AN EXPLORATORY STUDY OF THE RELATIONSHIP BETWEEN HEALTHY-LIVING AND TRAVEL BEHAVIOR

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ABSTRACT

In the field of travel and tourism, scholars with interest in consumer behavior studies have explored different variables and linked them with the individual's behavior. Variables such as destination image, environmental awareness, service perception, preferences, and motivations for travel are commonly used to understand and predict destination selections and travel behavior. There is also enough evidence to suggest that healthy-living is positively associated with travel behavior. If any, little empirical research has been done to explore and examine the nature of the relationship between healthy-living and travel behavior. The guidelines to healthy-living have not been introduced in the literature of travel and tourism. This study is intended to shed some light on this issue and contribute to knowledge in this area. The objective of this study was twofold: (1) to develop a healthy-living attitudinal construct, and (2) examine the relationship between healthy-living behavioral and attitudinal constructs and selected travel behavior variables.

Pearson's correlation coefficient analysis was undertaken to test the relationship between healthy-living and travel behavior variables. In addition, using ANOVA, the study examined if there were differences between healthy-living (behavioral and attitudinal) and socio-

demographic variables; and by using Tukey's multiple comparison test, significant differences between the different groups were revealed. Finally, multiple regression analysis was undertaken with the objective to find the degree with which healthy-living alone influences travel behavior while socio-demographic variables are constant or controlled for.

The overall findings of the study revealed that there seems to be a relationship between a healthy-living lifestyle and the individual travel behavior. However, the direction and strength of this relationship shows variations with respect to different dimensions of the healthy living construct and selected travel behavior questions.

The perceived importance of the interaction between healthy-living behavior and travel also implies that certain habits and practices of individuals may correspond to certain benefits and expectations that are both valued and obtained from travel experiences and at the destination site. Such information combined with demographic information may be of great help in understanding better the behavior of travelers to destinations. This research contributes to lifestyle studies in tourism and sheds further light on the complex nature of travel behavior.

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CHAPTER ONE

INTRODUCTION

1.1 STATEMENT OF THE PROBLEM

The understanding of consumers' needs, preferences, and behavior has proven to lead organizations and destinations to provide appropriate supply components and benefits that suit different market segments. Consumer behavior studies in the field of travel and tourism have examined the relationship between a consumer's personality type, values, and travel behavior. Some have investigated the impact of leisure on one's health status. However, no study has looked at the effect of one's healthy-living status on his or her travel behavior. As noted by Holland (1985:4) "people search for environments that will allow them to exercise their skills and abilities, express their attitudes and values, and take on agreeable problems and roles."

To address this problem, this research is designed to look at the effects of selected healthy-living components on travel behavior**.** Therefore, the purpose of this dissertation is to examine and understand the nature of the relationship between healthy-living and travel behavior in general. The guidelines to healthy-living will be introduced to the travel and tourism literature. A conceptual framework of healthy-living and travel behavior will be developed and empirically tested.

1.2 BACKGROUND OF THE PROBLEM

Scientific studies carried out by several official medical and dietetic associations have been showing strong correlation between components such as: exercising, diet, sexual behavior,

physical exam, self-image/perception of life and the human being's healthy-living status. There is enough evidence to suggest that healthy-living is positively associated with travel behavior. Trends related to consumer behavior in the United States have been revealing more concerns for healthy-living coupled with an increase in membership of health clubs, rising interests in all-natural diets and a higher demand for active holidays involving activities such as: walking, cycling, and golfing (Jefferson, 1995). Market trends have also been showing consumers focusing more on personal needs and being more active when taking trips (Chon and Singh, 1995). Such phenomena have influenced organizations and destinations on the supply side to provide more health-oriented holiday packages; they also have triggered an increase in the number of all-inclusive health-oriented package/resorts (Chon and Singh, 1995). The thoughtful consumer of the 1990s is being characterized as someone with concerns about health, the environment, time, and money. Also the '90s consumer is thought to be an individual who undertakes activities that bring tangible results (Martin and Mason, 1993). For such a consumer, leisure time is considered a means to improve one's mental and physical state as well as to enjoy oneself and help others (Martin and Mason, 1993).

Understanding the travel behavior of different market segments has become a necessity in today's travel and tourism industry; it is an industry that has been characterized with flexibility, segmentation, and authentic experiences (Poon, 1994). Destinations and organizations that have been following a consumer-led orientation have generated a successful experience to their target markets, and consequently, to their organizations/destinations. A consumer-led orientation to the tourism business implies that officials' actions need to rely on a solid knowledge of their clients, their needs, wants, expectations, and behavioral patterns (Haywood, 1990). Such strategy

demands that the design, development, and selling of products/services result in tangible results such as solving clients' problems and meeting their needs (Haywood, 1990). The art of segmentation has been evolving over the years due to such consumer-led orientation; for a specific market segment's travel behavior to be well analyzed and comprehended, segmentation got expanded to be based not only on demographics but also on values, lifestyles, and psycho-graphics as well (March, 1994). The individual's personal values and personality have become a focal point in numerous segmentation studies; Boote (1981), Valette-Florence (1988), Vinson, et al. (1977) found that personal values by being central to one's cognitive structure are looked at as strong predictors of an individual's behavior and are connected to one's motivation. Segal (1992) looked at values as active influences on an individual's actions, attitude and beliefs; such variables are used to pinpoint traits connected to social behavior. In other words, one's values do influence one's personality and behavior in different domains, and travel is perceived to be one of the domains.

Learning about a specific market's activities, interests, and opinions enhances the competitive position of the destination/organization by formulating messages, services/products, and activities that appeal to such particular target markets. One's values and lifestyle influence his/her consumer behavior; therefore, it is a must to build a picture of a target market's beliefs and attitudes through research that makes such a target's market's personality, attitudes, beliefs, and values become transparent. Understanding a segment's psychological state represents a useful construct to formulate strategic marketing plans for a destination as well as to come up with new ideas for new tourism products development.

Previous studies have used personal values to formulate a prediction of numerous leisure behaviors such as choice of recreation activities (Boote, 1981; Veroff, et al., 1981), selection of vacation destinations (Dalen, 1989; Klenosky, et al., 1993), and choice of leisure activities during vacations (Madrigal and Kahle, 1994). Some studies have linked personality to leisure activity decisions (Allen, 1982; Driver and Knopf, 1977) and travel decisions (Nickerson and Ellis, 1991; Plog, 1974).

Several studies have investigated the relationship between values and a list of behaviors. Some examples are: cigarette smoking (Grube, et al., 1984), religious behavior (Feather, 1984), consumer behavior (Kamkura and Mazzon, 1991; Kamakura and Novak), charitable giving (Manzer and Miller, 1978), and political behavior (Tetlock, 1986). Others examined the linkage between personal values and leisure behavior by looking at one's valuing of security and his or her perceptions of leisure (Pottick, 1983). The following section displays the importance of the study through its examination of the effects of an individual's healthy-living status on his or her travel behavior.

1.3 IMPORTANCE OF THE STUDY

Researchers have approached the relationship between health and leisure activities from the angle of the latter variable's effect on the former one. In other words, researchers have been mainly interested in answering the question about leisure's effects on an individual's health status and, consequently, on his or her quality of life in general. Some researchers looked at a leisure experience as a means to diminish one's stress level by boosting his or her social support, companionship, and self-determination and, therefore, positively influencing the subject's health

status (Coleman and Iso-Ahola, 1993). Caldwell and Smith (1988), Chalip, et al., (1992), Coleman and Iso-Ahola (1993) have all looked at a leisure's experience contribution to some psychological or physiological aspects. Some of the aspects are the following: positive moods, overcoming loneliness, enhancing one's well-being, providing a buffering mechanism against stress, and inducing one's self-determination through his or her perceptions of freedom, control, competence, and intrinsic motivation.

Despite such heightened interests to create a linkage between leisure and health, previous research studies have not looked at one's healthy-living status and its effects on his or her travel behavior. U.S. market trends have been revealing data that portray a growing segment of mature adults shying away from sedentary behavior and being more active and immersed in health-related awareness issues. Some of these issues are the following: a more natural-based diet, metaphysical and physical exercise, safe sex, sensibility to the environment, second-hand smoking effects, and the battle against aids and cancer.

The belief and practice of such health-oriented issues by an individual may occupy a central location in his or her value system and thus his or her lifestyle. Empirical studies in various fields have linked one's value system and personality to leisure behavior in general and specifically travel behavior (Madrigal, 1995). Plog (1983) has emphasized the importance of this linkage through his research on personality type/values and destination selection. His research has demonstrated that internally-oriented individuals, allocentrics, tend to seek control over their lives and are more positioned to take risks; therefore, they are more likely to explore exotic destinations. On the other hand, externally oriented individuals, psychocentrics, tend to favor a

high security level and seek familiarity in their surroundings and therefore are more likely to select mainstream or conventional destinations. Smith (1990) suggested that scholars need to look at the relationship between personality type and travel behavior. Beard and Mounir (1980) linked leisure activities to an individuals' identity, social interactions, and personal development.

If a relationship exists between personality type/values and travel behavior, then investigating healthy-living oriented customers' travel behavior and their perceptions of tourism/hospitality products provides a basis for specialized marketing techniques as well as customized product development with specific features that appeal to a targeted market. Such techniques depend on identifying the mentioned particular market's demographic as well as its psychographic characteristics (values and lifestyle in regard to their healthy-living status) with its particular sets of benefits from tourism/hospitality purchases.

It may be misleading to think that supply and demand can be separated. This study takes into consideration that the development of marketing strategies and new tourism/hospitality products/packages suited to the needs and wants of a market segment with a healthy-living status depend largely on the knowledge of such consumer type and motivation. Travel/hospitality marketers of numerous destinations/organizations are competing and eager to draw as many visitors to their facilities. In order for them to acquire a competitive edge, it is becoming substantially crucial for them to understand the factors that influence such segments' travel/hospitality choices. In other words, supply and demand can never be separated and have to match in order for a desirable output to be generated to both the guest and the physical facility which caters to him or her.

1.4 THE CONCEPTUAL FRAMEWORK

The conceptual framework of this study is based on the output of numerous fields and disciplines such as consumer behavior and marketing, hospitality and tourism management/ travel and tourism, social psychology, and health sciences. The conceptual models found in the literature dealt with the role of the psychological characteristics of the individual in terms of his or her needs, perceptions, and motivation; such components are considered important contributors to the understanding of the individual's travel behavior.

The attitudinal dimension plays a crucial part in understanding the travel and tourism product (Pearce, 1982); researchers tend to agree with the fact that different individuals tend to perceive the same sets of products or services in different ways. Goodall (1991:73) notes that "holidays comprise bundles of attributes (destination, accommodation type, travel mode, activities, etc.) leading to benefits (and costs) of differential desirability to holiday -makers." Such diversity of needs, perceptions, and motivations requires the understanding of the formation of tastes and preferences of those in different market segments (Johnson & Thomas, 1992:45). Analyzing the different market segments' demands can be implemented through a "socio-economic approach" or by a "psychological approach" (Theuns, 1984); the socio-economic approach is based on variables such as income, level of education, age, marital status, and residence. The psychological approach classifies individuals into different groups of life styles; it is based on the use of psychological variables connected with subjects' responses to products or services (Lowyck, Van Langenhove and Bollaert, 1992:48). Such research methods strive to give an explanation of the individual's travel behavior/choice and build a bridge between the

demand and the supply side. In other words, market research serves the task of taking a heterogeneous market and looks at ways to divide its members into homogeneous groups consisting of individuals with similar characteristics (Oppedijk, Van Veen and Verhallen, 1986). The homogeneity enables organizations and destinations to focus more efficiently on relating their marketing mix to match with appropriate specific market segment's needs and wants (bridging demand and supply). Such a phenomenon is expected to generate mutual beneficial outcomes to both markets and suppliers. Theories that provide the general framework as well as conceptual and theoretical underpinnings for this research are presented in the next section.

Gunn (1988), in his book *Tourism Planning*, presented the functioning tourism system model **(Figure 1.1)**. In his model, Gunn depicts the importance of understanding the demand side of different market segments and matching it with supply. Basically, the demand side requires market research studies with the purpose of unveiling a segment's characteristics, preferences, needs, and wants. In other words, researchers, and consequently, practitioners need to realize how each market segment perceives and relates itself to the supply side. The latter consists of the following components: (1) Transportation, (2) Attractions, (3) Information/Promotion, and (4) Facilities/Services. Understanding the different needs and wants factors that push market segments to select specific types of the above mentioned supply components, coupled with the comprehension of how such segments are pulled by the above mentioned supply components allows organizations/destinations to undertake a better utilization of the marketing mix and furnishes them with a possibility to be more creative when it comes to product development.

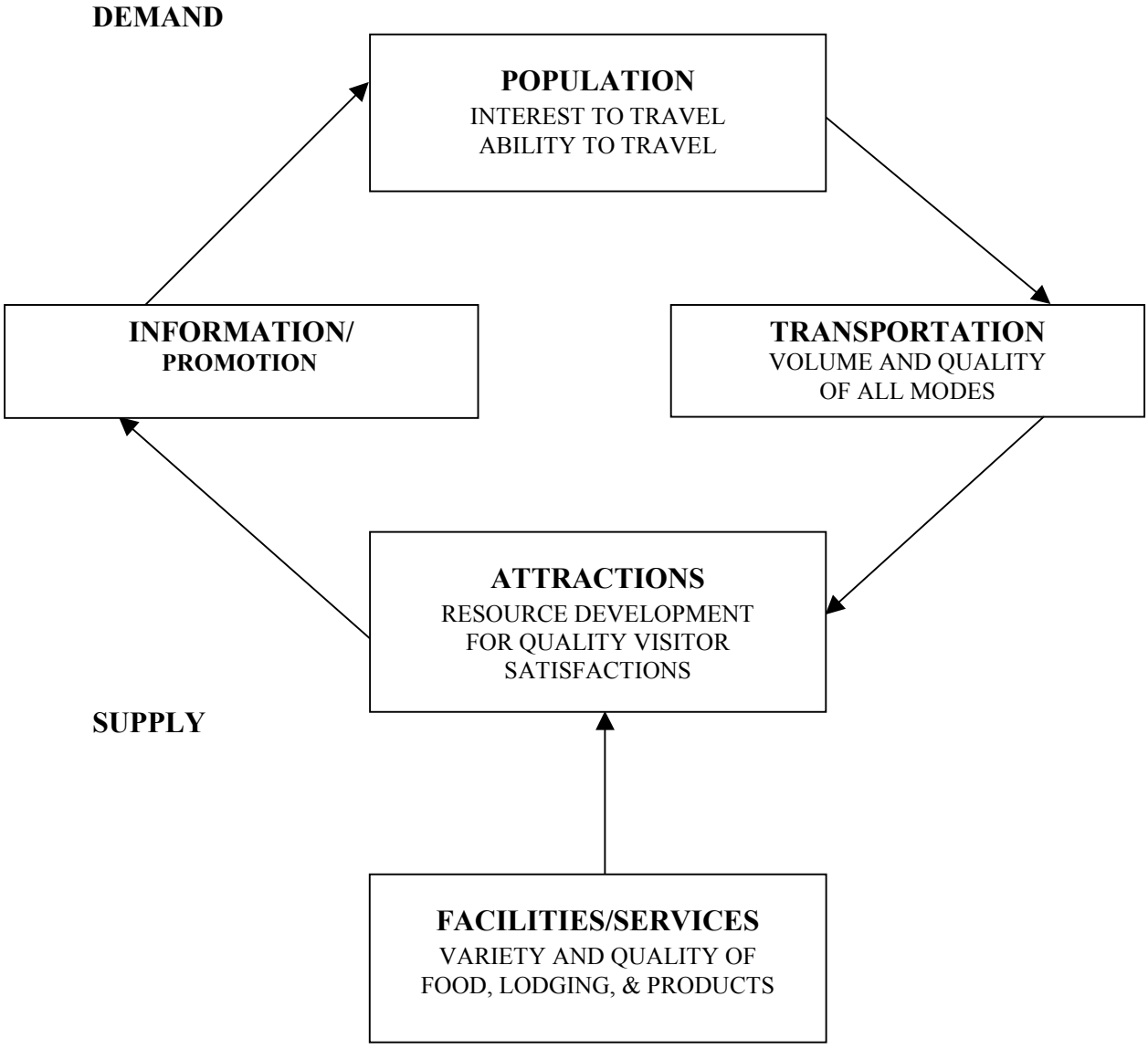

FIGURE 1.1 THE FUNCTIONING TOURISM SYSTEM
(GUNN 1988:68)

Pearce (1982), in his book *The Social Psychology of Tourist Behavior*, has looked at theories of motivation and travel motivation; he drew a link between the two mentioned theories through theoretical comparisons and therefore emphasized the relationship between the domains of tourist psychology and applied social psychology. He argued that the development of travel motivation models needs to be based on Maslow's self-actualization theory with additional input from achievement motivation and attribution theory. Maslow (1943) presented five classes of needs in a hierarchical fashion; they range from basic physiological ones, the lowest, to self – actualization the highest. Maslow states that the individual may partially satisfy the needs of one level before moving on to the higher one. Pearce (1982) asked researchers to examine closely such stages, especially the self-actualization step that portrays self-determination, and the notion of individual choice and realizing one's potential since such features transcend adequate motivational account of tourist behavior. The achievement motivation approach serves to clarify the question of long-term motives' roles. Pearce (1982) has relied on the work of Atkinson and Raynor (1975) in regard to achievement motivation, which depicts that motivation has to do with perceived positive results and incentive value stemming from future tasks and outcomes. Clawson (1963) reveals the achievement motivation approach by demonstrating that tourists plan their travel in advance, enjoy the immediate results of their traveling experience, and store long-term memories from their satisfactions even after the experience is over. In regard to attribution theory, Pearce (1982) emphasizes the importance of such a theory's connection to travel motivation since it encourages researchers to allow tourists the opportunity to express their own explanations of their behavior thus avoiding bias.

Mannell and Iso-Ahola (1987) have a model that shows two types of push and pull

factors: personal and interpersonal. Through their model, they present the argument that individuals are motivated to participate in leisure activities in order to escape from personal and/or interpersonal problems of their daily lives. In addition, they seek to acquire personal rewards such as self-determination, a sense of competence or mastery, challenge, learning, exploration, and relaxation and/or interpersonal rewards generated from their social interaction. Both kinds of rewards are thought to be the output of having participated in leisure activities.

Krippendorf (1987) has portrayed eight different theories that he has located in the tourism literature with connections to travel motivation; based on his research, travel is connected to the following features:

1. Escape
2. Recuperation and regeneration
3. Compensation and social integration
4. Communication
5. Freedom and self-determination
6. Self-realization
7. Happiness
8. Broadening of the mind

The scholar conveys his perception of two common features that link such theories. The first feature is that a traveler is induced to travel by his or her motivation to "go away from" rather than "going towards something"; the second feature is the self-orientation aspect of a traveler's motives and behavior characterized by the notion: "now I decide what is good for me".

Several other researchers (Gutman, 1982; Howard, 1977; Olson and Reynolds, 1983) have also looked at the means-end theory. The main focus of this theory is to build an understanding of consumers' thinking of products; in other words, the objective behind the theory is to find out about the important meanings consumers associate with products/services that they acquire and consume (Genler, Klenosky and Mulvey, 1993). The three levels of categories of meanings that are related to a product are the following: (1) Product attributes, (2) Consequences of product consumption, and (3) Personal values relevant to the consumer (cf., Olson & Reynolds, 1983). Product attributes convey concrete meanings and represent the product's physical characteristics. Consequences are more abstract meanings in that they convey the perceived benefits (or costs) that are linked with specific attributes (a running track may convey the feeling of being challenged). Personal values are highly abstract meanings in that they pertain to the individual's centrally-held beliefs which consumers strive to achieve by their purchase and consumption behavior (feeling challenged while swimming gives a sense of achievement or excitement) (Rokeach, 1973). Gutman (1982) presents the rationale of the means-end model by stating that individuals select products which produce desirable outcomes and minimize the undesirable ones; such desirability of outcomes or consequences are determined by one's personal values. Rokeach (1973) affirms that outcomes or consequences have negative or positive connotations based on their relationship to one's personal values. Therefore, the means-end theory's main focus is to connect a product's attributes to personal values which are regarded as key determinants of one's preferences and choice behavior (cf. Homer and Kahle, 1988; Henshel, 1971; Rokeash, 1973; Rosenberg, 1956; Wickert, 1940a, 1940b).

Dann (1977) addresses the question of "why do people travel?" In answering this question, Dann identifies two factors in an individual decision to travel: the push and then the pull factors. The push factors are the ones that push one or make one want to travel in order to satisfy a need. On the other hand, pull factors are those that pull one to some of the tourism supply components such as attraction or destination after the push has taken place. The pull factors are the ones that influence where one travels, but one needs to have the push or the initial motive to travel. So by answering the question "why do people travel?" Dann is looking at the push factors. The two basic tourism motivators that Dann emphasizes on are anomie and ego enhancement. Anomie serves the purpose of having social interaction, something that is not available at home whereas ego enhancement deals with one's desire to be recognized.

