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A MULTIVARIATE ANALYSIS OF SUN-SPOT-DESTINATION RESORT

MARKETS BY PRIMARY MARKET SEGMENTS

A Thesis in

Man-Environment Relations

by

Jihwan Yoon

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Submitted in Partial Fulfillment
of the Requirements
for the Degree of

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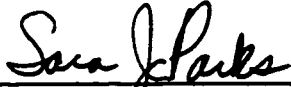300 North Zeeb Road
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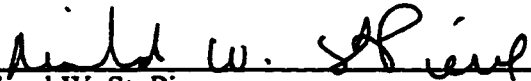Chair of Committee

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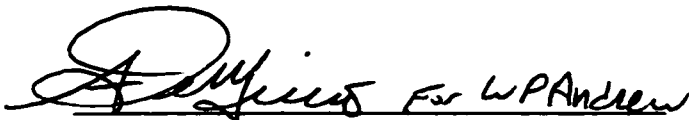
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ABSTRACT

One of the most important and growing segments of the contemporary tourism market, that caters to a wide variety of tourism demands, advertises sun, sand, and sea in its marketing strategies, is commonly referred to in the trade as sun-spot destinations. Despite of the rapid growth of the sun-spot-destination resort market, relatively little research exists on:

1. Significant differences among single, couple, and family travel parties -- in terms of socio-demographic characteristics, travel-related characteristics, and preferences for determinant attributes.

2. Significant differences between travel parties who prefer all-inclusive package and independent travel arrangement -- in terms of socio-demographic characteristics, travel-related characteristics, preferences for determinant attributes, and life-style characteristics.

This study involved 702 responses to a telephone survey that examined travelers' characteristics and the determinant attributes of sun-spot-destination resorts from two market segmentation perspectives. One segmentation was based on the type of travel party; the other related to preferences of travel arrangements. Both types of segmentation yielded significant differences that are useful for future marketing strategies.

Analyses of the travelers' socio-demographic and travel-related characteristics provided initial clues for defining differences among three types of travel parties (singles,

couples, and families), and two types of travel arrangement preferences (independent

travel arrangements and all-inclusive travel package). However, analyses of determinant

attributes and life-style characteristics provided more in-depth information about travel

party types and preference of travel arrangements. Therefore, a combination of socio-

demographic characteristics, travel-related characteristics, determinant attributes, and

life-style characteristics are recommended for defining various segments of the sun-spot-

destination resort market.

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ACKNOWLEDGMENTS

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I am also very grateful to my parents, Wooyoung and Junghang, my wife and daughter, Eunsuk and Sarah, and my sister and brother, Jihee and Jiho. Without their love and support, this dissertation never have been completed.

Chapter 1

INTRODUCTION

The tourist product (consumption) is the result of a combination (aggregate) of productive activities and services. In this particular type of production it is not the goods that are shipped, but the tourist consumer who travels to the site of consumption. This characteristic provides the basis for understanding the multiplicity of consumer activities that comprise the tourism product. First there is a demand for transportation, then a demand for food, beverages, lodging entertainment, safety, relaxation, leisure activities, solitude, comfort, and so on. This multiplicity of temporal progression, does not describe the tourism product until the very act of consumption. Thus, the terms of consumption and production are interchangeable because it is impossible to identify the tourism product until the time it is consumed (Sessa 1989; Moutinho 1989).

Marketing scholars and practitioners in tourism investigate consumer needs and attitudes in order to develop influential measures. Tourism consumer research has evolved as a discipline giving recommendations on which explanatory variables should be monitored in order to understand consumer behavior (Mill and Morrison 1985, McIntosh and Goeldner 1990).

The simple fact that different people demand different tourism products has given rise to a large variety of facilities and services: hotels, motels, inns, business conference

centers, etc. One of the most important and growing segments of the contemporary

tourism market, that caters to a wide variety of tourism demands, advertises sun, sand,

and sea in its marketing strategies, is commonly referred to in the trade as sun-spot

destinations. Some sun-spot destinations also add other "Ss" to the list of opportunities,

such as spirits and sex, suggest that tourism can also satisfy a variety of social needs and

provide an environment where normal social inhibitions can be suspended for the

duration of the trip (Morgan 1994). In this study, sun-spot-destination resorts was

defined as resorts which were located in warm weather destination such as Florida,

Mexico, Hawaii, or the Caribbean. Sun-spot-destination resorts in Florida, California, the

Caribbean and Hawaii are the most popular destinations for Americans (Harris 1989).

This travel market can be considered as a large market composed of smaller

submarkets or segments. The type of the travel party and the preference of travel

arrangements, for example, could be used to explore the properties of probable

submarkets: singles, couples, and families; all-inclusive package and independent travel

arrangement. The basic premise is that consumers in one segment are different from the

consumers in another segment, and so each group represents a separate entity. This type

of segmentation of sun-spot destinations is based on the reality that the proposed

submarkets are too complex and divers to consider all consumers within the market as

homogeneous.

Problem Statement

Despite of the rapid growth of the sun-spot-destination resort market, relatively little research exists on:

1. Significant differences among single, couple, and family travel parties -- in terms of socio-demographic characteristics, travel-related characteristics, and preferences for determinant attributes.

2. Significant differences between travel parties who prefer an all-inclusive package and independent travel arrangement -- in terms of socio-demographic characteristics, travel-related characteristics, preferences for determinant attributes, and life-style characteristics.

Definition of Key Terms

The key terms used in this study were defined as follows:

- Sun-spot destination resort -- A resort that is located in warm weather destination such as Florida, Mexico, Hawaii, or the Caribbean, etc.

- Single travel party -- Someone who travels by oneself or with a friend.

- Couple travel party -- Someone who travels with their spouse or significant others.

- Family travel party -- Someone who travels as a family with one or more children under 17 years of age.

- All-inclusive package -- An all-inclusive package provides guests a combination of accommodations, meals, recreational activities, and airfare for one price.

- Independent travel arrangement -- Independent travel arrangement involves the traveler making his or her travel arrangements (accommodations, meals, recreational activities, transportation, etc.).

- Determinant attributes -- The physical and psychological characteristics of a travel destination that travelers use to differentiate resorts when they make a travel decision.

- Life-style characteristics -- Life-style characteristics of tourists include their activities, interests, preferences, values, needs, and perceptions (Mayo and Jarvis 1981).

Research Objectives

The objectives of this study are:

1. To determine if there are significant differences among single, couple, and family travel parties in terms of preference for an all-inclusive travel package versus independent travel arrangements.

2. To determine if there are significant differences among single, couple, and family travel parties in terms of the following socio-demographic characteristics:

   age distribution,

   marital status,

   household size,

   employment status

   education, and

   household income before taxes.

3. To determine if there are significant differences among single, couple, and family travel parties in terms of the following travel-related characteristics:

   season of travel,

   destination of travel

   duration of travel,

pre-travel planning activities, and

reservation scheduling,

4. To determine if there are significant differences among single, couple, and family travel parties in terms of the following determinant attributes at sun-spot destination resorts:

X_1. Offering restaurants and nightlife,

X_2. Offering comfortable accommodations,

X_3. Being easy to book or arrange,

X_4. Letting me tailor my vacation to my budget,

X_5. Being educational,

X_6. Offering an escape from everyday life,

X_7. Being a family resort,

X_8. Offering good food,

X_9. Offering short stay getaways,

X_{10}. Offering hobbies and special interests,

X_{11}. Letting me tailor my vacation to my interests,

X_{12}. Being for people like me,

X_{13}. Being a beautiful location and setting,

X_{14}. Being new and different,

X_{15}. Being peaceful and quiet,

X_{16}. Being a place I feel comfortable and safe,

X_{17}. Being a great place to shop,

X_{18}. Offering sightseeing,

X_{19}. Offering a choice of different things to do,

X_{20}. Being a good value for the money, and

X_{21}. Having supervised activities for children

5. To determine if there are significant differences between travel parties who prefer an all-inclusive travel package versus independent travel arrangements in terms of the following socio-demographic characteristics:

age distribution,

marital status,

household size,

employment status

education, and

household income before taxes,

6. To determine if there are significant differences between travel parties who prefer an all-inclusive travel package versus independent travel arrangements in terms of the following travel-related characteristics:

season of travel,

destination of travel

duration of travel,

pre-travel planning activities, and

reservation scheduling,

7. To determine if there are significant differences between travel parties who prefer an all-inclusive travel package versus independent travel arrangements in terms of the following determinant attributes at sun-spot destination resorts:

X_1. Offering restaurants and nightlife,

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X_8. Offering good food,

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X_{18}. Offering sightseeing,

X_{19}. Offering a choice of different things to do,

X_{20}. Being a good value for the money, and

X_{21} Having supervised activities for children,

8. To determine if there are significant differences between travel parties who prefer an all-inclusive travel package versus independent travel arrangements in terms of the following life-style characteristics:

Z_1. Like to vacation in places where I know the people will like me,

Z_2. Like to vacation in places where I know the people are like me,

Z_3. Often seek the advice of others,

Z_4. Like to travel to places with good night life,

Z_5. Worry a lot about whether the people I'm with having a good time,

Z_6. Like to see and do new things on my vacation.

Z_7. Like to try new things,

Z_8. Like to learn about other cultures,

Z_9. Enjoy going to new restaurants and trying new foods,

Z_{10}. Like meeting new people,

Z_{11}. Worry about traveling to countries where there might be political unrest,

Z_{12}. Stay away from resort areas with high crime rates,

Z_{13}. Worry about quality of the water and the food when I travel,

Z_{14}. Would rather spend a quiet evening at home than go to a party,

Z_{15}. Am a quite person,

Z_{16}. Don't want anyone telling me when or what to do when I'm on vacation,

Z_{17}. Am more confident of myself than most people are,

Z_{18}. Take vacations mainly to relax,

Z_{19}. Like to be pampered,

Z_{20}. Am usually talkative and outgoing,

Z_{21}. Like to gamble,

Z_{22}. Get bored easily,

Z_{23}. Like to play competitive sports,

Z_{24}. Like spend a lot of my vacation time with my children, and

Z_{25}. Want my children to be exposed to other cultures,

Note that this list contains a combination of personality traits and life-stlye characteristics, but since life-style characteristics are reflections of personality traits, the list is labled life-style characteristics for purpose of this research.

Limitations

While the findings of this research should help resort managers and hospitality marketers to better understand characteristics of the American travelers and their preferences for physical and psychographic aspects of sun-spot destination resorts, the following limitations apply:

- The telephone questionnaire required more than 30 minutes per respondents, and therefore may have contributed to a high non-response rate.

- The sample was not proportional to population distribution throughout the United States and therefore final results only apply to the sample, not the entire U.S. market for this type of resort.

- Non-response bias could not be evaluated because it was not reported by the consultant who conducted the interviews.

- Survey questions, design, and sampling procedures were not under the control of the researcher.

Chapter 2

REVIEW OF LITERATURE

In this chapter, literature is reviewed that relates to trends in the sun-spot-destination resort, types of travel parties, preferences for different types of travel arrangements, life-style characteristics of tourists.

Sun-Spot-Destination Resorts

The resort industry has been one of the fastest-growing segments of the lodging industry in recent years. In turn, this growth created an oversupply, forcing resorts to become more aggressive in their marketing strategies (Whelihan III and Chon 1991). These strategies need to consider the following changes in three social trends - changing demographics, altered economic conditions, and revised leisure priorities:

- Demographics - the singles who created Club Med's early success have since matured and become couples and family.

- Economics - baby boomer households have grown substantially in affluence.

- Priorities - baby boomers consider enriched leisure time a key to a full life, and their motivation for self-actualization focuses on their family. Since

families have less time to spend their leisure dollar, the quality of a resort's family-oriented experience will be critical.

Resort visitors who use to spend all winter at a resort property have been replaced by young families looking for a value-conscious atmosphere in a more manageable, shorter-time period (Liberson 1993).

Throughout the world, the resort industry is being designed to attract travelers who are seeking to preserve their planet, their health, and their dollars. Resort-industry designers and architects have identified four trends that are carving a niche for the new look in resorts (Macdonald 1992):

- A growing demand for all-inclusive destination resorts

- Market differentiation

- Property renovation and repositioning

- Fantasy vacation resorts

As a result, there is a need for research to identify marketing strategies for the all-inclusive package and to identify market differentiation in the sun-spot-destination resort industry. Many resorts in the Caribbean, for example, are designed to provide extensive sporting, social and recreational facilities within the resort complex so that guests do not have to leave the resort to enjoy these activities during their stay. These resorts take the concept of brand image and replace the destination image. This formula works very successfully as long as the tourist's prime concern is for relaxation and recreation in a

sun-spot-destination resort where familiar symbols in a warmer climate create a relaxed mood (Morgan 1994).

For tourists making their first visit to a country, the modern architecture and multinational logos of the resorts promise an enclave of familiarity and security in a strange and threatening world (Morgan 1994). For example, SuperClubs has developed five all-inclusive resorts (the Boscobel Beach, Couples, the Grand Lido, Hedonism II, and Jamaica-Jamaica) along Jamaica's north and west coasts. Each of these properties target different types of travelers who are looking for a care-free sun-spot vacation that reflects the market differentiation available to them. The Boscobel Beach is a resort for family travelers with children under 14, Jamaica-Jamaica and Grand Lido caters to couples and singles, Hedonism II attracts mostly singles, and Couples is for couples only (Jamaica Hotel and Tourist Association 1994).

Types of Travel Parties

Gibbsons (1980) studied singles and couples as a major market segments of Club Med. In the past, singles had the connotation of "swinger". Today, the single person remains, or becomes single by choice; not pressured by society to be married or stay married. The single person may also be older as a result of the increased divorce rate among middle-aged married people. In addition, the term couple is no longer consist with a traditional "husband and wife" union, but rather implies "paired parties" such as

significant others, or two or more men, or women, due to the decline of the traditional marriage and the increased divorce rate. Couples in the DINKS (double-income-no-kids) life style, have more discretionary income for leisure activities. The primary travel motives of singles and couples are to: rest , relax, and escape the routine of pressures of daily living; indulge in their fantasies; enjoy the naturalness of life; and express total freedom.

The family travel party, on the other hand, is a growing segment of the sun-spot-destination resort markets. This growth is being fueled by the baby boomers' motivation for self-actualization and focus on the family values (Whelihan III and Chon 1991). The first priority of the family groups is to use travel as an educational experience for their children. Recently, many resorts developed special programs for children who travel with parents such as Ritz Kids, Westin Kids Club, Cactus Kids Club of Marriott, and Kid Club of Club Med. Levine 1989, Liberson 1993, Liberson 1994, Makens 1992, Palmer 1991, and Whelihan III and Chon 1991 have shown that the family travel party will be the major segment of the resort market, even though some niches of the singles and couples markets will continue to exist.

Preference of Travel Arrangements

The all-inclusive package has become a critical characteristic of successful sun-spot-destination resorts since travelers have become value-conscious. The all-inclusive package benefits both travel agents and travelers because travel agents make more money with less effort and travelers like the package arrangement because of the convenience and the price. (Liberson 1994).

Many researchers have attempted to understand the package-tour market with market segmentation. Plog (1974) categorized people as either psychocentric or allocentric. Psychocentric tourists prefer complete tour packages with heavy scheduling of activities; whereas allocentric tourists prefer independent travel arrangements or just basic tour packages (covering the cost of transportation and accommodations only) with considerable freedom and flexibility to spend their money as they choose.

Abbey (1979) examined tour travelers in Las Vegas to determine the relative effectiveness of life-style information and demographic characteristics in the design of package travel tours. The findings of this research suggested that life-style information is superior to demographic characteristics in explaining tourist preferences.

Mak and Moncur (1980) studied the demand of U.S. mainland visitors to Hawaii for travel agents. Results indicated that the degree of visitor's familiarity with a destination, education level of the tourists, package-tour availability, number of

destinations involved, intended length of stay, and variety of accommodations were significant factors that influenced use of travel agents.

Sheldon (1986) evaluated the prices of two different types of package tours to the Hawaiian Islands: basic package tours and inclusive package tours. The basic package tour included transportation, accommodations, and some sightseeing. The inclusive package tour included transportation, accommodations, meals, a full program of sightseeing and entertainment, and often an escorted tour. Study results indicated that basic package tours offered a bigger discount to the tourists than did inclusive package tours.

Sheldon and Mak (1987) reported that purchasers of package tours, among U.S. residents who traveled to Hawaii were likely to be elderly, intended to visit several destinations, were in small party groups, made short visits, and were first-time visitors to the destination.

Kale et al. (1987) compared the travel preferences to representative tour offerings targeted to the 18 to 35 age groups. Results indicated that potential travelers in this age group placed a higher value on free time, flexibility, exposure to the local culture, and the opportunity to visit scenic attractions.

Milman (1990) compared the characteristics of the two segments of the U.S. overseas travel market: travelers who preferred to go on package tours, and travelers who preferred to make their own travel arrangements. Results indicated that those who preferred package tours were more concerned with good value for the money, and

thought that accommodations and restaurants, shopping, and large metropolitan areas were major components of a successful vacation. Whereas, individual travelers were more interested in relaxation and beaches, want to talk in their social network about where they went.

Life-Style Characteristics

Travel behavior is part of an individual's overall life style. Travel behavior can be explained partially by understanding how travel fits into an overall life-style pattern (Mayo and Jarvis 1981). Many tourism researchers and practitioners have been aware of the usefulness of life-style research. Mazanec (1989) indicated that tourism-product development has shifted from offering a destination to selling a particular vacation style. Weber (1989) suggested that information about the life styles of potential travelers were necessary to segment the travel markets and to develop promotional programs. Brayley (1993) stressed that the understanding of personality, intentions, motivations, and life-style characteristics was very important to tourism and hospitality marketers.

Harris (1989) identified the three prominent types of American travelers based on their salient travel characteristics: life enhancers, sunseekers, and play-it-safers. Life enhancers comprise the dominant type of traveling American, comprising 40 percent of the American traveling public or 16.6 million households. The life enhancers, who want more than just a suntan. seek new adventures, new friends and new knowledge.

Sunseekers look for warm climates when they travel -- for swimming, tennis or golf. Like most traveling Americans, they go to Florida and California. But Hawaii and the Caribbean are also likely destinations. They prefer the all-inclusive resort where service is essential, and tend to be younger, single, and male. Sunseekers are the most affluent of the three broad groups and make up a quarter of traveling Americans. They spend more than $4,000 per household, per year on travel -- the most of any of the three groups. They view personal travel as a necessity and therefore do more traveling - both weekend escapes and long vacations than anyone else. Sunseekers are very ambitious, see themselves on the way up and are open-minded about sexual matters and others' lifestyles. They are self-described romantics and consider themselves to be fit and attractive to a greater extent than the other groups. And they describe themselves as very contemporary and "now."

Play-it-safers are best defined by what they don't want: no fancy foods, no foreign languages, nothing unexpected. They have high concern about airport safety and the crime rate and they only make up 15 percent of the personal travel market.

From a resort management and strategic marketing perspective, sunseekers are the major customer for the sun-spot-destination resorts. However, life enhancers and play-it-safers can be attracted to sun-spot-destinations by offering a wide variety of tourism attractions and activities.

Harris (1992) categorized travelers into two different styles: the "1980s traveler" and the "1990s traveler". The characteristics of each of these two categories are:

Eighties Traveler:

- Allow myself to do whatever I want whenever I want

- Indulge myself in ways I normally do not

- Spend money freely

- Order the most expensive foods and wines

Nineties Traveler:

- Understand the culture and history of an area I do not know

- Add some adventure and excitement to my life

- Work for an improved natural environment

- To gain a new perspective on my life or change the way I view things

- Strengthen a relationship with a traveling companion

- Strengthen a relationship with a child or children

- Get to know the people who live in the area

- Make disciplined use of my time

- Learn or improve my skills in a foreign language

While demographic characteristics either do not change or change relatively slowly, motivations, attitudes, and life style may change dramatically according to situations and within shorter periods of time (MacIntosh and Goeldner 1986). Therefore, research is necessary to continually monitor how life-style characteristics change overtime, and the effects of that change on tourism market behavior.

Overview of the Literature on Sun-Spot-Destination Resorts

Tourists are far more complicated consumers than in the past. The tourism

product is more than just the destination. Tourists are more likely to be motivated by

what they are going to do on their vacation than by where they are going to do it (Morgan

1994). Therefore, it is important for tourism marketing planners of sun-spot-destination

resorts to know the specific characteristics of their consumers' needs because relatively

little research has been aimed at this lucrative and growing segment of the tourism

phenomena.

Chapter 3

METHODOLOGY

This chapter consists of two major sections: survey procedures and overview of statistical methodology. The first section describes the telephone survey sample, survey screening questions, the quota system used, and the specific survey questions involved. The second section outlines the statistical procedures used to analyze the responses to each research questions.

Survey Procedures

Telephone Survey Sample

An international marketing-research firm allowed the researcher to use part of their database from a telephone-interview survey of U. S. tourists who had taken a vacation in the past three years to a sun-spot (warm-weather) destination such as Florida, Mexico, Hawaii, or the Caribbean. The survey was conducted during a 24-day period between February 22 - March 17, 1995, for a large sun-spot-destination resort company. Data was provided by the company with the understanding that it would remain anonymous.

Two procedures were used by the firm to generate telephone numbers for the survey: computer generated 10-digit random numbers, and telephone numbers provided by a mail/phone consultant. If a 10-digit random number was in fact an actual phone number it was used along with those supplied by the consultant to contact potential survey respondents.

Survey Screening Questions

The following screening questions were used in the opening phase of the telephone survey to determine if a phone respondent was eligible to participate in the survey; and, if so, to classify the respondent in one of three types of traveler categories -- singles, couples, or families:

- were the respondents 21 years of age or older?

- did the respondent take a vacation to a sun spot or warm weather destination such as Florida, Mexico, Hawaii, or the Caribbean in the past 3 years?

- did the respondent travel "alone or with a friend" and have an income of over $30,000 (respondent qualified as a singles category)?

- did the respondent travel as a couple, that is "with a spouse or significant other," and have an income over $35,000 (respondent qualified as a couples category).

- did the respondent travel with a family and have an income over $35,000

  (respondent qualified as a families category)?

Quota System Used

Interviewers used a quota system in the telephone interview process such that:

- Approximately one-third of all respondents were either in a singles, couples,

  or families category.

- Approximately half of all respondents were male or female (Table 3.1)

The random-generated phone numbers plus those provided by a consultant

resulted, respectively, in 451 and 251 completed interviews -- for a total of sample size of

702. The majority of respondents were from New York (27%) and California (18%); the

total sample involved respondents from 26 states but most respondents were from the

northeastern United States (Table 3.2).

