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RECREATIONAL BOATERS: A LIFE STYLE SEGMENTATION ANALYSIS

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ABSTRACT

A prevailing hypothesis in recreation scholarship is that a strong relationship exists between leisure choice behavior and life style. In this study boaters in a coastal county were segmented through life style analysis. Twenty-one life style dimensions utilized in previous studies were identified and twice pretested for validity. Of the 21 dimensions, 7 were found to be valid. These seven variables: Community Mindedness, Brand Loyalty, Price Consciousness, Law and Order, Upper Class Sociability, Women's Rights, and Credit User were included in the final survey instrument. Analysis of life style dimension data by K-means clustering resulted in a five group segmentation that effectively separated sail, power and dual boat owners. These groups were defined by their responses to the life style opinions and associated recreational activities. Findings support previous studies that suggest a strong relationship between leisure choice behavior and life style.

INTRODUCTION

In 1988, the National Marine Manufacturers Association estimated that there were 17,000 boating retailers, 9,000 marinas and over 3,000 boat makers in the United States. Nationally, boating is a significant commercial activity that operates in a competitive environment which forces managers and retailers to cater to individual needs. Market segmentation is one of the methods available for identifying boating market segments. Segmentation identifies groups or segments of clientele that exist, each with unique characteristics and needs. The approach to meet the needs of these market segments can be best met through product development, product mix, promotion and pricing efforts. In this study the author seeks to segment boaters in a coastal South Carolina area through life style analysis. Although life style segmentation has occurred throughout many industries including tourism (32, 2) investigations into outdoor recreational activities have been limited.

RELATED RESEARCH

Studies relating to recreational boating have covered a broad range of topics. Lentnek, Van Doren, and Trail (21) examined willingness to travel, and Perdue (27) studied destination awareness. Use conflicts have also been investigated (13). Carrying capacity has been addressed by several authors (18, 1).

Recently, Jaakson (19) analyzed spatial patterns in recreational boating. Life style associated information pertaining to boaters is found in the narrow context of demographic data (22, 34, 3).

The need for understanding recreational activity preference has long been recognized and the approaches to this problem have been quite numerous. For example, the relationship between activity and occupation (9, 6) and the influence of social variables such as status and prestige (12, 7, 24) have been extensively.

Bishop and Ikeda's (5) study of social status and leisure patterns and Bergier's (4) work relating to Leisure-Time Choice Behavior both suggest that there is a strong relationship between leisure activity choice and lifestyles. Psychographic (life style) investigations relating to outdoor recreation activities while not numerous have occurred since the 1970's, for example, Plummers' "Life Style of the Hunter", in Wells' article (33), and Hawes' (15) segmentation of recreational vehicle owners serve as examples.

METHODS

Sample

The geographical setting for the study was Beaufort County, South Carolina. Beaufort is located in the state's southern coastal region. A total of 558 power boaters, or 10.4% of the registered boating population, was randomly selected for the study. Three hundred and one sail boaters were selected after reviewing boat registrations and surveying all boating clubs and marinas in the area. Data collection relied upon mail questionnaires and a follow up non-resident telephone survey. Sixty percent of those who received questionnaires responded. A Chi-Square Goodness-of-fit (25) revealed that a difference did not exist between respondents and non-respondents at the $P=.05$ probability level on demographic variables tested.

Scales and Instrumentation

Three types of information were sought from the respondents: (1) life style-related opinions, (2) activity participation, and (3) basic demographics. A pool of potentially useful life style scale items was

obtained through an in depth review of previous segmentation work (8, 23, 29, 26, 31, 31). Twenty-one life style dimensions were selected and pretested in two other geographical regions. Factor Analysis was used to identify the life style dimensions of the boaters. The criteria set for validation of life style scales were: (1) the factor's eigenvalue had to exceed one (20) and (2) the factor had to replicate itself throughout the pre-testing. Community Mindedness, Brand Loyalty, Price Consciousness, Law and Order, Upper Class Sociability, Women's Rights and Credit User were the factors retained for further analysis (Table 1). Thirty-seven recreational activities were selected for investigation after reviewing previous activity studies (17, 11), along with the demographic variables age, marital status, children, and income.

Analysis

All boaters in the study were classified and segmented by their life style response profile. Cluster analysis procedures are well suited for this taxonomic purpose (28, 14). A K-means algorithm (10) was utilized in this investigation. A five group clustering based upon life style responses of boat owners revealed a segmentation of boater type (i.e., power, sail, or dual boater). This grouping clearly separated the sail boaters and the dual owners, and further segmented the power boaters into three groups.

The second stage of this analysis was concerned with: (A) the determination of relationships and associated differences of life style variables between life style groups and (B) the differences in dependent activity and demographic variables between life style groups. Analysis of Variance (ANOVA) was selected to determine if sample means were significantly different (25). The Welch and Brown-Forsythe tests were utilized for unequal variances. The SAS version of the Scheffe's test was utilized to compare means due to Scheffe's ability to compare unequal populations (30).