Uysal and McDonald (1989) stated the importance of pursuing the understanding of tourists which contributes in a substantial manner to the tourism industry; the mentioned scholars noted the importance of creativity in market segmentation techniques for such understanding to be better achieved. They have revealed the advancements in the area of segmentation and its accommodation to unlimited numbers of variables and attitudes. Such a phenomenon has certainly been contributing mutual benefits to both tourists/travelers and tourism/hospitality suppliers.

Uysal and Jurowski (1993) examined the nature of the interrelationship between push and pull factors that influence motivation for pleasure travel. The above mentioned scholars presented the reality that there is a reciprocal relationship between the mentioned factors (push

and pull). Based on their analysis, the attractiveness of the destination's supply components (pull factors) change with variations in motivational factors. And push factors get altered with the alteration of the destination's pull factors.

Oh, Uysal and Weaver (1995) presented the reciprocal relationship between push and pull factors as well. Through their research, they revealed the nature of such a relationship by stating how pull factors depend on the subject's motivation for attractiveness and at the same time by considering pull factors as motivators for one to seek the tourism experience. According to the authors, while an individual's intrinsic motivations may depend on the destination's attributes that aid in the fulfillment of such motivations, a destination's attributes depend on such motivations for their attractiveness.

Segmentation techniques facilitate the mentioned task through "dividing a potential market into distinctive consumers and selecting one or more segments as targets to be reached through distinct marketing mix" (Wilkie, 1986). Such phenomena should lead to a state of balance between desired specific markets' leisure/travel experiences and a reality of offerings. According to Woodside and Sherrell (1977) a segment needs: (1) to be measurable, (2) to have easy accessibility to such segment via advertising and channels of distribution, and (3) to present a sustainable source of business flow to offset investment. Laws (1992) stated the necessity to find out about the characteristics of visitors and the specific benefits they seek from acquiring tourism products/services. In other words, the destination's attributes and the individual's preference for such attributes are examined. According to McQueen and Miller (1985), the segmentation of tourists presents the opportunity to undertake appropriate promotional strategies

to satisfy a particular market segment's demands. Due to the importance of such marketing technique and its contributions to the tourism field, there are numerous studies in the field that undertake different variables in its segmentation strategies. The following studies serve as an example: product bundles (Oh, Uysal and Weaver, 1995), family group type (Ralston and Crompton, 1988), vacation attributes (Crask, 1981), benefits sought by travelers (Gitelson and Kerstetter, 1990), personal value systems (Madrigal and Kahle, 1994), gender (McGehee, Loker-Murphy and Uysal, 1996).

Looking at a market segment's travel behavior from a psychological perspective is to understand what travel means to such a segment (Pearce, 1982). Understanding individuals' perception and ranking of the tourism's system supply components leads to the formation of appropriate as well as tailored marketing techniques (Laws, 1991); this understanding also demands pinpointing the characteristics of specific markets and finding out about the benefits they extract from their tourism experiences

A trip is an experience during which an individual's central values and personality are expected to play a major role in shaping his or her journey. Holidays provide a free space and a fertile ground for establishing, cultivating, and nurturing one's human identity. It is thus natural to perceive one's travel behavior through one's personal values and personality. An individual's diet, exercise, sexual behavior, self-image, and other healthy-living related components are part of one's personal values and personality. A study of an individual's travel behavior and the possibility of one's healthy-living patterns in influencing such behavior will further our understanding of this substantially important but ignored facet of healthy-living and travel

behavior. Therefore, a conceptual framework of healthy-living and travel behavior is proposed and will be empirically tested. The conceptual framework is shown in **Figure 1.2**. The framework portrays the following constructs: travel behavior, healthy-living, and socio-demographic characteristics. The healthy-living components are portrayed in **Table 1.1**. The methodology will be discussed in chapter 3. The literature review will be provided in chapter 2.

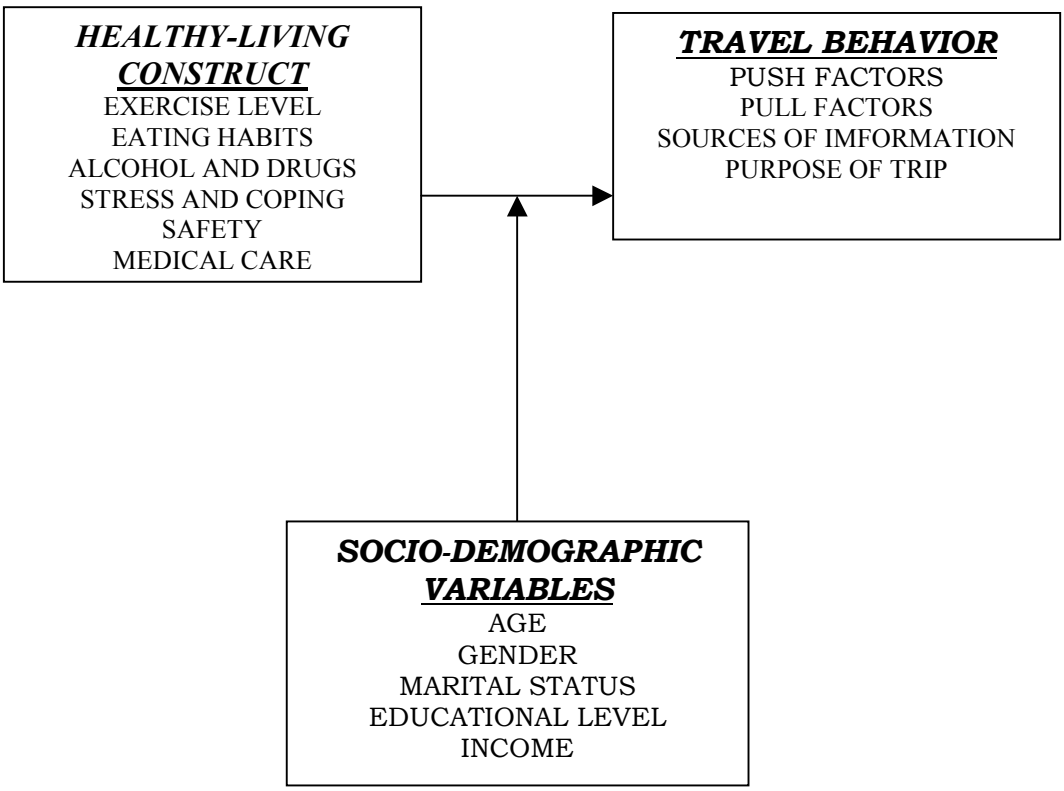

FIGURE 1.2: THE CONCEPTUAL FRAMEWORK OF HEALTHY-LIVING AND TRAVEL BEHAVIOR

Table 1.1: A List of Healthy-Living Construct's Variables

1. **Exercise Level:** aerobic and strength exercises.
2. **Eating Habits**: meat and protein foods, dairy products and eggs, desserts, cooking fats and food preparation, breads and grains, fruits and vegetables, fast foods, and salt.
3. **Alcohol and Drugs**: number of drinks and drugs (medications that affect one's mood, help one relaxes, or sleeps) and illegal drugs.
4. **Smoking Status**: smoking status (cigarettes, cigar, and pipe) and smokeless tobacco.
5. **Stress and Coping**: stress and coping, energy level, and happiness.
6. **Safety**: seat belts, sex, and drinking and driving.
7. **Medical Care**: sick days, personal physician, and sunburn.

1.5 PURPOSE OF THE STUDY

The guidelines to healthy-living have not been introduced in travel and tourism literature. This exploratory study is intended to shed some light on this unstudied field by drawing a connection between travel behavior and healthy-living. More specifically, the objectives of this exploratory study are:

(1) To develop a healthy-living attitudinal construct, and

(2) To examine the relationship between healthy-living constructs (attitudinal and behavioral) as well as socio-demographic variables and travel behavior.

1.6 RESEARCH QUESTIONS

To fulfill the above listed research objectives, the research questions of this study are as follows:

1) Are an individual's healthy-living behavioral characteristics associated with his or her travel behavior of push motivations?

2) Are an individual's healthy-living behavioral characteristics associated with his or her travel behavior of pull motivations?

3) Are an individual's healthy-living behavioral characteristics associated with his or her way of seeking a health-oriented travel information source when planning for a vacation or a travel experience?

4) Are an individual's healthy-living behavioral characteristics associated with the purpose of trips (including the number of trips) that he or she takes?

5) Are an individual's healthy-living attitudinal characteristics associated with his or her travel behavior of push motivations?

6) Are an individual's healthy-living attitudinal characteristics associated with his or her travel behavior of pull motivations?

7) Are an individual's healthy-living attitudinal characteristics associated with his or her way of seeking a health-oriented travel information source when planning for a vacation or a travel experience?

8) Are an individual's healthy-living attitudinal characteristics associated with the purpose of trips (including the number of trips) that he or she takes?

9) Are an individual's healthy-living behavioral characteristics associated with his or her socio-demographic characteristics?

10) Are an individual's healthy-living attitudinal characteristics associated with his or her socio-demographic characteristics?

11) Are an individual's healthy-living behavioral characteristics associated with travel behavior motivation factors (controlling for socio-demographic variables)?

1.7 THE CONCEPTUAL FRAMEWORK OF THE STUDY

In this study, a conceptual framework of ***Healthy-Living and Travel Behavior*** is presented. Formal theories of push/pull factors as well as previous research studies fuel the basis for the evolvement of the conceptual framework presented in **figure 1.2.** The framework includes variables that may have influence over an individual's travel behavior. The variables are the following: healthy-living (behavioral and attitudinal), and socio-demographic characteristics (as moderating variables). The healthy-living behavioral independent variable section is adapted from Wellsource, Inc. after its permission was extended. The healthy-living attitudinal scale (developed by the researcher) is based on the behavioral one. Both scales

include healthy-living components that are structured in line with recognized health and human services sources such as the Dietary Guidelines set by the United States Department of Agriculture and the United States Department of Human Services (1995). The mentioned scales contain components related to the following: exercise, eating habits, smoking status, stress and coping, alcohol and drugs, and medical care. One of its objectives is to measure an individual's standing on a healthy-living scale. The mentioned healthy-living components included in the conceptual framework are supported by different official health-related reports and articles. Some are the following: stress control and its effects, safe sex, preventive measures for skin cancer, car accidents' effects (seat belt and driving intoxicated), and recommendations for routine physical exams.

Socio-demographic variables, including conventional components related to the subject's age, income, gender, marital status and education, are moderating variables with a possible impact on an individual's travel behavior. As suggested by numerous previous research studies, socio-demographic characteristics alone cannot present a complete picture of a human being's travel behavior; for example, two individuals who have the same age and income might react differently to the same travel package. Tourism consumer behaviorists view the socio-demographic variable, if combined with other variables (in this case healthy-living), as a supportive element to explain an individual's pleasure travel motives and behavior.

The dependent variable of this study is travel behavior. The mentioned component is presented through elements connected to various social/psychological tourism motivational theories/studies'. For example, the push/pull model of tourist motivations provides ample

sources on activities, interests and opinions (AIO) as well as a destination's attributes and type of facilities. AIO is labeled as push factors whereas a destination's attributes and type of facilities are labeled as pull factors. Examples of a push factor's components include the following: AIO such as escape, rest and relaxation, self-esteem, interests, and sources of information. On the other hand, examples of a pull factor's components include the following: the destination's attributes and type of facilities such as climate, historic sites, cultural events and so on.

This conceptual framework proposes that an individual's travel behavior is a function of his or her status (behavioral and attitudinal) on the healthy-living's scale. Within this framework, socio-demographic components are considered as moderating variables.

The assumption of this study is that there is a relationship between an individual's healthy-living status and his or her travel behavior. The following section depicts the contribution of the study to the field of travel and tourism.

1.8 CONTRIBUTION OF THE STUDY

This study, building on previous work in consumer behavior and marketing, travel and tourism, health sciences, and social psychology, should have both theoretical as well as practical effects on the field of tourism and hospitality management.

Theoretical Advancement in Tourism and Hospitality Management

This study contributes to the theoretical advancement in the field of tourism and hospitality management by proposing and empirically testing its healthy-living and travel behavior conceptual framework. It is expected to add to the existing knowledge in the above mentioned fields by presenting a framework that explains the relationship between an individual's healthy-living status and his/her travel behavior in general. The introduction of the guidelines to healthy-living to the travel and tourism literature contributes to the uniqueness of this exploratory study.

Practical Application for Healthy-Living and Travel Behavior

It is anticipated that this project will create information that would be of value to destinations, tourism/hospitality managers, promoters and marketers, and tour operators in general. Knowing the nature of the connection between travel behavior and the influence of healthy-living on destination selections and preferences for product offerings will allow suppliers to better accommodate the specific needs of those travelers who consider health-related elements and healthy living attributes in their travel and recreational decisions. Such information may also be of value in customizing tour packages to meet the changing needs of this newly emerging market in hospitality and tourism.

1.9 LIMITATIONS/DELIMITATIONS OF THE STUDY

One delimitation of this study, related to the healthy-living component, is influenced by guidelines presented by the United States Department of Agriculture (USDA). For example, The USDA sets its own recommendations for daily dietary allowances portrayed through its own

food pyramid. Since countries may not necessarily follow the same guidelines, this study is limited to U.S. citizens 18 and older.

Another delimitation is that this study is attitudinal and behavioral in nature and touches lightly on medical care information and clinical tests related data but does not get into details related to the medical field. The healthy-living construct is mainly based on variables related to general personal health information such as exercise level, eating habits, alcohol and drugs consumption, stress, and coping.

Motivational studies can serve the purpose of drawing attention to some different needs that can motivate an individual's behavior. But it is important to keep in mind that such needs may only furnish a partial explanation of the motivated behavior. Therefore, it is fair to claim that needs are considered "a potential source of motivated behavior" (Witt and Wright: 44).

Due to the convenience sampling of this study, generalizations of the findings are limited to the individuals of the survey population and the study's geographical areas. However, since the focus of this study is to seek if there is a relationship between healthy-living and travel behavior, the notion of generality is secondary in nature.

1.10 ORGANIZATION OF THE STUDY

Chapter 1 presents an overview of the study that includes the background and statement of the problem, conceptual framework, and research questions. The conceptual framework of *Healthy-Living and Travel Behavior* is presented as well. In chapter 2, review of the literature related to healthy-living, socio-demographic characteristics, and travel behavior is discussed.

Chapter 3 conveys research hypotheses, research design, and methodology. The conceptual framework of healthy-living and travel behavior is re-visited. The sampling procedure as well as the measuring instruments and scaling are discussed. Finally, chapter 4 presents results and discussions, and chapter 5 ends with conclusion and implications.

CHAPTER TWO

LITERATURE REVIEW

INTRODUCTION

This chapter reviews the literature that gives support for the necessity of conducting such a study. Next, theories in the field of social psychology will be presented with the purpose to link the theoretical orientation of this study with the components of its conceptual framework. The review will proceed with looking at the literature related to a consumer's travel behavior and healthy-living variables; such process is supposed to support the theory that there is a relationship between one's healthy-living status and travel behavior.

2.1 RELEVANCE OF THIS RESEARCH

Practitioners, researchers, and marketers have always sought information that can provide feedback on an individual's travel behavior and his/her perception of tourism-related activities as well as amenities and facilities. Unveiling the motivating factor(s) behind a particular individual's travel behavior is considered vital to the purpose of defining the value of tourism behavior as well predicting and influencing future travel moves (Schreyer, 1986; Pearce, 1987; Uysal and Hagan, 1993). In other words, before attempting to explain an individual's travel behavior, his or her motivation needs to be clearly defined.

2.2 DEFINING MOTIVATION

Fodness (1994) states that motivation is the main driving force in interpreting an individual's behavior. In fact, motivational variables reveal information on some personal psychological components such as needs, benefits sought, expectations, and achievements.

Scholars have looked at the term "motive" as a collection of internal forces and external goals that guide, direct, and integrate an individual's behavioral pattern for the ultimate goal of a future satisfactory outcome (Murray, 1964; Atkinson and Raynor, 1975; Iso-Ahola, 1982; Hoyenga and Hoyenga, 1984; Pyo and Uysal, 1990). Therefore, motivation has interpersonal as well as physiological facets. Travel is expected to satisfy different levels of needs, such as psychological (intrinsic - personal and interpersonal rewards) and physiological (food, shelter, security/safety, culture, climate, education, health and fitness). In addition, travel is expected to offer the desired benefits, help meet expectations, and materialize achievements. It is of no surprise that recreation travel has been considered by several theorists as an activity that carries a psychological experience (Driver and Knopf, 1977; Dann, 1977, 1981; Crompton, 1979; Williams, 1986; Chon, 1989). Uysal and Hagan (1993) stated that desires are considered as recognized need. Travel motivation tells of an individual's attempt to satisfy his/her recognized need (Mill and Morrison, 1995). Therefore, a marketer does not create needs but influences the way the individual intends to satisfy his or her needs.

This psychologically-oriented tourism marketing research project is aimed at understanding a healthy-living market segment's consumption patterns, motives, expectations, and experiences when it comes to pleasure travel. Van Droen (1983) stated that the individual's motivations and cultural conditioning influence his or her urge to travel for the purpose of pleasure. The following section presents theories and previous studies related to both the behavior and motive of people traveling for pleasure. Such theories/studies form this research's theoretical base.

2.3 THEORIES/STUDIES IN PLEASURE TRAVEL BEHAVIOR AND MOTIVATION

The Model of Tourism System by Clare Gunn

The tourism system presented by Clare Gunn (1988) depicts the importance of understanding the interrelationship between demand and supply components in the field of tourism. Such comprehension is meant to lead to the presentation of supply components such as facilities/services, transportation, attractions, and information/promotion that are matching with a specific market segment's demand, and thus their needs and wants. The creation of a connection and linkage between a specific market segment's demand and specific supply components should lead to mutually beneficial consequences to suppliers and consumers alike. For consumers, this may lead to achieving better physical and social-psychological satisfaction from their leisure/travel experiences. On the supplier's side, this means a better positioning to cater to such a specific market segment's needs and wants and, therefore, a better competitive edge in the market. This is a scenario that may generate a better positive word of mouth and more profit in the short, as well as long terms.

Means-End Theory

Researchers have examined concrete and abstract factors that influence the destination that an individual chooses (Gearing, Swart and Var 1974; Goodrich 1977; Var, Beck and Loftus 1977; Crompton 1979; Dann 1981; Fisher and Price 1991; Lounsbury and Hopes 1985; Muller 1989; Pitts and Woodside 1986). Concrete factors represent the tangible aspects of a destination, whereas the abstract ones represent the intangible benefits or personal values sought to be satisfied from the experience. The Means-end theory (Gutman, 1982; Rokeach, 1973; Homer and Kahle, 1988; Henshel 1971; Rosenberg, 1956; Wickert, 1940; Klenosky, Gengler and Mulvey,

1993) looks at products' attributes (the means) and the perceived benefits as well as the personal values being reinforced from consuming them (the end). It attempts to link product attributes to personal values. The theory serves as a mechanism through which researchers may seek to understand the relationship between consumers and the products they acquire (Klenosky, Gengler and Mulvey, 1993). Such a phenomenon may serve as a tool to understand and therefore influence the individual's decision making.

Intrinsic Motivation and The Achievement Theory

Motivational theories may serve the need of helping to explain a tourist's behavior. For example, De Charms and Muir (1978) as well as Csikszentmihalyi (1975) emphasize intrinsic motivation as a means that aids in the study of an individual's travel behavior; such account emphasizes one's personal control and choice as well as self-direction and autonomy. Achievement motivation looks at long-term incentives and rewards when it comes to examining an individual's travel behavior as well as perceived images from the past (Atkinson and Raynor, 1975). The concern is not limited to looking at an individual's short-term results and immediate satisfactions from his or her travel experience.

The Attribution Theory

The attribution theory provides the framework through which researchers may avoid being biased. This is achieved by leaving subjects/tourists enough room to express their own explanations of their travel motives (Pearce, 1982). This theory avoids a common deficiency in research studies with a psychological orientation where the observer/researcher ends up interpreting a subject's travel behavior; such process may limit the subject's own self-

expression.

Crompton's Cultural-Social-Psychological Continuum

Crompton (1979) has undertaken a socio-psychological approach to explain tourists' motives to take a vacation; he has identified seven intra-individual forces with connection to promoting travel as follows:

1. Exploration and evaluation of self;
2. Relaxation,
3. Escape from a perceived mundane environment;
4. Prestige;
5. Regression;
6. enhancement of kinship relationships;
7. Facilitation of social interaction.

The main idea behind Crompton's theory is that prior to an individual's vacation, a disequilibrium is present in his or her cultural-social-psychological needs. The vacation's task is to bring equilibrium back to such needs. Therefore, the mentioned scholar emphasizes the need to consider the potential traveler's psychological needs (self-exploration; social interaction; sexual arousal; excitement) that need to be fulfilled first before stressing the destinations' features and its attractions. Therefore, it is logical and strategic to analyze potential markets' psychological needs (demand) before researching and portraying the supply components of a destination.

