"An exploratory analysis of leisure caravanning in the Kruger National Park in South Africa"

AUTHORS	C H van Heerden
ARTICLE INFO	C H van Heerden (2010). An exploratory analysis of leisure caravanning in the Kruger National Park in South Africa. <i>Innovative Marketing</i> , 6(1)
RELEASED ON	Thursday, 15 April 2010
JOURNAL	"Innovative Marketing "
FOUNDER	LLC "Consulting Publishing Company "Business Perspectives"



[©] The author(s) 2024. This publication is an open access article.



C.H. van Heerden (South Africa)

An exploratory analysis of leisure caravanning in the Kruger National Park in South Africa

Abstract

This paper explores the camping tourism experience of respondents interviewed at twelve rest camps in the Kruger National Park (KNP) in South Africa. It is postulated that three major factors influencing the "customer experience" at a caravanning and camping tourism destination are: the quality of the physical facilities; the proximity or access to a natural, built or cultural environment; and emotional and intrinsic values. Respondents completed a questionnaire that measured their view of the ideal rest camp and the ideal campsite in KNP.

The respondents indicated that the ideal caravan park in KNP should be very close to wildlife; have facilities such as a shop or a kiosk or a take-away; and have a view over a dam or a river. The ideal caravan site (stand) in KNP should be close to an electrical point, a water point, the rest camp's perimeter fence. It should be shaded, have a grass surface and a portable braai.

Keywords: caravanning, camping, customer experience, Kruger National Park, South Africa, tourism, leisure.

Introduction

It is estimated that there are approximatety 1300 camping facilities in South Africa. Most of them offer facilities that cater specifically for the caravan market. It is estimated that there are close to 107 000 registered caravans in South Africa. Judging by the increased number of manufacturers advertising camper-trailers it can be surmized that this type of camping is a growing niche market. Many resorts offer game viewing as an option. Most of South Africa's national parks offer camping facilities and camping in twelve rest camps in the Kruger National Park is especially popular in June and July.

The Motorhome Club of South Africa (MCSA) has a membership list of approx 650 and it is further estimated that there are close to 2000 motorhomes in total (MCSA plus private non-club owners plus units owned by rental companies). Motorhome owners are mostly pensioners and they visit game parks throughout the year.

1. Research question

The main research question is: What are the preferences of caravanners in a game reserve such as the Kruger National Park in South Africa in terms of the ideal rest camp and the ideal campsite.

The knowledge gained could also be made available to interested parties in other Southern African countries as it is predicted that more South Africans will in future be interested in camping in countries to the North. It is suggested that knowledge of the preferences of South African caravanners could greatly enhance the ability of the Southern African region to utilize its tourizm potential by offering quality tourism products to people who want to camp in game parks.

2. Problem statement

Various factors may influence the "total customer experience" at a campsite in the KNP as a camping tourism destination. These factors are inter alia: the quality of the physical facilities; the ability to experience nature by viewing game and spotting birds; and emotional and intrinsic values (i.e. spending time with the family, rest and relaxation). No research could be found that has measured the importance of any of these factors in the camping industry. This study aims to analyze these factors and to determine which aspects contribute most to an enjoyable camping experience. The findings of the study will also generate insight into attitudes and perceptions of people who camp in a national game park.

3. Literature review

In oder for a region's tourism industry to prosper, the difficult problems of crime and violence, lack of training, infrastructural deficiencies, and lack of government funding for tourism should be addressed (Ahmed, Heller & Hughes, 1998, p. 80).

The organization and internal management of game reserves have a profound effect on the economic growth of the nearby towns, villages, etc. in the surrounding geographic area. These enterprises offer job opportunities and a close-by natural attraction such as a dam or a river, birding spot, mountain range, etc. They also offer opportunities to local communities to establish and manage, and profit from them.

South Africa has tremendous potential to offer world-class tourism facilities such as game parks. World-class tourism facilities, which according to the British Graded Holiday Parks Scheme (2002, p. 1), "means a product of at least comparative quality with other leading tourism destinations. To achieve

a quality product all elements of the tourism experience should exceed customer expectations".

Tourism as a nonessential product is among the first activities to be affected by an economic downturn and the changing interests of tourists. Furthermore, most visitors to South African game reserves travel by personal vehicles, and are subsequently highly mobile. If an unpleasant experience such as poor service or untidy facilities is encountered, they quite easily avoid the facility in the future. Worse yet, the bad news gets around by word of mouth, hurting not only the facility that caused the problem, but other facilities in the area as well.