Table 3.1
Number of Respondents by Type of Travel Party and Gender (N = 702)

	Type of Travel Party		
	Singles	Couples	Families
Male	88	126	101
Female	125	117	145
Total	213	243	246

Table 3.2
Number of Respondents by State of Residence

State	No. of interviews	Percent
New York	190	27.07
California	126	17.95
Florida	69	9.83
New Jersey	63	8.97
Illinois	57	8.12
Massachusetts	55	7.83
Pennsylvania	36	5.13
Maryland	27	3.85
Connecticut	22	3.13
Virginia	19	2.71
Wisconsin	6	0.85
DC	5	0.71
Rhode Island	3	0.43
Texas	3	0.43
Vermont	3	0.43
Michigan	2	0.28
Minnesota	2	0.28
New Hampshire	2	0.28
Ohio	2	0.28
Tennessee	2	0.28
Nevada	2	0.28
Georgia	1	0.14
Maine	1	0.14
Missouri	1	0.14
North Dakota	1	0.14
Washington	1	0.14
Missing values	1	0.14
Total	702	100

Survey Questions

The following survey questions from the firm's data base were used in this study:

1. At what time of the year did you go on your last <u>sun spot</u> vacation?

   a) Winter

   b) Spring

   c) Summer

   d) Fall

2. What was your destination?

a) Arizona	h) Florida
b) Aruba	i) Hawaii
c) Bahamas	j) Jamaica
d) Bermuda	k) Mexico
e) California	l) Puerto Rico
f) Costa Rica	m) Virgin Islands
g) Dominican Republic	n) Other (Specify)

3. How long was your last sun spot vacation?

    a) Less than 3 days

    b) 3 or 4 days

    c) 5 to 7 days

    d) to 10 days

    e) or more days

4. When planning a vacation, how far in advance do you usually start collecting information?

    a) A week of two before

    b) About a month before

    c) 2 to 3 months before

    d) 4 to 5 months before

    e) About 6 months before

    f) 7 to 11 months before

    g) About a year before

    h) Over a year before

5. When making reservations for your vacation, how far in advance do you usually make reservations?

    a) A week of two before

    b) About a month before

    c) 2 to 3 months before

    d) 4 to 5 months before

    e) About 6 months before

    f) 7 to 11 months before

    g) About a year before

    h) Over a year before

6. Now, I'd like you to tell me how important each of a series of attributes is to you in selecting a sun-spot vacation. As I read you each attribute, please use a number from 1 to 10 to tell me how important it is to you in a sun spot vacation. If you feel it is **Extremely Important** you would give it a "10 or 9". If you feel it is **Not At All Important** you would give it a "1 or 2". Of course, you can give it any number in between 1 and 10 depending on how important you feel it is to you when selecting a sun spot vacation.

    a) Offering an all-inclusive package

    b) Being a place I feel comfortable and safe

    c) Offering hobbies and special interests

    d) Offering sightseeing

    e) Being new and different

f) Being peaceful and quiet

g) Being a beautiful location and setting

h) Offering a choice of different things to do

i) Being a great place to shop

j) Being a family resort

k) Being a good value for the money

l) Letting me tailor my vacation to my budget

m) Offering an escape from everyday life

n) Offering comfortable accommodations

o) Offering restaurants and nightlife

p) Offering short stay getaways

q) Being educational

r) Letting me tailor my vacation to my interests

s) Being easy to book or arrange

t) Being for people like me

u) Offering good food

v) Having supervised activities for children

7. Now, I'm going to read you a series of statements that people have used to describe themselves. After I read each statement, please use a scale from 1 to 10 to indicate how much you feel the statement applies to you personally. If you feel that statement **Applies To You Completely**, you'd rate it a "10 or 9". However, if you feel the statement **Does Not Apply To You At All**, you'd rate it a "1 or 2". Of course, you can rate each statement anywhere between 1 and 10 depending on how much you feel the statement applies to you personally.

a) I like to gamble

b) I like to be pampered

c) I take vacations mainly to relax

d) I like to see and do new things on my vacation

e) I like meeting new people

f) I like to vacation in places where I know the people will like me

g) I am more confident of myself than most people are

h) I would rather spend a quiet evening at home than go to a party

i) I enjoy going to new restaurants and trying new foods

j) I like to try new things

k) I like to vacation in places where I know the people are like me

l) I am usually talkative and outgoing

m) I worry about quality of the water and the food when I travel

n) I often seek the advice of others

o) I get bored easily

p) I like to learn about other cultures

q) When I'm on vacation I don't want anyone telling me when or what to do

r) I am a quite person

s) I like to play competitive sports

t) I worry about traveling to countries where there might be political unrest

u) I stay away from resort areas with high crime rates

v) I worry a lot about whether the people I'm with having a good time

w) I like to travel to places with good night life

x) I like spend a lot of my vacation time with my children

y) I want my children to be exposed to other cultures

8. Are you ...

a) Single

b) Married

c) Divorced

d) Widowed

e) Separated

f) Unmarried, but living with someone

9. Including yourself, how many people are there - in total - living in your household?

Total in household: _____

10. Are you employed outside the home?

    <u>IF "YES", ASK</u>: Is that ...   a) Full-time

                                         b) Or, part-time

    c) <u>NO, DO NOT WORK</u>

11. What was the last grade of school you completed. Was it ...

    a) Grade college

    b) High school

    c) Some college

    d) College graduate

    e) Post Graduate Degree

    f) Other non-college (secretarial/technical)

    g) Other (specify)

12. And finally, for classification purposes only, please tell me which of the following categories most closely approximates your total family income before taxes.

    a) Under $30,000

    b) $30,000 - $34,000

    c) $35,000 - $39,000

    d) $40,000 - $44,000

    e) $45,000 - $49,000

    f) $50,000 - $74,000

    g) $75,000 or more

Overview of Statistical Methodology

A brief overview of the statistical methodology used to answer each research objective is described next. More-detailed explanations of statistical analyses used to answer each research objective are presented in Chapter 4.

Research Objectives 1, 2, 3, 5, and 6

Chi-square analysis was used to examine relationships between: type of travel party versus preference of travel arrangements (research objective 1); socio-demographic characteristics versus type of travel party(research objective 2); travel-related characteristics versus type of travel party(research objective 3); socio-demographic characteristics versus preferences of travel arrangements (research objective 5); travel-related characteristics versus preferences of travel arrangements (research objective 6).

Research Objectives 4

Multivariate analysis of variance (MANOVA) and multiple discriminant analysis were used to investigate the determinant attributes listed in research objective 4. MANOVA is useful to test the equality of vectors of means on multiple dependent

variables (i.e. 20 determinant attributes) across groups (i.e. three types of travel parties) (Hair et al. 1992). Wilks' lambda was used to test the overall differences across the three types of travel parties. If the results of MANOVA indicated there was significant difference among group means, a univarate F test for each determinant attribute was used to investigate the source of these group differences (Cooley and Lohnes 1971). Multiple discriminant analysis was used to determine which of the 20 determinant attributes accounted for most of the differences of the three types of travel parties.

Multiple discriminant analysis determines the weights of combination of 20 determinant attributes that maximize the distance between three types of travel parties. These weights are best measured by discriminant loadings, which are the correlations between the discriminating variables and the canonical discriminant functions (Hair et al. 1992).

The analysis employed SPSS and a stepwise Mahalanobis D^2 procedure with a varimax rotation was applied. For the purpose of validity test of the discriminant function, the total sample was randomly divided into two groups. One of these groups, referred to as the analysis sample, was used to develop the discriminant function. The other group, referred to as the holdout sample, was used to test the discriminant function. To accomplish the validity test, classification matrices for the both analysis and holdout samples would be developed. The hit ratio (percent correctly classified) was obtained from the classification matrix. If the hit ratio was higher than the percentage that could

be classified correctly by chance, the prediction accuracy was acceptable. Press's Q

statistic was used to test for the discriminatory power of the classification matrix.

The stepwise procedure was used to analyze the determinant attributes since the

research objective was to determine the best discriminating variable set between three

types of travel parties singles, couples, and families. The stepwise procedure began by

selecting the single best discriminating variable and initial variable was then paired with

each of the other determinant attribute variables one at a time, and the second variable

was chosen that was best able to improve the discriminating power of the function in

combination with the first variable, and so forth. Eventually, either all determinant

attribute variables have been included in the function or the excluded variables have been

judged as not contributing significantly to further discrimination (Hair et al. 1992). In

this analysis, it was necessary to develop two separate discriminant functions to

distinguish between three types of travel parties. The first function separated one type

from the other two, and the second separated the remaining two types.

The final stage of the discriminant analysis involved interpretations. In this final

stage the contributions of the predictor variables to each function was evaluated

separately (i.e. discriminant loadings). Next the cumulative effect of both functions was

evaluated (i.e. potency index). Finally, a graphical display was developed to help the

researcher visualize, and better understand the relative position of each type of travel

party, and interpret the relative importance of each variable to that position. To facilitate

further interpretation, the entire solution of the discriminant functions was rotated with

the varimax procedures. Rotation provided a simpler structure and aided in profiling each function when there were two or more significant discriminant functions (Hair et al. 1992). To assess the relative contribution of the function to the overall solution, a potency index was used. A potency index is a composite measure of the discriminatory power of a predictor variable when more than one discriminant function is estimated (Hair et al. 1992). To demonstrate the differences in terms of the discriminant attributes, the rotated discriminant loadings and group centroids were plotted in the-two dimensional coordinates of the discriminant functions.

Research Objectives 7

The statistical methodology that was used to answer research objective 4 was also used to answer research objective 7. However in this case, the analytical procedures required less time than those for research objective 4 because only two types of travel arrangements were involved.

Research Objectives 8

In the analysis of data for research objective 8 about life-style characteristics, explanatory factor analysis was used first to find the best combination of independent factors for the 25 characteristics. Varimax rotation was used to produce orthogonal

factors to achieve simpler and theoretically meaningful solutions. The eigenvalue-one-criterion was used to extract the factors. In addition, the Cronbach's alpha was used to test the internal reliability of the factors. The life-style characteristic with the highest factor loading within each factor was selected as the surrogate variable to represent that factor.

Because the life-style scale used in this study was explanatory with little evidence of reliability, each of the surrogate variables were used in subsequent MANOVA and discriminant analysis to represent each factor (Hair et al 1992). A simultaneous discriminant procedure that included all surrogate variables was used in the discriminant function because each factor had unique source of discrimination not found in other factors.

Chapter 4

ANALYSIS AND DISCUSSION OF RESULTS

This chapter is divided into two major sections: analysis of data and discussion of results. Both sections contains subheadings that are abbreviations of the specific study objectives.

Analysis

Objective 1: Preference of Travel Arrangements versus Type of Travel Party

In the first item of question 6, respondents were asked to indicate, on a score from 1 to 10, their preference (or relative importance) for an all-inclusive package when selecting a sun-spot destination. "Extremely important" was a 10 or 9, whereas "not at all important" was 1 or 2. Respondents were stratified by the following two types of preferred travel arrangement categories based on their score. About two-thirds of respondents preferred an all-inclusive package (67.1%) and 31.9% of the sample did not (Table 4.1).

Table 4.1
Preference of Travel Arrangements

Preference of Travel Arrangements	Score	Frequency	Percent
Independent Travel Arrangement	1 - 5	224	31.9
All-inclusive Travel Package	6 - 10	471	67.1
No Answer		7	1.0
Total		702	100

Chi-square analysis results (chi-square = 1.33, p = 0.51) indicated there was no significant difference between the number of single, couple, and family travel parties who preferred either of two types of travel arrangements -- independent travel arrangement or an all-inclusive package (Table 4.2).

Table 4.2
Number of Respondents in Three Types of Travel Parties Who Preferred Either of Two Types of Travel Arrangements (chi-square = 1.33, p = 0.51)

	Singles	Couples	Families
Independent	62	82	80
All-Inclusive	150	158	163

Objective 2: Socio-Demographic Characteristics versus Type of Travel Party

Chi-square analysis was used to determine if there was a significant difference among the three types of travel parties in terms of socio-demographic characteristics:

- Age (screening question).

- Marital status (question 8).

- Household size (question 9).

- Employment status (question 10).

- Education (question 11).

- Household income before taxes (question 12).

The three types of travel parties differed significantly for all socio-demographic characteristics, except education (Table 4.3).

Table 4.3
Socio-Demographic Characteristics for Three Types of Travel Parties

Characteristics	Singles (N = 213)	Couples (N = 243)	Families (N = 246)	Statistics
Age[a]				
Under 21	0%	0%	0%	$\chi^2 = 128.35$
21 -24 years	4.7	1.2	2.4	p = 0.00
25 - 34 years	36.2	17.3	14.6	
35 - 44 years	18.8	21.8	52.4	
45 - 54 years	18.8	24.3	21.5	
55 - 64 years	12.7	23.5	4.1	
65 or older	8.9	11.9	4.9	
Marital Status[a]				
Single	49.3	4.9	3.7	$\chi^2 = 316.76$
Married	21.1	88.1	86.6	p = 0.00
Divorced	18.3	3.7	5.3	
Widowed	6.6	1.2	2.0	
Separated	2.3	0.4	0.4	
Unmarried, but living with someone	1.9	0.8	0.8	
No answer	0.5	0.1	1.2	
Household Size[a]				
One	39.4	6.2	2.0	$\chi^2 = 340.27$
Two	27.7	58.8	8.9	p = 0.00
Three	16.0	13.6	22.0	
Four	11.3	13.6	41.5	
Five	2.8	4.9	19.5	
Six or more	1.4	0.8	4.9	
No answer	1.4	2.1	1.2	

(Continued on next page)

[a] Significantly different at .01 level.

Table 4.3 (Continued)

Characteristics	Singles (N = 213)	Couples (N = 243)	Families (N = 246)	Statistics
Employment Status[a]				
Full-time	74.6%	58.8%	57.7%	$\chi^2 = 19.422$
Part-time	6.1	13.2	15.0	$p = 0.00$
Do not work	17.8	25.5	25.6	
No answer	1.4	2.5	1.6	
Education				
Grade college	0.9	0.0	0.4	$\chi^2 = 15.48$
High school	10.3	16.0	8.5	$p = 0.22$
Some college	20.7	16.5	14.6	
College graduate	39.9	37.0	40.7	
Post Graduate Degree	25.8	27.2	31.3	
Other non-college (secretarial/technical)	0.9	0.8	2.0	
No answer	1.5	2.5	2.5	
Household income before taxes[a]				
Under $30,000	0.0	0.0	0.0	$\chi^2 = 88.57$
$30,000 - $34,000	8.5	0.0	0.0	$p = 0.00$
$35,000 - $39,000	13.6	7.4	4.9	
$40,000 - $44,000	9.9	4.9	4.1	
$45,000 - $49,000	10.3	5.3	7.3	
$50,000 - $74,000	20.7	18.9	16.3	
$75,000 or more	23.5	46.9	45.5	
No answer	13.5	16.6	21.9	

[a] Significantly different at .01 level.

Objective 3: Travel-Related Characteristics versus Type of Travel Party

Chi-square analysis was used to determine if there was a significant difference among the three types of travel parties in terms of travel related characteristics:

- Season (question 1).

- Destination (question 2).

- Length of stay (question 3).

- How far in advance did the party start to collect information for planning the vacation (question 4).

- How far in advance did the party make reservations (question 5).

Results of chi-square analysis indicated the three types of travel parties differed significantly regarding: travel-destinations, timing of advanced travel-planning and reservation scheduling activities (Table 4.4).

Table 4.4
Travel-Related Characteristics for Three Types of Travel Parties

Characteristics	Singles (N = 213)	Couples (N = 243)	Families (N = 246)	Statistics
Season				
Winter	60.6%	59.7%	61.8%	$\chi^2 = 3.81$
Spring	13.6	13.2	9.3	$p = 0.70$
Summer	16.4	15.6	19.1	
Fall	9.4	11.5	9.8	
Destination [a]				
USA	28.2	27.2	41.1	$\chi^2 = 32.04$
Caribbean	16.0	20.6	21.1	$p = 0.00$
Mexico	23.5	16.5	16.7	
Hawaii	4.2	9.5	6.5	
Other	9.4	7.4	6.1	
No answer	18.8	18.9	8.5	
Length of stay				
Less than 3 days	0.0	0.8	0.0	$\chi^2 = 9.67$
3 or 4 days	6.6	7.0	3.7	$p = 0.29$
5 to 7 days	51.6	53.9	59.3	
8 to 10 days	17.4	16.0	17.9	
11 or more days	24.4	22.2	19.1	
Advanced Planning [b]				
A week of two before	4.7	4.9	4.1	$\chi^2 = 28.09$
About a month before	17.4	9.1	6.9	$p = 0.03$
2 to 3 months before	33.3	28.8	28.5	
4 or 5 months before	10.8	10.7	9.3	
About 6 months before	21.1	24.3	29.7	
7 - 11 months before	6.1	8.2	8.1	
About a year before	4.2	10.7	10.6	
Over a year before	0.5	2.1	1.6	
No answer	1.9	1.2	1.2	

(Continued on next page)

[a] Significantly different at 0.01 level.
[b] Significantly different at 0.05 level.

Table 4.4 (Continued)

Characteristics	Singles (N = 213)	Couples (N = 243)	Families (N = 246)	Statistics
Reservation[a]				
A week of two before	11.7	8.2	8.1	$\chi^2 = 44.66$
About a month before	34.3	21.4	15.4	p = 0.00
2 to 3 months before	33.8	33.7	33.7	
4 or 5 months before	8.0	12.3	14.6	
About 6 months before	8.0	14.4	17.1	
7 - 11 months before	1.4	4.1	6.1	
About a year before	0.5	1.2	2.4	
Over a year before	0.0	0.4	0.0	
No answer	2.3	4.1	2.4	

[a] Significantly different at 0.01 level.
[b] Significantly different at 0.05 level.

Objective 4: Determinant Attributes versus Type of Travel Party

Survey question 6 asked respondents to indicate how important each of 21 determinant attributes (X_1 to X_{21}) were to them in selecting a sun spot vacation. Each determinant attribute could be scored from 1 to 10, where 10 or 9 was "extremely important" and a 1 or 2 was "not at all important". This phase of the analysis used multivariate analysis of variance (MANOVA) and multiple discriminant analysis to determine the relationship between determinant attributes and the type of travel party -- singles, couples, or families.

First, the group means and standard deviations of the 21 determinant attributes were compiled within each travel party category -- singles, couples, and families (Table 4.4). Since only the family travel parties provided information about "having supervised activities for children" (X_{21}), it was excluded from any further analysis. In general, all three types of travel parties rated "comfortable and safe place" (X_{16}) as the most important determinant attribute, mean score ranged from 8.6 to 9.16; whereas "being a great place to shop" (X_{17}) had the lowest mean scores of 4.6 to 5.4.

The distribution patterns of mean values for each the determinant attributes are shown by type of travel party in Figure 4.1, in order to provide a better visual understanding of results in Table 4.5.

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Table 4.5
Means and Standard Deviations of 21 Determinant Attributes in Question 6,
by Three Types of Travel Parties.

Determinant Attributes	Type of Travel Party			Total
	Singles	Couples	Families	
X_1. Offering restaurants and nightlife	7.95 (2.13)	6.82 (2.50)	6.74 (2.23)	7.14 (2.35)
X_2. Offering comfortable accommodations	8.57 (1.76)	8.47 (1.67)	8.49 (1.82)	8.50 (1.75)
X_3. Being easy to book or arrange	8.25 (2.02)	7.68 (2.15)	7.75 (2.06)	7.88 (2.09)
X_4. Letting me tailor my vacation to my budget	7.86 (2.02)	7.56 (2.25)	7.46 (2.42)	7.62 (2.24)
X_5. Being educational	5.68 (2.67)	5.71 (2.58)	5.70 (2.37)	5.70 (2.53)
X_6. Offering an escape from everyday life	8.51 (2.16)	8.28 (2.12)	8.62 (1.94)	8.47 (2.07)
X_7. Being a family resort	3.80 (2.69)	4.81 (2.76)	8.29 (1.81)	5.71 (3.11)
X_8. Offering good food	8.33 (1.85)	8.16 (1.99)	7.88 (2.09)	8.12 (1.99)
X_9. Offering short stay getaways	6.45 (2.58)	6.01 (2.87)	5.15 (2.67)	5.85 (2.76)
X_{10}. Offering hobbies and special interests	6.92 (2.52)	5.96 (2.78)	6.38 (1.29)	6.40 (2.56)
X_{11}. Letting me tailor my vacation to my interests	8.35 (1.73)	8.02 (2.05)	7.90 (1.72)	8.08 (1.85)
X_{12}. Being for people like me	7.84 (2.49)	6.55 (2.82)	7.15 (2.43)	7.16 (2.63)
X_{13}. Being a beautiful location and setting	8.95 (1.24)	8.66 (1.47)	8.81 (1.28)	8.80 (1.33)
X_{14}. Being new and different	7.39 (2.32)	7.02 (2.46)	6.23 (2.32)	6.86 (2.41)
X_{15}. Being peaceful and quiet	6.45 (2.65)	7.20 (2.24)	7.27 (2.23)	6.99 (2.39)
X_{16}. Being a place I feel comfortable and safe	8.85 (1.78)	8.65 (1.72)	9.16 (1.35)	8.89 (1.63)
X_{17}. Being a great place to shop	5.36 (2.82)	5.06 (2.87)	4.63 (2.62)	5.00 (2.78)
X_{18}. Offering sightseeing	6.44 (2.48)	6.50 (2.29)	5.99 (2.49)	6.30 (2.42)
X_{19}. Offering a choice of different things to do	8.28 (1.96)	7.62 (2.23)	8.23 (1.61)	8.04 (1.96)
X_{20}. Being a good value for the money	8.39 (2.08)	8.80 (1.52)	8.40 (1.94)	8.53 (1.86)
X_{21}. Having supervised activities for children [a]			6.85 (3.08)	

[a] Only family travelers provided scores for this attribute.
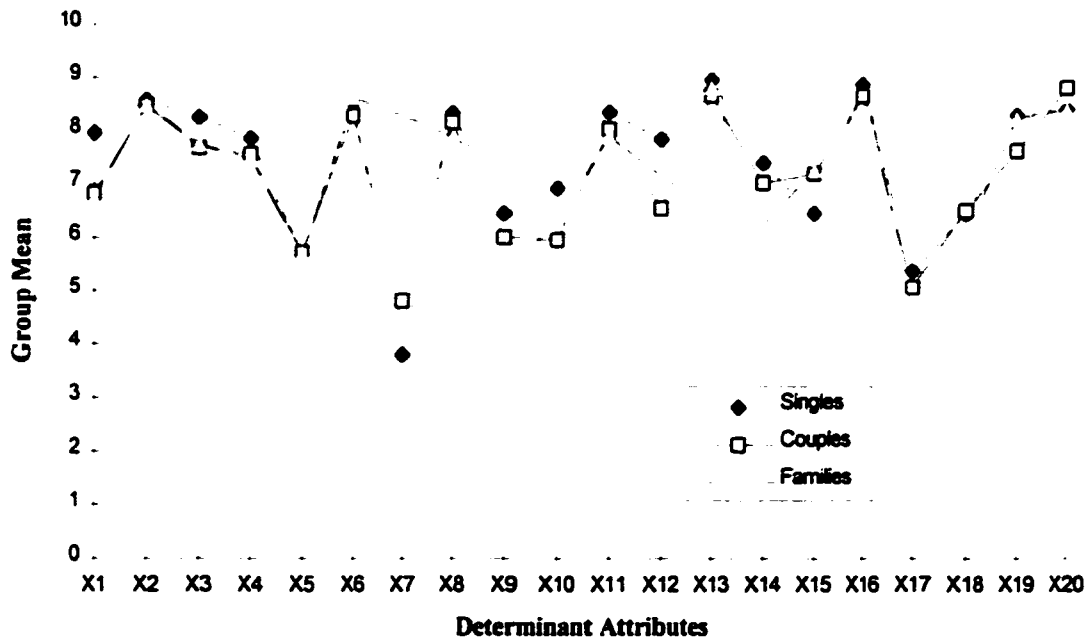
Figure 4.1
Distribution Patterns of Mean Values for 20 Determinant Attributes
by Three Types of Travel Parties
(See Table 4.5 for Descriptions of Determinant Attributes)

Next, multivariate analysis of variance (MANOVA) was used to determine if the three types of travel parties -- singles, couples, and families -- differed significantly in terms of their determinant attribute scores. Since a requirement of MANOVA is that the dependent variables (20 determinant attributes) are correlated, the appropriateness of either using or not using MANOVA was tested using Bartlett's test of spherity (Hair et al. 1992). The test (Bartlett's statistic = 3004.93 with 190 df, $p < .000$) indicated that MANOVA was appropriate for analyzing the data. Another fundamental assumption of MANOVA is that the covariance matrices are equal for three types of travel parties (Jobson 1992). Results of Box's M statistic (Box's M = 656.97; F approximation = 1.50 with 420, 1111272 df, $p = .000$) indicated that the covariance matrices were equal.

