# PREDICTING NATURE-BASED TOURIST ROLES: A LIFE SPAN PERSPECTIVE

James J. Murdy, Ph.D.
Assistant Professor, University of New Haven, Tagliatela
School of Hospitality and Tourism, 300 Orange Avenue,
West Haven, CT, 06516

Heather J. Gibson, Ph.D.
Assistant Professor, University of Florida, Department of
Recreation, Parks and Tourism, P.O. Box 1182039,
Gainsville, FL, 32611

Andrew Yiannakis, Ph.D.
Professor and Director, Laboratory for Leisure, Tourism &
Sport, Department of Kinesiology, University of
Connecticut, Storrs, CT 06269

**Abstract:** The concept of stable, clearly identifiable patterns of tourist behavior, or roles, is a relatively recent development. Yiannakis and Gibson (1988, 1992) identified fifteen tourist roles based on leisure travelers' vacation behaviors. Building on this work, Gibson (1994) used discriminant analysis to determine the combination of needs and demographics are associated with several of the tourist roles over the life course. The purpose of this study is to present the characteristics associated with three nature-based tourist roles: the Explorer, the Nature Lover and the Ecotourist (Murdy, 2001). Using Levinson et al.'s (1978) model of the adult life course, market segments were created for each role using needs and demographics.

## Introduction

Tourism is the world's largest industry. The growth of tourism has been accompanied by the development of scholarly research about the industry, its impacts, and tourists. One body of literature addresses the sociodemographic characteristics and needs associated with selected vacation styles, or tourist roles. For example, Yiannakis and Gibson (1988) found that preference for a tourist role is linked to a person's place in the adult life course. However, the motivation for selecting one tourist role over another remains largely unexplored. In this presentation, I will describe how three nature-based tourist roles may be predicted using needs, sociodemographic characteristics, and the combination of these attributes, and how this may be further used to identify key market segments.

## The Adult Life Course

The seminal work of Levinson and his associates identified four major life eras through which one passes: Childhood and Adolescence, Early Adulthood, Middle Adulthood, and Late Adulthood (Levinson, Darrow, Klein, Levinson, and McKee, 1978; Levinson, 1996). Each of these eras has specific goals or tasks associated with them. Because this study addresses the behaviors of adults, only the three adult stages are discussed. The adult initial era, Early

Adulthood, occurs between the ages of about 17-45 years. The tasks during this era include moving into and exploring the adult world, creating an adult identity, and creating and establishing a life structure. The second era of the adult life course is Middle Adulthood, which lasts from about 40-65 years. Tasks associated with this era include reevaluating the existing life structure, construction of a stable and satisfying life structure, modify this life structure as necessary, and adapting to biological, social and psychological changes associated with aging. The third era, starting around 60 years, is Late Adulthood. These older adults address tasks such as maintaining some form of youthful vitality and establishing a new relationship in society with the primary emphasis placed on the self.

While the general structure of the adult life course is similar for men and women, important differences exist. Levinson (1996) attributed many of these differences to gender splitting, or the divisions of masculinity and femininity that pervade human life. Gender splitting is most profound in the "Traditional Marriage Enterprise," in which the woman, who doesn't work outside the home, accepts her role as subordinate to her husband and as the primary caregiver to any children.

However, the "Traditional Marriage Enterprise" is rapidly changing. Women have joined the workforce in increasing numbers for a variety of reasons, including single parent homes, a shrinking labor pool, and a gender revolution that places greater value on women in the workplace. These changes may indicate a tendency for more similarities between the life structures of men and women (Levinson, 1996). With more similar career and home-life goals, the period tasks should become more alike. However, women interviewed by Levinson found the image of the traditional woman daunting. The image of the self as a career woman often resulted in conflicts that tore at the psyche. Similarly, men are also finding increasing turmoil as each partner in a marriage struggles to define the relationship and their roles. Therefore, while some similarities may be found in the life structure of women and men, differences also exist.