3.1. Tourism and leisure. Cooper, Fletcher, Gilbert, and Wanhill (1994), Ryan (1997) and Page, Brunt, Busby, and Connell (2001) view tourism as a subset of leisure and state that travel offers its own forms of recreation. Williams and Buswell (2003, p. 5) state that leisure can be viewed in terms of residual time, activity, function, state of mind or (p. 68) an additional dimension to a leisure and tourism product, namely a consumer experience. This may indicate that activities such as observing nature and rest and relaxation while doing so create a state of mind that enhances the experience of being in a game park.

The customer is viewed as both consumer and coproducer (Norman, 1991, p. 234) and therefore often plays an interactive role in shaping the experience; the leisure and tourism experience can be perceived as a service process containing a service encounter or a series of sequential encounters. The pleasure derived from a type of activity (such as spotting a wide variety of birds) is dependent on the tourist's willingness to selfdrive through a game park without being escorted or guided - therefore co-producing his/her own experience. Williams and Buswell (2003, p. 72) add that: "By definition, tourism occurs over a longer time span than conventional leisure activities; although a holiday is made up of a series of discrete leisure activities, it is also evaluated by the tourist as an overall experience or as one package.

Manfredo, Driver and Tarrant (1996, p. 189) argue that recreational activities are behavioral pursuits that are instrumental in attaining psychological and physical goals. They argue that recreation emerges from a problem state – the need for participation in an activity, while experience is the bundle of psychological outcomes desired. In other words, the participant uses leisure time and money to participate in a chosen setting or context with certain outcomes in mind. Williams and Buswell (2003, pp. 75-76) state that the experience can only be based on the interpretation

or perceptions of the individual and that the way forward is to focus on identifying the psychological aspects (or need-satisfactions) of leisure participation as perceived by the individual.

Another dimension to consider is Nash's conceptualization of human use of leisure time, as cited in Torkildsen (1986, p. 464), where the tourist may inter alia be a creative participant (inventor), active participant (copying), and/or emotional participant (appreciative). Holiday experiences can also tie into Maslow's hierarchy of needs, which range from affective (relaxing) to self-actualization (exploration and/or independent) (Ryan, 1997, p. 235). Many tourists visit game parks frequently because the thrill of viewing wild animals in a more "natural" environment never gets boring. By keeping record of animal sightings during each trip and following advice/studying maps and reading field guides on where to spot certain types of animals create inventor, copier and appreciative behavior.

3.2. Destination choice. Global research outputs concerning constructs relating to destination choice are restricted to the following: Edgar, Litteljohn, & Allardyce (1994) (who studied the short break market); Kandampully & Duddy (1997) (the quality of the experience at a destination); O'Neill, Williams, MacCarthy & Groves R. (2000) (measurement of service quality and its importance to the dive tourism industry); Huang & Xiao (2000) (leisure based tourist behavior); Fluker & Turner (2000) (needs and wants in adventure tourism); Chen & Gursov (2001) (destination loyalty and preferences). Also, of particular interest are the works of Wakefield & Blodgett (1994) (The Importance of Servicescapes in Leisure Service Settings); Blodgett, Wakefield, & Barnes (1995) (The effects of customer service consumer complaining behavior); Wakefield & Bush (1998) (Promoting leisure services: economic and emotional aspects of consumer response). The studies mentioned here little if any direction provided formulating how the consumer experience is created at a destination such as a game park.

From the above a few liberal assumptions were made: the choice of which game park to visit depended on the length of the visit (short or longer breaks), the type of experience sought, the cost of a camp site, the quality of service provided and the quality of the facilities (Servicescapes) in-and-around the camp site.

No scientific information is available on destination choice concerning Southern African game parks amongst caravanners.

3.3. Caravanning and camping. Ingram (1996, p. 91) identified camping as one area where research gaps exist. Recent desk research has not uncovered any scientific studies on the measurement of the "total customer experience" at caravanning and camping tourism destinations (locally or globally) – so after 8 years the gaps still exist.