Scmidhauser's work on Sociological fulfillment through travel

Schmidhauser (1989) has identified key sociological functions fulfilled by participating in tourism-related activities. The four sociological functions are the following:

1. The compensation for key deficits that evolve from one's daily working routine. The mentioned deficits are the following: social, climatic (the urge for sun and warmth), movement/sport activities, closeness to nature, enjoyment of scenery, participation in outdoor activities, discovery and change, luxury or prestige, and lack of freedom;

2. The need to recover from physical and physiological stress and keeping physical and mental well being;

3. Widening one's horizons, satisfying one's curiosity and increasing the feeling of one's own value;

4. Self-reward and indulgence.

Lifestyle and Travel Behavior

Oppedijk, Van Veen and Verhallen (1986) have looked at lifestyle in determining a tourist's choice behavior. The authors stress the fact that demographic and socio-economic variables are no longer sufficient to explain and understand a consumer's travel behavior and therefore to segment a heterogeneous market into groups of individuals that are homogeneous. In other words, an individual's social position and age do not give the complete picture of why he or she goes on holidays and chooses specific destinations or specific types of tourism supply components. For such reason, a psychologically oriented form of market research has emerged as a way to group individuals into different categories of lifestyles. In a psychographic oriented research, life styles are defined as "distinctions in people's behavior" and are classified through

subjects' responses to "life style items" (Lowyck, Van Langenhove and Bollaert, 1992). Life style items may be constructed by researchers through the following of measures such as: (1) imagination, (2) in depth-interviews, and (3) scientific literature. Based on respondents' response to such life style items, the data obtained from subjects may then be segmented into different categories by means of factor analysis or hierarchic clustering. Such life style items may then be used as independent variables in a research project that has the objective of discovering its relationships with other variables or behavioral characteristics (Lowyck, Van Langenhove, and Bollaert, 1992).

Dalen (1989) surveyed 3000 Norwegian adults. The survey instrument contained questionnaire on subjects' beliefs about how to live and their objectives in life. Through multi-dimensional correspondence analysis, two dimensions were identified: the first one varies from modern to traditional, and the second one varies from materialistic to idealistic. Such dimensions divide the population into four segments: the modern materialists, the modern idealists, the traditional idealists, and the traditional materialists. Modern materialists seek suntan to create an impression upon returning home and do not have a fear of skin cancer. Individuals in this segment appreciate nightclubs and wild parties where they can meet new people. They pay more attention to beverages than food and have a preference for fast foods. They consider features such as sex, superficial entertainment and action important in a holiday. Modern idealists tend to demand excitement and entertainment with intellectual orientation. Features such as atmosphere, ambiance and good friends are indispensable. Modern materialists value culture, new destinations and experiences and shy away from mass tourism and fixed itineraries. Traditional idealists place importance on features such as quality, nature, culture,

history, famous places, peace and safety. They tend to select packages with cultural features and visit family members.

Cohen's Types of Tourists

Cohen (1972) states that there are four types of tourists who fall on a spectrum that range from seeking novelty to pursuing familiarity in their travel experiences. The segments that he has identified are the following: the organized mass tourist, the individual mass tourist, the explorer, and the drifter. The first two segments tend to be the "institutionalized" type and the last two are the "non-institutionalized" type. The "institutionalized" type tends to be more dependent on his or her "environmental bubble", prefers package tours, and itemized itineraries. But the individual mass type tends to be slightly more open to novelty than the organized mass one. On the other hand, the "non-institutionalized" segment tends to be more eager to explore the local culture and embraces more novelty. The drifter type within this segment tends to shy away completely from "tourist establishment" or the" institutionalized" type of tourism and therefore he or she is positioned to be someone who embraces extreme novelty in the travel experience.

Personality Type and Travel Behavior

Plog (1987) addresses personality type and its links to travel behavior and preferences. Plog presented a spectrum that ranges from "the psychocentric" to "the allocentric" types. Between the two mentioned extremes fall "the near-psychocentrics", "the mid-centrics", and "the near-allocentrics". According to Plog, "the psychocentric" type is considered to be an individual who tends to concentrate on life's small problems, is bound to a specific location, has generalized anxieties and a sense of powerlessness. Whereas the allocentric type is someone who

is characterized as self-confident, has an open spectrum on life, enjoys discovery and new experiences, and is more versatile. When it comes to travel preferences and behavior, "the allocentric" and "near-allocentric" types tend to favor exotic places and the discovery of new cultures as well as the exploration of a new lifestyle. Plog notes that theme tourism such as theatre tours, as well as the convention and business market, tends to fall in the "near-allocentric" category. On the other hand, "the mid-centric" segment tends to value comfort and familiarity in its travel experience. Individuals within such segment tend to view a travel experience as a means to relax and get pleasure. "The near-psychocentric" and "the psychocentrics" types tend to use travel as means to enhance their social status. Individuals in the mentioned category tend to frequent famous tourist attractions. Individuals who are in the "near-psychocentric" and the "psychocentric" categories tend to frequent famous tourist attractions.

Plog (1987) emphasized the importance of incorporating psychographic/personality dimensions into travel research. The scholar presented the mentioned dimensions through his portrayal of eight different types of tourists. The eight types are the following:

1. Venturesome;
2. Pleasure-seeker;
3. Impassive;
4. Self-confident;
5. Planfull;
6. Masculine;

7. Intellectual;

8. People-oriented.

The Venturesome is inclined to explore and seek new features and tend to be the first to travel to an emerging destination. The pleasure-seeker demands comfort and luxury in components such as lodging services, entertainment, and transportation during their travel experience. The impassive is noticed for undertaking travel decisions fast and without advanced planning. The self-confident is receptive to undertaking different kinds of activities through his or her selection of unusual destinations and activities. The planfull tends to plan well in advance and is more inclined to purchase pre-packaged tours. The masculine is immersed in active leisure itineraries such as camping, hunting, and fishing. The intellectual dedicates a good amount of attention to a destination's historic and cultural aspects. Finally, the people-orientated is eager to establish contacts with locals when he or she travels.

AIO, Vacation Travel and Demographic Characteristics

Perreault, Darden, and Darden (1977) have undertaken a research project that consists of three parts: (1) vacation behavior, (2) socio-economic characteristics, and (3) activities, interests and opinions (AIO) in regard to leisure time, vacation activities, and general behavior pre-dispositions. Through the statistical technique of cluster analysis, five distinct groups with different types of vacation orientation have been identified. The groups are the following: budget travelers, adventurers, homebodies, vacationers, and moderates. Budget travelers tend to have medium income, seek travel information and tend to be economy-oriented with a high interest in camping. Adventurers tend to be money-oriented, have high income, and are well educated. Homebodies enjoy relaxing and show no interest in vacation travel and therefore tend

not to seek information related to travel and are not adventurous. They have good incomes. Vacationers tend to plan their vacations ahead of time and dedicate a fair amount of thinking about its features. They are considered active and have lower-paid jobs with less education. Moderates have a good level of interest in travel but do not prefer weekend travel or sports. Thus, they have no active lifestyle.

Mill and Morrison's Travel Motivation Theory

Mill and Morrison (1985) looked at travel as a means through which an individual's need or want is satisfied. According to Mill and Morrison, an individual may have a need that he or she is not aware of which gets to be translated into a want; for example, an individual having a need for affection that gets translated into wanting to visit family and friends. According to Mill and Morrison, motivation is defined as a phenomenon that takes place when an individual seeks to satisfy a need. The authors perceive an interrelationship between Maslow's hierarchy of needs and travel motivations. Within such context, the need to travel with the objective to escape or relieve tension is regarded as a means to satisfy basic physiological needs. On the other hand, travelling for health reasons is regarded as a way to satisfy one's needs for safety. Mill and Morrison (1985: 4) draw a clear picture of motivation by stating that "motivation occurs when an individual wants to satisfy a need".

Maslow's Hierarchy of Needs

Maslow (1943) presented his theory of the hierarchy of needs and the means to explain them. From such a theory, one may clearly perceive how motivation is regarded as the concept of need. The latter is considered the engine that arouses motivated behavior. The six levels of

needs are the following:

1. Need for self-actualization;
2. Need for self-esteem;
3. Need for recognition or status;
4. Need for belonging;
5. Need for safety or security;
6. Need for physiological requirements.

Hudman (1980) recognized Maslow's theory inclusion of major push factors for travel. Within this hierarchy, self-actualization depicts a human's quest for choice and self-determination as well as spiritual values. Travelling for the purpose of enhancing one's health relates to satisfying emotional and security needs. Self-indulgent travel has links to satisfying physiological and love/belonging needs (The psychology of tourist behavior).

Westvlamms's Research on Travel Motivation

Westvlaams Ekonomisch Studiebureau (1986) has undertaken a research project in which 3000 Belgians were interviewed about their demographic, socio-economic, expenditure, and other behavioral patterns. The Interviewees were asked questions linked to their short holidays (outside their area of residence for at least one and less than four successive nights) as well as during their regular ones (outside their area of residence for at least four successive nights). In addition, subjects were asked to specify the degree of importance they attach to 29 listed holiday ingredients. Through the statistical technique of cluster analysis, and in relation to the specific degree of importance given, seven clusters were created. The clusters are the

following:

1. The active sea lovers;
2. The contact-minded holiday makers;
3. The nature viewers;
4. The rest-seekers;
5. The discoverers;
6. The family-oriented sun and sea lovers;
7. The traditionalists.

Subjects belonging to each cluster conveyed a preference for specific types of features and activities. For example, active sea lovers tend to value the presence of the sea and the beach as well as sports and "going out." The contact-minded holiday makers attach high importance to a hospitable reception, meeting new people, and "making time for each other". The nature viewers value visits to beautiful landscapes but tend to be indifferent to the reception component. The Rest seekers seek rest to recapture their strength. They enjoy walking. The Discoverers attempt to initiate contacts with people, enjoy cultural holidays, and value adventure. The family-oriented sun and sea lovers enjoy beautiful scenery, tend to allocate time to each other, value a kind reception, appreciate good food, and look for "child-friendly" activities. The traditionalists place importance on safety and security and favor familiar surroundings as well as rest and good food.

American Express's Cross-cultural study on Travel Motivation

In a study sponsored by American Express (1989), 6500 adults in the United States of America, former West Germany, the United Kingdom and Japan were interviewed. The selection of the specific four countries was based on the fact that they spend the most on tourism and their citizens are the most international travelers worldwide. The findings of the study presented five types of travelers. Each type seeks unique experiences. The interesting feature is that members in each group share the same needs regardless of their origin, destination, or the frequency of their travel. The groups are the following:

1. Adventurers;
2. Worriers;
3. Dreamers;
4. Economizers;
5. Indulgers.

Adventurers are found to be independent and confident. They like to meet new people, interact with different cultures and undertake new activities. Findings revealed that the members of this group tend to be more educated and more affluent. Travel plays a central role in their lives. They are mostly males and younger than other travelers. The second segment pinpointed is the worriers. They tend to be easily stressed due to travel decisions and arrangements and experience fear of flying. It was observed that individuals in the mentioned segment tend to be less educated and less affluent than others. They also tend to lean more on domestic travel and are considered the least travelers. Individuals in this segment are predominantly females and are

older than other travelers. The third group is labeled as Dreamers. They are more inclined to relaxation than adventures and are fascinated by travel. But they tend to talk more about travel than they actually get involved in. Individuals in this group have a modest level of income and education, and consist mostly of women aged 50 and older. Dreamers are heavy consumers of travel guides and books when exposed to new destinations. The fourth group found is the economizers. They look at travel as a means for relaxation but do not attach a meaningful connotation to it. Economizers are price conscious and portray reluctant behavior to pay more for extra amenities and services. They have average income level and below average in education; they consist more of women than men and tend to be older. The fifth group found is labeled as the indulgers. This segment is considered as wealthier than others and portrays willingness to pay for extra comfort and level of service. Individuals in this segment tend to be more inclined to stay in large hotels and resorts due to their appreciation of being pampered. This segment is ranked second after adventurers in regard to the frequency of their trips, and they are equally divided among women and men.

Wanderlust and Sunlust

Gray (1970) has identified through his research two reasons for pleasure travel: "wanderlust" and "sunlust". "Sunlust" is linked to the interest of travel with the purpose to seek different or better amenities than those existing at one's local destination. "Wanderlust" is connected with the human being's nature to desire to leave the familiar and discover different cultures and destinations. Gray (1970:14) has listed some of the attributes that "wanderlusters" and "Sunlusters" seek when they travel:

Wanderlust

- May Visit several countries
    - *More interest in foreign travel*
- Travel is an essential component throughout the visit
- Usually have an interest in Educational Programs
- Interested in staged-artificial physical attributes (climate is unimportant)
- Searches for different cultures, institutions and authentic cuisine

Sunlust

- Usually visit only one country at a time
- More interest in domestic travel
- Travel is a minor component after one's arrival at the destination
- More interest either in rest and relaxation or being extremely active
- More interest in nature-made attributes (climate is important)
- Seeks domestic amenities and lodging facilities

Mcintosh and Goeldner's Study on Travel Motivation

Mcintosh and Goeldner's study (1990) on travelers' motivations generated four basic motivation categories: (1) physical, (2) cultural, (3) interpersonal, and (4) status and prestige.

The category of physical motivation emphasizes one's quest to travel for physical-related purposes such as: rest, recreation, health and fitness, and sports. The category of cultural motivation directs its emphasis on one's curiosity to discover the features of different cultures, societies, destinations, and environments. The category of interpersonal motivation depicts the desire to establish relationships with new individuals and maintain links and relationships with current friends and relatives as well as to escape. The category of status and prestige motivation deals with an individual's attempts to strengthen his or her self-esteem and personal development through educational and informative settings such as business meetings, conventions and educational seminars.

Iso-Ahola's Model of Social Psychological Theory of Tourism Motivation

Iso-Ahola (1980, 1982, 1989) pinpointed that the individual seeks to satisfy personal and interpersonal needs by capturing rewards related to such needs (intrinsic rewards) as well as by escaping the daily life problems related to such needs. According to Iso-Ahola, rewards and escape are the two main determinants of tourism behavior. The above mentioned scholar specified the rewards of self-determination, sense of competence or mastery, challenge, learning, exploration and relaxation as those connected to personal rewards. On the other hand, social interaction is connected to interpersonal rewards. His *Seeking and Escaping Dimensions Model* consists of two dimensions: Seeking and Escaping. The model's four quadrants are:

Quadrant I:	Need to escape interpersonal environment (such as friends)
Quadrant I:	Desire to seek personal rewards (such as rest and relaxation)
Quadrant II:	Desire to seek intrinsic rewards
Quadrant III:	Need to escape personal problems (such as personal problems and difficulties)
Quadrant III:	Desire to seek interpersonal rewards(such as cultural or group activities)
Quadrant IV:	Desire to get away from everyday environment

Iso-Ahola (1989) states that each quadrant by itself or along with other quadrants is the force that drives an individual to travel.

The following sections of this chapter portray literature on elements related to variables in the conceptual framework depicted in **figure 1.2**.

Goodrich's Study on Health Tourism

Jonathan Goodrich has addressed in his studies issues related to health tourism (Goodrich and Goodrich, 1987; Goodrich, 1993). According to Goodrich, health tourism may be defined as "the deliberate attempt on the part of a tourist facility (e.g. hotel) or destination (e.g. Baden, Switzerland or Bath, England) to attract tourists by promoting health-care services and facilities in addition to regular tourist amenities (Goodrich, 1993:37). The author has provided a listing of health-care services provided by such tourist facilities or destinations **(figure 2.1)**. Goodrich through his research has conveyed the motives of travelers in acquiring "curative properties and relaxation" or "to be cleansed physically and spiritually" when going to rivers and mineral springs or when bathing in the following rivers: the Nile, the Ganges, the Yangtze, and the Jordan River. Hembry (1990) has written about the ancient English individuals' motives behind visiting Bath in England, which is to be able to enjoy the healthy benefits of bathing in warm springs and mineral waters. The mentioned supply components are believed to offer a

cure for diverse health problems such as skin infections, poor digestion, and rheumatism (Goodrich, 1993). As a response to a more health-conscious market segment, many cruise lines and hotels have complemented their already existing exercise facilities with fitness and wellness seminars and programs (Goodrich, 1993).

Travel Motivation Related To Segmentation

Some researchers with interest in the study of travel motivations have looked at an individual's travel motivations in relation to segmentation. For example, one study used life cycles to group subjects in categories according to their stages in life. The emphasis in such approach is on the individual's stage of life rather than on his or her age and its relation to travel motivation. In other words, the focal point is how one's position in one of the stages of life may affect his or her travel behavior/motivations. Hill et al. (1990) examined motivational factors with influence over resort vacation and how they vary among individuals in different stages of life. The researchers looked at four stages of life: (1) single –no children, (2) married – no children, (3) single with children, and (4) married with children. Results obtained from their research revealed no significant differences among individuals from the listed stages of life in regard to the following motivational variables: relaxation, escape, novelty, education, and prestige. According to the input conveyed by the different subjects, it was found that relaxation and escape are the most important to every life cycle. On the other hand, novelty, education, and prestige are, relatively speaking, rated as unimportant by all subjects in the different stages of

Medical examinations in the hotel (cholesterol levels, diabetes, blood pressure, etc.)
Vegetarian or special diets
Transvital injections, and vitamin-complex treatment
Daily exercise programs
Yoga
Acupuncture
Thermal swimming pools (indoor and outdoor)
Underwater massage (balneotherapy)
Body massages
Cellulite treatments (cellutron)
Saunas
Hydrotherapy
Fango packs (mud)
Special stop-smoking programs
Various baths (e.g., eucalyptus bath, and Turkish bath)
Herbal wraps and herbal teas
Use of sun-bed under supervision
Sessions on muscle development and relaxation techniques
Beauty treatments, such as facials, cream packs, face peeling, etc.

Figure 2.1 A sample of health-care treatments offered by some hotels or resorts (Goodrich, 1993:38).

life. The major findings revealed through the mentioned research project is that the variable "enhancement of kinship relationships" tends to be more valued by those who are married than those who are singles. Singles tend to attach more importance to health and social variables in their travels.

In a study undertaken by Uysal et al. (1990), marital status with an age component was undertaken as a variable to incorporate in a travel motivation-oriented study. The objective was to look at motivation and activity differences in a resort environment between subjects who are married and 50 years old or older singles. The study revealed that both categories value "having fun and being entertained" as well as "escaping the pressures and responsibilities of daily life." These attributes are regarded as the major motivators for visiting a resort by both populations. In fact, the attribute of rest and relaxation was ranked number one by both groups. One noticeable fact is that single subjects tend to place more importance over the "having fun" and "being entertained" attribute. Whereas married subjects tend to value more "spending time with someone special" and "family togetherness" than the above mentioned variables. From the mentioned studies on segmentation and travel motivation, one may well notice the incorporation of socio-demographic variables in some of the travel motivational studies (marital status or age or other socio-demographic variables).

Cha, McCleary, and Uysal (1995) examined motivations that carry influence over the Japanese market's selection of a tourist destination. The authors identified six motivational factors that explained about 50 percent of the total variance; in addition, three clusters were identified: (1) sports Seekers, (2) Novelty Seekers, and (3) Family/Relaxation Seekers.

Demographic variables such as age and education strengthened the clusters. The authors used posteriori segmentation techniques on such segments.

In another study, Jurowski, Uysal and Noe (1993) undertook the statistical technique of posteriori segmentation to pinpoint travelers' preferences for sites in the U.S. Virgin Islands National Park. Two clusters were identified: a Conservationist type, one that appreciates more nature-made features and wildlife; and a Consumptive/Tour Type, one with an inclination to indulge in tourism services and facilities.

According to Johnson and Thomas (1991), the destination is comprised of different attributes or pull factors such as accommodations, attractions, foodservice establishments, and recreational facilities that are perceived differently by different segments in the society. The benefits sought by one segment from the above mentioned pull factors might not be the same ones sought by another segment. It is therefore imperative to look at the individual's specific push factors through which his or her needs, perceptions, and motivation are revealed. Such an account conveys well the reality that the market is highly segmented and that the segments are not only based on demographic (socio-economic) characteristics but on psychographic (behavioral/motivational) ones as well. The two characteristics are needed in order for an understanding of a consumer's choice behavior is materialized. Having looked at a selection of travel motivation-oriented studies, the following section looks at the concept of push and pull factors and their links to tourism marketing.