## Tourist Roles

The concept of stable, clearly identifiable patterns of tourist behavior, or roles, is a relatively recent development. Cohen (1972) proposed the existence of four roles: the drifter, individual mass tourist, organized mass tourist, and explorer. Cohen argued that engagement in these roles is motivated by a search for novelty while maintaining some degree of familiarity within the destination environment. To achieve this sense of novelty in a foreign environment without becoming overwhelmed by it, the individual and organized mass tourists operate within an "environmental bubble" of the familiar at the destination by confining themselves to amenities similar to those at home. On the other hand, the drifter is immersed in the host culture, living with the indigenous population, eating their foods, and avoiding the typical tourist route.

Based on Cohen's theoretical work, Pearce (1982, 1985) identified fifteen travel related roles. Of these roles, only

179

five could be considered touristic. The remainder of the roles included roles such as business travelers, migrant workers, overseas journalists, and missionaries. Pearce identified behaviors associated with each role, providing a conceptual bridge for the development of other tourist role typologies.

Building on the work of Cohen and Pearce, Yiannakis and Gibson (1992) developed an extensive typology of tourist roles based on tourists' behavioral vacation preferences. They (1988, 1992) identified fifteen tourist roles based on leisure travelers' vacation behaviors. Using multidimensional scaling, the authors found three underlying constructs associated with each role: strangeness-familiarity, stimulating-tranquil, and high-low structure. This work using the Tourist Role Preference Scale provided a theoretical background for research that integrated tourist role and life course theory.

By examining the tasks associated with each life course stage, Gibson and Yiannakis (Gibson, 1989, 1994; Gibson and Yiannakis, 1993, 2002; Yiannakis and Gibson, 1988) discovered a relationship between tourist role preference by life stage and specific developmental tasks. They concluded that tourists engage in specific roles at different era of the adult life course to meet the underlying needs associated with that life course era. For example, the Action Seeker is interested in partying, going to nightclubs and uncomplicated romantic interludes. This role is most popular among men and women in the Early Adulthood era, during which they address such tasks as the exploration of the adult world, breaking away from their family, and gaining more personal freedom. The logical conclusion is that the Action Seeker role is most associated with needs for freedom, stimulation, exploration, change, and sexual gratification.

More recent studies confirm the findings of Yiannakis and Gibson. Using time series analysis, Yiannakis, Gibson, and Murdy (2000) identified several needs that predict selected tourist roles. This work further established the relationship between tourist role preference and needs over the life course. Needs associated with each tourist role and life course stage also varied between men and women. For example, the male Anthropologist was associated with the needs for health, companionship, escape, status, and feeling connected to one's roots. For women, the Anthropologist role was related to needs for stimulation, financial security, safety, personal growth, and feeling connected to one's roots. The life course era most associated with this role was Middle Adulthood (40-59 years) for both men and women. From this work, a tentative relationship between tourist role preference and the underlying needs associated with life course era was hypothesized.

**Nature-based Tourism**

Recently, nature-base tourists have come under scrutiny. Despite the lack of a clear definition of ecotourist, a number of scholars have provided insights into the needs associated with and market segments of nature based tourists. Eagles (1992) also identified social interactions as

a motivation among Canadian ecotourists. He also identified safety, escape/change and physical activities as motivations for ecotourists. In addition, Weaver and Lawton (2002) segmented ecotourists staying at an ecolodge into three groups: softer, or those who liked ecotours but also enjoyed a beach resort; harder, or those who sought nature based learning, sustainable behaviors, self reliance, undisturbed or obscure destinations, & risk and challenge; and structured ecotourists, who like escorted ecotours, interpretation, leaning about the natural environment, and plan their own ecotour arrangements. They also found that some needs are also associated with these segments. Specifically, escaping the city, seeing fauna in their natural settings, experiencing the peace and tranquility of the natural environment, learning about the natural environment, self discovery, being physically active, and social interactions all motivated the respondents to participate in an ecotour. From the work of both Eagles and Weaver and Lawton, it is clear that there appear to be some common motivations among ecotourists.