Participant observation on the caravanning industry by the researcher has led to the following postulation: three major factors may influence the "customer experience" at caravanning and camping tourism destinations. First of all, such destinations provide physical facilities (camping sites, ablutions, recreation, etc.). Secondly, proximity or access to a natural, built or cultural environment (e.g., a game park such as KNP, mineral springs, the beach, a national park, Sun City or the KwaZulu-Natal battlefields) is offered. Lastly, certain emotional and intrinsic values are created (e.g., the ability to relax and unwind at the destination and/or to explore the environment; belonging to a group such as a caravan or camping club or a circle of family and friends; and/or participating in activities such as gameviewing, birding, tree-spotting, etc.).

The interaction between the three aspects creates the total experience during a camping trip to a game park: The camper relaxes and unwinds at the destination; the surrounding area is explored; and activities such as game-viewing, and bird and tree spotting are consumed.

The experience of such an excursion could, for example, have been influenced less positively by the physical facilities and/or the environment and more positively by certain intrinsic influences (experiencing a feeling of goodwill while observing nature) or vice versa.

Longer camping excursions (e.g., December holiday) are mostly organized independently with more of a focus on the location (seaside resort), with a greater tolerance for lower quality facilities or service quality standards. On the flipside of the coin a trend has emerged towards shorter-break excursions, particularly caravan club rallies over weekends and shorter school holidays at inland resorts where the quality of the physical facilities may be more important than the environment.

A unique feature of camping in a national park is: Visitors travel by personal vehicles and supply their own accommodation (caravan and/or tent), and often bring most of their consumable supplies along. They are highly mobile and most would utilize the campsite as a base from where to explore the surrounding environment (game viewing, birding, tree-spotting, etc.).

4. Methodology

Ethnographic research based on observations and experience gained over a period of several years has led to the postulation that certain factors influence the "customer experience" at a caravanning and camping tourism destination. The researcher gained insight into camping behavior during extended conversations with caravanners, while staying over at a variety of campsites. The researcher is a member of a caravan club, an assessor of the institutional body that oversees the grading of camp sites in South Africa, and an expert contributor to leisure and tourism media on camping. The specific postulation is that campers stay at camping destinations to relax or to explore the surrounding environment or both.

This research was conducted while the researcher assessed and graded twelve camp sites in the KNP during a twelve-day camping trip. Before a final questionnaire was constructed responses were first of all captured through a call to participants on the www.caravanparks.com web site to provide information on their views concerning the ideal camp site and ideal rest camp. Eleven respondents participated. Statements included in this questionnaire were based on these qualitative responses and on the judgment of the researcher and a project manager at SANParks.

The final structured questionnaire required that respondents express their views on the ideal rest camp, the ideal campsite and their opinion on which rest camp offered the best experience. They were also required to provide reasons for their choice of best campsite.

The researcher travelled for twelve days through the Kruger National Park and intercepted people who were camping in the twelve rest camps. A convenience sample of at least ten self-completed questionnaires per rest camp realized 152 useful questionnaires. At least five male and five female respondents were intercepted in each of the twelve rest camps.

5. Summarized research findings

Appendix A illustrates the mean scores for all questions included in the questionnaire.

In terms of an "ideal" rest camp proximity to wildlife understandably scored the highest. Of interest is that respondents did not regard "creating a rough camping experience" as being part of an ideal rest camp. Game parks in South Africa, in general, provide much better facilities than those found in neighboring countries. Luxury facilities such as private ablutions (KNP does not offer any private ablutions anyhow) also scored lower. Physical

facilities such as a shop or a kiosk, combined scullery/kitchen, better ablutions than at present, a swimming pool scored higher.

5.1. The ideal caravan park in KNP should: ...be very close to wildlife; have facilities such as a shop or a kiosk or a take-away; and have a view over a dam or a river. Combined scullery and cooking facilities, site allocation on a first-come-first-choice basis, facilities such as a swimming pool and better ablutions than currently offered in rest camps are also of importance.

The respondents don't want a "rough" experience and don't place a high premium on luxury facilities such as private ablutions. "Caravan sites separated from tent sites" and "...to be in a remote location away from main rest camps" are statements that scored closer to neutral. They are very neutral on whether the caravan park should be inside a big rest camp.

In terms of caravan stands a more natural setting is preferred – shade and grass. This combination is very difficult to sustain. The lack of adequate water in game parks to manicure grass on camping stands and the extended use of shaded spots cause grass to struggle to grow. Stand facilities such as electrical and water points should be close-by, because campers do not want to walk too far during night time to access water.

