-623.

Inskeep, E. (1991) Tourism Planning: An Integrated and sustainable Approach. New York, Van Nostrand.

Maben, A. F. S.a. Adapted from Statistics for the Social Sciences by Sharp.V. S.A. [Online]. Available from: http://www.enviroliteracy.org/pdf/materials/ 1210.pdf [Accessed: 29/06/2013].

Mliller, G. 2001. The development of indicators for sustainable tourism: results of a Delphi survey of tourism researchers. *Tourism management*, 22:351-352.

Murphy, P. E. (1985) Tourism: A Community Approach. New York, Methuen.

Ntloko, N.J. & Swart, K. (2008). Sport tourism event impacts on the host community: A case study of Red Bull Big Wave Africa, *South African Journal for Research in Sport, Physical Education and Recreation,* 30(2): pp. 79-93.

Pfister, R.E & Tierney, P.T. 2008. *Recreation, event and tourism businesses: start up and sustainable operations.* City: Pfister and Tierner Publishers.

Rogerson, C. & Visser, G. 2004. (ed.) *Tourism and development issues in contemporary South Africa*. City: Africa Institute of South Africa.

Saayman, M. 2013. (ed.) En route with tourism: an introductory text. Claremont: Juta.

South Africa.info. 2012. South Africa: adventure heaven. [Online]. Available from: www.Southafrica.info/travel/adventure/adv enture.htm#UJDp229ZJBA [Accessed: 10/31/12].

Statistics. Laerd. 2013. Laerd statisitics: Descriptive and Inferential Statistics. [Online]: Available from: https://statistics.laerd.com/statistical-guides/descriptive-inferential-statistics.php [Accessed: 29/06/2013].

Tavakol, M. & Dennick, R. 2011. Making sense of Cronbach's alpha. *International Journal of medical education*, 2:53-55.
Tourism Queensland. 2013. Tourism Environmental Indicators: FACT SHEET. [Online]. Available from: http://www.tq.com.au/fms/tq_corporate/ind ustrydevelopment/

Tourism%20Environmental%20Indicators %20\Fact% 20Sheet.PDF [Accessed: 20/08/2013].

Younis. E. 2004. Indicators to measure sustainability in tourism. In: 7th International Forum on Tourism Statistics, June 9-11, 2004, Stockholm, Sweden.

United Nations Environmental Programme & World Tourism Organisation. 2004. *Indicators of sustainable development for tourism destinations: a guidebook. Madrid, Spain.*

Western Rural Development. 1996. Tourism assessment handbook: A nine-step guide designed to facilitate the process of determining whether Tourism Development is right for your community. Utah State University.