Wight (1996) used demographic characteristics to create two target markets in her study of North American adventure, cultural, and ecotourists. The two markets included the general consumers from seven metropolitan areas and experienced ecotourists, who were recruited from ecotour companies with operations in North America. Both sets of tourists reside in urban areas, came from a variety of age groups, are typically middle to upper income earners, and live as couples. The primary differences between these markets included: experienced ecotourists were generally older, living either as a family with children (24%) or alone (25%), with very high educational levels, more actively engaged in prolonged nature-based recreational activities, and who were willing to spend more per trip than the general consumers. The general consumers were more likely to have children, engage in nature-based activities for less than 48 hours, well educated, although less well educated than the experienced ecotourists, and preferred summer trips. Wight's work suggests that lifestyle and demographic characteristics may be helpful in segmenting the nature-based tourists market.

However, a comprehensive analysis determining which needs and sociodemographic variables are associated with nature-based tourist roles at each era of the life course has not been conducted. Therefore, the purpose of this study was to determine which needs and sociodemographic characteristics predict preference for nature-based tourist roles at different eras of the adult life course for men and women. Specifically, the following three research questions were posed:

1. Which needs predict preference for specific tourist roles at different eras of the life course for men and women?
2. Which sociodemographic characteristics predict preference for specific tourist roles at different eras of the life course for men and women?
3. Which combination of sociodemographic characteristics and needs best predict preference

180

for specific tourist roles at different eras of the life course for men and women?

4.

## Methods & Procedures

*Data Collection*: A purposive sample of 2076 respondents was used for this study. The data were collected in two phases. Phase I data were collected during the spring and summer of 1993 (Gibson, 1994) from residents of Southern New England, and the data for phase II were collected during the summer of 2000 from residents of Connecticut. Because gender and age affect tourist role preference, the researcher used a purposive sampling procedure to ensure sufficient numbers of each gender across each the three adult life eras discussed earlier.

*The Instrument*: The instrument used for this research was comprised of three parts. Part I was the Tourist Role Preference Scale (TRPS) developed by Yiannakis (1986) and subsequently modified in work with Gibson (Gibson, 1994; Yiannakis & Gibson, 1992). This portion of the instrument consists of tourists' behavioral preferences, and contains 32 statements measuring 18 tourist roles. Each item measures the degree to which the subject engages in particular vacation behaviors using a five point Likert-type scale. The range of possible responses was from 1 (never like me) to 5 (always like me). The test-retest reliability coefficients for the tourist roles ranged from .66 to .84. Cronbach's $\alpha$ of internal consistency scores were also high, ranging from .82 to .87 (Gibson, 1989; Yiannakis & Gibson, 1988). The validity of this portion of the TRPS was established by testing the degree to which the operational definitions used in the TRPS corresponded to the conceptual definitions. Using a principal components factor analysis, operational items were assumed to measure the conceptual definition if they had a factor loading of .70 or higher on the same factor as the conceptual definition (Yiannakis & Gibson, 1992). This test indicated congruence between the operational items retained for the TRPS and their conceptual definitions.

The second section of the instrument consists of items developed by Yiannakis (1991) and adapted by Gibson (1994) to determine need satisfaction. Again, a five point Likert-type scale is used, with responses ranging from 1 (unsatisfied) to 5 (satisfied). Cronbach's $\alpha$ for this portion of the survey is .91. Construct validity for the needs section was established by correlating each need with a total needs score, with the results ranging from .47 to .68. A test of the criterion validity of this section was conducted using a one-way analysis of variance. An item measuring life satisfaction was trichotomized into high, moderate, and low scores. This measure was then compared to the total needs score by level of life satisfaction. It was found, as hypothesized, that subjects with higher scores on need satisfaction were also more satisfied with their life in general (Gibson & Yiannakis, 2002). The third section of the instrument measures six demographic characteristics. Subjects provided information concerning their gender, educational level, occupational category, income, age, and marital status.

*Data Analysis*: The respondents were classified into Levinson's (1978, 1996) three life course eras based on their ages: Early Adulthood (17-39 years), Middle Adulthood (40-59 years), and Late Adulthood (60 years and over). Responses to TRPS questions were dichotomized by collapsing the responses for each role into high and low scores based on their frequency distributions (similar to Attle, 1996, and Gibson, 1989, 1994). Similarly, the respondents' need satisfaction scores were also recoded based on their frequency distributions. The data were analyzed using logistic regression.