5.2. The ideal caravan site (stand) in KNP can be described as: Close to an electrical point, a water point, the rest camp's perimeter fence. It should be shaded, have a grass surface and a portable braai. A paved slab – whether shaded or not did not score very high.

Forty-three respondents indicated that Letaba Caravan Park offers the best experience. From personal observations while camping at Letaba I find a correlation between the high number of respondents that selected Letaba and the statements that scored high in the category – The ideal caravan site/stand, namely: Close to an electrical point, a water point, the rest camp's perimeter fence, and shade. Some sites at Letaba are grassed. To an extent these characteristics also apply to Lower Sabie (n=13 – the second most preferred camping area).

SANParks can feel reasonably satisfied as respondents indicated that KNP is reasonably priced, camping trips in KNP offer good value for money, and relaxing and adventurous experiences (found nowhere else) are offered.

From a managerial perspective, a game park's natural experience is likely to remain the dominant motivation for visits but destination choices are also

influenced by perceptions and expectations of the facilities available. Sometimes, as with repeat trips to stay at the same game park the quality of the camping stand may become a stronger aspect of destination choice (respondents indicated that they do not find a rough experience as that ideal). Thus, for some tourists game park enjoyment may be dependent on the perceived value provided and satisfaction experienced with the facilities utilized.

The influence on the satisfaction of a visit to a game park in terms of perceptions and expectations of the service quality and management efficiency should also be further investigated.

The choice of camping as a lifestyle (certain campers prefer bush experiences and they frequently visit game reserves and rustic camp sites) or holiday option (the family man has to take all the likes and dislikes of all family members into consideration before making holiday reservations and usually ends up holidaying at a large resort that offers a wide variety of family entertainment), the type of camper and the camp site/destination selected determine the type of experience that campers are after. Psychographic segmentation should also be investigated as the results showed that gender may be a moderating factor in perceptions of the ideal camp site.

The assumption that certain factors such as the quality of the physical facilities, the proximity or access to a natural environment, and emotional and intrinsic values influence the "customer experience" of camping in a game park should be further explored in terms of whether these factors have an effect on customer satisfaction/ dissatisfaction. Any other factors that impact customer satisfaction/dissatisfaction at a game park should also be investigated.

Final comments

Destination choice amongst caravanners is an area that needs more in-depth analysis. In this paper, the needs of tourists who camped in the Kruger National Park were explored. The main findings provide a rough indication of the ideal caravan park inside the Kruger National Park and the ideal caravan stand/site inside the Park.

Caravanners contribute substantially to the local economy of towns and regions. A customer-oriented approach is necessary to attract more tourists who participate in this type of leisure to a town, region or destination such as a game park. These findings also provide some insight that may be taken into consideration when camping facilities are established or upgraded in game parks.

The author predicts that South Africans will show an increased interest in exploring game parks outside their country's borders in future. They might travel with their own vehicles and especially tow modified and custom-built tent-trailers and rugged 4x4 caravans or they might want to rent/hire such equipment at the game parks. The findings of this study indicate that certain facilities should be offered. Of note is the following: security, quality ablutions, and a pleasant natural setting in and around the rest camps and/or campsites.

This study is highly exploratory and the findings cannot be generalized for all caravanners. It provides an indication of what an average caravanner desires in terms of rest camp facilities and the "look and feel" of camp sites/stands in KNP. These findings should be taken into consideration during any future developments of, and the redesign of, or the management of camping areas in the Kruger National Park or elsewhere in South Africa. Because camping as an activity has a strong nature based element it offers significant potential for regional economic development and cooperation across borders.