Wilks' lambda is a commonly used statistic to test for overall significance in MANOVA (Hair et al. 1992). Wilks' lambda (.538) was significant at the .000 level, which indicated there were overall differences among determinant attributes for the three types of travel parties. Subsequent univariate analysis procedures revealed that the three types of travel parties were significantly different at .05 or .01 significant level for eight determinant attributes (Table 4.6):

- X_1. Offering restaurants and good nightlife

- X_7. Being a family resort

- X_9. Offering short stay getaways

- X_{10}. Offering hobbies and special interests

- X_{12}. Being for people like me

- X_{14}. Being new and different

- X_{15}. Being peaceful and quiet

- X_{19}. Offering a choice of different things to do

Table 4.6
Test for Equality of Determinant Attribute Group Means
by Three Types of Travel Parties

Determinant Attributes	Wilks' Lambda	Univariate -F ratio	Significance
X_1. Offering restaurants and good nightlife [a]	0.95	9.17	0.00
X_2. Offering comfortable accommodations	1.00	0.10	0.90
X_3. Being easy to book or arrange	0.99	2.41	0.09
X_4. Letting me tailor my vacation to my budget	0.99	0.93	0.40
X_5. Being educational	1.00	0.00	1.00
X_6. Offering an escape from everyday life	1.00	0.78	0.46
X_7. Being a family resort [a]	0.61	102.37	0.00
X_8. Offering good food	0.99	1.47	0.23
X_9. Offering short stay getaways [a]	0.96	6.53	0.00
X_{10}. Offering hobbies and special interests [b]	0.98	3.89	0.02
X_{11}. Letting me tailor my vacation to my interests	0.99	1.70	0.18
X_{12}. Being for people like me [a]	0.96	6.70	0.00
X_{13}. Being a beautiful location and setting	0.99	1.24	0.29
X_{14}. Being new and different [a]	0.96	6.82	0.00
X_{15}. Being peaceful and quiet [b]	0.98	3.89	0.02
X_{16}. Being a place I feel comfortable and safe	0.98	2.86	0.06
X_{17}. Being a great place to shop	0.99	1.95	0.14
X_{18}. Offering sightseeing	0.99	1.48	0.23
X_{19}. Offering a choice of different things to do [b]	0.98	4.01	0.02
X_{20}. Being a good value for the money	0.99	1.73	0.18

Wilks' Lambda (U-statistic) and univariate F-ratio with 2 and 327 degrees of freedom.
[a] Significant at .01 level
[b] Significant at .05 level

At this point, however, it was not known whether there were significant differences between singles versus couples, couples versus families, or singles versus families and if so, which of the determinant attributes accounted most for the differences among the three types of travel parties. Multiple discriminant analysis is useful for understanding such group differences (Hair et al 1992).

Finally, multiple discriminant analysis was performed using "type of travel party" as the dependent variable and the 20 determinant attributes as the independent variables. This analytical approach assumes that the resulting discriminant model would allow for a precise determination of the attributes uniquely sought by each of the three types of travel parties. The analysis employed SPSS and used almost half of the total sample as a holdout sample for validation purposes. The holdout sample contained 106 singles, 121 couples and 123 family questionnaires. A stepwise Mahalanobis D^2 procedure with a varimax rotation was applied (Hair et al. 1992). The selection rule in a stepwise procedure was to maximize Mahalanobis distance (D^2) between three groups (Table 4.7). In this study, a probability of F was used as a criterion; variables were not entered unless this probability was less than .05, or removed unless this probability was greater than .10.

Table 4.7

Stepwise Discriminant Analysis Results by Three Types of Travel Parties

Step	Action Entered	Action Removed	Wilks' Lambda Values	Wilks' Lambda Sig.	Minimum D^2 Values	Minimum D^2 Sig.	Between Groups [a]	
1	X_7		0.614	0.000	0.167	0.003	S	C
2	X_{12}		0.570	0.000	0.548	0.000	S	C
3	X_1		0.550	0.000	0.702	0.000	S	C
4	X_{15}		0.537	0.000	0.864	0.000	S	C
5	X_{10}		0.525	0.000	0.989	0.000	S	C
6	X_{20}		0.512	0.000	1.080	0.000	S	C
7	X_4		0.501	0.000	1.181	0.000	S	C
8	X_9		0.458	0.000	1.254	0.000	S	C

[a] S = Singles and C = Couples

Since this was a three-group discriminant analysis model, it was necessary to calculate two canonical discriminate functions in order to discriminate among the three travel parties. The variables were entered into a canonical discriminant procedure and linear composites were formulated. Note that the discriminant functions were based only on the eight variables included in the stepwise discriminant model (X_7, X_{12}, X_1, X_{15}, X_{10}, X_{20}, X_4, and X_9) as shown in Table 4.8.

The canonical discriminant function was statistically significant (.000) as measured by chi-square statistics. The first function accounted for 89.85% of the variance and the second function explained 10.15% (Table 4.8).

Table 4.8
Summary of Three-Group Discriminant Analysis by Three Types of Travel Parties

Canonical Discriminant Functions

Func-tion	Eigen-value	Percent of Variance Function	Cumulative	Canonical Correlation	After Function	Wilks' Lambda	Chi-square	df	Sig
					0	0.458	252.568	16	0.000
1 [a]	0.968	89.85	89.85	0.701	1	0.901	33.557	7	0.000
2 [a]	0.109	10.15	100	0.313					

Standardized Canonical Discriminant Function Coefficients and Structure Matrix

Discriminant Attributes	Standardized Weights [b]		Discriminant Loadings [c]	
	Function 1	Function 2	Function 1	Function 2
X_7	1.021	0.206	0.797 [d]	0.312
X_9	-0.464	-0.101	-0.203 [d]	-0.003
X_5	NI	NI	0.109 [d]	0.012
X_{12}	-0.147	0.544	-0.071	0.573 [d]
X_1	-0.176	0.343	-0.191	0.435 [d]
X_{10}	-0.146	0.317	-0.058	0.433 [d]
X_{20}	0.051	-0.598	-0.020	-0.304 [d]
X_{19}	NI	NI	-0.025	0.304 [d]
X_{15}	0.218	-0.439	0.125	-0.279 [d]
X_{14}	NI	NI	-0.135	0.199 [d]
X_{17}	NI	NI	-0.003	0.194 [d]
X_8	NI	NI	-0.093	0.177 [d]
X_{18}	NI	NI	0.044	0.137 [d]
X_{16}	NI	NI	0.002	0.113 [d]
X_4	-0.178	0.285	-0.068	0.104 [d]
X_{11}	NI	NI	-0.064	0.101 [d]
X_2	NI	NI	-0.003	0.097 [d]
X_3	NI	NI	-0.006	0.076 [d]
X_6	NI	NI	-0.061	0.064 [d]
X_{13}	NI	NI	-0.044	0.051 [d]

NI: not included in the stepwise solution.

[a] The 2 canonical discriminant functions remaining in the analysis.

[b] Standardized canonical discriminant function coefficients.

[c] Pooled within-groups correlations between discriminating variables and canonical discriminant functions.

[d] Denotes largest absolute correlation between each variable and any discriminant function.

Before discussing the interpretation of the functions, it was necessary first to

determine if the functions were valid predictors. This determination was accomplished

by examining the classification matrices (Table 4.9). Correct classifications ranged from

53.3% for couples to 85.4% for families.

If the models were perfect, no misclassifications should have occurred. However,

singles were misclassified as couples 24.3% of the time and as families 10.3% of the

time. Couples were misclassified as singles 27.0% of the time and as families 19.7% of

the time. In the case of families, they were misclassified as singles 3.3% and as couples

11.4% of the time(Table 4.9).

The hit ratios indicated that the discriminant function correctly classified 68.18%

of the analysis sample and 60.57% of the respondents in the holdout sample. In this

study of 702 respondents, 213 were in the singles category, 243 were in couples category,

and 246 were in families category. The proportional chance criterion (C_{pro}) was

calculated by summing up the values of squared proportions of each group. The

calculated value was

$$C_{pro} = P_{singles}^2 + P_{couples}^2 + P_{families}^2$$

$$C_{pro} = (213 / 702)^2 + (243 / 702)^2 + (246 / 702)^2$$

$$C_{pro} = (.3034)^2 + (.3462)^2 + (.3504)^2 = .3347 \text{ or } 33.47\%$$

Table 4.9
Classification Matrices for Discriminant Analysis for
Both Analysis and Holdout Samples by Three Types of Travel Parties

		Results of Analysis Sample [a]		
	No. of	Predicted Group Membership		
Actual Group	Cases	Singles	Couples	Families
Singles	107	70	26	11
		65.4%	24.3%	10.3%
Couples	122	33	65	24
		27.0%	53.3%	19.7%
Families	123	4	14	105
		3.3%	11.4%	85.4%

		Results of Holdout Sample [b]		
	No. of	Predicted Group Membership		
Actual Group	Cases	Singles	Couples	Families
Singles	106	57	26	23
		53.8%	24.5%	21.7%
Couples	121	33	56	32
		27.3%	46.3%	26.4%
Families	123	10	14	99
		8.1%	11.4%	80.5%

[a] Percent of "grouped" cases correctly classified: 68.18%
[b] Percent of "grouped" cases correctly classified: 60.57%

Two types of criteria are generally used to assess the classification accuracy of the discriminant function -- maximum chance criterion and proportional chance criterion. This study used the proportional chance criterion because the sample sizes of three types of travel parties were unequal. The predictive validity of the discriminant function was assessed by comparing the overall hit ratios (68.18% for the analysis sample and 60.57% for the holdout sample) with the proportional chance criterion (33.47%). Hair et al. (1992) suggest that the classification accuracy reflected in the overall hit ratio should be at least 25% greater than that achieved by chance before one can have confidence in the predictive validity of the discriminant function. Since the classification accuracy of the discriminant function was greater than 125% of the proportional chance criterion (41.84%), the discriminant model was valid.

Another measure of classification accuracy, Press's Q, was calculated for both the analysis and holdout samples. The Press's Q statistics was calculated by the following formula (Hair 1992):

$$\text{Press's } Q = [N - (n \times K)]^2 / N (K - 1)$$

where

N = Total sample size

n = Number of observations correctly classified

K = number of groups

The calculated value for the analysis sample was

$$\text{Press's } Q = [352 - (240 \times 3)]^2 / 352 (3-1) = 192.36$$

The calculated value for the holdout sample was

Press's Q = $[350 - (212 \times 3)]^2 / 350 (3-1) = 116.85$

Since the Press's Q values were substantially larger than the critical value of 6.63 at a .01

significant level, there is confidence that the discriminant functions predict group

membership better than chance.

A potency index was examined to assess the relative contribution of the function

to the overall solution. Table 4.10 illustrates the calculation of the potency index for each

of the predictor variables. Table 4.11 presented the results for varimax rotated

discriminant analysis by three types of travel parties. Table 4.12 presented the three

interpretive measures, the rotated discriminant loadings, univariate F ratio, and the

potency index, for each variable. Although X_{14} and X_{19} had substantial univariate F

ratios and potency indices, they were not included in the stepwise analysis because of

collinearity. However, the results generally supported the stepwise discriminant

analysis. The other variables (X_2, X_3, X_5, X_6, X_8, X_{11}, X_{13}, X_{16}, X_{17}, and X_{18}) were not

included because of nonsignificant F values and low potency index values.

To demonstrate the differences in terms of the discriminant attributes, the rotated

discriminant loadings and group centroids were plotted in the two dimensional

coordinates (Figure 4.2). All of the significant variables included in the stepwise

discriminant model were plotted. The length of each vector in Figure 4.2 is indicative of

the relative importance of each attribute in discriminating among three groups.

Table 4.10

Potency Indices for the Discriminant Analysis by Three Types of Travel Parties

Determinant Attributes	Discriminant Function 1 Loading	Potency[a] Value	Discriminant Function 2 Loading	Potency[a] Value	Potency Index
X_1	-0.191	0.0328	0.43562	0.019261	0.052087
X_2	-0.003	9.84E-06	0.09733	0.000962	0.000971
X_3	-0.006	3.4E-05	0.07655	0.000595	0.000629
X_4	-0.068	0.00416	0.10468	0.001112	0.005272
X_5	0.109	0.010742	0.01255	1.6E-05	0.010758
X_6	-0.061	0.003356	0.06472	0.000425	0.003782
X_7	0.797	0.57128	0.31224	0.009896	0.581175
X_8	-0.093	0.007926	0.17739	0.003194	0.011120
X_9	-0.203	0.037081	-0.00345	1.21E-06	0.037082
X_{10}	-0.058	0.003036	0.43302	0.019032	0.022068
X_{11}	-0.064	0.003736	0.1014	0.001044	0.004779
X_{12}	-0.071	0.004602	0.57385	0.033424	0.038027
X_{13}	-0.044	0.001746	0.05126	0.000267	0.002013
X_{14}	-0.135	0.016378	0.19958	0.004043	0.020421
X_{15}	0.125	0.014152	-0.27953	0.007931	0.022083
X_{16}	0.002	4.67E-06	0.11354	0.001308	0.001313
X_{17}	-0.003	1.3E-05	0.19471	0.003848	0.003861
X_{18}	0.044	0.001809	0.1379	0.00193	0.003739
X_{19}	-0.025	0.000598	0.30431	0.009399	0.009997
X_{20}	-0.020	0.000378	-0.30489	0.009435	0.009813

[a] Potency value = $(loading)^2$ × relative eigenvalue.

Relative eigenvalue = eigenvalue of the discriminant function divided by the sum of the eigenvalues for all discriminant functions.

The relative eigenvalue for function 1 = .9680 / (.9680 + .1093) = .8985

The relative eigenvalue for function 2 = .1093 / (.9680 + .1093) = .1015

Table 4.11
Results for Varimax Rotated Discriminant Analysis
by Three Types of Travel Parties

Rotated Standardized Canonical Discriminant Function Coefficients and
Rotated Structure Matrix

Determinant Attributes	Discriminant Function Coefficients[a]		Discriminant Function Loadings[b]	
	Function 1	Function 2	Function 1	Function 2
X_7	1.041[c]	-0.025	0.846	0.127
X_9	-0.475[c]	0.004	-0.198	0.041
X_{20}	-0.083	-0.595[c]	-0.087	-0.292
X_{12}	-0.022	0.563[c]	0.057	0.575
X_{15}	0.115	-0.477[c]	0.060	-0.300
X_1	-0.096	0.374[c]	-0.089	0.467
X_{10}	-0.072	0.342[c]	0.039	0.435
X_4	-0.110	0.318[c]	-0.043	0.117
X_2	NI	NI	0.018	0.095
X_3	NI	NI	0.011	0.076
X_5	NI	NI	0.109	-0.012
X_6	NI	NI	-0.045	0.076
X_8	NI	NI	-0.052	0.193
X_{11}	NI	NI	-0.040	0.113
X_{13}	NI	NI	-0.031	0.059
X_{14}	NI	NI	-0.087	0.224
X_{16}	NI	NI	0.027	0.110
X_{17}	NI	NI	0.039	0.190
X_{18}	NI	NI	0.074	0.124
X_{19}	NI	NI	0.042	0.302

Group Means (Centroids) of Canonical Discriminant Functions

Group	Discriminant Function Centroids	
	Function 1	Function 2
Singles	-1.003	0.560
Couples	-0.380	-0.370
Families	1.263	-0.133

NI: not included in the stepwise solution.
[a] Rotated standardized discriminant function coefficients
[b] Correlations between rotated canonical discriminant functions and discriminating variables
[c] Denotes largest absolute correlation between each variable and any discriminant function.

Table 4.12
Summary of Interpretive Measures of Discriminant Analysis
by Three Types of Travel Parties

Determinant Attributes	Rotated Discriminant Loading		Univariate F Ratio	Potency Index
	Function 1	Function 2		
X_1 [a]	-0.089	0.467	9.17	0.052087
X_2	0.018	0.095	0.10	0.000971
X_3	0.011	0.076	2.41	0.000629
X_4 [a]	-0.043	0.117	0.93	0.005272
X_5	0.109	-0.012	0.00	0.010758
X_6	-0.045	0.076	0.78	0.003782
X_7 [a]	0.846	0.127	102.37	0.581175
X_8	-0.052	0.193	1.47	0.011120
X_9 [a]	-0.198	0.041	6.53	0.037082
X_{10} [a]	0.039	0.435	3.89	0.022068
X_{11}	-0.040	0.113	1.70	0.004779
X_{12} [a]	0.057	0.575	6.70	0.038027
X_{13}	-0.031	0.059	1.24	0.002013
X_{14}	-0.087	0.224	6.82	0.020421
X_{15} [a]	0.060	-0.300	3.89	0.022083
X_{16}	0.027	0.110	2.86	0.001313
X_{17}	0.039	0.190	1.95	0.003861
X_{18}	0.074	0.124	1.48	0.003739
X_{19}	0.042	0.302	4.01	0.009997
X_{20} [a]	-0.087	-0.292	1.73	0.009813

[a] Variables included in the stepwise solution.

The plot indicated that discriminant function 1 was the primary source of differences between a combined singles and couples category versus the families category (Figure 4.2). Function 1 corresponded closely to variables X_7 and X_9.

- Being a family resort (X_7)

- Offering short stay getaways(X_9)

Not surpassingly, "being a family resort (X_7)" was the most important determinant attribute to the families; whereas "offering short stay getaway (X_9)" was the most important attribute of both the singles and couples.

Function 2 showed the difference between singles versus couples category. The major differences between singles versus couples, the significant determinant attributes are as follows:

<u>Singles</u>

- offering restaurants and good nightlife (X_1)

- offering hobbies and special interests (X_{10})

- being for people like me (X_{12})

- letting me tailor my budget (X_4).

<u>Couples</u>

- being peaceful and quiet (X_{15})

- being a good value for money (X_{20}).
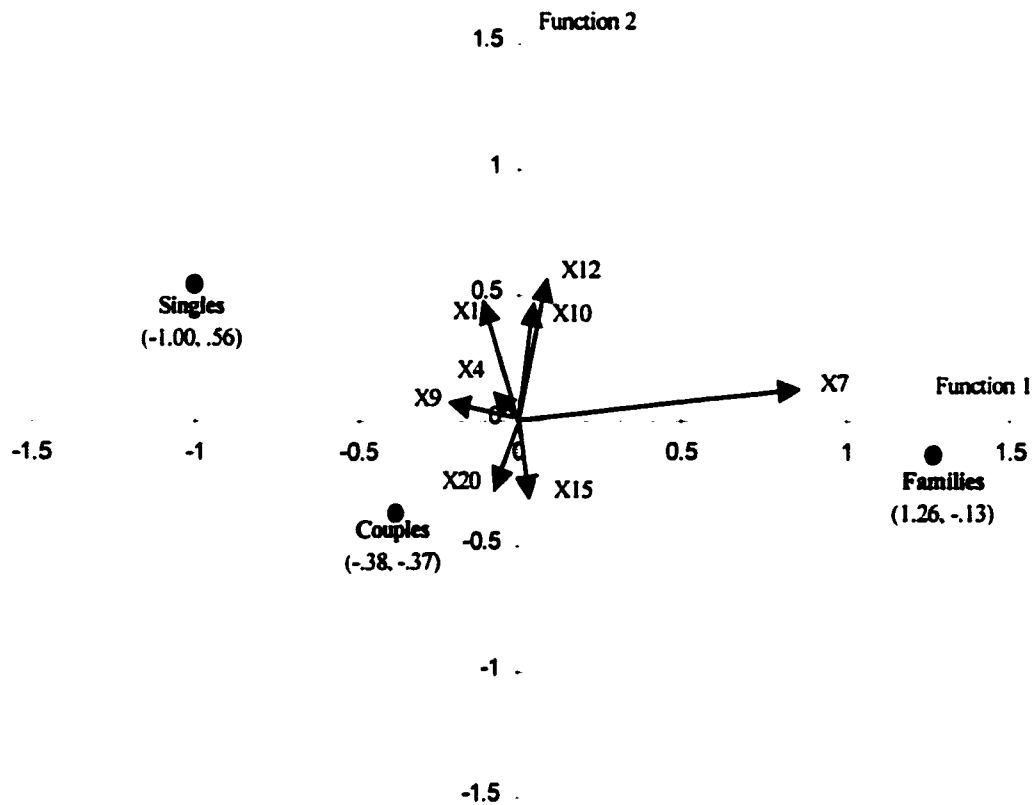
• = centroid for each of three types of travel party

X_7 = being a family resort

X_9 = offering short stay getaways

X_1 = offering restaurants and good nightlife

X_{10} = offering hobbies and special interests

X_{12} = being for people like me

X_4 = letting me tailor my budget

X_{15} = being peaceful and quiet

X_{20} = being a good value for money

Figure 4.2
Plot of Rotated Significant Discriminant Loadings and Group Centroids
for Three Types of Travel Parties

Objective 5: Socio-Demographic Characteristics versus Preference of Travel

Arrangements

Chi-square analysis was used to determine if there was a significant difference between the two types of travel arrangement preferences in terms of socio-demographic characteristics.