2.4 PUSH/PULL FACTORS OF TRAVEL MOTIVATION

Uysal and Hagan (1993) stated the important role that push and pull factors play in travel motivations. The mentioned authors have looked at push and pull factors as internal and external "forces" that play a vital role in people's travels. Push factors are interpreted as the "socio-psychological constructs of tourists and their environments that help explain the desire to travel" (McGhee, Loker-Murphy, and Uysal, 1996: 46). In other words, push factors help interpret "how individuals are pushed to making a travel decision", whereas pull factors clarify how "they are pulled or attracted by the destination area" (Uysal and Hagan, 1993: 801). Push factors tend to be more of intrinsic nature such as the desire to escape, rest and relaxation, prestige, health and fitness, adventure, and social interaction (Uysal and Hagan, 1993). Lundberg (1990) looked at push factors as intangible desires portrayed by the individual. Cohen and Taylor (p.37) have looked at push factors through the contribution of holidays for "the nurturance and cultivation of human identity". Holidays may be considered as a means to escape daily pressures and to further develop one's self-determination and identity through the individual's involvement in activities that meet his or her particular inner needs. Hill (1965) stresses the concept of "internal goods" being carried with visitors back home after a trip. The internal goods are the intrinsic rewards felt after satisfying certain psychological needs. Some of the theories presented in previous sections also depict the concept of push factors in travel motivation. Hudman (1980) stated that Maslow's hierarchy of needs theory (presented in the previous section) with its components such as self-esteem, belonging, self-actualization, recognition, and status form the basis for an individual's internal motivation to travel (push factors). Dann (1977) has identified two major needs (push factors): anomie and ego-enhancement. They both transcend from the concept of escape and ego-enhancement. Anomie needs stem from the fact that individuals are

living in an anomie society which provokes a need to seek social interaction that is lacking locally; given such a fact, individuals travel away from their local residence to seek the satisfaction of such a need. On the other hand, ego-enhancement stems from the need to be recognized. An individual may seek a travel experience as a means to satisfy such a need by being catered to or to be able to live in a world of fantasy. Pizam et al. (1979) stated that travel motivation consists of certain needs that push an individual to take an action - travel. Uysal and Hagan (1993) stressed the importance of comprehending the factors that push an individual to travel. Such comprehension is believed to aid destinations in developing suitable marketing strategies and opportunities that meet a particular segment's push factors. The importance of considering pull factors has emerged due to such theoretical justifications.

Smith (1983) stated that pull factors consist of tangible components such as beaches, recreation facilities, and cultural attractions as well as travelers' perceptions and expectations that may consist of novelty, benefit expectation, and marketed image of destinations. Pull factors are thus considered the supply components of a tourism system that cater to and also support the motivational factors of push factors. The destination capitalizes on its pull factors as a "drawing power" in the perception of the traveler (Uysal and Hagan, 1993). In other words, the potential traveler has to attach weights or value to such factors in order for them to be considered attractive. In order for such aspect to occur, such pull factors need to cater to the potential traveler's push factors or motivational factors. In other words, a destination's characteristics may "respond to, stimulate, and reinforce the inherent push factors motivations" (McHehee, Loker-Murphy, and Uysal, 1996:46). Marketers, researchers and promoters of destinations strive to understand the implications of a match between push and pull factors. Such

understanding fosters tourism marketing and development as well as the generation of tourist satisfaction from the leisure experience. (Uysal and Hagan, 1993) provided a model which portrays examples of push and pull factors with their influence on the traveler **(figure 2.2).** According to the authors, push factors consist of the following variables: 1. Motivations (AIO), 2. Socio-economic and demographic, and 3. Market knowledge. Pull factors consist of the following variables: 1. Destination attributes and type of facilities, 2. Accessibility, and 3. Marketed image.

The authors stress the importance of understanding the implications of the intersection of such factors (push and pull) which could be utilized by promoters of activities that reflect motives and destination attributes. Pyo, Mihalik and Uysal (1989) undertook a research project that demonstrated the possibility to combine attraction attributes with motives. In their quest to demonstrate the relationship between motives and destination attributes, the researchers undertook canonical correlation analysis. The research's outcomes proved the possibility for a combination. For example, one of their four variates displayed that tours to museums and galleries should appeal to the individual's intellectual needs. On the other hand, places that portray attributes of outdoor recreation, night-life features, and amusement parks need to focus on the market's social and stimulation motives. One can clearly conclude that the tourism industry is demand-driven. In order for developers and marketers to understand the genuine prospects for such industry, an understanding of the demand factor and the consumer's decision making is an essential element (Pearce, 1982). Based on such comprehension, demand should fuel prospects to develop the supply side and to formulate relevant marketing strategies. Therefore, it is clear that supply and demand are highly interconnected; in order for a successful

tourism-related development and marketing projects to prevail, such bridging between the two sides needs to be built.

One of the psychologically-oriented tourism marketing research concerns is to understand consumer types, motives, expectations, and experiences. Such understanding aids in revealing information related to various segments' decision making process and their destinations and leisure activities choice.

The next section presents the healthy-living variable that is depicted in the Healthy-Living and Travel Behavior conceptual framework. The variable is presented with its various components.

MOTIVATIONS (AIO)

ESCAPE
REST AND RELAXATION
SELF-ESTEEM
PRESTIGE
HEALTH AND FITNESS
ADVENTURE
SOCIAL INTERACTION
BENEFITS
INTERESTS
BENEFIT EXPECTATIONS

SOCIOECONOMIC AND DEMOGRAPHIC FACTORS

AGE, GENDER, INCOME, EDUCATION, FAMILY LIFE-CYCLE AND SIZE, RACE/ETHNIC GROUP, OCCUPATION, SECOND HOME OWNERSHIP

MARKET KNOWLEDGE

Destinations Attributes and Type of Facilities

CLIMATE
HISTORY SITES
SCENIC BEAUTY
SUNSHINE
BEACHES
SNOW
CULTURAL EVENTS
RECREATIONAL OPPORTUNITIES

ACCESSIBILITY

MARKETED IMAGE

FORMED NEGATIVE/ POSITIVE DESTINATION IMAGES

QUALITY OF SERVICES

QUALITY OF FACILITIES

FIGURE 2.2 MODEL OF PUSH AND PULL TOURISM MOTIVATIONS – EXAMPLES-. (UYSAL AND HAGAN 1993:800).

2.5 HEALTHY LIFESTYLE

The Dietary Guidelines for Americans were presented to the public by the United States Department of Agriculture and the United States Department of Health and Human Services with the objective to help Americans determine healthy food choices (USDA & USDHHS, 1995). According to USDA, The Guidelines came as a response to the concerns raised by health professionals about Americans' eating habits in general. Professionals viewed the risk in the consumption of diets that are high in fat (especially saturated fat), cholesterol, and sodium with less emphasis on complex carbohydrates and fiber. Such a type of diets has caused high rates of obesity, heart disease, high blood pressure, diabetes, and some kinds of cancers.

The current Dietary Guidelines for Americans, first introduced in 1980, emphasize getting sufficient protein, starch, fiber, vitamins, and minerals, but limiting the intake of fat, sugars, and sodium (USDA & USDHHS, 1995). Alterations from the original guidelines represent refinement of wording rather than any substantive changes. The alterations are the following:

"1. A daily food guide with suggested numbers of servings,

"2. More help for determining a "healthy" weight, including an easy way to check your body weight,

"3. Practical suggestions that focus on foods (such as vegetables and fruits) rather than food components (such as starch and fiber),

"4. More emphasis on physical activity, with an updated activity chart showing calories used per hour,

"5. Numeric goals for total fat and saturated fat intake, and

"6. A definition of "moderate" drinking for women and men." (USDA, 1993: 3)

Lifestyle is defined as the individual's "integrated way of life" and has both attitude and material possession notions (Cholesterol Watch, 1991). A lifestyle is labeled as healthy or healthy-living oriented if it looks seriously and deals with facets such as: abnormal cholesterol levels, poor diet, inadequate exercise, high blood pressure, smoking, excessive drinking and stress (Cholesterol Watch, 1991).

HEALTHFUL DIET - The Food Guide Pyramid

According to the United States Department of Agriculture and the Department of Health and Human Services (1995), healthful diets are those "that contain essential nutrients and calories needed to prevent nutritional deficiencies and excesses. Healthful diets also provide the right balance of carbohydrate, fat, and protein to reduce risks for chronic diseases, and are part of a full and productive lifestyle" (P. 3). The Food Guide Pyramid **(figure 2.3)** is presented by the United States Department of Agriculture in its efforts to clarify to the American public the formula to optimal Dietary Guidelines and to aid them in selecting foods that provide them with the recommended intake of essential nutrients (Hertzler and Anderson, 1974). The Food Guide Pyramid "translates the Recommended Daily Allowances (RDAs) into the kinds and amounts of food to eat each day" (USAD/USDHHS, 1995: 4). The pyramid consists of the following categories:

1. Bread, Cereal, Rice, and Pasta Group;
2. Fruit Group;
3. Vegetable Group;

4. Meat, Poultry, Fish, Dry Beans, Eggs and Nuts Group;

5. Milk, Yogurt and Cheese Group;

6. Fats, Oils, and Sweets Group.

According to USDA, The individual needs vitamins and minerals as well as protein, fat, carbohydrate and water to be able to remain healthy. Carbohydrates include starches, sugars and dietary fiber; they provide the body with energy. Proteins are essential for the growth, maintenance, and replacement of body cells and form hormones and enzymes that help in regulating body processes. Fats fuel the body with energy and carry the fat-soluble vitamins. They help in the formation of cell membranes and hormones. The human body needs vitamins in small amounts. They help in the releasing of energy from carbohydrates, fats and proteins. Minerals do not supply energy but aid in building strong bones and teeth and make hemoglobin in red blood cells. They also maintain body fluids. Water is essential for replacing body water lost in urine and sweat. It also aids in supporting the following important tasks: transporting nutrients, removing wastes and regulating body temperature. A calorie is a measure of the energy.

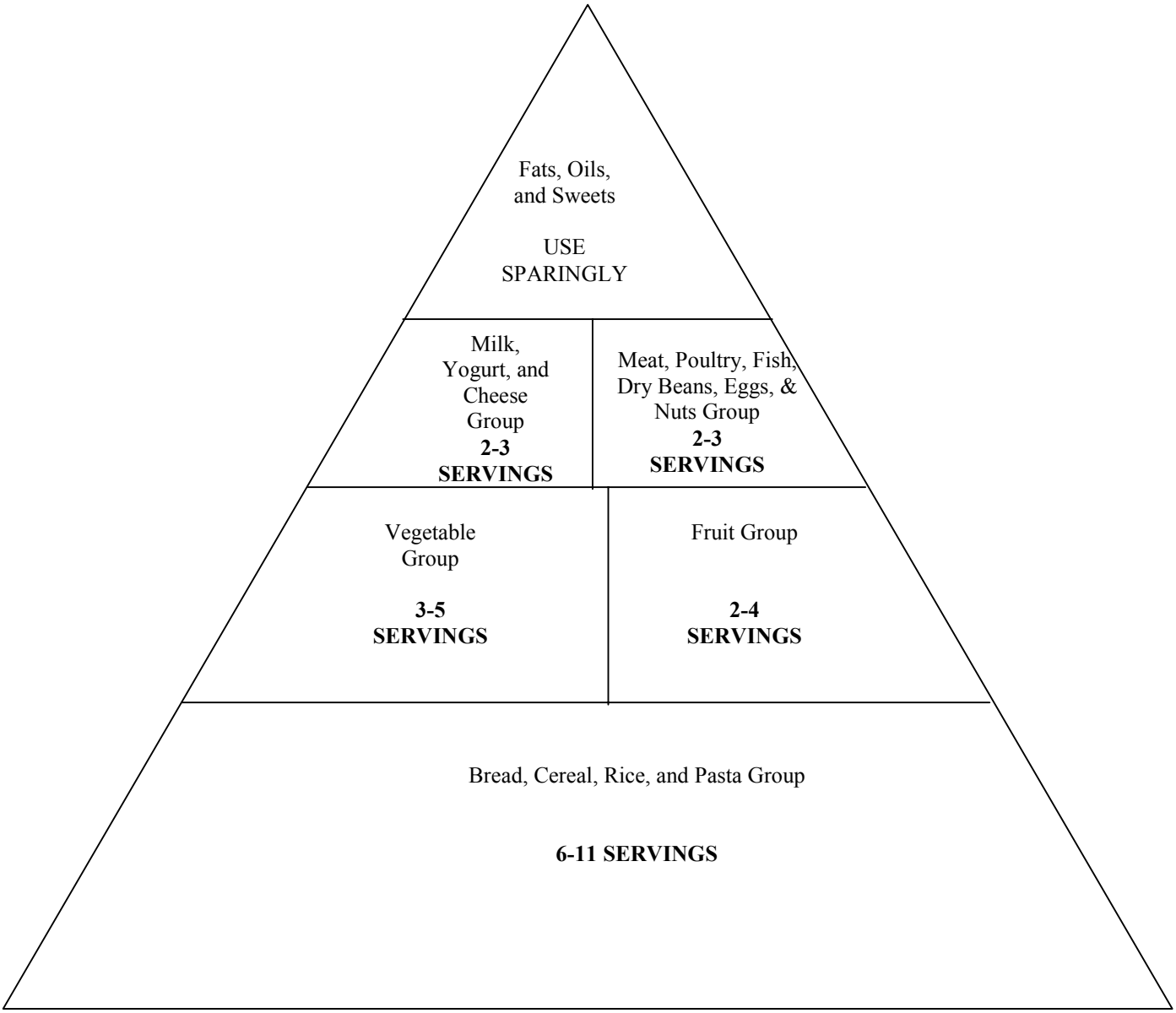

FIGURE 2.3: NUTRITION AND YOUR HEALTH: DIETARY GUIDELINES FOR AMERICANS (USDA & USDHHS 1995:5)

Since no single food item can supply all the needed nutrients, the food pyramid displays the recommended number of daily servings from each of the five major food groups. The number of servings that are suitable for a specific individual depends on the number of calories needed, which has connections with age, sex, size, and activity level. However, it is suggested for every individual to consume at least the lowest number of servings listed under each group daily. The top of the recommended range is for active man or a teenage boy. The count for each serving from each group is presented in **(Table 2.1)**. The important message conveyed by the Pyramid is that healthful diets take foods from grain products (6-11 servings) along with vegetable (3-5 servings) and fruit (2-4 servings) as the basis. It is believed that such items provide vitamins, minerals, complex carbohydrates (starch and dietary fiber) and other nutrients and healthful substances that are relatively low in calories.

FAT AND CHOLESTEROL

Saturated, monounsaturated and polyunsaturated fatty acids generate a substantial number of calories in comparison to carbohydrates and alcohol. Each gram of fat generates 9 calories. In addition, fat aids the body in its absorption of certain vitamins and some provide essential fatty acids (e.g. linoleic) that are needed by every individual. The following are items considered as major sources of fat: butter, margarine, shortening, oil, well-marbled meats, poultry skin, whole milk, cheese, ice cream, nuts, seeds, and fatty salad dressings. Fat, Oils as well as some types of desserts and snack foods are high in calories yet they contain limited nutrients. Some foods in the milk group (except those with low fat content) and the meat group (including eggs, nuts, meat, poultry and fish) may contain a high content of fat unless one selects lower fat dairy products, or lean meats coupled with low fat preparation methods.

Cholesterol is a component of all body cells and is needed to form hormones, cell membranes, and other body substances. Cholesterol is not needed in the diet since the body is able to generate the needed cholesterol. Cholesterol is prevalent in all animal products but is not found in food of plant origins. Fatty acids are the basic chemical units in fat. Hydrogenation is the process that generates solid spreadable fat from an unsaturated liquid oil source. Saturated fatty acids tend to have the most amount of hydrogen whereas the polyunsaturated fatty acids contain the least hydrogen. Saturated fatty acids are found in fats of animal origin (whole milk, cream, cheese, butter, meat, and poultry) and also in some vegetable fats (coconut, plant kernels, and palm oils). Monounsaturated fatty acids are found in the fats of both plant and animal origins such as olive oil, canola oil and peanut oil. Polyunsaturated fatty acids are found in substantial proportions in most fats of plant origin and fish (omega-3 fatty acids) that contain high proportion of polyunsaturated fatty acids such as sunflower, corn, soybean, cottonseed, and safflower.

WHAT COUNTS AS A SERVING?

GRAIN PRODUCTS GROUP (BREAD, CEREAL, RICE, AND PASTA)

- 1 SLICE OF BREAD
- 1 OUNCE OF READY-TO-EAT CEREAL
- ½ CUP OF COOKED CEREAL, RICE OR PASTA

VEGETABLE GROUP

- 1 CUP OF RAW LEAFY VEGETABLES
- ½ CUP OF OTHER VEGETABLES – COOKED OR CHOPPED RAW
- ¾ CUP OF VEGETABLE JUICE

FRUIT GROUP

- 1 MEDIUM APPLE, BANANA, ORANGE
- ½ CUP OF CHOPPED, COOKED, OR CANNEDFRUIT
- ¾ CUP OF FRUIT JUICE

MILK GROUP (MILK, YOGURT, AND CHEESE)

- 1 CUP OF MILK OR YOGURT
- 1 ½ OUNCES OF NATURAL CHEESE
- 2 OUNCES OF PROCESSED CHEESE

MEAT AND BEANS GROUP (MEAT, POULTRY, FISH, DRY BEANS, EGGS, AND NUTS)

- 2-3 OUNCES OF COOKED LEAN MEAT, POULTRY, OR FISH
- ½ CUP OF COOKED DRY BEANS OR 1 EGG COUNTS AS 1 OUNCE OF LEAN MEAT. TWO TABLESPOONS OF PEANUT BUTTER OR 1/3 CUP OF NUTS COUNT AS 1 OUNCE OF MEAT.

TABLE 2.1 NUTRITION AND YOUR HEALTH: DIETARY GUIDELINES FOR AMERICANS, (USDA & USDHHS, 1995: P7).

The Dietary Guidelines for Americans suggest a diet that is low in fat, saturated fat and low in cholesterol. Low-density lipoprotein (LDL) is the bad cholesterol whereas High-density lipoprotein (HDL) is considered as the good cholesterol since it is believed to lower the bad one. A total cholesterol level of 240 mg/dl or more is considered high; cholesterol levels between 200 and 240 mg/dl are considered moderately elevated cholesterol levels below 200 mg/dl (LDL should be less than 130 mg/dl and HDL should be greater than 45 mg/dl) are considered healthy for the heart (Cholesterol Watch, 1991). High cholesterol levels in the body may lead to the accumulation of fatty acids inside the arteries leading to the blockage of blood supply and oxygen to the heart muscle. Research studies show that high-fat diets especially saturated fatty acids - such as fried foods and milk shakes can raise the blood cholesterol level which leads to overweight, heart diseases, and certain cancers.

SODIUM

USDA Views Sodium as a contributor to regulating body fluids and maintaining normal blood volume; it is also needed for the normal functioning of nerves and muscles. Table salt is made of sodium (40 percent) and chloride. However, health specialists advise individuals to consume less sodium and salt since they both contribute to high blood pressure. Five hundred milligrams of salt (less than ¼ teaspoon salt) is considered as a safe minimum intake.

SUGAR

According to USDA, sugar supplies large amounts of calories but limited nutrients. It is suggested for sugar to be consumed moderately by individuals who enjoy a good healthy status and sparingly by those with low calorie needs. Sugar is associated directly with tooth decay and

diabetes mellitus, and indirectly with obesity and heart disease due to the unhealthy weight gain. Sugar includes all kinds of sweeteners that include calories such as white table sugar, brown sugar, raw sugar, syrup, honey, and molasse. Sugars are considered simple carbohydrates and consist of one or more sugar units. Complex carbohydrates consist of many sugar units; starch are dietary fiber complex carbohydrates. Sugar can also be found naturally in various kinds of foods. Lactose, fructose, and sucrose are found in most fruits and vegetables. Lactose is found in milk and other milk products. Maltose is found in legumes and cereals.

PHYSICAL ACTIVITY

The Department of Health and Human Services is concerned that many Americans spend a large amount of their leisure time inactive such as watching television or working at a computer. Inactive behavior causes an adult to gain weight. Gaining weight in adulthood can cause the individual health problems such as high blood pressure, heart disease, stroke, diabetes, some types of cancer, arthritis, breathing problems and other types of illnesses (USDA & USDHHS, 1995). In order for adults to maintain a desirable weight level, they need "to balance the amount of calories in the foods and drinks they consume with the amount of calories the body uses" (p.15). Physical activity is considered a vital means to use food energy and to help reduce body fat and the risk for disease. The buildup of fatty deposits in the heart's arteries causes blockage. An individual needs to undertake 30 minutes of moderate physical activity at least three times a week, and preferably all days of the week. (**Table 2.2)** displays examples of moderate physical activities for healthy U.S. adults.

A sedentary lifestyle is also believed to cause the accumulation of fatty deposits in the

heart's arteries that may lead to a heart attack. It is considered as one of the major causes of such blockage. Exercise is believed to improve an individual fat metabolism by helping the individual burns fat and keeps the blood vessels and heart healthy (Cholesterol Watch, 1991). Exercise aids the heart by raising the high-density lipoprotein, the "good cholesterol", reducing blood pressure and diminishing one's weight.

In 1996, the American Academy of Family Physicians in conjunction with the Center for Disease Control and Prevention, the National Center for Chronic Disease Prevention and Health Promotion and the President's Council on Physical Fitness and Sports, The U.S. Department of Health and Human Services presented the first report on physical activity and health by the U.S. Surgeon General. The report titled "Physical Activity and Health: A Report of the Surgeon General" looks at the effects of physical activities in preventing diseases. The report presents the final conclusion that regular physical activity diminishes risks associated with developing or dying from the following symptoms: coronary heart disease, noninsulin-dependent diabetes, hypertension, and colon cancer. Physical activity also reduces the symptoms of anxiety and depression and aids in the development and maintenance of healthier bones, muscles, and joints and supports one's attempts to control weight (Family Physician, 1996). According to Consumer Reports on Health (1995) fitness also contributes to an individual's mental level by easing tension, improving endurance, and boosting an individual's general sense of well-being and strengthening the immune system which tend to dwindle with advancing age. Regular exercise when coupled with a nutritious diet may contribute to the reduction of some conditions such as diabetes, obesity, and osteoporosis.