References

- 1. Ahmed Z.U., Heller V., Hughes KA (1998). Tourism in South Africa. Cornell Hotel and Restaurant Administration Quarterly. Dec 39/6, 80-91.
- 2. Blodgett, J.G. Wakefield, K.L. & Barnes J.H. (1995). The effects of customer service on consumer complaining behavior. *Journal of Services Marketing*, 9/4, 31-42.
- 3. British Graded Holiday Parks Scheme (2002). English Tourism Council. Britain.
- 4. Chen J.S. & Gursov D. (2001). An investigation of tourists' destination loyalty and preferences. *International Journal of Contemporary Hospitality Management*, 13/2, 79-85.
- 5. Cooper C., Fletcher J., Gilbert D. & Wanhill S. (1994). Tourism Principles and Practices. London: Pitman Publishing.
- 6. Edgar D.A., Litteljohn D.L. & Allardyce M.L. (1994). Strategic Clusters and Strategic Space: The Case of the Short Break Market. *International Journal of Contemporary Hospitality Management*, 6/5, 20-26.
- 7. Fluker M.R. & Turner L.W. 2000. Needs, Motivations, and Expectations of a Commercial Whitewater Rafting Experience. *Journal of Travel Research*, 38, May, 380-389
- 8. Huang A. & Xiao H. (2000). Leisure-based tourist behavior: a case study of Changchun. *International Journal of Contemporary Hospitality Management*, 12/3, 210-214.
- 9. Ingram H. (1996). Clusters and gaps in hospitality and tourism academic research. *International Journal of Contemporary Hospitality Management*, 8/7, 91-95.
- 10. Kandampully J. & Duddy R. (1997). Celebrate and record Shotover to quality: the world's most exciting jet boat ride. *Managing Service Quality*, 7/5, 221-223.
- 11. Manfredo M.J., Driver B.L., & Tarrant M.A. (1996). Measuring leisure motivation: a meta-analysis of the recreation experience preference scales. *Journal of Leisure Research*, 3, 188-213.
- 12. Norman, R. (1991). Service Management. John Wiley & Sons, Chichester, p. 234.
- 13. O'Neill M.A., Williams P., MacCarthy M. & Groves R. (2000). Diving into service quality ± the dive tour operator perspective. *Managing Service Quality*. 10/3, 131-140.
- 14. Page S.J., Brunt P., Busby G., & Connell, J. (2001). Tourism: A Modern Synthesis, London: Thomson Learning.
- 15. Ryan C. (1997). From motivation to assessment. In: Ryan, C (ed). The Tourist Experience. Cassel, London, p. 235.
- 16. Torkildsen G. (1986). Leisure and Recreation Management. 2nd Edition. E. and F. Spon, London, p. 464.
- 17. Wakefield K.L. & Blodgett J.G. (1994). The Importance of Servicescapes in Leisure Service Settings. *Journal of Services Marketing*. 8/3, 66-76.
- 18. Wakefield K.L. & Bush V.D. (1998). Promoting leisure services: economic and emotional aspects of consumer response. *Journal of Services Marketing*,12/3, 209-222.
- 19. Williams C., & Buswell J. (2003). Service Quality in Leisure and Tourism. Trowbridge: CABI Publishing.

Appendix A



RESEARCH STUDY ON CARAVANNING IN THE KRUGER NATIONAL PARK

Total number of respondents = 152 (spread over all 12 camping areas)

Male respondents = 79 / Female respondents = 73

	The ideal caravan park in KNP should:	Mear	score			
			Total	Male	Fem	
1	offer luxury facilities such as private ablutions		2.97	3.01	2.9	

2	create a rough camping experience	2.58	2.55	2.6	
3	be inside a big rest camp	3.05	2.90	3.2	
4	have facilities such as a swimming pool	3.68	3.73	3.6	
5	have facilities such as a shop or kiosk or take-away	4.46	4.44	4.5	
6	have a combined scullery and cooking facility	3.82	3.70	4.0	
7	have caravan sites separated from tent sites	3.44	3.59	3.30	
8	have a view over a dam or river	4.29	4.23	4.4	
9	be very close to wildlife	4.7	4.66	4.7	
10	be in a remote location away from main rest camps	3.3	3.45	3.2	
11	have better ablutions than currently offered in rest camps	3.66	3.61	3.7	
12	allow site allocation on a first-come-first-choice basis	3.81	3.75	3.9	

	The ideal caravan site (stand) in KNP should:	Mean score		
		Total	Male	Fem
13	not be shaded and have a paved or cement slab surface	2.01	2.16	1.8
14	not be shaded and have a grass surface	2.29	2.36	2.2
15	be shaded and have a grass surface	4.23	4.17	4.3
16	be shaded and have a paved or cement slab	3.21	3.24	3.2
17	be shaded and have a natural surface (i.e. no grass)	3.06	3.10	3.0
18	be demarcated with a number	3.32	3.39	3.2
19	be closer to the ablutions	3.61	3.53	3.7
20	be closer to the rest camp's perimeter fence	4.02	3.99	4.1
21	have a portable braai	4.4	4.48	4.3
22	be a short distance from an electrical point	4.73	4.75	4.7
23	be a short distance from a water point	4.72	4.75	4.7