Two socio-demographic characteristics, age and employment status, were significantly different between two types of travel arrangement preferences in terms of chi-square test at 0.05 significant level (Table 4.13).

Objective 6: Travel-Related Characteristics versus Preference of Travel

Arrangements

Chi-square analysis was used to determine if there was a significant difference between the two types of travel arrangement preferences in terms of travel related characteristics.

Travel destinations and length of stay were significantly different between two groups by preference of travel arrangements in terms of chi-square test at 0.01 and 0.05 significant level, respectively (Table 4.14).

Table 4.13
Socio-Demographic Profile by Preference of Travel Arrangement

Characteristics	Independent (N = 224)	All-Inclusive (N = 471)	Statistics
Age[a]			
Under 21	0%	0%	$\chi^2 = 14.93$
21 -24 years	1.8	3.2	p = 0.01
25 - 34 years	17.0	24.6	
35 - 44 years	29.9	32.5	
45 - 54 years	22.8	21.0	
55 - 64 years	19.6	10.6	
65 or older	8.9	8.1	
Marital Status			
Single	16.1	18.9	$\chi^2 = 4.54$
Married	71.4	65.0	p = 0.60
Divorced	8.5	8.9	
Widowed	1.8	3.8	
Separated	.9	1.1	
Unmarried, but living with someone	.9	1.3	
No answer	.4	1.1	
Household Size			
One	17.0	13.8	$\chi^2 = 7.01$
Two	34.8	30.8	p = 0.32
Three	14.3	18.7	
Four	21.9	22.7	
Five	9.8	9.1	
Six or more	.9	3.2	
No answer	1.3	1.7	

(Continued on next page)

[a] Significantly different at .05 level.

Table 4.13 (Continued)

Characteristics	Independent (N = 224)	All-Inclusive (N = 471)	Statistics
Employment Status [a]			
Full-time	55.8%	66.9%	$\chi^2 = 8.40$
Part-time	13.4	10.6	$p = 0.04$
Do not work	28.1	21.0	
No answer	2.7	1.5	
Education			
Grade college	.9	.2	$\chi^2 = 7.44$
High school	8.9	12.7	$p = 0.28$
Some college	17.9	16.8	
College graduate	37.5	39.9	
Post Graduate Degree	31.7	26.8	
Other non-college (secretarial/technical)	.4	1.7	
No answer	2.7	1.9	
Household income before taxes			
Under $30,000	0	0	$\chi^2 = 11.64$
$30,000 - $34,000	1.8	2.8	$p = 0.07$
$35,000 - $39,000	5.4	9.6	
$40,000 - $44,000	6.3	6.2	
$45,000 - $49,000	5.8	8.5	
$50,000 - $74,000	16.5	19.7	
$75,000 or more	47.3	35.5	
No answer	17.0	17.5	

[a] Significantly different at .05 level.

Table 4.14
Travel-Related Characteristics by Preference of Travel Arrangement

Characteristics	Independent (N = 224)	All-Inclusive (N = 471)	Statistics
Season			
Winter	59.8%	60.7%	χ^2 = 5.82
Spring	15.2	10.6	p = 0.12
Summer	13.4	18.9	
Fall	11.6	9.8	
Destination [a]			
USA	42.4	27.2	χ^2 = 18.65
Caribbean	15.2	21.7	p = 0.00
Mexico	14.3	20.8	
Hawaii	7.6	6.6	
Other	7.1	7.9	
No answer	13.4	15.9	
Length of stay [b]			
Less than 3 days	.4	0	χ^2 = 10.99
3 or 4 days	8.9	4.2	p = 0.03
5 to 7 days	50.0	58.0	
8 to 10 days	16.1	17.4	
11 or more days	24.6	20.4	
Advanced Planning			
A week of two before	7.6	3.0	χ^2 = 14.38
About a month before	10.3	11.3	p = 0.07
2 to 3 months before	32.1	29.1	
4 or 5 months before	11.2	9.8	
About 6 months before	22.3	26.8	
7 - 11 months before	4.9	8.7	
About a year before	7.6	9.1	
Over a year before	1.8	1.3	
No answer	2.2	1.1	

(Continued on next page)

[a] Significantly different at .01 level.
[b] Significantly different at .05 level.

Table 4.14 (Continued)

Characteristics	Independent (N = 224)	All-Inclusive (N = 471)	Statistics
Reservation			
A week of two before	10.7	8.5	$\chi^2 = 9.55$
About a month before	26.8	21.7	$p = 0.30$
2 to 3 months before	33.5	33.5	
4 or 5 months before	9.8	13.0	
About 6 months before	10.3	14.9	
7 - 11 months before	3.1	4.5	
About a year before	1.8	1.3	
Over a year before	.4	0	
No answer	3.6	2.8	

[a] Significantly different at .01 level.
[b] Significantly different at .05 level.

Objective 7: Determinant Attributes versus Preference of Travel Arrangements

The purpose of this phase of the data analysis was to determine the relationship between the determinant attributes in sun-spot-destination resort and two types of travel arrangement preferences (all-inclusive travel package and independent travel arrangement).

Group means and standard deviations of 20 determinant attributes were compiled to see if the two types were significantly different on any single determinant attribute variables (Table 4.15). Figure 4.3 showed the distribution of group means for each type of travel arrangement preferences, indicating respondents who preferred all-inclusive travel package rated all twenty determinant attributes more important than those who preferred independent travel arrangements.

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Table 4.15
Means and Standard Deviations of 20 Determinant Attributes in Question 6 by Two Types of Travel Arrangement Preferences

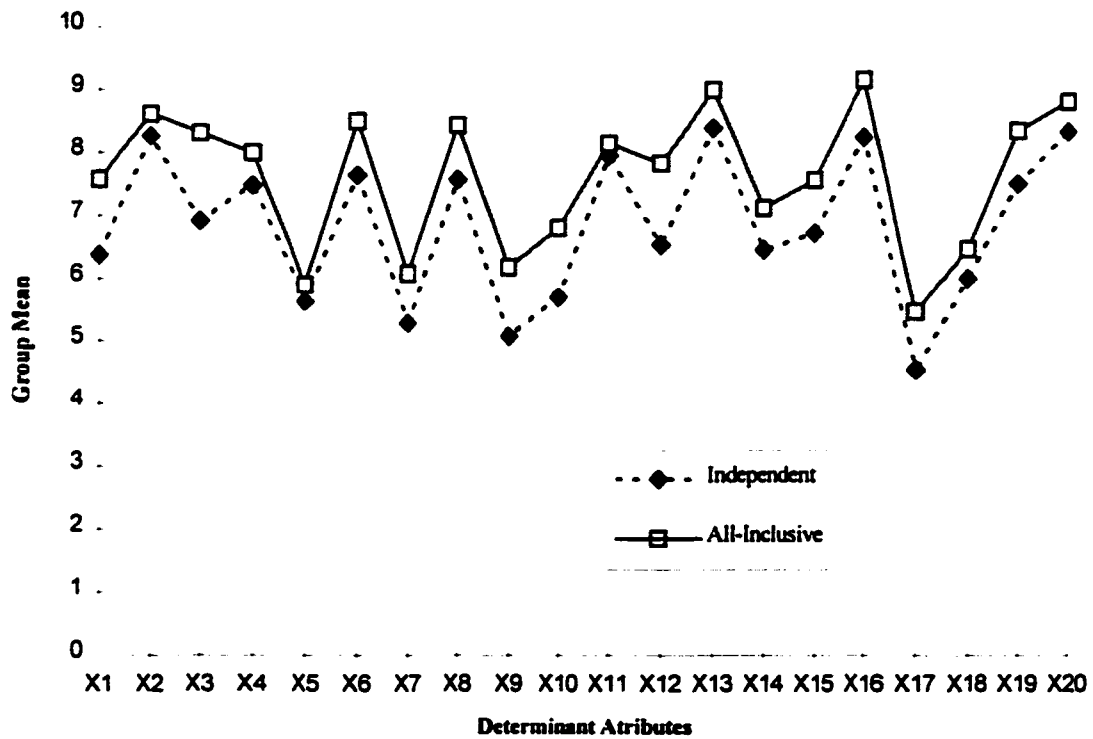| Determinant Attributes	Type of Travel Arrangement		
	Independent	All-Inclusive	Total
X_1. Offering restaurants and good nightlife	6.38 (2.64)	7.58 (2.09)	7.19 (2.35)
X_2. Offering comfortable accommodations	8.26 (1.84)	8.61 (1.57)	8.50 (1.67)
X_3. Being easy to book or arrange	6.92 (2.45)	8.31 (1.87)	7.85 (2.17)
X_4. Letting me tailor my vacation to my budget	7.48 (2.37)	7.99 (2.01)	7.82 (2.14)
X_5. Being educational	5.63 (2.73)	5.89 (2.45)	5.81 (2.54)
X_6. Offering an escape from everyday life	7.64 (2.55)	8.51 (2.03)	8.22 (2.25)
X_7. Being a family resort	5.28 (3.11)	6.08 (3.12)	5.82 (3.13)
X_8. Offering good food	7.57 (2.12)	8.43 (1.83)	8.15 (1.97)
X_9. Offering short stay getaways	5.07 (2.74)	6.17 (2.70)	5.81 (2.76)
X_{10}. Offering hobbies and special interests	5.69 (2.53)	6.80 (2.45)	6.44 (2.52)
X_{11}. Letting me tailor my vacation to my interests	7.94 (2.02)	8.14 (1.87)	8.08 (1.92)
X_{12}. Being for people like me	6.54 (3.09)	7.83 (2.35)	7.40 (2.68)
X_{13}. Being a beautiful location and setting	8.38 (1.71)	8.99 (1.21)	8.79 (1.42)
X_{14}. Being new and different	6.45 (2.54)	7.12 (2.31)	6.90 (2.41)
X_{15}. Being peaceful and quiet	6.72 (2.51)	7.56 (2.27)	7.29 (2.38)
X_{16}. Being a place I feel comfortable and safe	8.23 (2.09)	9.15 (1.27)	8.85 (1.64)
X_{17}. Being a great place to shop	4.53 (2.99)	5.47 (2.81)	5.16 (2.90)
X_{18}. Offering sightseeing	5.99 (2.57)	6.46 (2.37)	6.31 (2.44)
X_{19}. Offering a choice of different things to do	7.50 (2.11)	8.33 (1.74)	8.06 (1.91)
X_{20}. Being a good value for the money	8.32 (2.11)	8.80 (1.72)	8.64 (1.86)

Figure 4.3
Distribution Patterns of Mean Values for 20 Determinant Attributes
by Two Types of Travel Arrangement Preferences
(See Table 4.15 for Descriptions of Determinant Attributes)

Multivariate analysis of variance (MANOVA) was used to determine if the two types of travel arrangement preferences -- all-inclusive travel package and independent travel arrangements -- differed significantly in terms of their determinant attribute scores. The Bartlett's test of sphericity (2745.04 with 190 df, p < .000) indicated that MANOVA was appropriate for analyzing the data. Since test of equality of group covariance matrices using Box's M (Box's M = 615.33, F = 2.82 with 210, 567742 df, p = .000) indicated that the covariance were equal, a fundamental assumption of MANOVA was satisfied.

Wilks' lambda (.84) were significant at .000 level which indicated overall differences between two groups. The subsequent univariate analysis procedures revealed that two types were significantly different on all determinant attributes except three -- offering comfortable accommodations (X_2), being educational (X_5), and offering sightseeing(X_{18}) -- at .05 significant level (Table 4.16). At this point, however, it was not known which of the determinant attributes accounted most for the differences in the mean score profiles of the two types of travel arrangement preferences.

Table 4.16
Test for Equality of Determinant Attributes Group Means
by Two Types of Travel Arrangement Preferences

Variable	Wilks' Lambda	Univariate F ratio	Significance
X₁. Offering restaurants and good nightlife [a]	0.942	20.204	0.000
X₂. Offering comfortable accommodations	0.990	3.311	0.069
X₃. Being easy to book or arrange [a]	0.910	32.501	0.000
X₄. Letting me tailor my vacation to my budget [b]	0.988	4.152	0.042
X₅. Being educational	0.998	0.775	0.379
X₆. Offering an escape from everyday life [a]	0.967	11.780	0.000
X₇. Being a family resort [b]	0.986	4.780	0.029
X₈. Offering good food [a]	0.958	14.398	0.000
X₉. Offering short stay getaways [a]	0.965	12.071	0.000
X₁₀. Offering hobbies and special interests [a]	0.958	14.475	0.000
X₁₁. Letting me tailor my vacation to my interests	0.998	0.785	0.376
X₁₂. Being for people like me [a]	0.949	17.691	0.000
X₁₃. Being a beautiful location and setting [a]	0.959	14.083	0.000
X₁₄. Being new and different [b]	0.983	5.664	0.017
X₁₅. Being peaceful and quiet [a]	0.973	9.241	0.002
X₁₆. Being a place I feel comfortable and safe [a]	0.930	24.701	0.000
X₁₇. Being a great place to shop [a]	0.977	7.769	0.005
X₁₈. Offering sightseeing	0.992	2.716	0.100
X₁₉. Offering a choice of different things to do [a]	0.958	14.398	0.000
X₂₀. Being a good value for the money [b]	0.985	5.049	0.025

Wilks' Lambda (U-statistic) and univariate F-ratio with and 329 degrees of freedom.
[a] Significant at .01 level
[b] Significant at .05 level

Discriminant analysis was performed using "two types of travel arrangement preferences" as the dependent variable and the 20 determinant attributes as the independent variables. The analysis employed SPSS and used a holdout sample for validation purposes. A stepwise Mahalanobis D^2 procedure was applied since the objective of this analysis was to determine which determinant attributes are most efficient in discriminating between two types of travel arrangement preferences (Hair et al. 1992). In this analysis, it was necessary to develop one discriminant function to distinguish between two types of travel arrangement preferences.

Table 4.17 indicated that four attributes (X_1, X_3, X_{10}, and X_{16}) entered in the stepwise model. One canonical discriminant function was remaining in the analysis which was statistically significant (.000) as measured by chi-square statistics (Table 4.18).

Table 4.17
Stepwise Discriminant Analysis Results
by Two Types of Travel Arrangement Preferences

	Action		Wilks' Lambda		Minimum D^2		Between	
Step	Entered	Removed	Values	Significance	Values	Significance	Groups [a]	
1	X_3		0.910	0.000	0.447	0.000	I	A
2	X_1		0.884	0.000	0.596	0.000	I	A
3	X_{16}		0.868	0.000	0.691	0.000	I	A
4	X_{10}		0.855	0.000	0.765	0.000	I	A

[a] I = Independent and A = All-Inclusive

Table 4.18
Canonical Discriminant Functions
by Two Types of Travel Arrangement Preferences

Function	Eigen-value	Percent of Variance Function	Cumulative	Canonical Correlation	After Function	Wilks' Lambda	Chi-square	df	Sig
					0	0.855	51.126	4	0.000
1	0.169	100	100	0.380					

To validate the discriminant function, the classification matrices were analyzed

(Table 4.19). For respondents who preferred independent travel arrangements,

misclassifications were made to all-inclusive travel package (39.3%) whereas people who

preferred all-inclusive travel package were misclassified to independent travel

arrangements (23.0%).

The hit ratios indicated that the discriminant function correctly classified 71.76%

of the analysis sample and 71.55% of the respondents from the holdout sample. In this

study of 695 respondents, 224 were in independent and 471 were in package. The

proportional chance criterion (C_{pro}) was calculated by summing up the values of squared

proportions of each group. The calculated value was

$$C_{pro} = (.3223)^2 + (.6777)^2 = .5632 \text{ or } 56.32\%$$

The predictive validity of the discriminant function was assessed by comparing

the overall hit ratios (71.76% for the analysis sample and 71.55% for the holdout sample)

with the proportional chance criterion (56.32%) since the groups were of unequal sizes.

Hair et al. (1992) suggest that the classification accuracy reflected in the overall hit ratio should be at least 25% greater than that achieved by chance before one can confidence in the predictive validity of the discriminant function. Since the classification accuracy of the discriminant function was greater than 125% of the proportional chance criterion (70.40%), the discriminant model was valid.

Table 4.19
Classification Matrices for Discriminant Analysis for Both
Analysis and Holdout Sample by Two Types of Travel Arrangement Preferences

Results of Analysis Sample [a]			
Actual Group	No. of Cases	Predicted Group Membership	
		Independent	All-Inclusive
Independent	112	68	44
		60.7%	39.3%
All-Inclusive	235	54	181
		23.0%	77.0%

Results of Holdout Sample [b]			
Actual Group	No. of Cases	Predicted Group Membership	
		Independent	All-Inclusive
Independent	112	63	49
		56.3%	43.8%
All-Inclusive	236	50	186
		21.2%	78.8%

[a] Percent of "grouped" cases correctly classified: 71.76%
[b] Percent of "grouped" cases correctly classified: 71.55%

Another measure of classification accuracy, Press's Q, was calculated for both

analysis and holdout samples. The calculated value for the analysis sample was

Press's $Q = [347 - (249 \times 2)]^2 / 347 (2 - 1) = 65.71$

The calculated value for the holdout sample was

Press's $Q = [348 - (249 \times 2)]^2 / 348 (2 - 1) = 64.66$

Since the Press's Q values were substantially larger than the critical value of 6.63 at a .01

significant level, there is confidence that the discriminant function predicts group

membership better than chance.

Table 4.20 contained the discriminant weights and loading for the discriminant

function. Since the loadings are considered more valid than the weights (Hair et al 1992),

the loadings are used to interpret the results. All of four attributes (X_1, X_3, X_{10}, and X_{16})

in the stepwise model had higher loadings than others which were not included in the

stepwise model. The discriminant loadings and univariate F ratio of four attributes (X_1,

X_3, X_{10}, and X_{16}) had the same rank in terms of their discriminating value. Of the four

attributes in the function, X_3 discriminated the most and X_{10} the least between two types.

Table 4.20
Summary of Discriminant Analysis for Determinant Attributes
by Two Types of Travel Arrangement Preferences

Determinant Attributes	Standardized Weights[a]	Discriminant Loadings[b]	Univariate F ratio
X_1. Offering restaurants and good nightlife	0.2971	0.602 (3)[c]	20.204 (3)
X_2. Offering comfortable accommodations	NI	0.444	3.311
X_3. Being easy to book or arrange	0.48893	0.764 (1)	32.501 (1)
X_4. Letting me tailor my vacation to my budget	NI	0.238	4.152
X_5. Being educational	NI	0.113	0.775
X_6. Offering an escape from everyday life	NI	0.299	11.780
X_7. Being a family resort	NI	0.222	4.780
X_8. Offering good food	NI	0.396	14.398
X_9. Offering short stay getaways	NI	0.307	12.071
X_{10}. Offering hobbies and special interests	0.32895	0.510 (4)	14.475 (4)
X_{11}. Letting me tailor my vacation to my interests	NI	0.264	0.785
X_{12}. Being for people like me	NI	0.375	17.691
X_{13}. Being a beautiful location and setting	NI	0.316	14.083
X_{14}. Being new and different	NI	0.275	5.664
X_{15}. Being peaceful and quiet	NI	0.326	9.241
X_{16}. Being a place I feel comfortable and safe	0.42001	0.666 (2)	24.701 (2)
X_{17}. Being a great place to shop	NI	0.305	7.769
X_{18}. Offering sightseeing	NI	0.2	2.716
X_{19}. Offering a choice of different things to do	NI	0.357	14.398
X_{20}. Being a good value for the money	NI	0.246	5.049

Group means (centroids) of canonical discriminant functions

Group	Function 1
Independent	-0.589
All-Inclusive	0.285

NI: not included in the stepwise solution.

[a] Standardized canonical discriminant function coefficients.

[b] Pooled within-groups correlations between discriminating variables and canonical discriminant functions.

[c] The number in parentheses denote ranks of four attributes included in stepwise model.

The following determinant attributes were of greater importance to respondents who preferred an all-inclusive travel package compared to those who preferred independent travel arrangements in selecting a sun-spot destinations:

- Offering restaurants and good nightlife (X_1)

- Being easy to book or arrange (X_3)

- Offering hobbies and special interests (X_{10})

- Being a place I feel comfortable and safe (X_{16}).

These results suggest that if resort managers want to promote all-inclusive travel packages of their properties, they should emphasize these four attributes in their marketing and promotion strategies.

Objective 8: Life-Style Characteristics versus Preference of Travel Arrangements

In question 7, respondents were asked to describe themselves. The interviewer read 25 statements and for each statement asked the respondent to indicate how much that statement applied personally to him or her. If a statement applied completely, the respondent rated it a 10 or 9. However, if the statement did not apply at all, the respondent rated it a 1 or 2. Respondents could rate each statement anywhere between 1 or 10 depending on how much they felt the statement applied to them personally.

The purpose of this phase of the analysis was to determine the relationship between the life-style characteristics and the two types of travel arrangement preferences (all-inclusive travel package and independent travel arrangement).

An explanatory factor analysis was performed on the 25 life-style characteristics (Table 4.21). The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was used to determine whether a factor analysis was appropriate (Norusis 1994). Since the overall KMO statistics of 0.74 was considered "middling" (Kaiser 1974), we can proceed with the factor analysis. The factor analysis reduced the 25 life-style characteristics to 8 factors based on the eigenvalue-one-criterion. These 8 factors accounted for 58.9% of the total variance involved among the 25 variables. Each factor was named based on the common characteristics of the variables it included. The first factor was labeled "Family" since it contained four items such as, "I like to learn about other cultures" (Z_8), "I want my children to be exposed to other cultures" (Z_{25}), "I like meeting new people" (Z_{10}), and "I like spend a lot of my vacation time with my children" (Z_{24}). This factor explained 17.8% of the total variance with an eigenvalue of 4.439.