EXAMPLES OF MODERATE PHYSICAL ACTIVITIES FOR HEALTHY U.S. ADULTS

WALKING BRISKLY (3-4 MILES PER HOUR)

CONDITIONING OR GENERAL CALISTHENICS

HOME CARE, GENERAL CLEANING

RACKET SPORTS SUCH AS TABLE TENNIS

MOWING LAWN, POWER MOWER

GOLF-PULLING CART OR CARRYING CLUBS

HOME REPAIR, PAINTING

FISHING, STANDING/CASTING

JOGGING

SWIMMING (MODERATE EFFORT)

CYCLING, MODERATE SPEED (LESS OR EQUAL 10 MILES PER HOUR)

GARDENING

CANOEING LEISURELY (2.0-3.9 MILES PER HOUR)

DANCING

TABLE 2.2 PATE ET AL., JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION, 1995, VOL. 273, P. 404**.**

Researchers at Stanford University tracked 450 runners and 330 non-runners, aged 50 to 72, for eight consecutive years. After taking into consideration the presence of a disease or a disability at the start of the study, the findings portrayed that non-runners developed three and a half times more "disabling aliments" then runners (Consumer Reports On Health, 1995). Studies have also found a direct correlation between exercising and having a positive mood. A team of researchers at Stanford undertook experimental research by assigning 360 individuals aged 50 to 65, either to a working-out group or to an inactive one. After a period of one year, findings have revealed that those who worked out had less symptoms of depression, stress and anxiety than the inactive ones (Consumer Reports On Health, 1995). Another research study found that women on reducing diets who exercised three times a week (45 minutes each time) ate less and lost more weight than those who did not due to exercise's mood boosting/self-control effects (Prevention, 1995).

There are two types of exercise: aerobic and anaerobic. Aerobic exercise is considered "a low-grade, steady activity that increases your heart's rate enough so that an adequate supply of oxygen is delivered to your body tissues to meet the increased metabolic demands of the activity" (Cholesterol Watch, 1991). Some examples of aerobic activities are the following: walking, jogging, cycling, swimming, cross-country skiing, and aerobic dancing. The second type of exercise is known as anaerobic (without oxygen). Such activity does not involve the increase in the supply of oxygen to body tissues. It is an activity of "high intensity and short duration" (Cholesterol Watch, 1991). An example of such activity is weight lifting and sprinting. Anaerobic exercise is also found to help reduce cholesterol and fat and improves the

way the human being's body metabolizes glucose. Aerobic exercise is found to develop stamina. On the other hand, anaerobic exercise develops strength and speed.

When it comes to determining the appropriate level of exercise, there is no single recommendation. The regime depends on the individual's health background. In case the individual has a health problem such as heart disease, then consultation with the doctor is recommended. In general, an exercise regime between light and hard that comprehends 30 minutes four times a week is considered to be a good one (Cholesterol Watch, 1991). Light to moderate exercise is the range that health authorities are now recommending (Consumer Reports On Health, 1996). According to the report, the recommendation is based on the findings that "exercise's ability to prevent disease depends more on the total amount of activity people get than on how hard they work out" (p.7). In other words, one does not need to put the half-hour all at once but can "piece it together in brief bursts throughout the day" (p.7). But still the traditional prescription of at least 20-30 minutes hard work three to four times a week boosts the heart and lungs, which a gentler exercise cannot generate (Consumer Reports On Health, 1996).

ALCOHOL AND OTHER DRUGS

Alcoholic beverages provide calories but no nutrients. There are 4 calories per gram of protein, 4 calories per gram of carbohydrate and 7 calories per gram of alcohol (USDA, 1993). The United States Department of Agriculture along with the United States Department of Health and Human Services have defined moderate drinking as no more than one drink per day for women and no more than two drinks per day for men (USDA/USDHHS, 1995). The following are examples on what is considered as a drink: 12 ounces of regular beer (150 calories), 5 ounces

of wine (100 calories) and 1.5 ounces of 80-proof distilled spirits (100 calories) (USDA.USDHHS, 1995) **(Table 2.3)**.

Medical studies have shown that moderate drinking, not more than two for men and one for women, reduces the risk, 20 to 40 per cent less, of developing coronary heart disease than nondrinkers (Consumer Reports on Health, 1996). According to Consumer Reports on Health (1996), The conclusion of such studies is based on the following effects of alcohol: boosting the HDL level (the good cholesterol), prevents dangerous blood clouts and increases the body's response to the hormone insulin. But one needs to keep in mind that these studies have looked at moderate drinkers who have been drinking for some time, and new drinkers may not be able to keep their drinking habits at a moderate level. In 1989, a study unveiled the reality that 41.7 per cent of college students consumed 5 or more drinks on any occasion within the past thirty days (2000 objective). A 12-year Harvard study of 86,000 nurses found that those who drank moderately in their 30s died at a faster rate than those who did not consume alcohol at all. In addition, those in their 40s who drank moderately died at the same rate of that of nondrinkers (Consumer Reports On Health, 1996). The explanation given is that pre-menopausal women have greater risk of breast cancer and have smaller volume of fluids in their body to dilute alcohol and less of the stomach enzyme that breaks the alcohol down. Due to such facts, it is recommended for pre-menopausal women to drink a maximum of three drinks a week and one drink for men under 40.

Another argument claimed that moderate drinking has killed more men under age 40 than heart attacks and diabetes combined. So this should outweigh the stated benefits of moderate

alcohol consumption related to coronary heart disease and diabetes (Consumer Reports On Health, 1996). A medical study that was done on 60,000 Dutch women found that those who consumed just one drink a day increased their risk of breast cancer by 30 per cent (Consumer Reports On Health, 1996). Another study compared 6000 breast-cancer patients with 9200 other women and found that a single drink led to 40 per cent increase in cancer and that two drinks led to 70 per cent increase. Such findings claim that alcohol boosts a female's estrogen level, which fuels breast cancer growth (Consumer Reports On Health, 1996).

Risk factors associated with moderate drinking have links to the following features: accidents, other cancers, and cirrhosis of the liver. In regard to accidents, it has been found that a single drink consumed by an average woman or two drinks consumed by an average man can have the impact of disrupting coordination, clouding judgment, and weakening inhibitions. Due to such facts, the risk of dying from accidents or violence is considered to be 40 per cent higher in moderate drinkers than in non-drinkers (Consumer Reports On Health, 1996). In regard to alcohol's links with other types of cancer, some research studies have suggested that moderate drinking may increase the risk of cancer in areas exposed to high concentration of alcohol such as the mouth, throat, larynx, esophagus, and liver (Consumer Reports On Health, 1996). Several studies have found a relationship between moderate drinking and cirrhosis of the liver or irreversible liver damage. Alcohol consumption during pregnancy can damage the developing fetus leading to low birth weight, reduced growth rate, birth defects, and mental retardation (USDA, 1995). Alcohol can also make certain common drugs dangerous including antihistamines, aspirin or other nonsteroidal anti-inflammatory drugs such as ibuprofen (Advil)

WHAT DOES COUNT AS A DRINK?

- 12 OUNCES OF REGULAR BEER
- 5 OUNCES OF WINE
- 1.5 OUNCES OF 80-PROOF DISTILLED SPIRITS

WHAT IS CONSIDERED AS MODERATE DRINKING?

- NO MORE THAN ONE DRINK PER DAY FOR WOMEN.
- NO MORE THAN TWO DRINKS PER DAY FOR MEN

Table 2.3: NUTRITION AND HEALTH: DIETARY GUIDELINES FOR AMERICANS (USDA & USDHHS, 1995: 40).

or aspirin or other nonsteroidal anti-inflammatory drugs such as ibuprofen (Advil) or Diclofenac (Voltaren), nitrates (ISMO, Nitrostat), certain pain killers, sleeping pills and tranquilizers (Consumer Reports On Health, 1996). Alcohol may alter the effectiveness of some drugs such as propranolol (Inderal) or Metoprolol (Lopressor). Avoiding alcohol has also been suggested to the following individuals who suffer or have suffered from the following symptoms: liver disease, hemorrhagic stroke, peptic ulcers, gout, pancreatitis, or high triglyceride levels (Consumer Reports On Health, 1996).

The USDA in its Nutrition and Your Health: Dietary Guidelines for Americans, recommend the following in regard to who should not drink:

- Children and adolescents,
- Individuals who cannot limit their drinking to a moderate level,
- Women who are trying to conceive or who are pregnant,
- Individuals who plan to undertake driving or other activities that require concentration or skill since alcohol remains in the blood 2-3 hours after a single drink, and
- Individuals using prescription and over-the-counter medications.

The National Institute on Drug Abuse conducted a 1988 National Household Survey and found that 21.2 million Americans used marijuana in 1987 and 65.7 million tried such substance at least once (Healthy People 2000). The survey also unveiled that cocaine consumption has slightly decreased in 1988, but 21.2 million Americans have tried cocaine at least once. Crack cocaine, which is more addictive than the regular cocaine, has become more spread and available

to the population and is consumed through smoking which leaves more adverse health impacts on the consumer (Healthy People 2000). Marijuana is known to impair driving ability, causes possible lung damage, reduces sperm count and sperm motility (American College Health Association, 1996). According to the American College Health Association, Cocaine/crack is known to cause permanent lung damage, holes and ulcer inside the nose, personality changes, and violent behavior and hallucination.

TOBACCO

Tobacco causes one of six deaths or some 390,000 deaths annually in the United States (Healthy People 2000). It is considered the most important single preventable cause of death in the United States. Major risks for some diseases are linked to tobacco. Some are the following: diseases of the heart and blood vessels, chronic bronchitis and emphysema, cancers of the lung, larynx, oral cavity, esophagus, pancreas and bladder, and other problems such as respiratory infections and stomach ulcers.

The nicotine in cigarette smoke is the cause of the addiction to smoking. Nicotine is a drug that is addictive for three main reasons. First, when taken in small amounts, it produces a sense of pleasure that makes the smoker wants more; second, smokers become dependent on nicotine and suffers from physical and psychological withdrawal symptoms such as nervousness, headaches and irritability when they stop taking it; and third, the nicotine has tremendous effects on the chemistry of the brain and the human being's central nervous system affecting the mood and temperament (The American Cancer Society, 1993).

Nicotine is a form of poison that has the danger of killing an individual by paralyzing breathing muscles (The American Cancer Society, 1993). According to the American Cancer society, The reason for nicotine not killing smokers instantly is that because it is taken in small amounts that the body is able to break down and get rid of . Secondhand smoking or environmental tobacco smoke is harmful to nonsmokers or passive smokers as well. According to the American Cancer society, tobacco smoke contains at least 43 carcinogenic (cancer-causing substances). Secondhand smoking comprises the smoke that is exhaled into the air by smokers as well as the smoke that comes from the burning tobacco in cigarettes. Due to the fact that sidestream smoke is formed at lower temperatures, it emits even larger amounts of cancer-causing substances and may cause lung cancer in healthy nonsmokers as well as respiratory problems and middle ear infections in children.

Smokeless tobacco contains nicotine as well. Snuff dippers consume more than ten times the amount of nitrosamines, a cancer causing agent, than cigarette smokers (American Cancer Society, 1993). The lining of the mouth helps the juice from the smokeless tobacco to get absorbed leading to the cancer of the mouth and other types of cancer such as gum, pharynx, larynx and esophagus.

Pregnant women who smoke are at risk for delivering babies with low birth weight or to experience premature deliveries, miscarriage, and sudden infant death syndrome (Healthy People 2000). Twenty to thirty percent of reported low birth weight, 14 percent of premature deliveries, and 10 percent of infant deaths are attributed to maternal cigarette smoking (Healthy People 2000).

In 1993, researchers from the University of California along with the Centers for Disease Control conducted an analysis of National Expenditures Survey that showed $50,000 billion or $2.06 per package of cigarette sold was spent on medical problems with connection to smoking. In that same year, 24 billion packages of cigarettes were sold and 400,000 individuals died from smoking-related causes (Morbidity and Mortality Weekly Report, 1994).

In 1964, the first Surgeon General's report on the harmful effects of smoking was made public and since then cigarette consumption has declined in a dramatic manner (Healthy People 2000). It was reported that in 1987, 29 percent of adults smoked compared to 40 percent in 1965. But still smoking is still prevalent in the society, about one-third of adults in the United States smoke, and the objective of the official party who has sponsored such a program is to reduce cigarette smoking to 15 percent among adults by year 2000 (Healthy People 2000).

STRESS AND SAFETY

Stress is defined as a collection of "negative" emotions such as hostility, impatience and competitiveness that generate a feeling of helpless toward uncontrollable factors in the environment (Cholesterol watch, 1991). According to Cholesterol Watch, stress may cause arrhythmias and an increase in spasms in the coronary arteries and may also expedite the release of adrenaline. It is believed that extensive concentration on competitiveness could generate to the prevailing of symptoms such as: aggression and anger. Loneliness and depression are considered as the product of a state of "negative" emotion.

According to Consumer Reports on Health (1996), there are some variables that indicate an individual's commitment to safety measures and thus avoiding risky behavior. Some of the mentioned safety habits are the following: (1) wearing a seat belt, (2) following "safe-sun" practices (minimizing sun exposure, wearing protective clothing and the utilization of sunscreen) to avoid adverse conditions like sunburn and skin cancer, (3) getting an annual flu and pneumonia vaccine (single one in a lifetime for healthy and more for people at high-risk), and (4) going through regular physical exams such as pap smears (ability to detect cervical cancer – every one to two years from age 40 to 50 and annually thereafter), sigmoidoscopy (ability to detect colorectal cancer - examination of the rectum and lower intestine and the fecal occult-blood test which involves checking stool samples for hidden blood).

In addition to the mentioned habits, one should also avoid driving under the influence of alcohol (driving while intoxicated have been leading in many cases to deadly accidents). Another safety habit is the proper utilization of condoms (for all individuals from both genders and all marital status with multiple sex partners and/or involved in non-monogamous relationships).

This section has listed all variables connected with the healthy-living component of the Healthy-Living and Travel Behavior conceptual framework. The survey instrument incorporates such variables in its healthy-living questionnaires.

Looking at a market segment's travel behavior from a psychological perspective is to understand what travel means to such a segment (Pearce, 1982). Understanding individuals'

perception and ranking of the supply components of the tourism system leads to the formation of appropriate as well as tailored marketing techniques (Laws, 1991). This also demands pinpointing the characteristics of specific markets and finding out about the benefits they extract from their tourism experiences.

The personality and values of the human being are expected to exercise some influence over his or her travel behavior. Leisure travel lays the ground for an individual to practice acts that suit his or her self-identity. Therefore, features such as diet, exercise, sexual behavior, self-image and other healthy-living related variables, which are well linked to an individual's personality and values system, are expected to show during a leisure journey. Personality and values constitute self-identity. An exploration of an individual's healthy-living status and its possible influence over his or her travel behavior will shed light on such an important and timely topic. The next section portrays a summary of chapter II.

2.6 SUMMARY OF CHAPTER II

The beginning of this chapter focuses on the importance of understanding an individual's travel behavior and the various factors that motivate or lead to such behavior. The definition of motivation was provided with its interpersonal and physiological implications. The nature of such psychological-oriented research was portrayed and its aim was clearly stated. The aim is to understand different market segments at various healthy-living levels with their approach to pleasure travel. Different theories and studies in pleasure travel behavior and motivations are presented. They form the theoretical base of the study.

Relevant theories/studies in the field of tourism, social psychology, and marketing/consumer behavior were presented. Some of the theories or studies presented stressed the following issues: (1) the importance of matching supply with demand, (2) the concrete as well as abstract features sought by an individual form his or her travel experience, (3) the emphasis on intrinsic reward/achievement sought from a travel experience, (4) attribution theory with its emphasis on giving a subject the freedom to express his or her own explanation of travel motives, (5) socio-psychological motives behind taking a vacation, (6) the inclusion of lifestyle as a viable variable in addition to age and social position, (7) the influence of personality type on travel behavior, and (8) the inclusion of AIO (activities, interests, and opinions), vacation travel, and socio-demographic characteristics as a logical combination to understand the pleasure traveler. This section was followed by variables that are included in the study's model related to push/pull factors as well as socio-demographic factors and followed by healthy-living components. Both socio-demographic variables and push or pull factors along with healthy-living variables contribute to the understanding of the traveler's motivation and behavior in a better fashion. The following chapter presents the methodology of the study.

CHAPTER THREE

METHODOLOGY

The preceding chapters look at the research areas of healthy living and travel behavior. In addition, they define the research orientation of this project as the relationship between healthy-living and travel behavior. This chapter conveys the study's framework and the proposed conceptual framework of this study. The hypotheses are undertaken to guide the empirical study. The research design is stated. The instrument that will be undertaken for the purpose of collecting and measuring the data is examined. And finally the methods of data analysis are discussed.

3.1 PROPOSED CONCEPTUAL FRAMEWORK OF HEALTHY-LIVING AND TRAVEL BEHAVIOR

The main objective of this exploratory study is to propose and test the Healthy-Living and Travel Behavior conceptual framework to investigate the relationship between an individual's healthy-living variables and his or her travel behavior. **Figure 1.2** (Chapter I) presents the conceptual framework for the study.

3.2 THE DEPENDENT VARIABLE

The dependent variable is travel behavior. Travel behavior consists of tourism motivation components such as push and pull factors as well as sources of information and purpose of trip. The objective of this push and pull theory of travel motivation is to clarify issues related to "travel patterns and travel behavior" (Uysal and Hagan, 1993). In general, push factors consist of components related to an individual's travel motivations - activities, interests and

opinions (AIO - e.g. escape, rest and relaxation, self-esteem and so on). In addition to an individual's activities, interests and opinions, push factors may also include socioeconomic and demographic variables and other variables that may influence an individual's decision to travel (Smith, 1983).

Pull factors may consist of components related to the destination's tangible resources (e.g. beaches, snow, historical sites and so on) as well as travelers' perceptions and expectations such as novelty, benefit expectation and the destination's marketed image (Smith, 1983). According to Uysal and Hagan (1993), pull factors are considered the attributes that interact with the push factors of motivations by responding to them and reinforcing them. According to the mentioned scholars, pull factors are considered the destination's drawing power as perceived by the visitors. Brayley (1990) stated the importance of having a destination's attribute that is valued by the individual in order for such component to respond to or reinforce the motivation to travel factor. According to Brayley, the destination's ability to pull or attract the potential tourist is what forms the individual's attitude toward such place.

Uysal and Jurowski (1993) have presented through a research study the reciprocal relationship that exists between push and pull factors. Uysal and Hagan (1993) mentioned the importance of understanding the factors that push an individual to travel as a means to allow a particular destination to provide the specific attributes that meet such push factors. In other words, push and pull factors have implications related to tourism marketing and development. Promotional activities could incorporate tourists' motives and "destination attitudes" (Uysal and Hagan, 1993).

In this study, the dependent variable incorporates elements related to the following:

1. Motivations – Activities, Interests and Opinions (AIO),
2. Sources of Information (Market knowledge),
3. Destination Attributes and Type of Facilities, and
4. Purpose of trip.

3.3 INDEPENDENT VARIABLES

The study's independent variables consist of behavioral and attitudinal variables related to healthy-living.

The healthy-living variables are based on the Personal Wellness Profile (PWP) that was developed by Wellsource, Inc – Health Assessment and Prevention Systems. PWP is considered " a health and lifestyle assessment system used in health screening managed care, demand management and health promotion programs" (PWP, 1998:1). PWP is designed to pinpoint personal and group health needs and interests (PWP, 1998). One of PWP's purposes that fit well this project's objectives is to "identify persons likely to have higher health claims" (PWP, 1998:1).

Some of (PWP's) components, including Personal Health Information, Exercise Level, Eating Habits, Alcohol and Drugs, Stress and Coping, Safety and Medical Care, create an awareness in the individual in regard to health needs as well as specific lifestyle practices that play a vital role in determining personal well-being. The emphasis is put on health-related lifestyle components that an individual is able to exercise control over.

According to Wellsource Inc., health promotion specialists have played a role in developing PWP. Specialists include doctors, health educators, nutritionists, and exercise physiologists. PWP's recommendations for healthy living components as well as risk reduction techniques are drawn from well recognized guidelines pertaining to major health organizations in the United States of America. Such organizations include the following:

American Cancer Institute,

American Cancer Society,

American College of Sports Medicine,

American Heart Association,

National Center for Health Statistics,

National Institutes of Health,

National Mental Health Association,

USDA Dietary Guidelines for Americans,

U.S. Surgeon General's Report on Health, and

Promotion and Disease Prevention.