	Caravanning in the Kruger National Park:	Mean	Mean score			
			Total	Male	Fem	
24	is reasonably priced		4.32	4.42	4.2	
25	offers good value for money		4.16	4.16	4.16	
26	offers relaxing experiences found nowhere else		4.18	4.2	4.16	
27	offers adventurous experiences found nowhere else		3.95	3.96	3.9	

Which rest camp offers the best experience?	Letaba (n = 43); Lower Sabie (n = 13); Shingwedzi (n = 13); Berg-en-Dal (n = 11); Crocodile Bridge (n = 11); Balule (n = 8)

Difference between male and female respondents (absolute score)

Difference between male and female respondents (absolute score)							
STATEMENT (biggest difference)	M or F		STATEMENT (small difference)				
V13 (not be shaded and have a paved or cement slab surface)	M		V20 (be closer to the rest camp's perimeter fence)				
V3 (be inside a big rest camp)	F		V2 (create a rough camping experience)				
V7 (have caravan sites separated from tent sites)	М		V16 (be shaded and have a paved or cement slab surface)				
V10 (be in a remote location away from main rest camps)	F		V23 (be a short distance from a water point)				
V6 (have a combined scullery and cooking facility)	F		V5 (have facilities such as a shop or kiosk or take-away)				
V24 (is reasonably priced)	M		V22 (be a short distance from an electrical point)				
V19 (be closer to the ablutions)	F		V26 (offers relaxing experiences found nowhere else)				
V21 (have a portable braai)	М		V27 (offers adventurous experiences found nowhere else)				
V18 (be demarcated with a number)	М		V25 (offers good value for money)				

The statements in the right hand column scored very closely amongst male and female respondents.

Female respondents were more favorable towards: campsites being inside big rest camps; have a combined scullery and cooking facility; and be closer to ablutions. Females were also less favorable towards campsites in remote locations.

Male respondents were more favorable towards: have caravan sites separated from tents sites; sites should have a portable braai; and sites should be demarcated with a number. Male respondents were more positive that KNP site fees were reasonably priced compared to females.

The only statement that had any significant difference statistically was:

	Males n=79	Females n=73	p-value**
have a combined scullery and cooking facility	3.70	4.0	.0000

Note: ** Two sample t-test

Strongly agree with statements (x>4.0)

The ideal caravan park in KNP should

	STATEMENT		Mean (x)			
9	be very close to wildlife		4.7			
5	have facilities such as a shop or kiosk or take-away		4.46			
8	have a view over a dam or river		4.29			
The ideal of	The ideal caravan site (stand) in KNP should:					
22	be a short distance from an electrical point		4.73			
23	be a short distance from a water point		4.72			

4.4

4.23

4.02

Caravanning in the Kruger National Park:

..be shaded and have a grass surface

..be closer to the rest camp's perimeter fence

..have a portable braai

15

20

24	is reasonably priced	4.32
26	offers relaxing experiences found nowhere else	4.18
25	offers good value for money	4.16

Some agreement with statements (3.1<x<3.99)

The ideal caravan park in KNP should

6	have combined scullery and cooking facilities	3.82
12	allow site allocation on a first-come-first-choice basis	3.81
4	have facilities such as a swimming pool	3.68
11	have better ablutions than currently offered in rest camps	3.66
7	have caravan sites separated from tent sites	3.44
10	be in a remote location away from main rest camps	3.3

The ideal caravan site (stand) in KNP should:

19	be closer to the ablutions	3.61
18	be demarcated with a number	3.32
16	be shaded and have a paved or cement slab	3.21

27	offers adventurous experiences found nowhere else	3.95

Close to neutral (x = 3.0)

17	be shaded and have a natural surface (i.e. no grass)	3.06
3	be inside a big rest camp	3.05
1	offer luxury facilities such as private ablutions	2.97

Some disagreement with statements $(1.5 \le x \le 2.99)$

2	create a rough camping experience	2.58
14	not be shaded and have a grass surface	2.29
13	not be shaded and have a paved or cement slab surface	2.01