The second factor was named "Solicitude" since it contained three items such as, "I worry about quality of the water and the food when I travel" (Z_{13}), "I worry about traveling to countries where there might be political unrest" (Z_{11}), "I stay away from resort areas with high crime rates" (Z_{12}), and "I worry a lot about whether the people I'm with having a good time" (Z_5). The second factor explained 9.5% of the total variance with an eigenvalue of 2.373

The third factor was titled "Social Interaction" because it included six variables such as, "I like to travel to places with good night life" (Z_4), "I like to gamble" (Z_{21}), "I often seek the advice of others" (Z_3), "I like to be pampered" (Z_{19}), and "I like to vacation in places where I know the people are like me" (Z_2) or "I like to vacation in places where I know the people will like me" (Z_1). This factor explained 8.7% of the total variance with an eigenvalue of 2.166.

The factor 4 was titled "Exploration" because it included three variables such as, "I enjoy going to new restaurants and trying new foods" (Z_9), "I like to try new things (Z_7), and I like to see and do new things on my vacation" (Z_6). With an eigenvalue of 1.332, this factor accounted for 5.3% of the total variance.

The fifth factor was labeled "Solitude" and included two items such as, "I am a quite person" (Z_{15}) and "I would rather spend a quiet evening at home than go to a party" (Z_{14}). This factor explained 4.8% of the total variance with an eigenvalue of 1.207.

The factor 7 was named "Self-Confidence" because it involved items such as, "I don't want anyone telling me when or what to do when I'm on vacation" (Z_{16}) and "I am more confident of myself than most people are" (Z_{17}). With an eigenvalue of 1.036, this last factor accounted for 4.1% of the total variance.

The last factor was labeled "Relaxation" because it contained "I take vacations mainly to relax" (Z_{18}). This factor explained 4.1% of the total variance with an eigenvalue of 1.033.

Internal reliability tests showed Coronbach alphas ranging from 0.283 through 0.683. Since the sixth factor had a relatively small Coronbach alphas (0.283), indicating that it was relatively unstable, this factor was excluded from further analyses.

The Bartlett's test of sphericity (251.36 with 21 df, $p < .000$) indicated that MANOVA was appropriate for analyzing the data. Since test of equality of group covariance matrices using Box's M (Box's M = 68.07, F = 2.40 with 28, 694430 df, p = .000) indicated that the covariances were equal, a fundamental assumption of MANOVA was satisfied.

Wilks' lambda (.908) was significant at .000 level which indicated overall differences between two groups. The subsequent univariate analysis procedures revealed that two groups were significantly different on three factors (Social Interaction, Independence, and Relax) at .10 significant level and two factors (Solicitude and Solitude) at .05 significant level. (Table 4.22).

Table 4.21
Factor Analysis of Life-Style Characteristics

Factors (Factor Name)	Loading	Eigen-value	Percent of Variance Explained	Cronbach Alpha
Factor 1 (Family)		4.439	17.8	.667
Z_8. Like to learn about other cultures	.778			
Z_{25}. Want my children to be exposed to other cultures	.775			
Z_{10}. Like meeting new people	.597			
Z_{24}. Like spend a lot of my vacation time with my children	.554			
Factor 2 (Solicitude)		2.373	9.5	.612
Z_{13}. Worry about quality of the water and the food when I travel	.690			
Z_{11}. Worry about traveling to countries where there might be political unrest	.659			
Z_{12}. Stay away from resort areas with high crime rates	.577			
Z_5. Worry a lot about whether the people I'm with having a good time	.469			
Factor 3 (Social Interaction)		2.166	8.7	.683
Z_4. Like to travel to places with good night life	.671			
Z_{21}. Like to gamble	.555			
Z_3. Often seek the advice of others	.554			
Z_{19}. Like to be pampered	.532			
Z_2. Like to vacation in places where I know the people are like me	.401			
Z_1. Like to vacation in places where I know the people will like me	.382			
Factor 4 (Exploration)		1.332	5.3	.678
Z_9. Enjoy going to new restaurants and trying new foods	.724			
Z_7. Like to try new things	.581			
Z_6. Like to see and do new things on my vacation	.569			

(Continued on next page)

[a] One life-style characteristics (I am usually talkative and outgoing) in factor 5 was excluded from further analysis because of negative loading. It resulted in improving Cronbach alpha from -.118 to .534.

[b] Factor 6 was eliminated from further analysis since it was found relatively unstable to warrant additional analyses.

Table 4.21 (Continued)

Factors (Factor Name)	Loading	Eigen-value	Percent of Variance Explained	Cronbach Alpha
Factor 5 (Solitude) [a]		1.207	4.8	.534
Z_{15}. Am a quite person	.796			
Z_{14}. Would rather spend a quiet evening at home than go to a party	.454			
Factor 6 [b]		2.143	4.6	.283
Z_{23}. Like to play competitive sports	.760			
Z_{22}. Get bored easily	.487			
Factor 7 (Self-Confidence)		1.036	4.1	.324
Z_{16}. Don't want anyone telling me when or what to do when I'm on vacation	.755			
Z_{17}. Am more confident of myself than most people are	.375			
Factor 8 (Relaxation)		1.033	4.1	-
Z_{18}. Take vacations mainly to relax	.853			

[a] One life-style characteristics (I am usually talkative and outgoing) in factor 5 was excluded from further analysis because of negative loading. It resulted in improving Cronbach alpha from -.118 to .534.

[b] Factor 6 was eliminated from further analysis since it was found relatively unstable to warrant additional analyses.

Table 4.22
Test for Equality of Group Means
for Life-Style Characteristics by Two Types of Travel Arrangement Preferences

Surrogate Variable (Factor Name)	Group Mean Independent	Package	Wilks' Lambda	Univariate F ratio	Sig.
Z_8 (Family)	8.054	7.979	0.999	0.094	0.758
Z_{13} (Solicitude)[b]	7.009	7.551	0.991	3.048	0.081
Z_4 (Social Interaction)[a]	4.703	6.530	0.916	31.311	0.000
Z_9 (Exploration)	7.964	7.957	1.000	0.000	0.979
Z_{15} (Solitude)[b]	5.910	5.286	0.989	3.608	0.058
Z_{16} (Self-Confidence)[a]	8.622	8.115	0.987	4.441	0.035
Z_{18} (Relaxation)[a]	7.423	8.205	0.977	7.884	0.005

Wilks' Lambda (U-statistic) and univariate F-ratio with 1 and 343 degrees of freedom.
[a] Significant at .05 level
[b] Significant at .10 level

The simultaneous discriminant procedure was used to include all surrogate variables in the discriminant function. The canonical discriminant function is highly significant (.000) as measured by chi-square statistics (Table 4.23).

Table 4.23
Canonical Discriminant Functions
for Life-Style Characteristics by Two Types of Travel Arrangement Preferences

Func-tion	Eigen-value	Percent of Variance Function	Cumulative	Canonical Correlation	After Function	Wilks' Lambda	Chi-square	df	Sig
					0	0.872	46.290	7	.000
1[a]	0.146	100	100	.357					

[a] One canonical discriminant functions remaining in the analysis.

To validate the discriminant function, the classification matrices were analyzed

(Table 4.24). Tourists who preferred independent travel arrangements were misclassified

to all-inclusive travel package (33.9%) whereas tourists who preferred all-inclusive travel

package were misclassified to independent travel arrangements (33.1%).

The hit ratios indicated that the discriminant function correctly classified 66.67%

of the analysis sample and 62.82% of the holdout sample. To assess their "true"

effectiveness, the proportional chance criteria was compared to the hit ratios (Hair et al

1992). The proportional chance criterion (C_{pro}) was calculated by summing up the values

of squared proportions of each group. The calculated value was

$$C_{pro} = (.3223)^2 + (.6777)^2 = .5632 \text{ or } 56.32\%$$

The overall hit ratios (66.67% of the analysis sample and 62.82% of the holdout sample)

were lower than 70.4% (125% of the proportional chance criterion; Hair et al 1992),

suggesting that the predictive validity of the discriminant function may be low.

Table 4.24
Classification Matrices for Life-Style Characteristics
by Two Types of Travel Arrangement Preferences

	Results of Analysis Sample [a]		
	No. of	Predicted Group Membership	
Actual Group	Cases	Independent	All-Inclusive
Independent	112	74	38
		66.1%	33.9%
All-Inclusive	236	78	158
		33.1%	66.9%

	Results of Holdout Sample [b]		
	No. of	Predicted Group Membership	
Actual Group	Cases	Independent	All-Inclusive
Independent	112	67	45
		59.8%	40.2%
All-Inclusive	235	84	151
		35.7%	64.3%

[a] Percent of "grouped" cases correctly classified: 66.67%
[b] Percent of "grouped" cases correctly classified: 62.82%

Another measure of classification accuracy, Press's Q, was calculated for both analysis and holdout samples. The calculated value for the analysis sample was

Press's Q = $[348 - (232 \times 2)]^2$ / 348 (2 - 1) = 38.67

The calculated value for the holdout sample was

Press's Q = $[347 - (218 \times 2)]^2$ / 347 (2 - 1) = 22.82

Since the Press's Q values were substantially larger than the critical value of 6.63 at a .01 significant level, there is confidence that the discriminant functions predict group membership better than chance.

Table 4.25 contained the discriminant weights and loading for the discriminant function and univariate F ratio. Since the loadings were considered more valid than the weights (Hair et al 1992), the loadings were used to interpret the results. The discriminant loadings and univariate F ratio of seven factors had the same rank in terms of their discriminating value. Based on this information, "Social Interaction," "Relaxation," "Self-Confidence," "Solitude," and "Solicitude" had relatively larger loadings and F ratios than "Family" and "Exploration," indicating those four factors had more discriminant power than the other two.

Table 4.25
Summary of Interpretive Measures for Discriminant Analysis
for Factors of Life-Style Characteristics by Two Types of Travel Arrangement
Preferences

Surrogate Variables	Standardized[a] Weights	Discriminant Loadings[b] Value	Discriminant Loadings[b] Rank	Univariate F-ratio Value	Univariate F-ratio Rank
Z_8 (Family)	-0.054	-0.043	6	0.094	6
Z_{13} (Solicitude)	0.166	0.246	5	3.048	5
Z_4 (Social Interaction)	0.808	0.790	1	31.311	1
Z_9 (Exploration)	-0.299	-0.003	7	0.000	7
Z_{15} (Solitude)	-0.247	-0.268	4	3.608	4
Z_{16} (Self-Confidence)	-0.431	-0.297	3	4.441	3
Z_{18} (Relaxation)	0.306	0.396	2	7.884	2

NI: not included in the stepwise solution.

[a] Standardized canonical discriminant function coefficients.

[b] Pooled within-groups correlations between discriminating variables and canonical discriminant functions.

Discussion of Results

Objective 1: Preference of Travel Arrangements versus Type of Travel party

There was no significant difference between the number of single, couple, and family travel parties who preferred either of two types of travel arrangements -- independent travel arrangement or an all-inclusive travel package. Approximately two-third of each type of travel party preferred an all-inclusive travel package.

Objective 2: Socio-Demographic Characteristics versus Type of Travel Party

The three types of travel parties differed significantly in terms of each socio-demographic characteristic, except education. Highlights of these results follow (Figure 4.4 to 4.8)

- Age: There were approximately 2 to 3 times as many respondents in the 35 - 44 age

  category for family parties, as compared to the singles or couples category (Figure

  4.4).
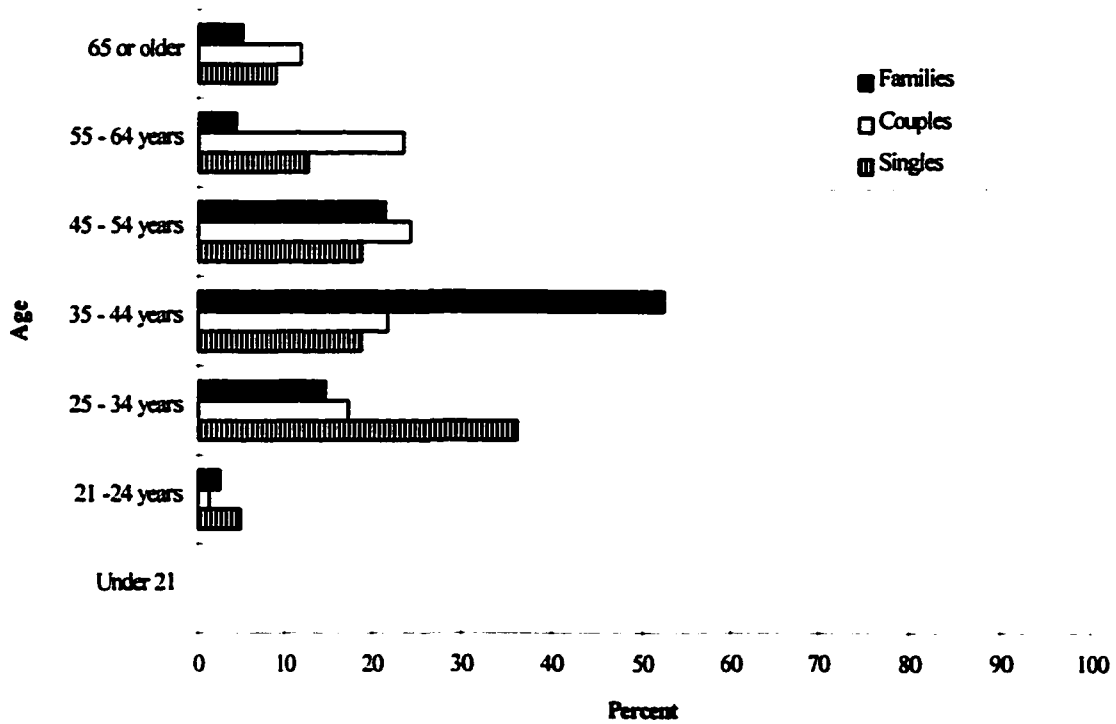
Figure 4.4
Age by Three Types of Travel Parties (Screening Question)
(chi-square = 128.35, p = 0.00)

- <u>Marital Status</u>: 90 percent of both couples and families indicated they were married, as compared to 20 percent of singles who also said they were married -- despite the survey's definition of a single travel party (Figure 4.5).
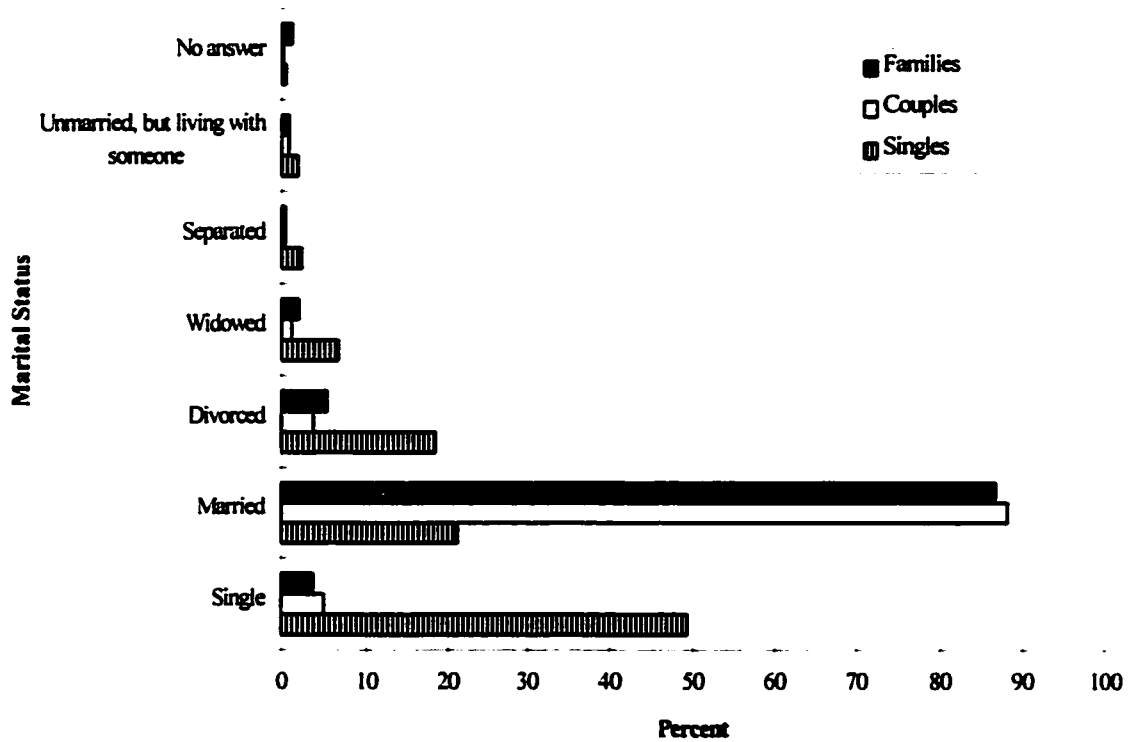
Figure 4.5
Marital Status by Three Types of Travel Parties (Question 8)
(chi-square = 316.76, p = 0.00)

- **Household Size:** Not surprisingly, the highest percent of the one-person households

occurred in the singles category. The highest percent of two-person household

appeared in the couples category; whereas the highest percent of four-person

households were in the family category (Figure 4.6).
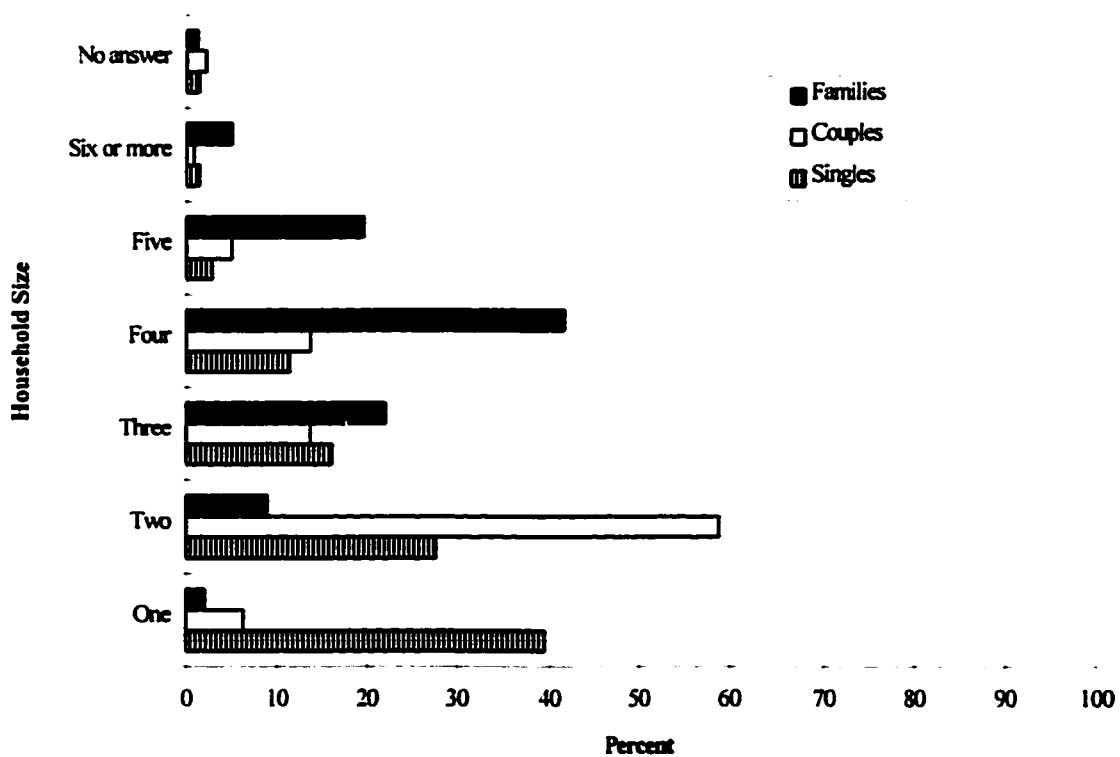
Figure 4.6
Household Size by Three Types of Travel Parties (Question 9)
(chi-square = 340.27, p = 0.00)

• **Employment Status**: The highest percent of respondents in all three types of travel

parties was always in the full-employment response category, which ranged from 74

percent for singles, to around 57 to 58 for the other two types of travel parties (Figure

4.7).
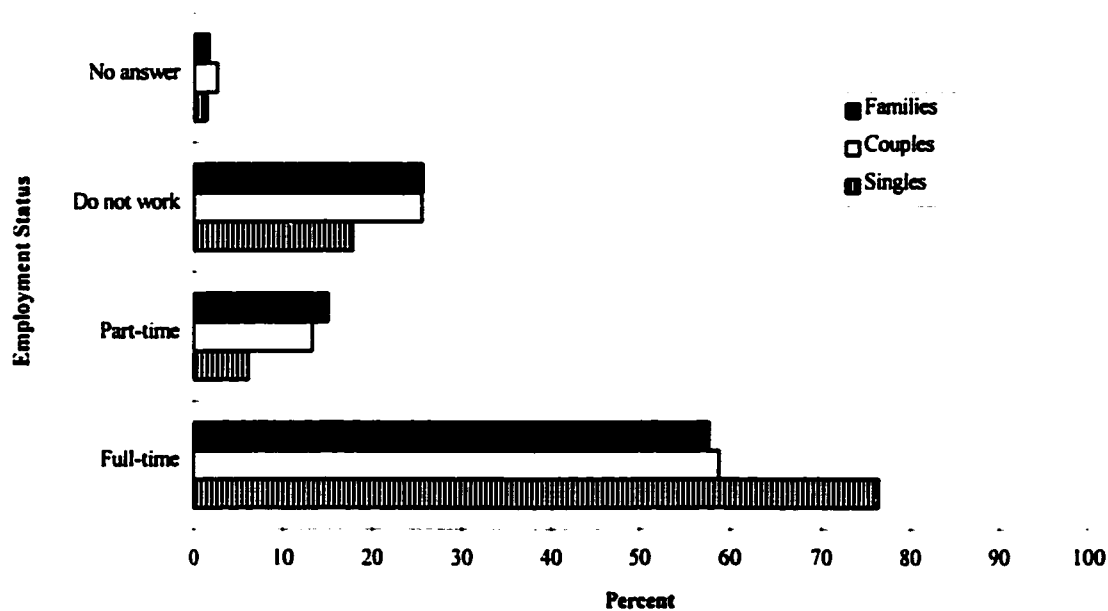
Figure 4.7
Employment Status by Three Types of Travel Parties (Question 10)
(chi-square = 19.422, p = 0.00)

- **Education**: The majority of respondents had either college or post graduate degrees in

  all three types of travel parties (Figure 4.8).
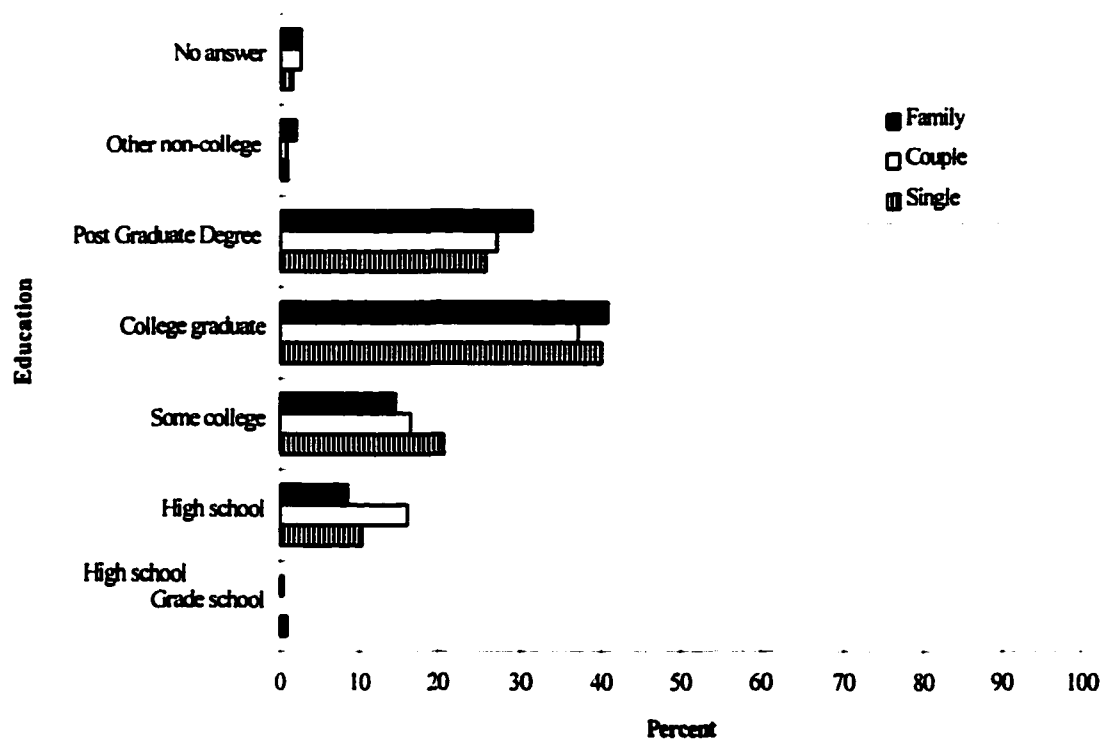
Figure 4.8
Education by Three Types of Travel Parties (Question 11)
(chi-square = 15.48, p = 0.216)

- <u>Household Income Before Taxes</u>: About 45 to 46 percent of couples and families

were in the $75,000+ income category, as compared to only 23 percent for singles.