*Results and Analysis*: Q1: Which needs predict preference for specific tourist roles at different eras of the life course for men and women? The needs that predict preference for the Ecotourist role among men in Early Adulthood included satisfied needs for independence and change combined with unsatisfied needs for accomplishment, escape, family, and sexual needs. The model accurately classified 73.68% of those included in the analysis. Among men in Middle Adulthood, a combination of satisfied needs for escape and growth and unsatisfied needs for privacy, control and financial security contributed to selection of this role. The percent correct classification of this analysis is 68.03. Men in Late Adulthood who preferred the Ecotourist role are predicted by unsatisfied needs for control over their lives and for family, which combined with satisfied needs for privacy, financial security, feeling connected with their roots, feeling good about themselves, stimulation, and being cared for. This model correctly classified 71.21% of the respondents. Note that some needs overlap from one era to the next. For example, the need for control appears in both Middle and Late Adulthood.

Similarly, female Ecotourists are also predicted well by needs. Women in Early Adulthood preferring this role are predicted by a satisfied need for stimulation combined with an unsatisfied need for control over their lives. The accuracy of classification for this analysis is 70.87%. Middle aged women select this role when the combination of an unsatisfied need for health and a satisfied need for feeling connected with their roots enter the model. This model correctly classified 61.34% of the respondents. Among women in Late Adulthood, the mix of needs included satisfied needs for love and escape and unsatisfied needs for health and sex as predictors of preference for the Ecotourist role. The correct classification rate is 72.88%. Note that there is no overlap here among the needs in each model.

Q2: Which sociodemographic characteristics predict preference for specific tourist roles at different eras of the life course for men and women? The model using sociodemographic variables only to predict the Nature Lover role among men in Early Adulthood had no predictors enter it. Similarly, the analysis using these variables to predict this role among men in Late Adulthood resulted in an insignificant model. However, income and education both entered the model as predictors of preference for this role among men in Middle Adulthood. Income levels of $10,000 to $19,999 and $50,000 to $59,999 per year both make a positive contribution to the

181

model. On the other hand, holding a high school, technical school, or four year college degree makes a negative contribution to the model. Finally, this model fit the data moderately well ($\chi^2$=35.8, p<.004, correct classification rate=72.58%). As with their male counterparts, women preferring the Nature Lover role are not predicted well by sociodemographic variables, as no variables entered the models.

Q3: Which combination of sociodemographic characteristics and needs best predict preference for specific tourist roles at different eras of the life course for men and women? The results of the combination of needs and sociodemographic variables as predictors of the Explorer role show promise. Male Explorers in Early Adulthood are predicted by needs only. These include a satisfied need for status combined with unsatisfied needs for family and companionship. The accuracy of classification is 60.7%. Among men in Middle Adulthood, satisfied needs for financial security, health, and stimulation combined with unsatisfied needs for safety and family as predictors of preference for this role, along with the income level of 50 and 59,999 dollars, which makes a positive contribution to the selection of this role among middle aged men. The percent correct classification for this model is 67.96. Men in Late Adulthood have several levels of income and education affecting the selection of this role, as well as a mix of satisfied needs for being connected with their roots, safety, and financial security and an unsatisfied need for independence. This analysis accurately classified 83.15% of the respondents.

Female Explorers in Early Adulthood are best predicted by a combination of income levels and an unsatisfied need for family. The accuracy of classification is 66.67%. Women in Middle Adulthood preferring this role are predicted by a satisfied need for independence combined with an unsatisfied need to be cared for. Also, the educational levels of some high school, high school, and technical school also entered the model. This model correctly classified 69.5% of the respondents. Finally, a mix of satisfied needs for safety, growth and change and an unsatisfied need for creativity predicted preference for the Explorer among women in Late Adulthood. This model has a percent correct classification rate of 66.33%.

## Discussion

The results of the logistic regression models support three major findings:

1. Needs alone predict preference for nature-based tourist roles across the adult life course with a satisfactory success rate (63.88%, 81 models)
2. Sociodemographic variables provide marginal results when predicting preference for nature-based tourist roles across the adult life course (64.83%, but only 41 models generated)
3. Needs and sociodemographics combined offer the best prediction of nature based tourist roles preference across the life course (70.25%, 80 models)

The results also support the work of Gibson (1989, 1994), Gibson & Yiannakis (2002) and Yiannakis and Gibson (1988) by showing that needs and sociodemographic variables predict tourist role preference across the life course. They also support the work of Yiannakis and Gibson (1992), Pearce (1982, 1985), and Cohen (1972) by showing that needs are the underlying factors that drive preference for specific vacation behaviors.