It seems that in the past two decades more concerns have been raised for the necessity to follow a healthy lifestyle. Such concerns for health, have generated an increase in the membership of leisure clubs as well as in active holidays such as walking, cycling, and golfing (Jefferson, 1995). Changing lifestyles coupled with the focus on personal needs as well as active travel participation have shaped the meaning of value for many American travelers. Such a phenomenon has provoked a heightened interest in all- inclusive package/resorts, soft adventure travel and more health-oriented holidays (Chon & Singh, 1995). According to the National Tour

Foundation, today's mature adults tend to have less desire for a sedentary lifestyle, are considered more fit, and follow a more active lifestyle than those in previous generations (Chon & Singh, 1995). Advances in medicine as well as changes in diet and the increase in health awareness have contributed to such reality.

According to Kobasa (1979), individuals who possess personal control over their lives have demonstrated better resistance to stressful events. Self-control and self-determination help one deal better with stress; which helps to reduce one's chance of becoming ill (Deci & Ryan, 1987). Iso-Ahola (1980) have stressed leisure's offering of an opportunity for an individual to develop and exercise his or her own self-determination. Mannell and Iso-Ahola (1985) have stressed leisure's intrinsic benefits achieved through experiences that promote the enrichment of one's self-identity. Self-identity stems from freedom and autonomy to exercise a suitable lifestyle. And one's leisure inclinations and activities are expected to be a component of one's self-identity. A human being's healthy-living status is connected with his or her lifestyle. Lifestyle is considered the skeleton of one's self-identity. According to McIntyre (1989) individuals' involvement in leisure activities occupy a central role in their lifestyle.

Smith (1983) has pinpointed the influencing role that socioeconomic variables along with a subject's attitudes, interests and opinions have on travel motivations. Researchers (Perreault, Darden and Darden, 1977; McGehee, Loker-Murphy and Uysal, 1996) have stated the benefits drawn from the incorporation of demographic and socioeconomic variables in understanding better the behavior of travelers. Lowyck, Van Langenhove and Bollaert (1992) have pinpointed the necessity to combine the mentioned variables with other behavioral/psychological ones such

as activities, interests and opinions (lifestyle/psychologically-oriented variables) since socioeconomic and demographic variables alone are not sufficient to explain the subject's consumption behavior. For example, behavior in general, and travel behavior specifically cannot be totally inferred from one's social position, economic status, or marital status. More benefit /psychographic oriented variables need to be incorporated in order for a better picture and a better judgment to evolve.

The conceptual framework portrayed emphasizes the importance of travel behavior as a function of an individual's approach to healthy-living. In this conceptual framework, the moderating variables are the socio-demographic ones.

3.4 HYPOTHESIS

The proposed conceptual framework is developed to conduct the evaluation and testing of general research hypothesis that there is a relationship between an individual's healthy-living behavioral and his or her travel behavior. The specific null hypotheses are the following:

Hypothesis 1:

There is no significant relationship between an individual's healthy-living behavioral characteristics in general and his or her travel behavior of push motivations.

Hypothesis 2:

There is no significant relationship between an individual's healthy-living behavioral characteristics in general and his or her travel behavior of pull motivations.

Hypothesis 3:

There is no significant relationship between an individual's healthy-living behavioral characteristics in general and his or her way of seeking a health-oriented travel information source when planning for a vacation or travel experience.

Hypothesis 4:

There is no significant relationship between an individual's healthy-living behavioral characteristics and the purpose of the trip (including the number of trips) that he or she takes.

Hypothesis 5:

There is no significant relationship between an individual's healthy-living attitudinal characteristics and his or her travel behavior of push motivations

Hypothesis 6:

There is no significant relationship between an individual's healthy-living attitudinal characteristics in general and his or her travel behavior of pull motivations.

Hypothesis 7:

There is no significant relationship between an individual's healthy-living attitudinal

characteristics in general and his or her way of seeking a health-oriented travel information source when planning for a vacation or travel experience.

Hypothesis 8:

There is no significant relationship between an individual's healthy-living attitudinal characteristics and the purpose of the trip (including the number of trips) that he or she takes.

Hypothesis 9:

There are no significant differences between an individual's healthy-living behavioral variables and his or her socio-demographic characteristics.

Hypothesis 10:

There is no significant relationship between an individual's healthy-living attitudinal characteristics and his or her socio-demographic characteristics.

Hypothesis 11

There is no significant relationship between an individual's healthy-living behavioral variables and his or her travel behavior (controlling for socio-demographic variables).

3.5 DESIGN OF THE STUDY

This research investigates an unexplored phenomenon and is conducted in the field using the on-site intercept procedure. The relevant unit of analysis for this study is travelers at points of exit at the following airports: Hobby National Airport and Intercontinental George Bush Airport in Houston, TX; Jackson International Airport in Jackson, MS; and New Orleans

International Airport in New Orleans, LA.

A self-administered questionnaire was distributed and collected from travelers on site. Subjects were selected on a random basis (taking into consideration the limitations set for one to be over 18 years of age as well as an American citizen) and were kindly asked to participate in the survey Appendix A lists a copy of the survey instrument used in the study.

3.6 INSTRUMENTATION

The survey instrument consisted of three sections.

1. Section one measures the subject's current healthy-living characteristics/status using behavioral and attitudinal healthy-living constructs. Such constructs consist of components based on the Personal Wellness Profile (PWP) that measures an individual's current health status (1987). The components included in the Healthy-Living Construct (HLC) are related to the following: exercise level, eating habits, alcohol and drugs, smoking status, stress and coping, safety and medical care. Components in this section are measured on a 4 to 5 Likert-type scale.

2. Section two measures travel motivations and behavior. This section will consist of sub-sections related to the travel behavior of push motivations, travel behavior of pull motivations, information sources, and purpose of trip. The items included in that section stem from theories in pleasure travel behavior and motivation as well as some that are healthy-living-oriented constructed by the researcher; they include components that portray high as well as low healthy-living/travel behavior oriented tendencies. The theoretical framework is mainly based on the means-end theory that seeks to understand the meanings and the importance that individuals

attach to products/services that they acquire and consume (Klenosky, Genler and Mulvey, 1993). Gunn's (1988) has emphasized through his functioning tourism system model the linkage created between the demand and supply side. In addition, Smith's (1983) presentation of push and pull factors is incorporated. The components related to travel motivations and behavior (except the purpose of trip) will be measured on a 4-point Likert type scale.

3. Section three measures the socioeconomic and demographic characteristics of the subject. Ascriptive characteristics such as gender do not have control over leisure preferences, but have links to them (Crowther & Khan, 1983; Woodward, 1988). Achievement factors such as education and income can control over leisure needs and values and have links to them (Kabanoff & O'Brien, 1986). Education and income have control over leisure attitudes and are linked to them (Ragheb & Beard, 1982). Life cycle factors such as age and marital status are considered as important determinants of abilities, interests and constraints on one's behavior (Kelly, 1983). Traveler characteristics will be measured at the nominal (e.g. genderand marital status) and ordinal (e.g. education, age and income) levels.

3.7 PILOT STUDY

A pilot study was conducted to test the validity and reliability of the survey instrument. The first draft of the questionnaire was circulated to 75 selected students at the University of Southern Mississippi as well as diverse subjects from a major shopping center in the Hattiesburg area, Mississippi, for input regarding features such as wording, layout and comprehension of the listed items. The questionnaire was revised based on their input.

3.8 POPULATION AND SAMPLE

The population consisted of travelers at selected airports' exit gates in Louisiana, Mississippi and Texas. Subjects had to be at least 18 years old and U.S. citizens (since the study follows the dietary guidelines for Americans presented by the United States Department of Agriculture) and consist of both females and males. A total of 515 were randomly selected. The surveyed followed the techniques pertaining to proper on-site intercept methodology procedure.

3.9 VALIDITY AND RELIABILITY TESTS

Reliability is a means to examine the observations' degree of consistency and stability (Rosenthal and Rosnow, 1984). Validity looks at the relationship between a construct and its measures. The study looks at construct and internal reliability issues for the mentioned variables in this project. A coefficient alpha measure is used to estimate the internal consistency reliability coefficient with the objective to test the internal consistency of items relating to each concept within the survey instrument components (Nunnally, 1978). The test is performed for healthy-living (attitudinal only - the adapted healthy-living behavioral construct has already been tested by Wellsource, Inc.) and travel behavior and motivations (push, pull and sources of information and purpose of trip). Nunally (1978) views a coefficient of .70 or better as acceptable. All factors tested have Cronbach's alpha coefficient of .70 and higher and most of the items loaded in the appropriate places. However, some factors with four or three components/items have a Cronbach's alpha coefficient lower than .70. Since the value of alpha is dependent largely on the average of inter-item correlation and the number of items in the scale, for those scales that have a smaller number of items, a lower alpha level is acceptable (Carmines and Zeller, 1979). For example, a ten-item scale with a .4 inter-item correlation would have an alpha level of .87 while

that of a two-item scale (having the same inter-item correlation value) would be .572. In addition, this study is exploratory in nature and therefore a lower reliability is expected for some of the factors. The Cronbach's alpha reliability coefficients are presented in chapter four under the factor analysis section.

3.10 ANALYSIS OF THE DATA

Data analysis is conducted utilizing the Statistical Package for Social Sciences (SPSS). The analysis consists of the following steps:

1. Descriptive analysis of all variables and data cleaning based on frequency distributions of variables,
2. Data reduction techniques through factor analysis are conducted based on the healthy-living attitudinal construct as well as on push and pull travel motivations. Such technique delineates the underlying dimensions of the constructs. The healthy-living behavior construct is already factor analyzed,
3. Undertaking Pearson's correlation coefficient analysis on factor groupings of both the independent and dependent variables to test the specific hypotheses,
4. ANOVA is used to see if the constructs of health-living scale showed variations across different response categories of the selected socio-demographic variables. Once F-test is fund significant, then Tukey's multiple range test is run to see where the differences between the two pairs of response categories occur, and
5. Multiple regression analysis to seek if there is a relationship between healthy-living and travel behavior while controlling for socio-demographic variables.

3.11 SUMMARY

This chapter presents the conceptual framework as well as specific research hypotheses. In addition, the chapter portrayed the research design, population, and the method of analysis. The findings are presented in the following chapter, Chapter IV.

CHAPTER FOUR

RESULTS AND DISCUSSION

4.1 INTRODUCTION

Chapter three has presented the research methodology used in the study in order to answer the research question. The research methodology chapter consists of three major sections: (1) Research design, (2) the development of the survey instrument, and (3) the statistical methods undertaken to examine the relationship between healthy-living as the independent variable and travel behavior as the dependent variable.

This chapter presents the following: (1) the interpretation and discussion of the data that were collected, (2) validity and reliability tests, (3) profile of the subjects, and (4) hypotheses testing. The research questions proposed in previous chapters are answered through the implementation of appropriate statistical techniques.

4.2 DATA COLLECTED

The sample population consisted of American travelers at points of exit in the following airports: Jackson International Airport in Jackson, Mississippi, Hobby National Airport and George Bush Intercontinental Airport in Houston, Texas, and New Orleans International Airport in New Orleans, Louisiana. Subjects were approached at the gate area before boarding their planes. The researcher made sure that there was a sufficient amount of time left before boarding starts by checking the listed departure time at the gate's check-in desk. Such a procedure guaranteed that the subject would not feel rushed while completing his or her survey. The

subject was approached and kindly asked for his or her participation after the purpose of the survey was clearly explained and anonymity guaranteed. In addition, the researcher made sure that the subject's age was over 18 and that he or she was U.S. citizen. On average, it took subjects 15-20 minutes to complete the survey. All surveys were collected on site. Around 520 questionnaire were collected but some had unanswered sections. A total of 477 usable ones were coded for data analyses. Summary of data collection sites and number of surveys collected (of those that were coded) are presented in **Table 4.1**.

4.3 PROFILE OF RESPONDENTS

a. Socio-Demographic Characteristics of Respondents

The socio-demographic data collected from the survey instrument under section three are presented in **Table 4.2**. In regard to age, the majority of the subjects fall in the 37-55 years old group (42.3%), followed by 26-36 years old group (25.2%), 18-26 years old group (18.9%), and 56 and above years old group (13.6%). The participants in this study were 55.8% male and 44.2% female. Fifty six percent attended a four-year college, 27.3% attended graduate school, 16.1% attended high school, and .4% only attended grade school.

In regard to the marital status variable, 59.5% of the participants are married; 28.9% of the participants are singles and 11.5% are either divorced, widowed, or separated one. In regard to the approximate household income before taxes, 28.5% checked the $100,000 or more option, 22.4% checked the $50,000-74,000 category, 14.3% marked the $75,000- 99,999 option, 13.8% have checked the $35,000-49,000 category, 8.6% made under $25,000, and 7.8% made between $25,000-34,999.

Table 4.1: Data Collection Sites and Number of Surveys collected

Location	N	%
Hobby National Airport and George Bush Intercontinental Airport, Houston – TX	126	26.4
Jackson International Airport, Jackson - Mississippi	8	1.7
New Orleans International Airport, New Orleans – Louisiana	343	71.9
Total	**477**	**100%**

Table 4.2: Socio-Demographic Characteristics of Respondents

Variable	Frequency (N=477)	Percent
Gender		
Male	266	55.8
Female	211	44.2
Marital Status		
Single	138	28.9
Married	284	59.5
Other	55	11.5
Education		
Grade School	2	.4
High School	77	16.1
College	268	56.2
Graduate School	130	27.3
Household Income (BT)		
Under $25,000	41	8.6
$25,000-34,999	37	7.8
$35,000-49,000	66	13.8
$50,000-74,000	107	22.4
$75,000-99,999	68	14.3
$100,000 or more	136	28.5
Age		
18-26	90	18.9
26-36	120	25.2
37-55	202	42.3
55+	65	13.6

b. Healthy-Living (Behavioral) Characteristics of Respondents

The behavioral healthy-living characteristics of respondents are portrayed in **Table A.1 (Appendix A)**. When it comes to being involved in recommended aerobic exercises (15 to 30 minutes duration of activities such as cycling, swimming, aerobic dance, jogging, active sports or brisk walking) 34.4% indicated that they do not have a regular exercise program. 22.6% conveyed that they get involved in aerobic exercises three or four times per week, 19.6% revealed that they practice twice per week, 12.8% indicated that they get involved in aerobic exercises five or more times per week, and 9.9% practice once per week.

In regard to practicing strength exercises such as sit-ups, push-ups, or use weight training equipment, 52.8% of the respondents conveyed that they do not do strength exercises. 19.3% practice such type of exercise three or more times per week. 14.0% undertake it once per week, and 13.4% do it twice per week.

When it comes to eating habits, under the meat and protein foods section, 41.3% of the respondents conveyed that they eat a combination of regular meats and some poultry or fish. 30.0% eat very little red meat, mostly the white meat of poultry or fish. 17.2% indicated that they eat only lean meats, skinless poultry, or fish. 9.0% of subjects eat regular cuts of red meat, hamburgers, hot dogs and luncheon meats while 2.1% seldom or never eat meat. They eat vegetable protein.

In regard to dairy products and eggs, 37.9% of the respondents indicated that they eat primarily low-fat products (skim milk, low-fat yogurt or cottage cheese, egg whites or egg

substitutes), some high-fat (ice cream, sour cream, yellow cheese, whole milk, eggs and butter). Over 25% eat both about the same. Over 18% eat mostly the high-fat products, some low. 10.9% eat the high-fat ones and 2.1% eat only low-fat or none at all.

In regard to desserts, 33.1% indicated that they eat both (high-fat such as cake, donuts, pastry, pie, ice cream, custard and chocolate, and low-fat foods such as fruit salads, gelatins, melons, grapes, dried fruits, and home baked goods using vegetable fat in moderate amounts) about the same. Over 29% of the subjects conveyed that they eat primarily low-fat desserts, or rarely eat some. Over 17% eat mostly the high-fat kind, some low-fat. Over 11% nearly always eat the high-fat products while 8.8% eat only low-fat desserts or none at all.

In regard to cooking fats and food preparation methods, 49.5% of the subjects indicated that they cook food primarily the low-fat way (broil, bake, boil, or steam, primarily use vegetable oil (sparingly), flavor food with seasonings, keep added fat very low in cooking, and use low-fat dressings). Over 25% cook food both ways about the same, that is low-fat way (defined above) and high-fat one (pan frying or deep fat frying, primarily use shortening, add frequently butter, margarine, oils or other fats to foods for flavoring, use regular amount of these fats called for in recipes, and use creamy or full fat dressings). Over 10% about cooking food mostly the high-fat way, while an equal percentage of subjects indicated that they prepare food only the low-fat way. Almost 5% of the respondents cook food nearly always the high-fat way.

In regard to the kind of breads consumed, 31.2% of the population indicated that they eat both about the same, that is refined grain products (white bread, rolls, biscuits, crackers, regular

pancakes and waffles, white rice, typical breakfast cereals and typical baked goods) and the whole grain kind (whole grain bread and rolls, whole grain pancakes and waffles, whole grains used in baked goods, brown rice, oatmeal and other whole grain cereals). Almost 30% have indicated that they eat primarily whole grain. Over 18% eat mostly refined grain products. And 13.2% always eat refined while 6.7% eat only the whole grain type.

In regard to fruits and vegetables, 33.3% of the respondents indicated that they consume two servings per day of fruits and vegetables (a serving is: 1 cup fresh, ½ cup cooked, 1 medium size fruit, ¾ cup juice). Almost 27% consumed three servings per day. Over 25% of the respondents consume one serving per day. Nine percent take four servings of fruits and vegetables per day while 4.8% take five or more servings.

In regard to fast food (such as hamburgers, tacos, fried chicken, hot dogs, french fries, milk shakes, etc.), 43.6% of the respondents indicated that they consume fast foods few times per month. 27.3% consume fast foods several times per week. Over 22% seldom or never do so. And only 6.1% consume fast foods nearly every day.

When it comes to salt, 35.6% of the respondents indicated that they seldom or never add salt to their foods or eat salty foods (such as chips, pickles, soy sauce). Over 31% stated that they do so with some meals. Over 24% claimed to add salt or eat salty foods on the majority of meals. And only 8.0% undertake such behavior on nearly every meal.

In regard to consuming alcohol, 23.2% of respondents stated that in the last two weeks they drank one alcoholic drink per day on the average. Over 19% indicated two drinks per day on the average and almost 17% revealed that they did not drink in the past year. Over 16% consumed three to four drinks and13.8% had none in the past two weeks. Almost 11% of the respondents claimed to have had five or more drinks.

When it comes to taking drugs or medications that affect one's mood, help relax or sleep, 66.7% of the subjects have conveyed that they never took such drugs. Over 18% claimed to do so rarely, few times a year. Almost 8% have stated that they consume it frequently, every week. And 6.9% do so sometimes, monthly.

In regard to smoking status, 58.7% of the subjects stated that they never smoked. Almost 20% quit smoking, 2 or more years ago. Over 7% smoke 10 or more cigarettes per day. 6.5% smoke less than 10 cigarettes per day. Four percent have quit smoking less than 2 years ago. And 3.8% smoke pipe or cigar only. When it comes to smokeless tobacco, 95.0% stated that they do not consume smokeless tobacco, whereas 4.4% do consume it.

Under stress and coping, 54.7% of the respondents indicated that they are sometimes stressed, but coping very well. Almost 25% stated that they are seldom stressed, coping very well. Over 15% indicated that they are often stressed with trouble coping at times. Less than 4% are heavily stressed and often have trouble coping. And only a minority of .2% conveyed that they are excessively stressed and unable to cope.

In regard to their energy level, 51.2% indicated that they occasionally felt tired, worn out, used-up, or exhausted during the past month. Almost 20% felt so less than half of the time, and 15.5% seldom or never. And almost 13% had such symptoms during the majority of the time.

When it comes to happiness, 53.2% indicated that they are pretty happy. Almost 38% are very happy, and 6.7% are not too happy. Less than 2% indicated that they are very unhappy.

In regard to how often they wear a seat belt when driving or riding, 72.3% did so always. 16.1% wore it the majority of the time, and 7.1% did so only occasionally. Less than 4% had it less than half of the time.

When it comes to drinking and driving, almost 65% indicated that in the past year they never drank or never drove after drinking.

When asked how many days did they miss from work due to sickness or injury during the past 12 months, 49.3% indicated none and 31.4% marked one or two days. A little bit over 10% had three or four days and 5.0% had missed five to eight days. Less than 2% had missed fourteen or more days. And 1.5% had nine to thirteen days. Seventy four percent of the respondents had a personal physician while 24.9% did not. When it comes to how often do they get sunburn, 45.7% indicated 1 time per year and 27.0% marked never.

Table 4.3 presents a summary of this section with the mean scores and the standard deviation listed for each category of the healthy living behavioral section. The means for

exercise level ($\bar{x}$ = 2.34) and eating habits ($\bar{x}$ = 2.94) indicate that the majority of the respondents tend to have a moderate healthy exercise routine and moderate healthy eating habits. As for smoking habits ($\bar{x}$ = 3.48), the listed mean presents that the majority of respondents seem to be non-smokers or have quit smoking. As for stress and coping ($\bar{x}$ = 3.33), the majority seem to handle stress well and are pretty happy. For safety ($\bar{x}$ = 3.42), the majority tend to have high safety behavior. And the mean for medical care ($\bar{x}$ = 3.30) indicates a moderately healthy behavior when it comes to the mentioned healthy-living behavior. The next section, presents the respondents' healthy-living (attitudinal) characteristics.