About 13 to 22 percent of time, respondents did not answer this question (Figure 4.9).
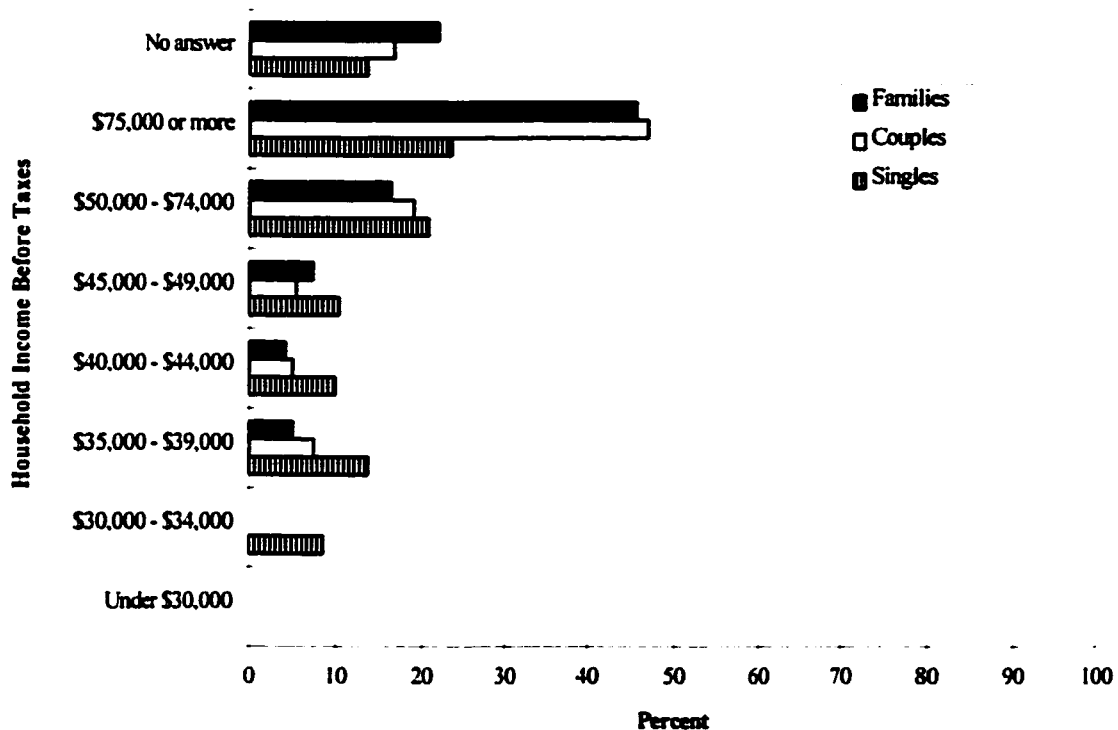
Figure 4.9
Household Income Before Taxes by Three Types of Travel Parties (Question 12)
(chi-square = 88.57, p = 0.00)

Objective 3: Travel-Related Characteristics versus Type of Travel Party

The three types of travel parties differed significantly regarding travel-
destinations, timing of advanced travel-planning and reservation scheduling activities.
Highlights of these results follow (Figure 4.10 to 4.14).

• Season: Winter season was the predominate period of travel for all three types of

travel parties (Figure 4.10).
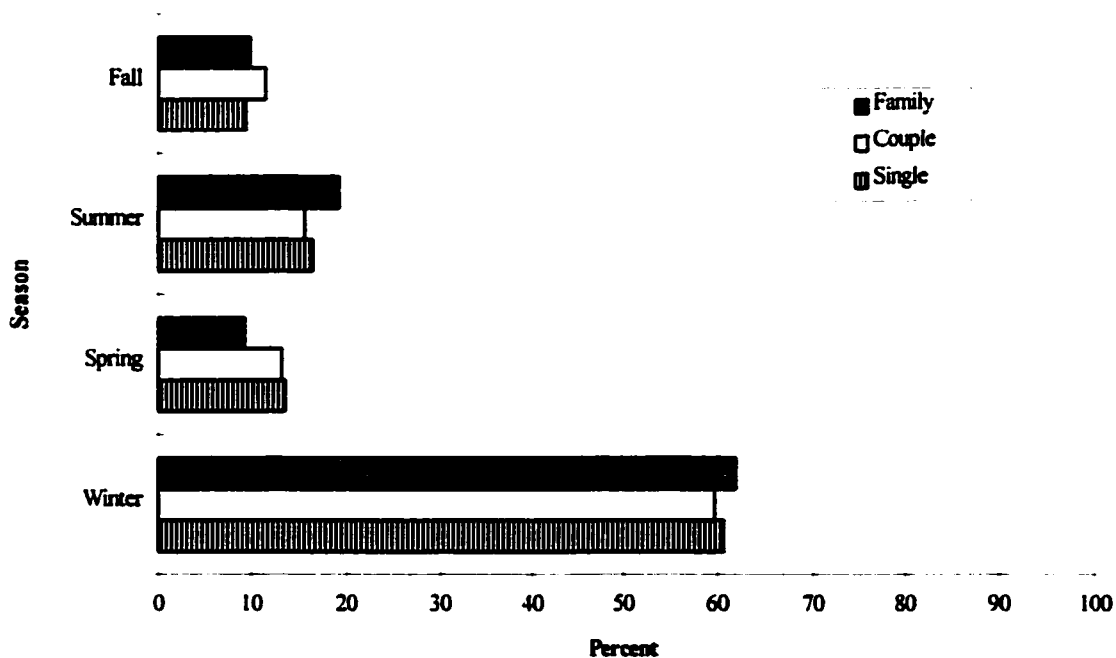
Figure 4.10
Season by Three Types of Travel Parties (Question 1)
(chi-square = 3.81, p = 0.70)

- <u>Travel Destinations</u>: The United State, the Caribbean and Mexico were the order of preference for most destination spots - two thirds or more of the time. But, about 19 percent of the time singles and couples did not answer this question (Figure 4.11).
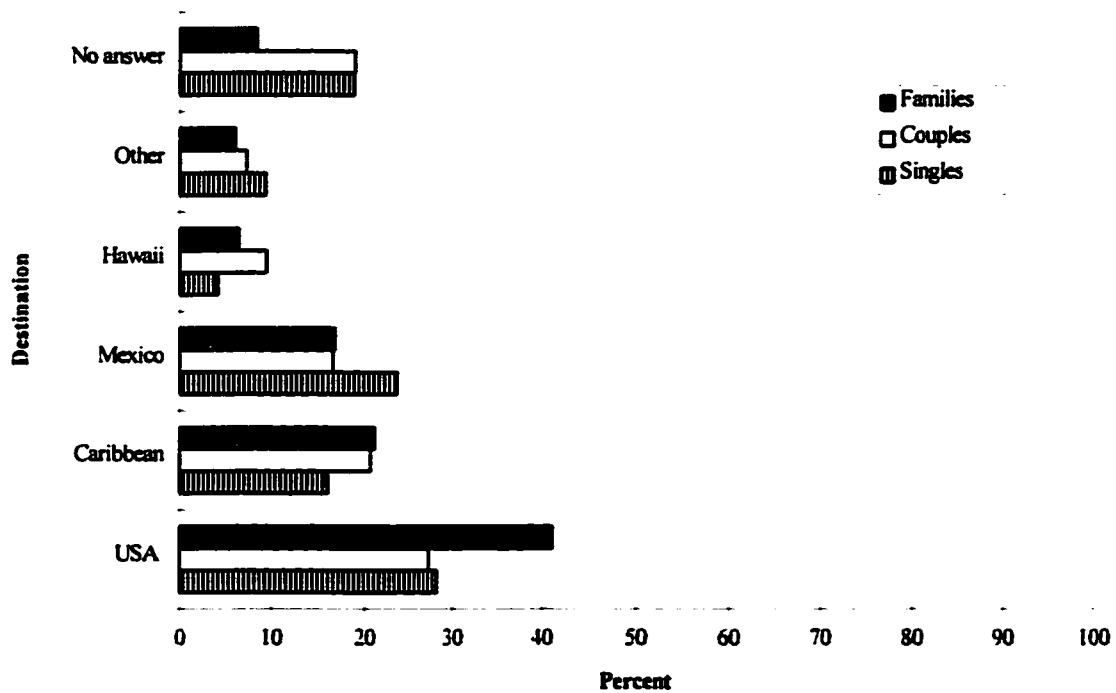
Figure 4.11
Destination by Three Types of Travel Parties (Question 2)
(chi-square = 32.04, p = 0.00)

- <u>Length of Stay</u>: Approximately 50 to 60 percent of all three types of travel parties stayed 5 to 7 days ; another 20 - 24 percent stayed 11 or more days (Figure 4.12).
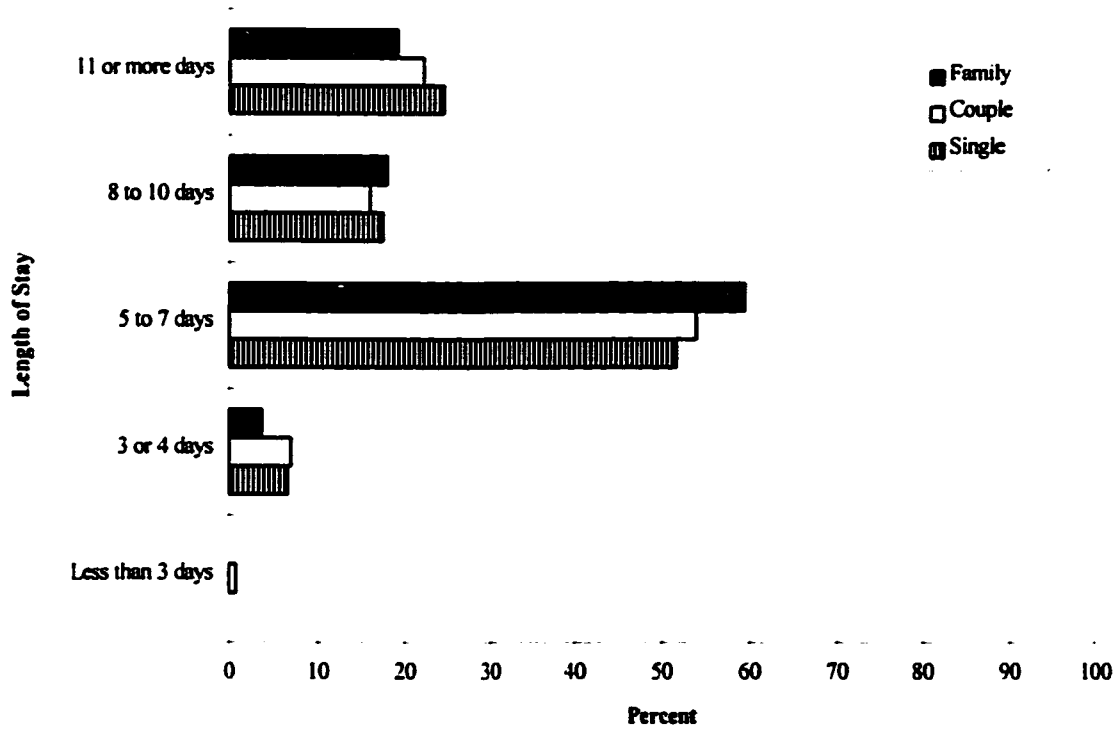
Figure 4.12
Length of Stay by Three Types of Travel Parties (Question 3)
(chi-square = 9.67, p = 0.29)

- **Advanced Planning**: About one-third of all three types of travel parties collected

  information about their destination 2 to 3 months prior to the trip. Another 21 to 30

  percent started collecting information about 6 month before their trip (Figure 4.13).
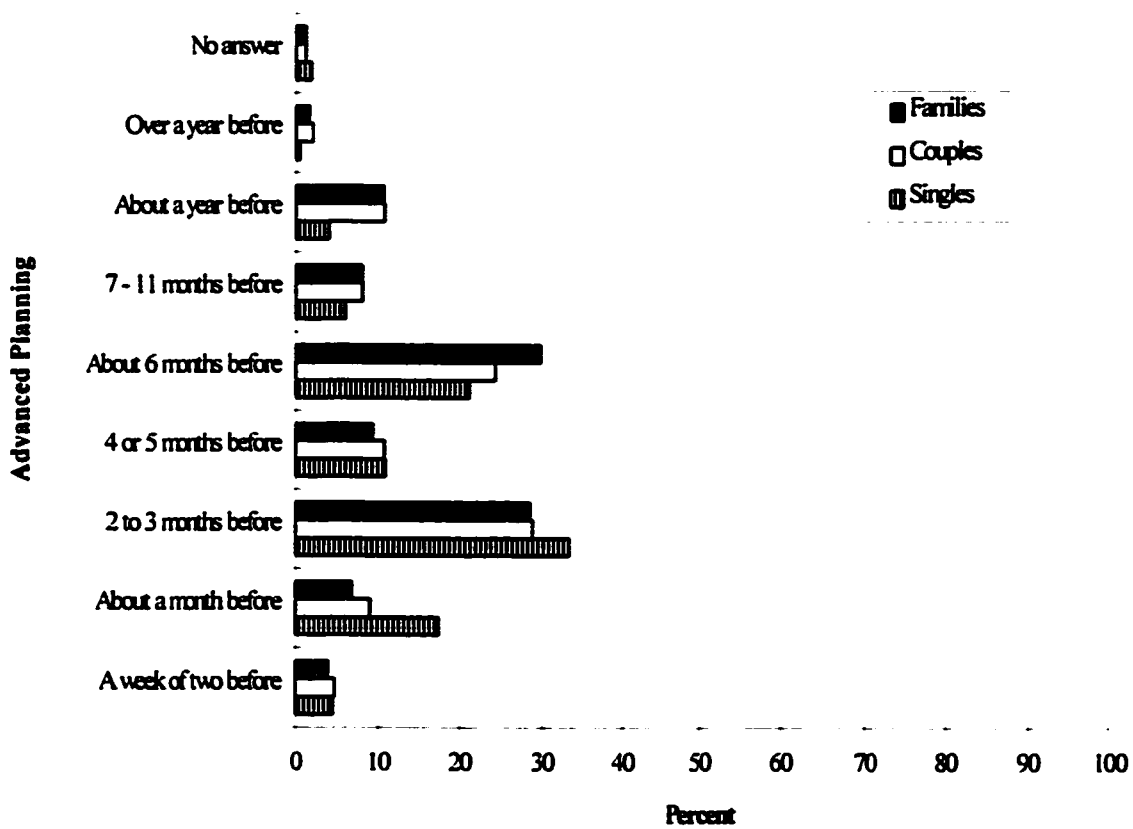
Figure 4.13
Advanced Planning by Three Types of Travel Parties (Question 4)
(chi-square = 28.09, p = 0.03)

- **Reservations**: About 46 percent of singles made reservations a week to a month

  before their trip, as compared to about 30 to 24 percent for couples and families.

  About one-third of all parties made reservations about their destination 2 to 3 months

  prior to the trip (Figure 4.14).
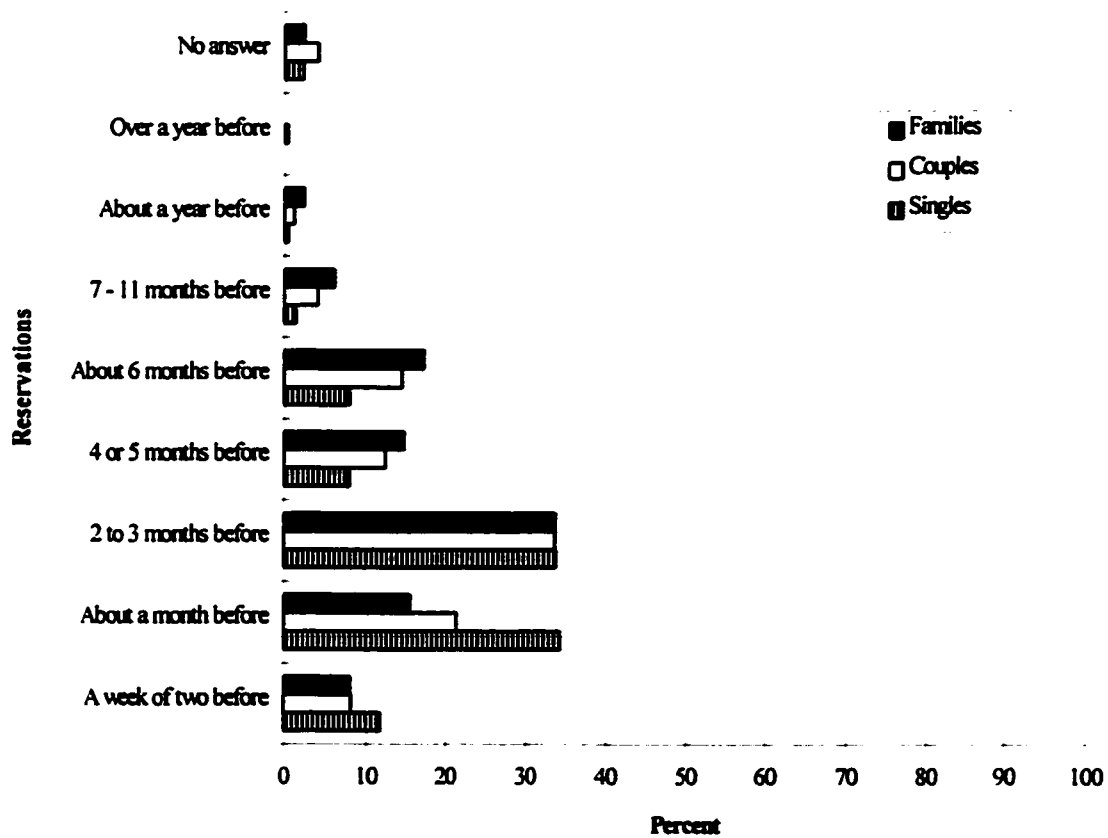
Figure 4.14
Reservations by Three Types of Travel Parties (Question 5)
(chi-square = 44.66, p = 0.00)

Respondents' behavior patterns -- in terms of the time between when they plan a

trip and actually make reservations for the trip -- are shown in Table 4.26 (which is a

combination of results from Figures 4.13 and 4.14). Approximately 43 percent of both

singles and couples, and 46 percent of families planned and made reservations within a

each of the eight time periods. Two-to-three months prior to actual travel was the period

that contained the largest number of travel parties who collected information and made

reservations.