FINDINGS

Life style segmentation analysis revealed the following profiles of five potential market segments (Table 2). Segment One: The Sociable Sailor: The Sailor is a sociable moderately community aware individual who drinks wine. The Sailor is also a credit user who is not highly price conscious and who participates in club meetings, lectures, walking and bicycling for pleasure. This group is also characterized by a lack of bowling and tennis activities and non-participation in crabbing, shrimping, hunting, and freshwater fishing. Segment Two: The Community Minded Conservative Power Boater: This power boater is a highly community minded individual who is upper class sociable. He is also a credit buyer who is aware of brands and pricing. He enjoys the outdoors and participates in fishing, crabbing, shrimping, hunting, walking and bicycling. Members of this group are conservative in their rate of participation in almost all of their activities. It is unlikely that you would find the Conservative at the tennis court, theater or a classical play. Segment Three: The

Progressive Independent Dual Owner: The Progressive represents 90% of the Dual Owner population. He is also a community minded individual. As a shopper he is a non brand loyal independent who is not particularly price conscious and uses credit. The Dual Owner shares an enthusiasm for the arts, bicycling, club meetings and wine consumption with the sailor. This group is unique in that it has interests in the arts and outdoor activities. The Dual Owners' participation in bowling and freshwater fishing is very low. Segment Four: Non-Mobile Cash Power Boater: This moderately community minded boater is somewhat sociable, but less so than three of the groups. This boater type is uniquely different from all others in its orientation toward cash buying. The Non-Mobile Cash Power Boater is a water oriented outdoor person who enjoys shrimping, crabbing, fishing and hunting, and who has little use for the arts. Approximately 35% of the total power boater population are within this group. Segment Five: Loner Power Boater: Upon review, one finds the Loner Power Boater to be the only boater who is not community conscious. He is also moderate in sociability. This moderate sociability is also reflected in other habits such as non-attendance in lectures or meetings. The Loner has little interest in the arts and is basically an outdoors type. He enjoys saltwater fishing, shrimping, crabbing, and bicycling. The Loner represents 28% of the power boat population.

CONCLUSION

The research findings demonstrate that consumers of recreational products and services can be meaningfully segmented by life styles, and that activity and sociodemographic variables may vary significantly among life style groups. The findings support the conclusions of Perreault et al (28) and Bergier (4) that there should be a strong relationship between leisure choice behavior and life styles; and that psychographic segmentation would be a logical approach to activity research. The findings have provided an in-depth description of five boater types and their associated activities.

These descriptions can assist managers in channeling their efforts. For example, both the cultured sailor and the progressive dual boat owner could be selected as target groups.

Data acquired could be beneficial in creating more effective communication packages for these segments of boaters. For example, in Product Positioning, the data can be employed to position a product to fit a person's life style. Both the sociable sailor and the progressive independent dual boat owner would be target consumer groups for luxury boating products, educational boating lecture packages, and credit card sales. Advertising themes emphasizing classical music, community, and sociability would appear to be effective in reaching the sociable sailor and the progressive dual boat owner. These would be very undesirable for use in advertising media directed at the non-mobile cash power boater. Findings pertaining to the cash power boater suggest they have little desire nor perceived need for meetings and lectures. This finding would indicate that approximately 35% of the power boaters are less than ideal candidates (target consumers) for public hearings and public sector workshops. Public service announcements and direct mail would be much

more effective in reaching this group.

During an era of reduced funding for public services and facilities, there is a great need to develop a more effective allocation of both personnel resources and facilities. For example, neither tennis nor bowling are heavy favorites among identified boating groups, but walking, bicycling and the arts are important to sailors and The Progressive Independent dual boat owners. This suggests that for marine park areas with large sail boat usage, trails and facilities for arts and lectures would be more logical services to provide. Marine facilities and marine related agencies servicing those consumers would find programming directed at lectures and club meetings an efficient method of allocating efforts and resources. Facilities and agencies providing services to the loner power boater and the non-mobile cash power boater would find this type of outreach to be less effective.

The ground work accomplished through this research provides a basis for further research by demonstrating that consumer desires for recreational products and services can be meaningfully segmented by life style groups, and that activity and demographic variables vary significantly among life style groups. The dimensions utilized in this study demonstrated the ability to group individuals by life styles and found significant relationships among life style groups, their socio-economic characteristics and recreational activities. These differences are structured and further demonstrate that life style pervades many aspects of life. Future work in the segmentation of recreation markets has potential for providing more optimal mixes of recreational services and marketing for specific market groups. This can be accomplished through identifying both leisure activity choices and associated life styles. Findings indicate that additional research is needed in the development of life style dimensions which demonstrate both construct validity and reliability. There is also a need to test further the dimensions using population samples located in different geographic and social settings.