Table 4.3: Healthy-Living (Behavioral) Variables

Variable	Mean	Std. Deviation
Exercise Level	2.34	1.18
Eating Habits	2.94	.66
Alcohol and Drugs	3.54	.96
Smoking Status	3.48	.83
Stress and Coping	3.33	.59
Safety	3.42	.73
Medical Care	3.30	.53

c. Healthy-Living (Attitudinal) Characteristics of Respondents

(Table B.2 - Appendix B) shows the healthy-living attitude of respondents. A healthy-living construct used to measure the attitude consisted of 14 items covering different health-related variables such as exercise, red meat consumption, high-fat desserts, whole grain products, vegetables and fruits, fast food, alcohol, smoking, illegal drugs, seat belt, drinking and driving, condoms/preventive measures, and physical exam. Agreement with healthy-oriented statements or disagreement with the unhealthy ones revealed the subject's attitude toward healthy-living. The scale ranges from strongly agree to strongly disagree. The closer the mean to a figure of 4, the more the positive the individual's healthy-living attitude is. Eleven statements with the following mean scores: 3.62 (exercise on a regular basis), 3.29 (limiting the consumption of high fat-desserts), 3.24 (eating whole grain products), 3.45 (limiting fast food consumption), 3.22 (limiting alcohol drinking to not more than 2 drinks a day), 3.49 (tobacco's negative impacts on one's health and others'), 3.52 (illegal drugs consumption), 3.70 (seat belt), 3.78 (one should not drink and drive), 3.65 (using condoms or preventive measures), and 3.34 (undertaking a comprehensive physical exam one or two years) are interpreted as parts of a healthy-oriented attitude. Such high ratings show that an overwhelming majority of the respondents carry a positive attitude towards healthy-living. On the other hand, three statements with mean scores of 2.79 (limiting the consumption of red meat), 2.90 (eating 5 servings of vegetables and fruits per day), and 2.01 (one should not consume alcohol) are interpreted as parts of an unhealthy-oriented attitude. The first two explain that there are a good majority of individuals who still cannot accept the notion of giving up or limiting red meat's consumption and that still more people need to be aware of the importance of consuming 5 servings of vegetables and fruits per day. The low rating on alcohol may reaffirm that published reports on alcohol's moderate consumption's (not

more than 2 drinks a day) positive impacts on health has a widespread acceptance among the American public. Such a low rating on alcohol might also be attributed to the fact that simply the public, at large, is not yet ready to accept the notion of giving up alcohol consumption due to social and cultural reasons.

d. Travel Motivation of Push Factors

The responses of travel motivation of push factors are shown in **Table B.3 (Appendix B)**. This section consists of 20 travel push motivational variables (a mix of general healthy-living oriented and unhealthy ones). Respondents were asked to imagine taking a trip and to "X" one box to show how important that reason is to him or her when considering such a trip. Answers were measured on a four point Likert-type scale, ranging from 1 = very important to 4 = not at all important. The security and safety variable tends to be valued the most with a mean of 1.62. It is followed by the following variables: learning and increasing knowledge ($\bar{x}$ = 1.63), escaping from the ordinary ($\bar{x}$ = 1.67), breaking from the daily routine ($\bar{x}$ = 1.76), going to places rich in nature-made attractions ($\bar{x}$ = 1.79), and being physically active ($\bar{x}$ = 1.85). The variables that are valued the least are the following: seeking health-care services ($\bar{x}$ = 2.99), bath in warm springs and mineral waters ($\bar{x}$ = 2.92), participate in fitness and wellness seminars ($\bar{x}$ = 2.88), doing nothing at all ($\bar{x}$ = 2.87), health spas ($\bar{x}$ = 2.69), travelling through urban areas ($\bar{x}$ = 2.67), participating in sports ($\bar{x}$ = 2.66), and indulging in gourmet cuisine ($\bar{x}$ = 2.54). There are some variables on which the majority of subjects felt that they are somewhat important. The variables are the following: traveling through places that are important in history ($\bar{x}$ = 2.01), developing healthy-living habits ($\bar{x}$ = 2.02), finding thrills and excitement ($\bar{x}$ = 2.06), feeling at home away from home ($\bar{x}$ = 2.22), being daring and adventuresome ($\bar{x}$ = 2.26), and be cleansed

physically and spiritually ($\overline{x}$ = 2.30).

e. Travel Motivation of Pull Factors

Table B.4 (Appendix B) shows the statistics of travel motivation pull factors. It consists of 26 variables; some of them are closely associated with satisfying the needs of an individual with a high healthy-living status. It is measured on a four point Likert scale, ranging from 1 "very important" to 4 "not important at all". Subjects were asked to "X" one box to show how important that variable is to him or her in a vacation destination. The majority of respondents indicated that hygiene and cleanliness in facilities and services ($\overline{x}$ = 1.39) is a variable that pulls them the most to a vacation destination. It was followed by the environmental quality of air, water and soil ($\overline{x}$ = 1.72). The variables that the majority of subjects mentioned about being attracted to the least are the following: casinos and gambling ($\overline{x}$ = 3.19), campgrounds and trailer parks ($\overline{x}$ = 3.16), shopping with emphasis on health products (vitamins and herbal remedies ($\overline{x}$ = 3.14)), clothing optional resorts and beaches ($\overline{x}$ = 3.12), fast food restaurants ($\overline{x}$ = 3.05), mineral springs ($\overline{x}$ = 3.04), spas or health resorts ($\overline{x}$ = 3.01), the availability of nearby open-running track and stretching out zone ($\overline{x}$ = 2.99), cafes serving alcoholic-free beverages ($\overline{x}$ = 2.90), accessibility to a gym with a daily or weekly rate (no membership require ($\overline{x}$ = 2.87)), educational tours with emphasis on boosting well-being ($\overline{x}$ = 2.83), accommodation with a health club or exercise facility ($\overline{x}$ = 2.65), the destination's regulations on seat belt and smoking in public places ($\overline{x}$ = 2.55), and big modern cities ($\overline{x}$ = 2.54). On the other hand, subjects attached the rating of "somewhat important" to the following attributes: the destination's local health-care emergency and facilities' standards ($\overline{x}$ = 2.01), national parks and forests ($\overline{x}$ = 2.01), historical, archeological, or military sites and buildings ($\overline{x}$ = 2.05), beaches for swimming with

umbrellas for sun protection ($\bar{x}$ = 2.15), museums and art galleries ($\bar{x}$ = 2.20), outdoor activities such as hiking and climbing ($\bar{x}$ = 2.29), luxury facilities/services ($\bar{x}$ = 2.31), smoking-free bars and night clubs ($\bar{x}$ = 2.31), and healthy local cuisine (emphasis on healthy cooking methods with vegetables, fruits, grains, seafood, and olive oil ($\bar{x}$ = 2.33)).

f. Information Sources

Descriptive analysis for information sources is included in **Table 4.4**. This section consists of 10 items grouped in four categories (advice from professionals, printed materials, word of mouth, and the internet). According to Chisnall (1985), these information categories play an important role in today's modern approach towards consumer travel behavior. Such an approach claims that individuals in seeking information aim to diminish the risk associated with their decision making.

Again, in this section certain variables with a supposed appeal to an individual with a more healthy-living orientation status are incorporated. It is measured on a four point Likert type scale, ranging from 1 as "very important" to 4 as "not important at all." Subjects were asked to "X" one box to show how important that source is to him or her in planning for a vacation or a travel experience. Based on the ranking of mean scores, the sources of information that the majority of the subjects indicated that they view as very important are the following: friends or family members ($\bar{x}$ = 1.67), general brochures or travel guides ($\bar{x}$ = 1.88), and the internet ($\bar{x}$ = 1.99). In addition, there are certain information sources to which respondents attach the label of "somewhat important" to. They are the following: general travel agents ($\bar{x}$ = 2.40) and advertisements in general magazines ($\bar{x}$ = 2.45).

On the other hand, based on the ranking of mean scores, the sources which the respondents perceive as "Not Very Important" are the following: direct mail from destinations ($\bar{x} = 2.69$), general tour operators ($\bar{x} = 2.72$), special interest brochures or travel guides (health tourism ($\bar{x} = 2.83$)) , special interest travel agents or tour operators (health tourism ($\bar{x} = 2.93$)), and advertisements in health or fitness magazines ($\bar{x} = 3.01$).

g. Trip Characteristics

Descriptive analysis for the purpose of trip(s) taken is included in **Table 4.5**. Respondents were asked to circle the number of trips they have taken in the last twelve months under different categories (total, pleasure, business, meetings or conventions and a mix of the mentioned three). Each category was measured on a scale ranging from 0 to 10+. The results revealed the following: a mean score of 6.22 relating to the number of trips taken in the last twelve months, a mean score of 3.07 relating to the number of business trips taken in the last twelve months, a mean of 3.71 relating to the number of pleasure trips taken in the last twelve months, a mean score of 1.47 relating to the number trips for attending meetings or conventions taken in the last 12 months, and finally a mean score of 1.64 relating to the number of mixed trips (business, pleasure, meetings, and conventions) taken in the last 12 months.

Table 4.4: Information Sources

Information Sources	Very Important 1		2		3		Not Important At All 4		Mean	SD.
	N	%	N	%	N	%	N	%		
Advice From Professionals										
(1) General Travel Agents	**64**	13.4	**218**	45.7	**139**	29.1	**53**	11.1	**2.40**	**.94**
(2) Special Interests Travel Agents /Tour Operators (health tourism)	**22**	4.6	**122**	25.6	**194**	40.7	**135**	28.3	**2.93**	**.85**
(3) General Tour Operators	**33**	6.9	**140**	29.4	**219**	45.9	**76**	15.9	**2.72**	**.82**
Printed Materials										
(1) General Brochures /Travel Guides	**128**	26.8	**285**	59.7	**49**	10.3	**12**	2.5	**1.88**	**.68**
(2) Special Interest Brochures/ Travel Guides (Health/Fitness)	**28**	5.9	**147**	30.8	**179**	37.5	**121**	25.4	**2.83**	**.88**
(3) Advertisements in General Magazines	**42**	8.8	**212**	44.4	**176**	36.9	**40**	8.4	**2.45**	**.77**
(4) Advertisements in Health/ Fitness Magazines	**21**	4.4	**98**	20.8	**210**	44.0	**145**	30.4	**3.01**	**.83**
(5) Direct Mail from Destinations	**50**	10.5	**150**	31.4	**171**	35.8	**104**	21.8	**2.69**	**.93**
Word of Mouth										
Friends/Family Members	**207**	43.4	**225**	47.2	**28**	5.9	**12**	2.5	**1.67**	**.70**
The Internet	**165**	34.6	**199**	41.7	**58**	12.2	**51**	10.7	**1.99**	**.95**

Note: Respondents rated the importance of information sources in planning for a vacation or travel experience ranging from 1 = very important to 4 = not at all important.

Table 4.5: Trip Characteristics of Respondents

Trip Variables	Mean	Std. Dev.
Number of trips taken in the last 12 months	**6.22**	**3.43**
Number of purely business trips taken in the last 12 months	**3.07**	**4.03**
Number of purely pleasure trips taken in the last 12 months	**3.71**	**2.65**
Number of trips for attending meetings/conventions taken in the last 12 months	**1.47**	**2.57**
Number of mix trips (business/pleasure/meetings and Conventions) taken in the last 12 months	**1.64**	**2.68**

4.4 Factor Analysis

Factor analysis is a statistical technique to conduct an analysis of the interrelationships among a substantial number of variables and to offer an explanation of these variables in regard to their common factors (dimensions). It is used to condense the information included in a number of variables and transform them into a smaller set of factors with a minimum loss of information (Hair et al. 1992). Factor analyses are conducted on healthy-living (attitudinal), travel motivation of push factors and travel motivation of pull factors to reduce the data and to test the hypotheses.

a. Factor Analysis of Healthy-Living (Attitudinal)

First, the fourteen healthy-living attitudinal statements were factor analyzed to delineate underlying dimensions of the subject's healthy-living attitude. The results of factor analysis and related statistics are presented in **Table 4.6**. Two Healthy-living attitudinal sub-scales were generated from the varimax rotation technique. The sub-scales are the following: The exercise and nutrition (alpha reliability = .70), and the alcohol, smoking/drugs and safety (alpha reliability = .58). Both sub-scales had an eigen value greater than one.

The exercise and nutrition sub-scale consists of statements that relate to exercise and nutrition. The statements are the following: "I believe it is important for one to exercise on a regular basis", "I believe it is not important for one

Table 4.6: Factor Analysis of Healthy-Living (Attitudinal) Variables

Item	**Factor** *Loading*	**Eigen** *values*	**Variance** *Explained*	**Reliability** *Alpha*
Factor 1 - Exercise & Nutrition		**2.84**	**20.3**	**.70**
I believe it is important for one to exercise on A regular basis	530			
I believe it is not important for one to limit Consumption of red meat*	.670			
I believe it is important for one to limit Consumption of high-fat desserts	.526			
I believe it is important to eat whole grain Products	.635			
I believe it is not important to eat 5 servings Or more of fruits and vegetables per day*	.681			
I believe it is important to limit fast food Consumption	.559			
Factor 2 – Alcohol, Smoking/Drugs & Safety		**2.18**	**15.6**	**.57**
I believe it is important to limit alcohol drinking To not more than 2 drinks per day	.543			
One should not consume alcohol	.442			
I believe it is important not to consume drugs (e.g. cocaine, marijuana, etc…)	.621			
I believe it is important for one to wear a seat belt (safety)	.639			
I believe it is important not to drink and drive	.676			
I believe it is important to undergo a comprehensive Physical exam every one or two years	.495			
I believe it is not important for one's own and Others' health not to smoke*	.434			
TOTAL VARIANCE EXPLAINED			**35.8**	

Note: A four point Likert-type scale was used to measure each item: 4 = Strongly agree. 2 = agree. 3 =don't agree. 4 = strongly disagree

***Items were reversed coded.**

to limit the consumption of red meat" (reversed coded), "I believe it is important to eat whole grain products", "I believe it is important to eat 5 servings or more of fruits and vegetables per day", and "I believe it is important to limit fast food consumption."

The alcohol, smoking or drugs, and safety sub-scale consists of statements that test the subject's attitude in regard to the above stated items. The statements are the following: "I believe it is important to limit alcohol drinking to not more than 2 drinks per day", "one should not consume alcohol", "I believe it is not important for one's own and others' health not to smoke" (reversed coded), "I believe it is important not to consume drugs" (e.g. cocaine; marijuana), "I believe it is important for one to wear a seat belt" (safety), "I believe it is important not to drink and drive", and "I believe it is important to undergo a comprehensive physical exam every one or two years". The item "I believe it is not important to use condoms/preventive measures" has loaded on the first factor grouping without any factor loading, therefore this item was removed.

b. Factor Analysis of Travel Motivation of Push Factors

The twenty motivation push items were factor analyzed to delineate the underlying dimensions (factors). The findings are presented in **Table 4.7**. Varimax rotation resulted in five factors with eigen values greater than one. The factors were labeled as *Healthy-living* (alpha reliability = .82), *Excitement or Thrills* (alpha reliability = .70), *Education* (alpha reliability = .59), *Indulge* (alpha reliability = .35), and *Escape (*alpha reliability = .59). Combined, these factor groupings accounted for 55 percent of the total variance. The majority of the factor

Table 4.7: Factor Analysis of Push Factors

Item	Factor Loading	Eigen values	Variance Explained	Reliability Alpha
Factor One - Healthy-Living		**4.942**	**24.7**	**.82**
Bath in warm springs and mineral waters	.474			
Enjoy health spas (such as relaxation, saunas, Yoga, muscle development, beauty treatments and weight reduction programs)	.748			
Be cleansed physically and spiritually	.655			
Developing healthy-living habits	.661			
Participate in fitness and seminars	.782			
Seek health-care services (medical examinations, special diets, vitamin-complex intakes, transvital injections, herbal remedies, etc,..)	.765			
Factor Two – Excitement /Thrills		**1.913**	**9.6**	**.70**
Finding thrills and excitement	.728			
Participating in sports	.568			
Being daring and adventuresome	.816			
Factor Three - Education		**1.618**	**8.1**	**.59**
Travelling through places that are important in history	.740			
Learning new things, increasing my knowledge	.698			
Traveling through places rich in nature-made attractions	.561			
Travelling through urban areas	.421			
Factor Four - Indulge		**1.330**	**6.7**	**.35**
Being physically active	.580			
Doing nothing at all	.611			
Indulging in gourmet cuisine	.628			
Factor Five - Escape		**1.218**	**6.1**	**.59**
Breaking from my daily habits	.646			
Escaping from the ordinary	.640			
TOTAL VARIANCE EXPLAINED			**55.1**	

Note: A four point Likert-type scale was used to measure each item: 1 = very important. 2 = somewhat important. 3 = not very important. 4 = not at all important

loading was greater than .60, conveying a high correlation that is reasonable between delineated factors and their specific items. Two particular items loaded on two factors. "Participating in sports" loaded on *healthy-living* and *excitement/thrills* factors, and "escaping from the ordinary" loaded on *Excitement or Thrills* and *Escape* factors. The item "feeling at home away from home" was removed from the *healthy-living* factor and the item "travelling to places where I feel safe/secure" was removed from the factor *Escape* to enhance the reliability alpha.

c. Factors Analysis of Travel Motivation of Pull Factors

The twenty-six motivation pull items were factor analyzed to delineate the underlying dimensions (factors). The findings are presented in **Table 4.8**. Varimax rotation resulted in six factors with eigen values greater than one. However, the last factor had three items (casinos and gambling; fast food restaurants; clothing optional resorts/beaches) with a reliability coefficient of .47. Therefore, this factor grouping is not considered further in the study. The remaining factors are labeled as *Health and Fitness* (alpha reliability = .86), *Hygiene and the Environment* (alpha reliability = .68), *History and Nature* (alpha reliability = .72), *Vigilance and Health* (alpha reliability = .71), and *Arts and Urban Luxury* (alpha reliability = .54). Combined, these factor groupings accounted for 54 percent of the total variance. Most of the factor loading was greater than .60, which conveys a reasonably high correlation between the delineated factors and their individual items. Seven items loaded on fourteen factors: " restaurants with emphasis on light cuisine" loaded on *Health and Fitness* as well as *Hygiene and the Environment*; "healthy local cuisine – emphasis on healthy cooking methods with vegetables, fruits, grains, seafood, and olive

Table 4.8: Factor Analysis of Pull Factors

Item	FactorLoading	Eigen values	Variance Explained	Reliability Alpha
Factor One – Health and Fitness		**6.740**	**25.9**	**.86**
Accommodation with a health facility club/exercise facility	.767			
Shopping with emphasis on health products (vitamins and herbal remedies)	.705			
Healthy local cuisine (emphasis on healthy cooking methods with vegetables fruits, grains, seafood and olive oil)	.500			
The availability of open-air running track and stretching out zone	.662			
Educational tour packages with emphasis on boosting well-being (physically and spiritually – developing healthy habits)	.442			
Accessibility to a GYM with a daily/weekly rate (no membership required)	.748			
Mineral springs	.612			
Spas/health resorts (offer medical examinations & treatments)	.705			
Factor Two – Hygiene and the Environment		**2.314**	**8.9**	**.68**
Hygiene and cleanliness in facilities/services	.685			
Beaches for swimming with umbrellas for sun protection	.645			
Restaurants with emphasis on light cuisine	.568			
Environmental quality of air, water and soil	.578			
Factor Three – History and Nature		**2.036**	**7.8**	**.72**
Campgrounds and trailer parks	.519			
Outdoor activities such as hiking and climbing	.827			
National parks and forests	.852			
Historical, archeological or military sites and buildings	.581			
Factor Four – Vigilance and Health		**1.742**	**6.7**	**.71**
Smoking-free bars and night clubs	.509			
Cafes serving alcoholic-free Beverages	.736			
Local health-care emergency/ Facilities' standards	.524			
The destination's regulations on seat belt and smoking in public places	.648			
Factor Five – Arts and Urban Luxury		**1.463**	**5.6**	**.54**
1. Museums and art galleries	687			
2. Big modern cities	531			
3. Luxurious facilities/services	570			
TOTAL VARIANCE EXPLAINED			**54**	

Note: A four point Likert-type scale was used to measure each item: 1 = very important. 2 = somewhat important. 3 = not very important. 4 = not at all important

oil" on *Health and Fitness* as well as *Hygiene and the Environment, "*smoking-free bars and night clubs" on *Hygiene and the Environment* as well as *Vigilance and Health*, "local health-care emergency/facilities' standards" on *"Hygiene and he Environment"* as well as *"Vigilance and Health",* "*educational* tour packages with emphasis on boosting well-being – physically and spiritually – developing healthy habits" on *Health and Fitness* as well as *Vigilance and Health*, "campgrounds and trailer parks" on *Nature and History*, "museums and art galleries" on *Nature and History* as well as *Arts and Urban Luxury* and "historical, archeological, or military sites, and buildings" on *Nature and History* as well as *Arts* and *Urban Luxury.*

The next section tests hypotheses using Pearson's correlation coefficients.