Table 4.26
Percent of Three Types of Travel Parties Classified by Eight Time-Periods for: Advanced Trip Planning and Actual Reservations

Advanced Trip Planning	Actual Reservations								
	A week of two before	About a month before	2 to 3 months before	4 or 5 months before	About 6 months before	7 - 11 months before	About a year before	Over a year before	No answer
A week of two before	S: 4.7 C: 4.1 F: 3.7								C: 0.8 F: 0.4
About a month before	S: 4.7 C: 1.6 F: 2.8	S: 12.2 C: 7.0 F: 3.7							S: 0.5 C: 0.4 F: 0.4
2 to 3 months before	S: 1.4 C: 1.6 F: 1.2	S: 15.0 C: 9.5 F: 9.3	S: 16.4[a] C: 17.3[a] F: 17.5[a]						S: 0.5 C: 0.4 F: 0.4
4 or 5 months before	C: 0.4	S: 1.9 C: 1.2 F: 0.4	S: 5.2 C: 5.8 F: 5.3	S: 3.3 C: 2.5 F: 3.3					S: 0.5 C: 0.8 F: 0.4
About 6 months before	C: 0.4 F: 0.4	S: 3.8 C: 2.5 F: 1.6	S: 8.9 C: 6.6 F: 6.5	S: 3.3 C: 6.6 F: 8.5	S: 5.2 C: 8.2 F: 12.2				F: 0.4
7 - 11 months before		S: 0.5 C: 0.4	S: 2.8 C: 1.2 F: 1.2	S: .9 C: 2.5 F: 1.6	S: 1.4 C: 2.1 F: 1.6	S: 0.5 C: 2.1 F: 3.7			
About a year before		S: 0.9 C: 0.4 F: 0.4	S: 0.5 C: 2.9 F: 1.2	C: 0.8 F: 1.2	S: 1.4 C: 4.1 F: 3.3	S: 0.9 C: 1.6 F: 2.4	S: 0.5 C: 0.8 F: 2.0		
Over a year before	S: 0.5	C: 0.4 F: 1.6					C: 0.4	C: 0.4	C: 0.8
No answer			F: 0.4			C: 0.4		F: 0.4	S: 0.9 C: 0.8 F: 0.4

S = Singles, C = Couples, and F = Families
[a] Largest percentages were for this time period.

Objective 4: Determinant Attributes versus Type of Travel Party

The discriminant function 1 was the primary source of differences between the

families versus a combined singles-couples segment. Not surpassingly, "being a family

resort (X_7)" was the most important determinant attribute for families; whereas "offering

short stay getaway (X_9)" was the most important attribute of both the singles and couples.

Function 2 showed the difference between singles versus couples category. The

major differences between singles and couples in terms of the significant determinant

attributes are as follows:

Singles preferred sun-spot-destination resorts that --

- offered restaurants and good nightlife (X_1)

- offered hobbies and catered to the consumer's special interests (X_{10}),

- personalized the visit by created a feeling that the resort was "for people like

    me" (X_{12}), and

- allowed visitors to tailor their budget (X_4).

Couples, on the other hand --

- wanted a peaceful and quiet environment (X_{15}) and

- stressed getting a good value for money (X_{20}).

Objective 5: Socio-Demographic Characteristics versus Preference of Travel

Arrangements

Two socio-demographic characteristics, age and employment status, were significantly different between two types of travel arrangement preferences in terms of chi-square test at .05 significant level. Highlights of these results follow (Figure 4.15 to 4.20).

- **Age:** Respondents in the 21 to 44 years age categories preferred all-inclusive travel

  package, as compared to those who belonged to the 45 or older age categories (Figure

  4.15).
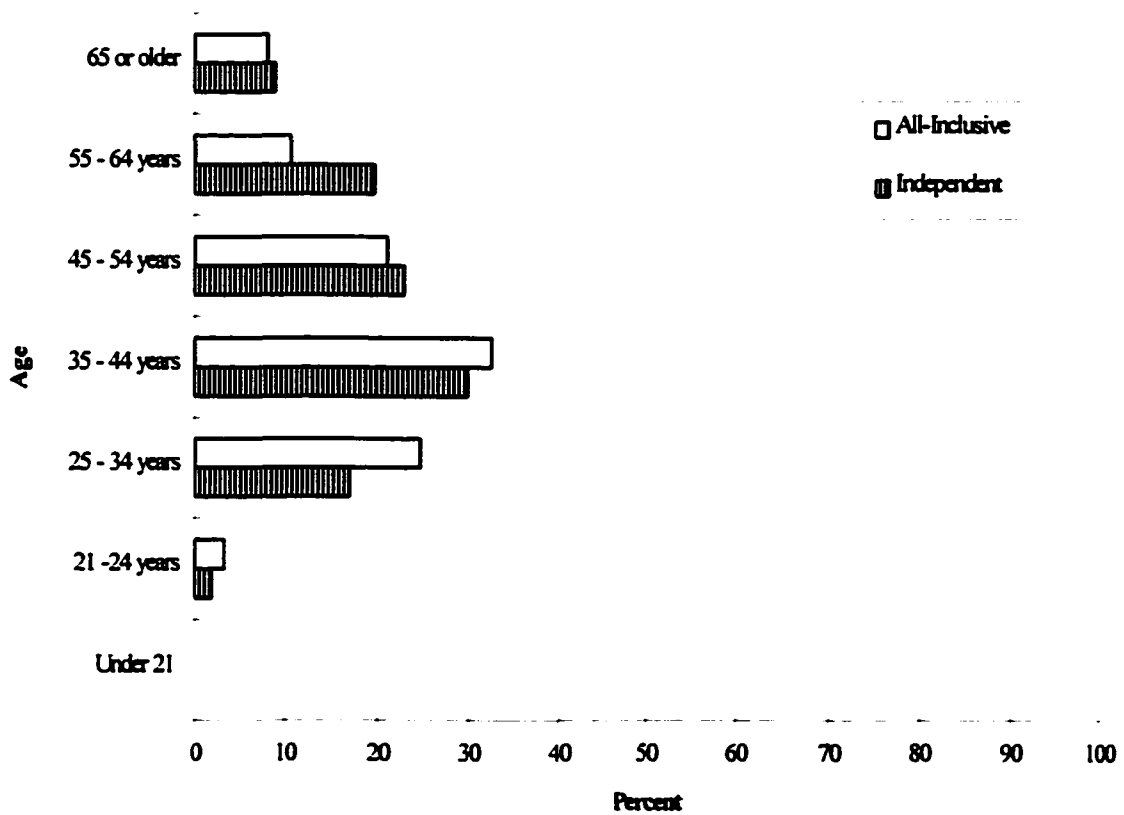
Figure 4.15
Age by Preference of Two Types of Travel Arrangement Preferences
(Screening Question) (chi-square = 14.93, p = 0.01)

- Marital Status: The majority of respondents were married regardless of their

  preference of travel arrangements (Figure 4.16).
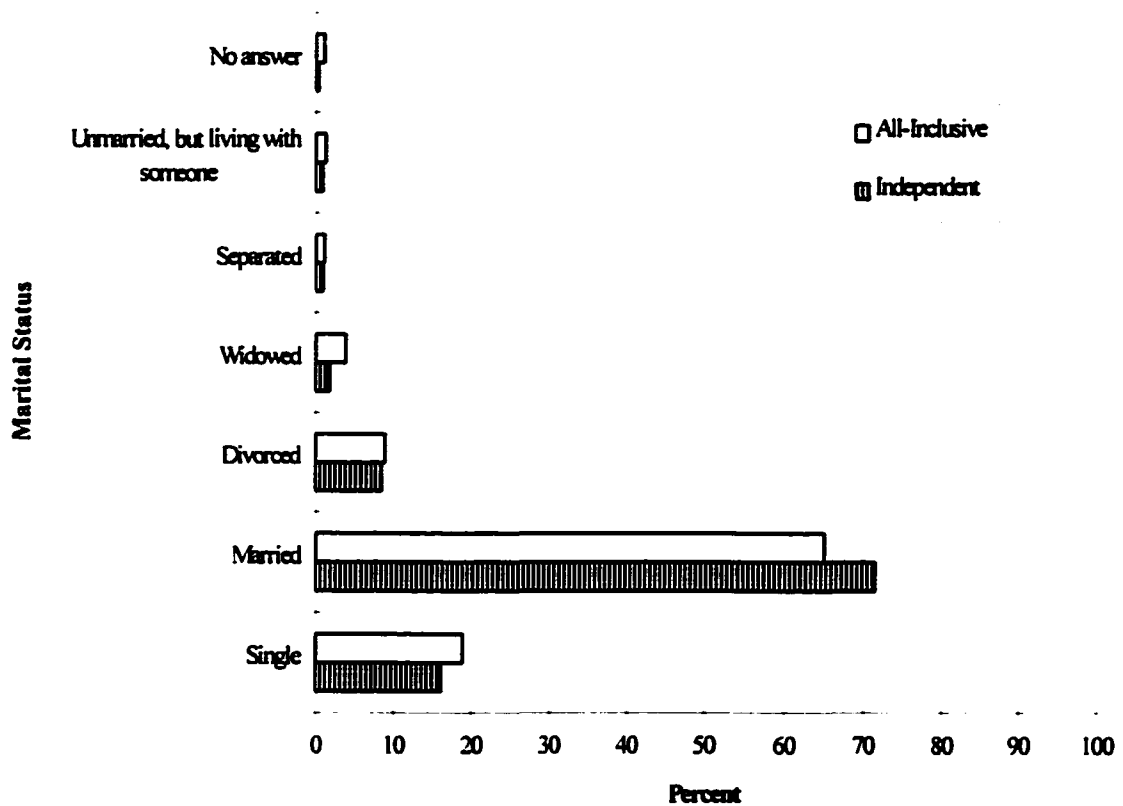
Figure 4.16
Marital Status by Two Types of Travel Arrangement Preferences (Question 8)
(chi-square = 4.54, p = 0.60)

- Household Size: Approximately one third of respondents were living in two-person

households regardless of their preference of travel arrangements (Figure 4.17)
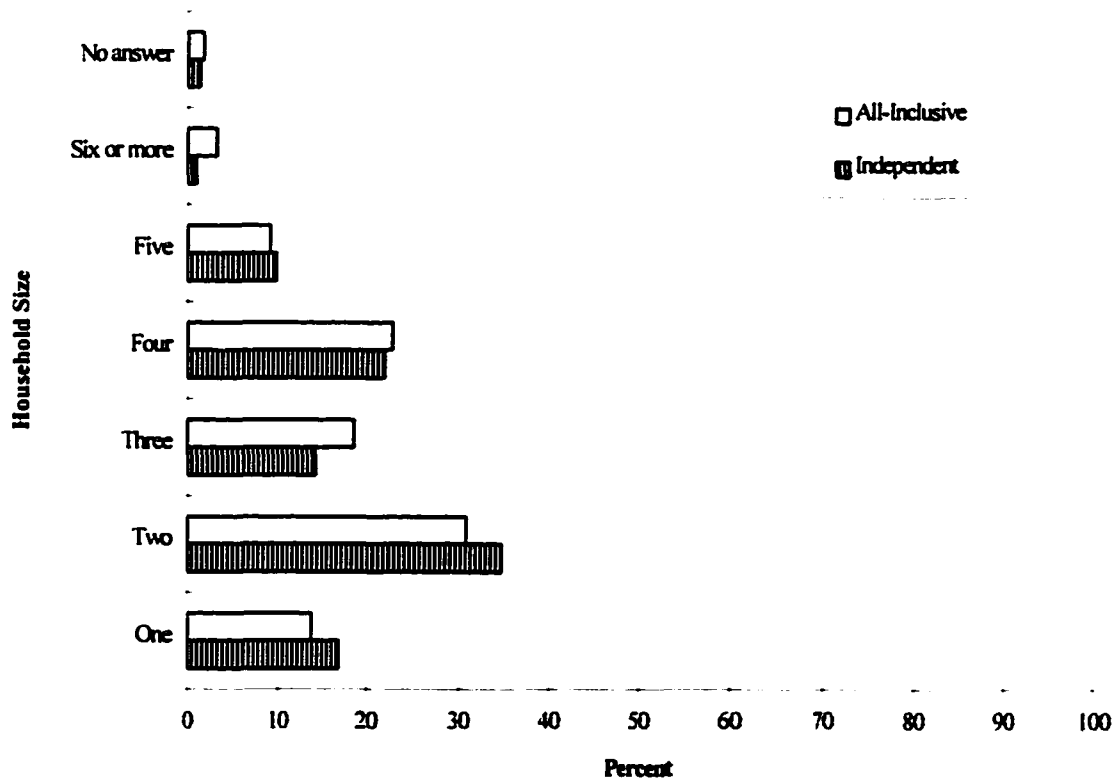
Figure 4.17
Household Size by Two Types of Travel Arrangement Preferences (Question 9)
(chi-square = 7.01, p = 0.32)

- **Employment Status**: About 56 to 67 percent of respondents who preferred

    independent travel arrangements and those who than those who preferred all-inclusive

    travel package were employed full time (Figure 4.18).
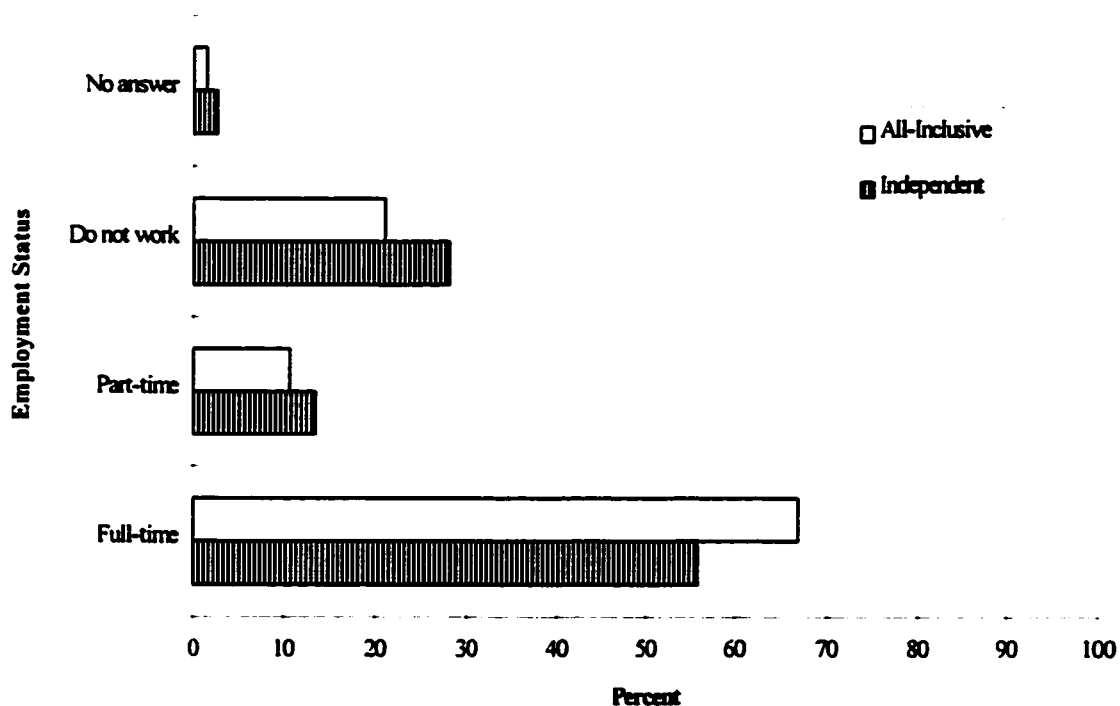
Figure 4.18
**Employment Status by Two Types of Travel Arrangement Preferences (Question
10)**
(chi-square = 8.40, p = 0.04)

- **Education**: The majority of respondents were college graduates regardless of their

  preference of travel arrangements (Figure 4.19).
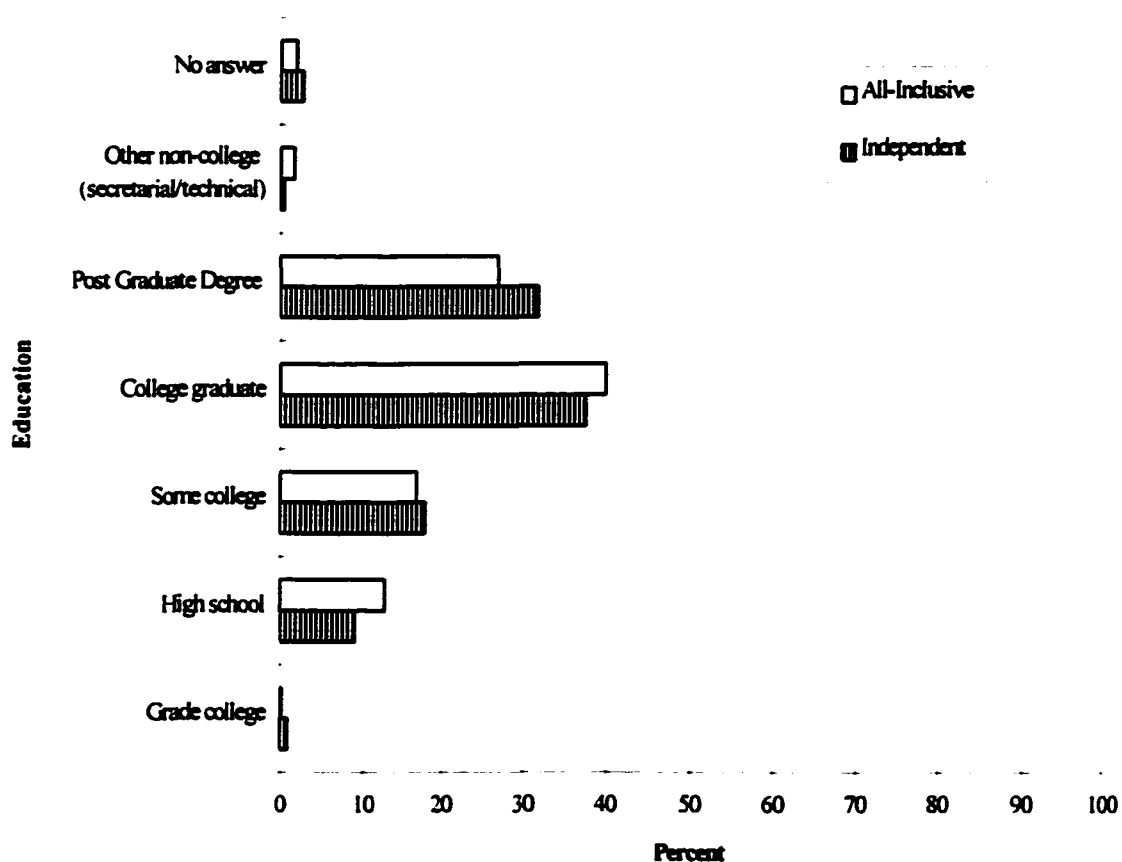
Figure 4.19
Education by Two Types of Travel Arrangement Preferences (Question 11)
(chi-square = 7.44, p = 0.28)

- **Household Income Before Taxes**: About 47 to 36 percent of respondents who
  preferred independent travel arrangements and those who preferred all-inclusive
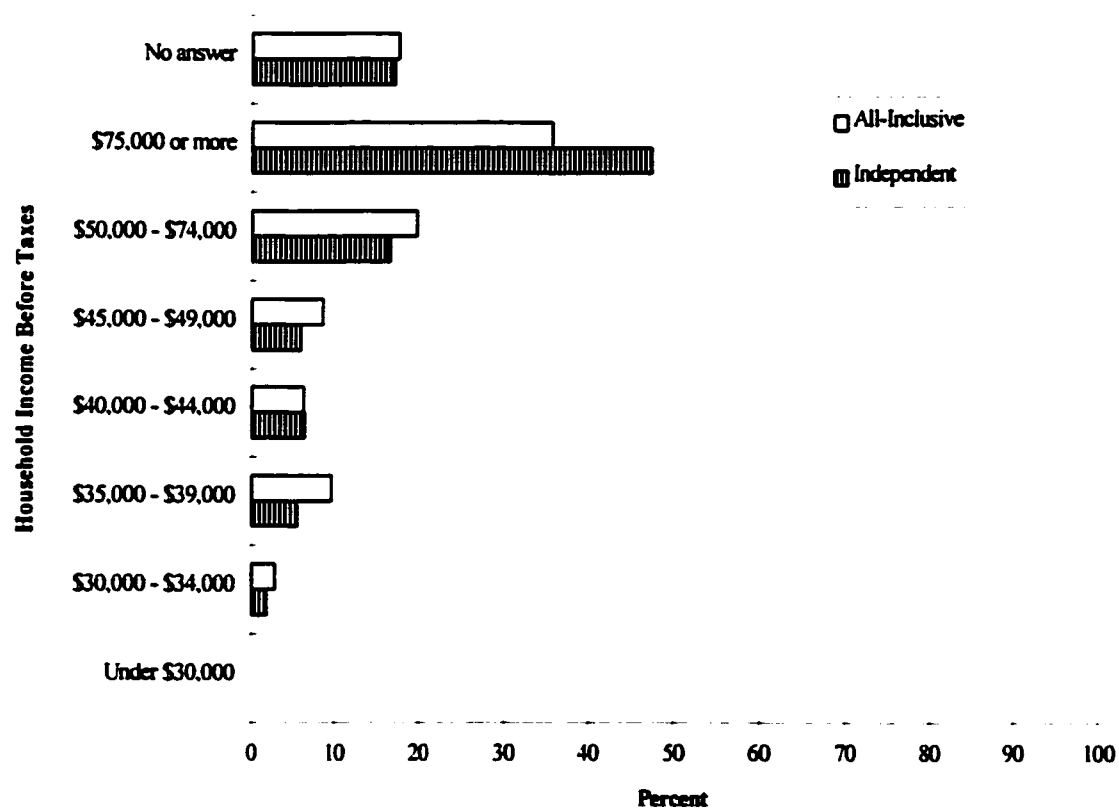 travel package were in the $75,000+ income category (Figure 4.20).

Figure 4.20
Household Income Before Taxes by Two Types of Travel Arrangement Preferences
(Question 12) (chi-square = 11.64, p = 0.07)

Objective 6: Travel-Related Characteristics versus Preference of Travel

Arrangements

Travel destinations and length of stay were significantly different between two

groups by preference of travel arrangements in terms of chi-square test at 0.01 and 0.05

significant level, respectively. Highlights of these results follow (Figure 4.21 to 4.25).