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TABLE 1
PRETEST TWO-LIFE STYLE DIMENSIONS

<u>Dimension</u>	<u>Factor Score</u>
Community Mindedness	
(b) I am influential in my neighborhood.	.684
(c) I think participation in community affairs is important.	.712
(d) I have helped to collect money or do work for the Red Cross, United Fund, and such organizations.	.505
Brand Loyalty	
(a) I keep away from brands of which I have never heard.	.619
(b) I like to wait to see how other people like new brands before I try them.	.789
(c) I don't like to take chances with new brands.	.732
Price Consciousness	
(a) I shop a lot for specials.	.873
(b) I usually check the advertisements for announcements of sales.	.829
(c) I do a lot of shopping during and after the christmas sales.	.567
Law and Order	
(a) Our laws give too much protection to criminals.	.887
(b) I am in favor of strict enforcement of all laws.	.610
(c) The sentences handed down to criminals are usually too light.	.803
Upper Class Sociability	
(a) I'd like to spend a vacation in London or Paris meeting new people and making new friends.	.763
(b) I'd like to take a trip around the world to know about people and their cultures.	.834
Women's Rights	
(a) A woman's place is in the home. (reversed)	.744
(b) Even today women live under unfair restrictions that ought to be done away with.	.859
Credit User	
(a) It is good to have charge accounts.	.800
(b) I like to pay cash for everything I Buy. (reversed)	.444

TABLE 2
LIFE STYLE PROFILES
MEAN SCORES

GROUPS	(1) Sociable- Sailor	(2) Community Minded Con- servative Power Boater	(3) Progressive Independent Dual Owner	(4) Non-Mobile Cash Power Boater	(5) Loner Power Boater
Life Styles:					
Community Mindedness	3.69 (2,3,5)*	4.05 (1,4,5)	4.05 (1,4,5)	3.70 (2,3,5)	2.98 (1,2,3,4)
Price Consciousness	2.97 (2)	3.76 (1,3,5)	3.32 (2)	3.36	3.09 (2)
Brand Loyalty	2.93	3.27 (3)	2.72 (2)	3.00	3.04
Upper Class Mobility	3.96 (4)	3.90 (4)	3.82 (4)	3.27 (1,2,3)	3.51
Credit User	3.33 (4)	2.52 (4)	3.43 (4)	2.25 (1,2,3,5)	3.30 (4)
Activities					
Crabbing	1.84 (2,4)	3.13 (1)	2.43	3.01 (1)	2.57
Freshwater Fishing	2.38	2.36	2.45 (5)	1.85	1.75 (3)
Saltwater Fishing	2.07 (2,3,4,5)	3.89 (1)	3.36 (1,4)	4.45 (1,3)	3.80 (1)
Shrimping	1.69 (2,3,4,5)	3.11 (1)	2.87 (1)	3.48 (1)	2.79 (1)
Hunting	1.45 (2,4)	2.46 (1)	2.06	2.49 (1)	2.00
Walking	4.38 (5)	3.86	4.09	3.42	3.09 (1)
Bicycling	3.11 (4)	2.87 (3)	3.48 (2,4,5)	1.69 (3)	2.79 (3)
Attended Club Meetings	3.65 (5)	3.29 (3,5)	4.41 (2,4,5)	2.90 (3)	1.98 (1,2,3)
Consumed Wine	4.60 (2,4,5)	2.95 (1,3)	4.77 (2,4,5)	2.58 (1,3)	3.09 (1,3)
Dining Out	5.37	5.38	5.61 (4,5)	4.75 (3)	4.84 (3)
Visited Art Gallery	2.16 (2,4,5)	1.50 (1,3)	2.12 (2,4,5)	1.38 (1,3)	1.46 (1,3)
Went to a Museum	2.14 (4)	1.80 (3)	2.36 (2,4,5)	1.61 (3,1)	1.71 (3)
Classical Concerts	1.71 (4,5)	1.35 (3)	1.80 (2,4,5)	1.18 (1,3)	1.27 (1,3)
Play Attendance	2.12 (2,4,5)	1.50 (1,3)	1.90 (2,4,5)	1.42 (1,3)	1.46 (1,3)
Lecture Attendance	2.38	2.36	2.45 (5)	1.85	1.75 (3)
Went Bowling	1.25	1.68 (3)	1.00 (2,4)	1.68 (3)	1.25
Played Tennis	2.23	1.54 (3)	2.45 (2,5)	1.68	1.41 (3)
Demographics					
Age	4.48	4.33	4.74 (5)	4.32	3.90 (3)
Income	8.05 (2,4,5)	6.79 (1,3)	8.29 (2,4,5)	6.13 (1,3)	6.69 (1,3)

¹Numbers in parentheses indicate significantly different life style groups. Sheffes Test, p=0.05.