Based on this research, distinct market segments are also created. The work of Weaver & Lawton (2002) and Eagles (1992) are supported, showing that ecotourists are in fact motivated by needs. However, demographic characteristics alone appear to be less useful as market segmentation characteristics when predicting who chooses these types of vacation behaviors. Despite this, some support exists from this research for the types of market segments established by Wight (1996). Specifically, the current research shows that socio-demographic variables, in conjunction with needs, do combine to create precise market profiles for nature-based tourist roles.

## Conclusions

If the results were to be used by practitioners, model selection is dependent on the goals of the user: if the intent is to develop the most parsimonious model, needs alone suffice. However, if the objective is to develop a profile of the tourist for marketing or destination development purposes, the combined model offers the most comprehensive understanding of each type of tourist in each life course era. Further, the following recommendations for future research are offered:

1. Use micro level approach by analyzing each role across 10 life course stages to eliminate any masking effects.
2. The interaction of sociodemographic variables and needs should be studied.
3. A structural model should be developed to determine the relationship between needs, sociodemographic variables, destination attributed, and preference for nature-based tourist roles.

## References

Attle, S. 1996. _Tourist role preference and the development of life style profiles: Implications for market segment and tourist destination selection._ Unpublished Doctoral Dissertation. University of Connecticut.

Cohen, E. 1972. Toward a sociology of international tourism. _Sociological Research, 39(1)._ 164-182.

Eagles, P. 1992. The travel motivations of Canadian ecotourists. _Journal of Travel Research, 31._ 3-7.

Gibson, H. 1989. _Tourist roles: Stability and change over the life cycle._ Unpublished Masters Thesis, University of Connecticut.

Gibson, H. 1994. Some predictors of tourist role preference for men and women over the adult life course. Unpublished Doctoral Dissertation. University of Connecticut.

Gibson, H., & Yiannakis, A. 1993. Patterns of tourist role preference across the Life Course. Presented at the Leisure Studies Association Third International Conference, Loughborough University, UK.

Gibson, H., & Yiannakis, A. 2002. Tourist roles: Needs and the lifecourse. Annals of Tourism Research, 29, 358-383.

Levinson, D. 1996. The seasons of a woman's life. New York: Knopf.

Levinson, D., Darrow, C., Klein, E., Levinson, M., & Mckee, B. 1978. The seasons of a man's life. New York: Knopf.

Murdy, J. 2001. Predicting tourist role preference across the life course. Unpublished Doctoral Dissertation. University of Connecticut.

Pearce, P. 1982. The social psychology of tourist behaviour. New York: Pergamon.

Pearce, P. 1985. A systematic comparison of travel related roles. Human Relations, 38, 1001-1011.

Weaver, D., & Lawton, L. 2002. Overnight ecotourist market segmentation in the Gold Coast Hinterland of Australia. Journal of Travel Research, 40, 270-280.

Wight, P. 1996. North American ecotourism markets: Motivations, preferences, and destinations. Journal of Travel Research, 35, 3-10.

Yiannakis, A. 1986. The ephemeral role of the tourist: Some correlates of tourist role preference. Paper presented at the NASSS Conference, Las Vegas, NV, October, 1986.

Yiannakis, A. 1991. Some predictors of tourist role preference: A logistic regression approach. Presented at the Leisure Studies Association Conference, Northern Ireland, October 1991.

Yiannakis, A. & Gibson, H. 1992. Roles tourists play. Annals of Tourism Research, 19, 287-303.

Yiannakis, A., & Gibson, H. 1988. Tourist role preference and need satisfaction: Some continuities and discontinuities over the life course. Presented at the Leisure Studies Association Conference, Brighton, England, June 29-July 3, 1988.

Yiannakis, A., Gibson, H., & Murdy, J. 2000. Tourists roles and psychological needs: A time series analysis. Presented at the 3rd Symposium on Social Aspects and Recreation Research, Tempe, AZ, February 16-19, 2000.