• Season: Winter season was the predominate period of travel regardless of their
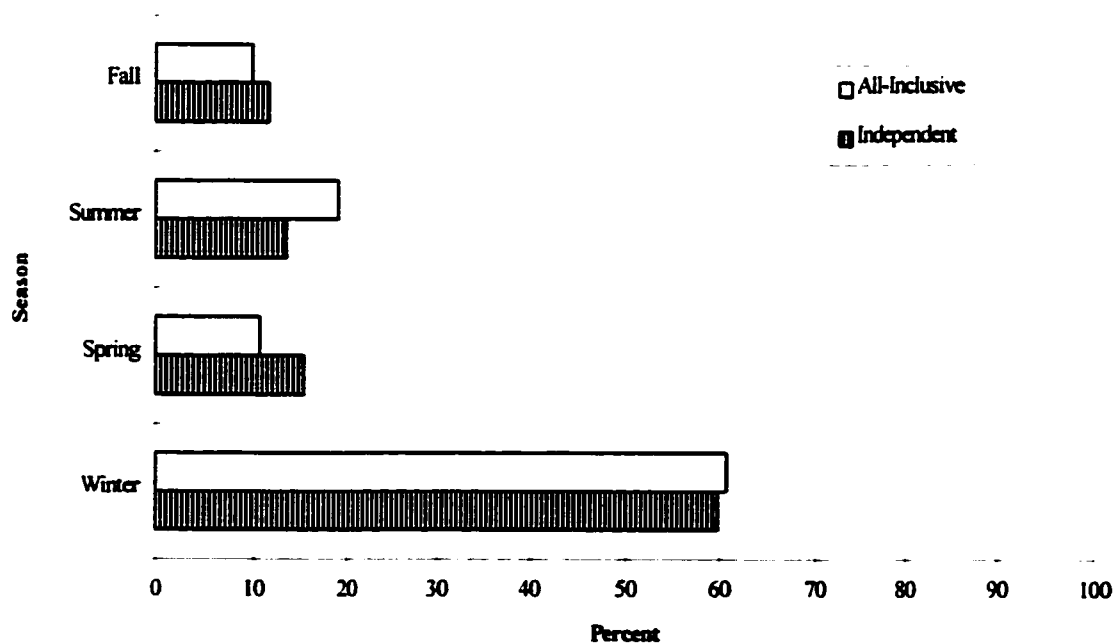
preference of travel arrangements (Figure 4.21).

Figure 4.21
Season by Two Types of Travel Arrangement Preferences (Question 1)
(chi-square = 5.82, p = 0.12)

- **Travel Destinations**: The respondents who preferred independent travel arrangements traveled the in United States more than those who preferred all-inclusive travel package. Whereas, those who preferred all-inclusive travel package traveled Caribbean and Mexico more than those who preferred independent travel arrangements (Figure 4.22).
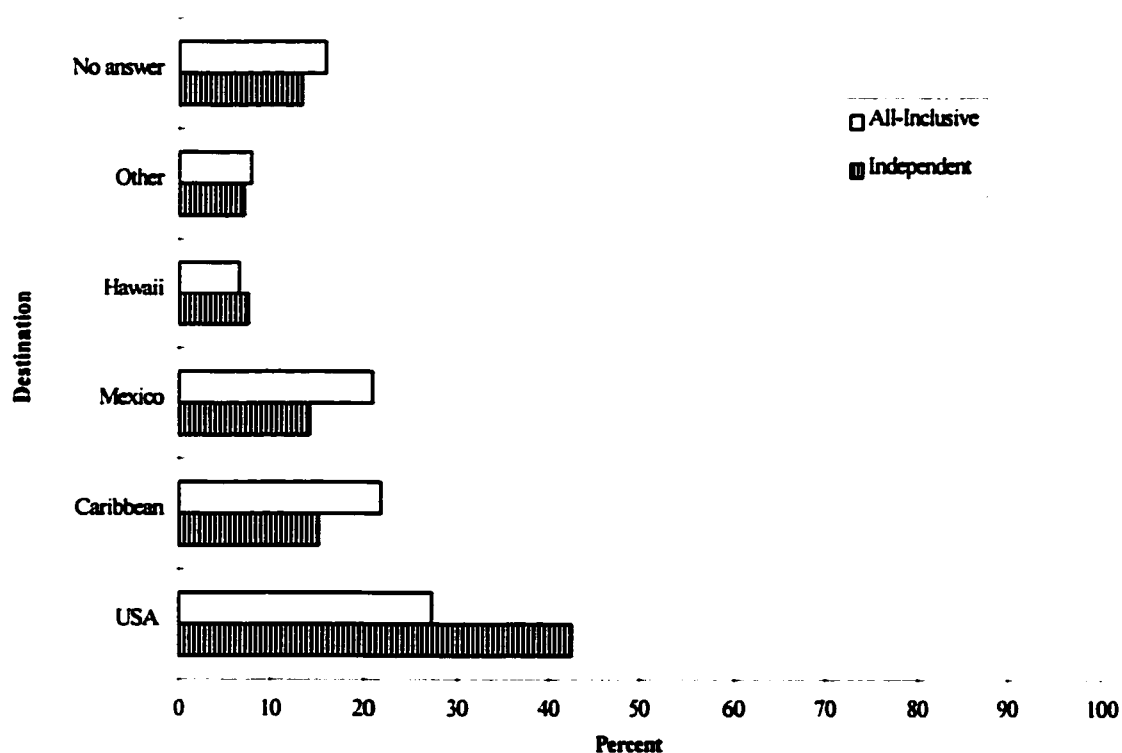

Figure 4.22
Destination by Two Types of Travel Arrangement Preferences (Question 2)
(chi-square = 18.65, p = 0.00)

- **Length of Stay:** Approximately 50 to 58 percent of two groups by preference of
  travel arrangements stayed 5 - 7 days ; another 20 - 25 percent stayed 11 or more days
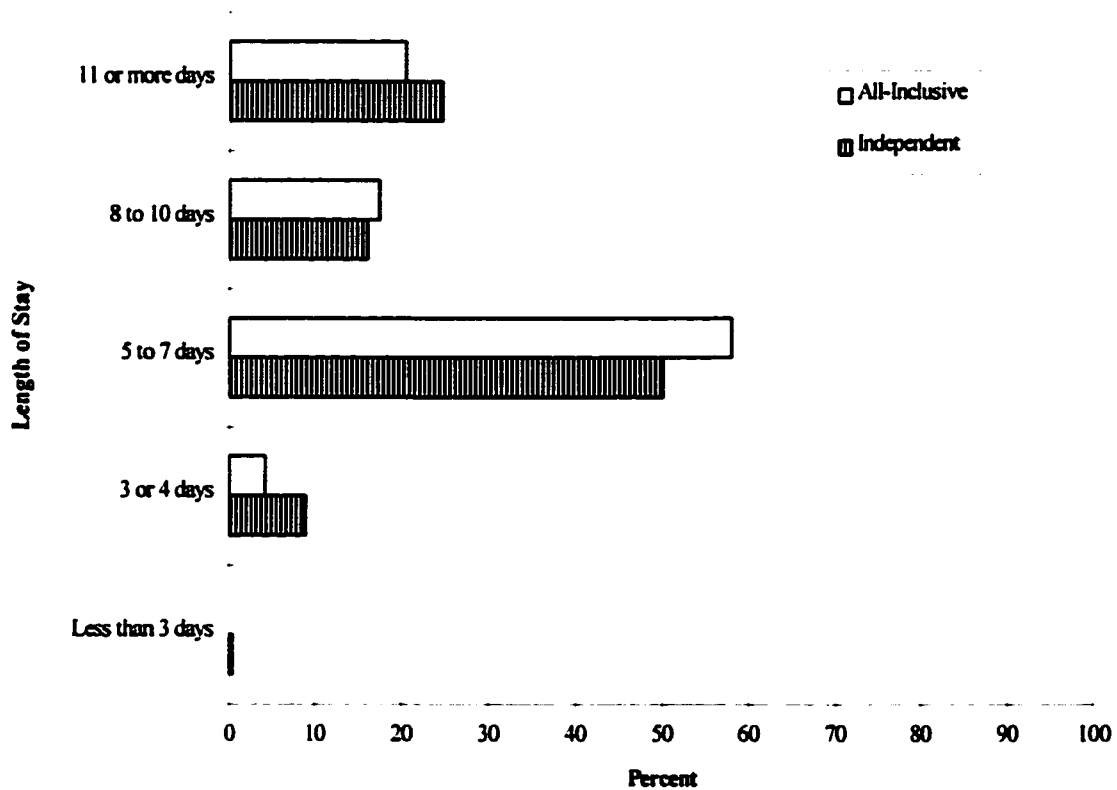 (Figure 4.23).

Figure 4.23
Length of Stay by Two Types of Travel Arrangement Preferences (Question 2)
(chi-square = 10.99, p = 0.03)

- **Advanced Planning**: About 32 to 29 percent of the two groups by preference of travel arrangements collected information about their destination 2 to 3 months prior to the trip. Another 22 to 27 percent started collecting information about 6 months before their trip (Figure 4.24).
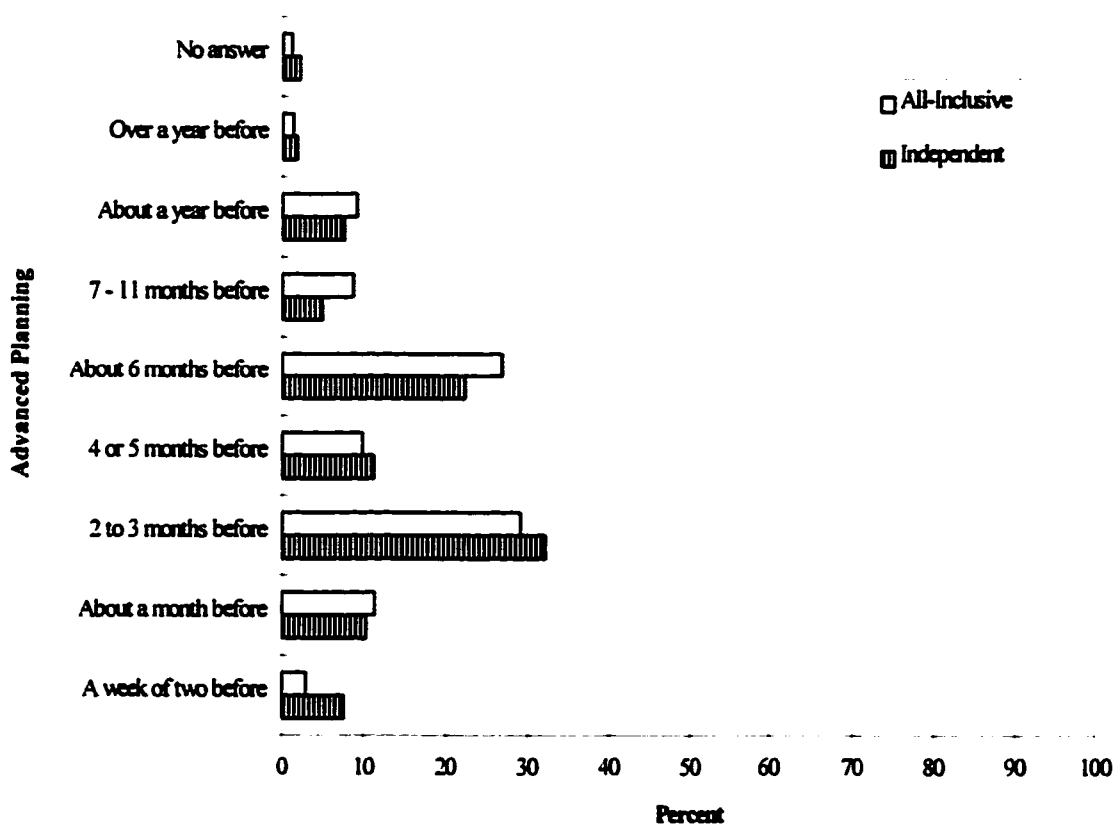

Figure 4.24
Advanced Planning by Two Types of Travel Arrangement Preferences (Question 4)
(chi-square = 14.38, p = 0.07)

• <u>Reservations</u>: About one third of respondents made reservations 2 to 3 months prior

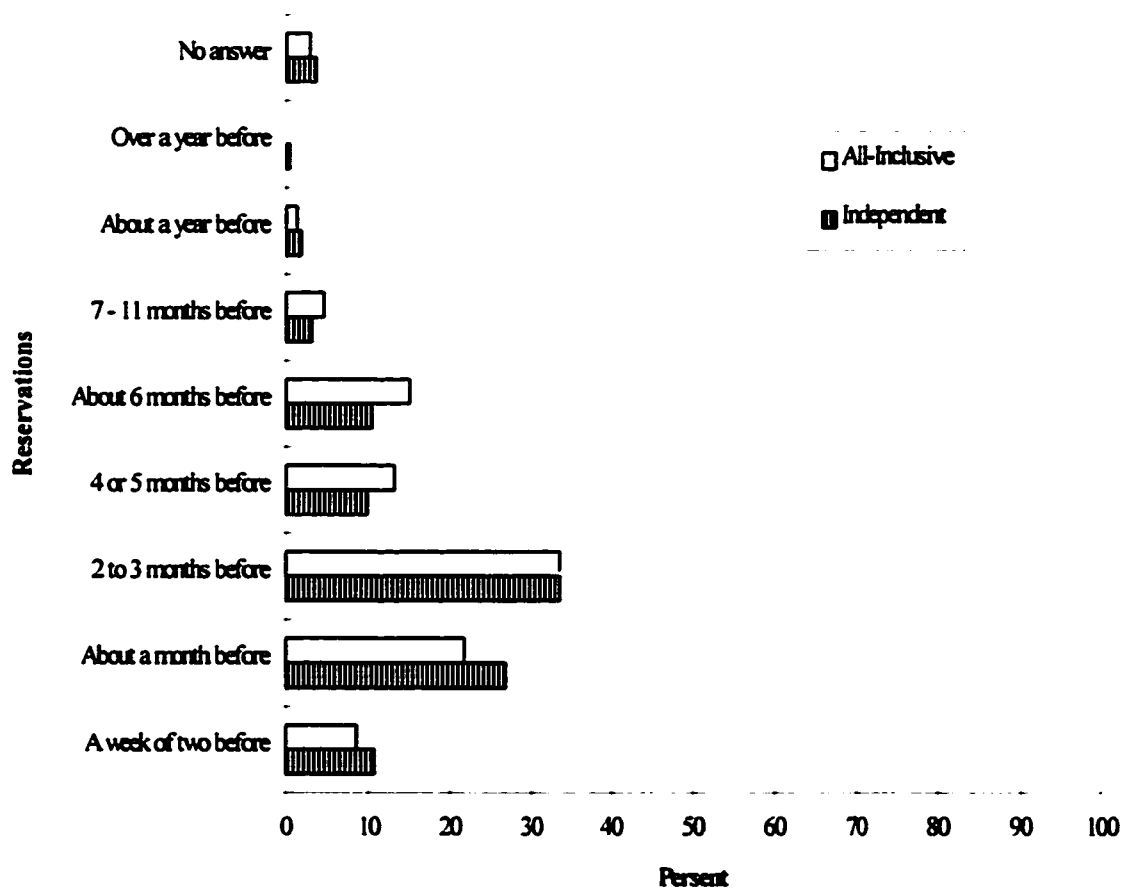to the trip regardless of their preference of travel arrangements (Figure 4.25).

Figure 4.25
Reservations by Two Types of Travel Arrangement Preferences (Question 5)
(chi-square = 9.55, p = 0.30)

Objective 7: Determinant Attributes versus Preference of Travel Arrangements

Compared to respondents who preferred independent travel arrangements, respondents who wanted to purchase an all-inclusive travel package preferred sun-spot-destination resorts that:

- offered restaurants and good nightlife (X_1)

- were easy to book or arrange (X_3)

- offered hobbies and catered to the travelers' special interests (X_{10})

- was a place that provide comfort and safety (X_{16}).

These results suggest that if resort managers want to promote all-inclusive packages of their properties, they should emphasize these four attributes in their marketing and promotion strategies.

Objective 8: Life-Style Characteristics versus Preference of Travel Arrangements

Respondents who preferred an all-inclusive package were more socially interactive (Factor 1), took vacations mainly to relax (Factor 8), and were more solicitous (Factor 2), as compared to respondents who preferred independent travel arrangements. Respondents who preferred independent travel arrangements were more self-confident

(Factor 7) and often sought solitude (factor 5). Specific life-style characteristics of

factors 1, 2, 5, 7, and 8 are summarized in Table 4.27.

Table 4.27
Specific Life-Style Characteristics of Factors 1, 2, 5, 7, and 8

Significant Factors of Life-Style Characteristics
Social interaction (Factor 1) [a]
I like to travel to places with good night life(Z_4)
I like to gamble(Z_{21})
I often seek the advice of others(Z_3)
I like to be pampered(Z_{19})
I like to vacation in places where I know the people are like me(Z_2)
I like to vacation in places where I know the people will like me(Z_1)
Relaxation (Factor 8) [a]
I take vacations mainly to relax(Z_3)
Solicitude (Factor 2) [a]
I worry about quality of the water and the food when I travel(Z_{13})
I worry about traveling to countries where there might be political unrest(Z_{11})
I stay away from resort areas with high crime rates(Z_{12})
I worry a lot about whether the people I'm with having a good time(Z_5)
Self-Confidence (Factor 7) [b]
I don't want anyone telling me when or what to do when I'm on vacation(Z_{16})
I am more confident of myself than most people are(Z_{17})
Solitude (Factor 5) [b]
I am a quiet person (Z_{15})
I would rather spend a quiet evening at home than go to a party(Z_{14})

[a] Relevant to tourists who prefer an all-inclusive package
[b] Relevant to tourists who prefer independent travel arrangements

Chapter 5

CONCLUSIONS

This chapter contains two sections: summary of findings, and implications and recommendations for future research.

Summary of Findings

This study examined travelers' characteristics and the determinant attributes of sun-spot-destination resorts from two perspectives of market segmentation. One segmentation was based on the type of travel party; the other related to preferences of travel arrangements. Both types of segmentation yielded significant differences that are useful for future marketing strategies.

Implications of this research for marketing sun-spot-destinations are restricted by the limitations of the study. Nonetheless, the following summary of findings may be helpful in formulating future marketing strategies.

Three types of travel parties -- singles, couples, and families -- differed significantly in terms of the following characteristics: age, marital status, household size, employment status, household income before taxes, travel destinations, advanced travel planning, and reservation activities.

Singles

- about 41 percent were 34 years old or younger (Figure 4.4),

- the majority (49.3 percent) were unmarried, but 20 percent of singles also said
  they were married (despite the survey's definition of singles) (Figure 4.5),

- almost 40 percent were one-person households (Figure 4.6),

- about 75 percent were employed full-time (Figure 4.7),

- about 24 percent were in the $75,000+ income category (Figure 4.9),

- the United States, Mexico, and the Caribbean were the order of preference for
  most destination spots (Figure 4.11), and

- advanced planning and reservations were made relatively close to the time of
  the actual trip, as compared to couples and families (Figure 4.13).

Couples

- the majority (69.6 percent) were in the 35 to 64 age categories (Figure 4.4),

- most (88.1 percent) were married (Figure 4.5),

- about 59 percent of this market segment were from two-party households
  (Figure 4.6),

- about 59 percent were employed full-time (Figure 4.7),

- almost half were in the $75,000+ income category (Figure 4.9),

- the United States, the Caribbean, and Mexico were the order of preference for
  most destination spots (Figure 4.11), and

- the majority of advanced planning and reservations were made earlier than

  singles but later than families (Figure 4.13).

<u>Families</u>

- the majority (52.4 percent) were in 35 - 44 age category (Figure 4.4),

- most (86.6 percent) were married (Figure 4.5),

- about 42 percent were four-person households (Figure 4.6),

- about 58 percent were employed full-time (Figure 4.7),

- about 46 percent were in the $75,000+ income category (Figure 4.9),

- the United States, the Caribbean, and Mexico were the order of preference for

  most destination spots (Figure 4.11), and

- advanced planning and reservations were made earlier than those made by

  couples and singles (Figure 4.13).

Based on the discriminant function 1, preference patterns for determinant

attributes of sun-spot destination resorts can be segmented by families versus a combined

singles-couples segment. This two-way segmentation explained most of the variation of

20 determinant attributes. Not surpassingly, "being a family resort" was the most

important determinant attribute for families; whereas "offering short stay getaway" was

the most important determinant attribute of both the singles and couples. However, based

on the discriminant function 2, there were significant differences between singles and

couples (Figure 4.2).

Singles preferred sun-spot-destination resorts that:

- offered restaurants and good nightlife,

- offered hobbies and catered to the consumer's special interests,

- personalized the visit by created a feeling that the resort was "for people like me", and

- allowed visitors to tailor their budget.

Couples, on the other hand:

- wanted a peaceful and quiet environment and

- stressed getting a good value for money.

The two types of travel arrangement preferences differed significantly in terms of age, employment status, travel destinations, and length of stay.

For tourists who preferred an all-inclusive travel package:

- about 78 percent were in 25 to 54 age categories (Figure 4.15),

- about 67 percent were employed full-time (Figure 4.18),

- the United States, the Caribbean, and Mexico were each preferred about 21 to 27 percent of time as a destination (Figure 4.22), and

- about 58 percent stayed 5 to 7 days (Figure 4.23).

For tourists who preferred independent travel arrangements:

- about 70 percent were in the 25 to 54 age categories (Figure 4.15),

- about 59 percent were employed full-time (Figure 4.18),

- the majority (42.4%) preferred the United States as a destination (Figure 4.22), and

- about 50 percent stayed 5 to 7 days (Figure 4.23).

Regarding travel arrangements, if resort managers want to promote all-inclusive travel packages for their properties, they should emphasize the following four attributes in their marketing and promotion strategies (Table 4.20).

- highlight restaurants and good nightlife,

- provide easy booking arrangements,

- cater to tourists' hobbies and special interests, and

- emphasize comfort and safety.

Based on travelers' life-style characteristics, tourists who preferred all-inclusive travel package are more socially interactive, solicitous, and take their vacations mainly to relax, as compared to those who preferred independent travel arrangements. Tourists who preferred independent travel arrangements were more self-confident and often seek solitude.

In conclusion, analyses of the travelers' socio-demographic and travel-related characteristics provided initial clues for defining differences among three types of travel parties (singles, couples, and families), and two types of travel arrangement preferences (independent travel arrangements and all-inclusive travel package). However, analyses of determinant attributes and life-style characteristics provided more in-depth information about travel party types and preference of travel arrangements. Therefore, a combination

of socio-demographic characteristics, travel-related characteristics, determinant attributes,

and life-style characteristics are recommended for defining various segments of the sun-

spot-destination resort market.

Recommendations for Future Study

The following suggestions provide insights for the future research about sun-spot destination resorts.

- This study showed that the determinant attributes were different according to the types of travel parties or preference of travel arrangements. Similar studies should be conducted on individual resort properties of sun-spot destinations, because each property may have different physical and social environments.

- Because of increasing international travel, similar studies should be conducted on travelers from other countries outside the United States.

- Definitions of families, singles and couples need to be mutually exclusive in order to detect the wide range of niches within each of these three broad market segments.

- Questions about determinant attributes should contain precise wording that sensitizes respondents' understanding of exactly what is involved. For example, "being a family resort" may be too generic. If the survey questions would have contained more specific attributes, the survey results probably would have been more useful for detecting significant market segments.

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