4.5 Hypothesis Testing - Correlation

This section portrays the statistical tests' results with the objective to test the previously stated research hypotheses. Hypotheses 1 through 8 were tested by undertaking Pearson's correlation coefficient analysis on factor groupings of both the independent and dependent variables. Factor groupings based on the factor analysis techniques were used for a set of independent (healthy-living behavioral and attitudinal) and dependent variables. The dependent variable is travel motivation that consists of push and pull factors, information sources, and purpose of trip. The push variable consists of five delineated factors. The pull variable consists of six delineated factors. The information sources variable consists of six categories and the purpose of trip consists of five ones. The following are listings of the null hypotheses, and the results generated from the statistical analysis are presented.

Hypothesis 1:

There is no significant relationship between an individual's healthy-living behavioral characteristics in general and his or her travel behavior of push motivations.

Pearson's correlation coefficient analysis was undertaken in order to test the stated hypothesis. Such technique is undertaken to help in investigating the relationship between the subject's healthy-living behavioral characteristics (exercise level, eating habits, alcohol and drugs, stress and coping, safety, and medical care) and travel behavior of push motivations consisting of five factors: healthy-living, excitement or thrills, education, indulge, and escape.

The results of the correlation analysis **(Table 4.9)** portrayed that there were significant relationships (at the .05 or better probability level) between selected healthy-living behavioral factors and selected travel behavior of push motivations which conveys partial support to the stated hypothesis (reject null hypothesis). Push1 factor, healthy-living, correlated with the following healthy-living behavioral factors: exercise level, eating habits and alcohol and drugs. The correlation coefficients ranged from .094 to .111. Such correlation conveys that those who follow an exercise regime (aerobic and strength types), eat healthy (limited amount of meat, low-fat dairy products, low-fat desserts, low-fat cooking methods, whole grain products, a substantial amount of fruits and vegetables, limit fast food, and eat less salty foods) and consume, if any, a limited amount of alcohol and drugs (drugs or medications that affect one's mood or help one to relax or sleep) are more likely to portray travel behavior push motivations related to Push1 or healthy-living. That is they are motivated to go to health spas, participate in fitness and wellness

seminars, seek to develop healthy-living habits when they travel, and bath in warm springs and water and so on.

A closer examination of the results showed a significant correlation between exercise level and push2 factor (excitement or thrills). In the meantime, there is a negative correlation between safety and excitement or thrills. The correlation coefficients range from -.220 to .207. It can be interpreted that individuals in this segment are involved in exercise activities (aerobic and/or strength), tend to seek excitement or thrills and adventures while travelling through their participation in sports (be it attending a competition or being involved in competitions or simply exercise). The significant negative correlation conveys the fact that such a segment tends to place less emphasis on safety measures such as always wearing a seat belt or avoiding drinking and driving. The negative correlation in this case seems natural with the adventuresome and thrills variables of the excitement or thrills factor. The less safety is valued, the more travel behavior of excitement/thrills push motivations is portrayed.

Table 4.9: Correlation between Healthy-Living (Behavioral) Variables and Push Factors

Variables	Push1	Push2	Push3	Push4	Push5
Exercise Level					
r =	.111	.207	.019	.032	.019
Sig. level	**(.015)***	**(.000)****	**(.686)**	**(.488)**	**(.685)**
Eating Habits					
r =	.111	-.064	.110	.016	-.008
Sig. Level	**(.015)***	**(.161)**	**(.016)***	**(.733)**	**(.867)**
Alcohol & Drugs					
r =	.094	-.100	.046	-.011	.008
Sig. level	**(.041)***	**(.029)**	**(.315)**	**(.806)**	**(.863)**
Smoking Status					
r =	.033	-.070	.049	.031	.102
Sig. Level	**(.468)**	**(.127)**	**(.288)**	**(.505)**	**(.027)***
Stress & Coping					
r =	-.039	-.026	-.019	-.040	-.128
Sig. Level	**(.399)**	**(.577)**	**(.680)**	**(.388)**	**(.005)****
Safety					
r =	-.036	-.220	.040	-.061	-.037
Sig. Level	**(.435)**	**(.000)****	**(.386)**	**(.186)**	**(.420)**
Medical Care					
r =	.010	-.071	-.029	-.037	-.023
Sig. Level	**(.823)**	**(.124)**	**(.531)**	**(.415)**	**(.613)**

Note: ** Correlation is significant at the 0.01 level (2-tailed)
*** Correlation is significant at the 0.05 level (2-tailed)**

Push1 = healthy-living. Push2 = excitement and thrills. Push3 = education. Push4 = indulgence. Push5 =escape.

A significant correlation is witnessed (at the .016 probability level) between eating habits and push3 factor. This factor is education. The correlation coefficient is .110. It may be interpreted that those individuals who eat healthier tend to enjoy more nature- made attractions, historical sites, and they treat travel as a learning experience.

A significant correlation also exists between smoking status and factor push5. This factor is escape. However, a significant negative correlation is detected between stress and coping and escape. The correlation coefficients ranged from -.128 to .102. This may be interpreted that those who smoke tend, in general, to be stressed and yearn to escape and break from their daily routine. A stressed individual tends to puts more emphasis on safety or security. On the other hand, a significant negative correlation between stress and coping and escape exists. It is interpreted that those who are less happy, have less energy, and have difficult time coping with stress tend to look at travel as a means to escape from their reality, regain security, and break their routine.

Hypothesis 2:

There is no significant relationship between an individual's healthy-living behavioral characteristics in general and his or her travel behavior of pull motivations.

The above hypothesis was tested using Pearson's correlation coefficient analysis with the objective to investigate the relationship between the individual's behavioral healthy-living characteristics (exercise level, eating habits, alcohol and drugs, stress and coping, safety and medical care) and travel behavior of pull motivations. The travel behavior of pull motivations

variable consists of the following five factors: health and fitness, hygiene and the environment, history and nature, vigilance and health, and arts and urban luxury.

The results of the correlation analysis **(Table 4.10)** portray significant relationships between selected healthy-living behavioral factors and selected travel behavior of pull motivations which conveys support to the stated hypothesis (reject null hypothesis). There is a significant correlation between Pull1 factor, health and fitness and exercise level, eating habits, and smoking status. The correlation coefficients range from .104 to .256. Such correlation conveys that those who follow an exercise regime (aerobic and strength types), eat healthy (limited amount of meat, low-fat dairy products, low-fat desserts, low-fat cooking methods, whole grain products, a substantial amount of fruits and vegetables, limit fast food, and eat less salty foods) and do not smoke are more likely to portray travel behavior pull motivations related to Pull1 or health and fitness. Those individuals are pulled by attributes in a destination such as accommodation with a health club or exercise facility, shopping with emphasis on health products (vitamins and herbal remedies), value healthy local cuisine (emphasis on healthy cooking methods using vegetables, fruits, grains, seafood, and olive oil), the availability of a nearby open-air running track and stretching out zone, educational tour packages with an emphasis on boosting well being (physically and spiritually), developing healthy habits, accessibility to a gym with a daily or weekly rate (no membership required), and mineral springs, spas, or health resorts (offer medical examinations and treatments).

A closer examination of the results shows a significant correlation between eating habits and smoking status on one side, and pull2 factor or hygiene and the environment.

The correlation coefficients range from .169 to .224. It can be interpreted that a segment that is well involved in healthy eating habits and abstains from smoking tends to be pulled by attributes in a destination such as hygiene and cleanliness in facilities or services, beaches for swimming with umbrellas for sun protection, restaurants with emphasis on light cuisine, and environmental quality of air, water, and soil. A significant correlation is witnessed between eating habits and pull3 factor that is history and nature. A significant negative correlation is detected between medical care and pull3 factor. Correlation coefficients range from -.125 to .107. This may be interpreted that those individuals who eat healthier tend to attach more importance to attributes such as campgrounds and trailers, outdoor activities such as hiking and climbing, national parks and forests, historical, archeological, or military sites and buildings. On the other hand, it seems that the significant negative correlation between medical care and pull3 factor portrays the fact that those who tend to get sunburn more often tend to be attracted to the outdoors.

A significant correlation is found between eating habits, alcohol/drugs, smoking status, safety, and pull4 factor, which is vigilance and health. The correlation coefficients range from .152 to .215. It may be interpreted that those who have healthy eating habits and consume, if any, limited amount of alcohol and abstain from drugs, do not smoke and value safety such as seat belts and do not drink and drive tend to attach a high degree of importance on healthy-oriented attributes. They are the following: smoking-free bars and night clubs, cafes serving alcohol-free beverages, local health-care emergency or facilities' standards, the destination's regulations on seat belt, and smoking in public places.

Table 4.10: Correlation between Healthy Living (Behavioral) Variables and Pull Factors

Variables	Pull1	Pull2	Pull3	Pull4	Pull5
Exercise Level					
r =	.256	.015	.084	.004	-.067
Sig. Level	**(.000)****	**(.746)**	**(.069)**	**(.935)**	**(.145)**
Eating Habits					
r =	.213	.224	.107	.152	033
Sig. Level	**(.000)****	**(.000)****	**(.019)***	**(.001)****	**(.469)**
Alcohol and Drugs					
r =	.058	.063	.042	.260	-.064
Sig. Level	**(.206)**	**(.170)**	**(.359)**	**(.000)****	**(.166)**
Smoking Status					
r =	.104	.169	.011	.307	.023
Sig. Level	**(.024)***	**(.000)****	**(.803)**	**(.000)****	**(.610)**
Stress and Coping					
r =	.019	-.008	.047	.040	-.049
Sig. Level	**(.686)**	**(.854)**	**(.312)**	**(.380)**	**(.289)**
Safety					
r =	-.044	.056	-.030	.215	-.090
Sig. Level	**(.340)**	**(.221)**	**(.514)**	**(.000)****	**(.050)***
Medical Care					
r =	-.005	.044	-.125	.072	-.066
Sig. Level	**(.910)**	**(335)**	**(.006)****	**(.118)**	**(.151)**

Note: ** Correlation is significant at the 0.01 level (2-tailed)
*** Correlation is significant at the 0.05 level (2-tailed)**

Pull1= health and fitness. Pull2 = hygiene and the environment. Pull3 = history and nature. Pull4 = vigilance and health. Pull5 = arts and urban luxury.

A significant negative correlation is witnessed between safety and pull5 factor, which is arts and urban luxury. The correlation coefficient is -.090. This may be interpreted that those who tend to put less emphasis on seat belt as well as drinking and driving enjoy big modern cities, luxury, and museums.

Hypothesis 3:

There is no significant relationship between an individual's healthy-living behavioral characteristics in general and his or her way of seeking health-oriented travel information sources when planning for a vacation or travel experience.

The above hypothesis is tested using Pearson's correlation coefficient analysis with the objective to investigate the relationship between the individual's healthy-living behavioral characteristics (exercise level, eating habits, alcohol and drugs, stress and coping, safety, and medical care) and information sources. Information sources consist of the following six factors: 1. advice from general travel professionals such as general travel agents and tour operators, 2. advice from special interest travel professionals such as special interest travel agents or tour operators (health tourism), 3. general travel printed materials such as general travel brochures or travel guides and advertisements in general magazines, 4. special interest brochures or travel guides (health/fitness) and advertisements in health or fitness magazine, 5. Word of mouth, and 6. the internet.

The results of the correlation analysis **(Table 4.11)** portray some relationships between selected healthy-living behavioral factors and selected health-oriented travel information sources

which conveys support to the stated hypothesis (reject the null hypothesis). Advice from general travel professionals correlate significantly with stress and coping variables of healthy-living behavioral. The correlation coefficient is .101. Such correlation conveys that those who feel less stressed and are coping well, along with those who are fairly happy and with good energy, tend to seek the advice of general travel professionals when planning their travel or vacation experience.

A closer examination of the results shows a significant correlation between advice from general travel professionals and the healthy-living behavioral of medical care. The correlation coefficient is .158. It can be interpreted that individuals who did not miss a substantial number of days from work due to sickness or injury during the past 12 months, and also those who have personal physicians and do not often get a sunburn tend to value an advice from a general travel professional.

A significant correlation is found between the healthy-living behavioral of exercise level such as aerobic and strength exercises and advice from health-related travel professionals such as special interest travel agents/tour operators (health tourism). The correlation coefficient is .134. It can be interpreted that those who are active in aerobic and strength-related types of exercise tend to look for travel professionals whose specialization is health tourism.

No correlation is noticed between general printed materials and healthy-living behavioral characteristics. However, a significant correlation is detected between special interest brochures or travel guides (health/fitness) as well as advertisements in health or fitness magazines and the

healthy-living behavioral factor of exercise level (aerobic exercises and strength exercises). The correlation coefficient is .158. It can be interpreted that those individuals who score high in exercise activities tend to seek health-oriented printed materials when planning for a vacation or a travel experience. No correlation is detected between healthy-living behavioral characteristics and word of mouth. Regardless where an individual stands on healthy-living, he or she seeks word of mouth when planning for a vacation or travel experience. In regard to the internet, a significant negative correlation is detected between the mentioned information source and the healthy-living behavioral factor of alcohol and drugs such as number of alcoholic drinks consumed and the intake of drugs or medications that affect one's mood or help one to relax or sleep. The correlation coefficient is -.129. It may be interpreted that those who score low on such healthy-living behavioral factor tend to attach a high level of importance to the internet when planning for a vacation or trip experience. It also may be interpreted that those who drink more tend to spend more time on the internet.

Table 4.11: Correlation between Healthy Living (Behavioral) Variables and Information Sources

Variables	INFPRO	INFPROH	INFPRIG	INFPRIH	WM	INTERNET
Exercise Level						
R =	.054	-.134	.035	-.158	.033	-.024
Sig. Level	**(.240)**	**(.003)****	**(.450)**	**(.001)****	**(.482)**	**(.602)**
Eating Habits						
R =	-.051	-.068	.027	-.082	.006	-.038
Sig. Level	**(.266)**	**(.140)**	**(.558)**	**(.076)**	**(.902)**	**(.414)**
Alcohol & Drugs						
R =	-.038	-.036	.012	-.010	-.087	.129
Sig. Level	**(.408)**	**(.433)**	**(.803)**	**(.835)**	**(.060)**	**(.005)****
Smoking Status						
R =	-.026	.007	-.035	-.053	-.034	-.026
Sig. Level	**(.573)**	**(.887)**	**(.446)**	**(.246)**	**(.462)**	**(.573)**
Stress & Coping						
R =	-.101	-.070	.007	-.033	-.059	-.009
Sig. Level	**(.028)***	**(.131)**	**(.885)**	**(.473)**	**(.201)**	**(.847)**
Safety						
R =	-.061	.039	.001	.069	.010	.023
Sig. Level	**(.189)**	**(.396)**	**(.986)**	**(.134)**	**(.821)**	**(.612)**
Medical Care						
R =	-.158	-.034	-.026	-.019	.046	.088
Sig. Level	**(.001)****	**(.454)**	**(.577)**	**(.686)**	**(.324)**	**(.055)**

Note: ** Correlation is significant at the 0.01 level (2-tailed)
*** Correlation is significant at the 0.05 level (2-tailed)**

INFPRO: advice from general travel agents professionals such as general travel agents and tour operators.
INFPRO: advice from special interest travel professionals such as special interest travel agents or tour operators (health tourism).
INFPRIG: general travel printed materials such as general travel brochures or travel guides and advertisements in general magazines.
INFPRIH: special interest brochures or travel guides (health/fitness) and advertisements in health or fitness magazines
WM: word of mouth

Hypothesis 4:

There is no significant relationship between an individual's healthy-living behavioral characteristics and his or her purpose of trip, including the number of trips that he or she takes.

The above hypothesis is tested using Pearson's correlation coefficient analysis with the objective to investigate the relationship between the individual's healthy-living behavioral characteristics (exercise level, eating habits, alcohol and drugs, stress and coping, safety, and medical care) and purpose of trip. The purpose of trip consists of the following five factors: 1. trip1 or the total number of trips taken in the last twelve months, 2. trip2 or the total number of business trips taken in the last twelve months, 3. trip3 or the total number of pleasure trips taken in the last twelve months, 4. trip4 or the total number of trips taken in the last twelve months for attending meetings or conventions, and 5. trip5 or the total number of mixed trips (pleasure, business, and conventions/meetings) taken in the last twelve months.

The results of the correlation analysis **(Table 4.12)** convey some relationships between selected healthy-living behavioral factors and selected factors under purpose of trip which conveys support to the stated hypothesis (reject null hypothesis). A significant negative correlation is detected between the number of trips taken in the last twelve months (trip1) and the healthy-living behavioral factor of alcohol and drugs. The correlation coefficient is -.145. It may be interpreted that those individuals who have a higher intake of alcohol and drugs tend to have the least number of trips taken in the last twelve months. A significant negative correlation is noticed between trip one and safety. The correlation coefficient is -.90. It may be interpreted

that those individuals who do not score high on safety-related healthy-living behavioral-related variables such as seat belt as well as drinking and driving tend to have a lower total number of trips taken in the last twelve months.

No correlation is detected between the variable trip2 or trips for business purposes and healthy-living behavioral variables. However, a significant negative correlation is detected between the healthy-living behavioral variables of alcohol and drugs and the variable trip3 or the number of pleasure trips taken in the last twelve months. The correlation coefficient is -.135. It could be interpreted that an individual who ranks low on the healthy-living variable of alcohol and drugs (consume a substantial amount of such substances) gets involved less in trips for pleasure. No correlation is detected between the variable trip4 or the number of trips taken in the last twelve months to attend meetings or conventions and the variable of healthy-living behavioral.

When it comes to looking at the variable trip5 or the trips taken in the last twelve months that were a mix of business, pleasure, and meetings or conventions, a significant negative correlation is detected with the variable of healthy-living behavioral of alcohol and drugs. The correlation coefficient is -.094. It can be interpreted that the lower the individual's healthy-living behavioral status on alcohol and drugs (over-consumption of such substances) the less the number of mixed trips are taken.

Table 4.12: Correlation between Healthy Living (Behavioral) Variables and Purpose of Trip

Variables	Trip 1	Trip 2	Trip 3	Trip 4	Trip 5
Exercise Level					
R =	.019	.033	.049	-.007	.012
Sign. Level =	**(.675)**	**(.473)**	**(.293)**	**(.872)**	**(.797)**
Eating Habits					
R =	.063	.039	.082	.041	-.012
Sign. Level =	**(.170)**	**(.402)**	**(.075)**	**(.371)**	**(.799)**
Alcohol & Drugs					
R =	-.145	-.054	-.135	-.043	-.094
Sign. Level =	**(.002)****	**(.244)**	**(.003)****	**(.355)**	**(.042)***
Smoking Status					
R =	-.027	-.031	.033	-.008	-.002
Sign. Level =	**(.550)**	**(.496)**	**(.475)**	**(.855)**	**(.963)**
Coping & Stress					
r =	.018	-.030	.096	-.067	.028
Sign. Level =	**(.694)**	**(.518)**	**(.038)***	**(.144)**	**(.552)**
Safety					
R =	-.090	-.065	-.047	-.074	-.036
Sign. Level =	**(.049)***	**(.158)**	**(.311)**	**(.108)**	**(.439)**
Medical Care					
R =	-.033	.001	-.043	.036	.020
Sign. Level =	**(.478)**	**(.979)**	**(.347)**	**(.432)**	**(.669)**

Note: ** Correlation is significant at the 0.01 level (2-tailed)
*** Correlation is significant at the 0.05 level (2-tailed)**

Trip1 = total number of trips taken in the last twelve months
Trip2 = total number of business trips taken in the last twelve months
Trip3 = total number of pleasure trips taken in the last twelve months
Trip4 = total number of trips taken in the last twelve months for attending meetings and conventions
Trip5 = total number of mixed trips (pleasure, business and conventions and meetings) taken in the last twelve months

Hypothesis 5:

There is no significant relationship between an individual's healthy-living attitudinal characteristics and his or her travel behavior of push motivations.

Pearson's correlation coefficient analysis is undertaken in order to test the above stated hypothesis. This technique is undertaken to help in investigating the relationship between the individual's attitudinal healthy-living (1. exercise and nutrition and 2. alcohol, smoking or drugs, and safety) and Travel behavior of push motivations. Push motivations consist of the following five factors: healthy-living, excitement or thrills, education, indulge, and escape. The first healthy-living attitudinal factor comprehends variables related to exercise, red meat consumption, high-fat desserts, whole grain products, fruits and vegetables, and fast food. The second healthy-living attitudinal factor comprehends variables related to the alcohol and drugs consumption, seat belt, drinking and driving, comprehensive physical exam, and smoking. Subjects' attitudes in regard to the mentioned variables are tested.

The results of the correlation analysis **(Table 4.13)** portray significant relationships between selected healthy-living attitudinal factors and selected travel behavior of push motivations which conveys support to the stated hypothesis (reject null hypothesis). Push1 factor, healthy-living, correlate significantly with healthy-living attitudinal factor1 (exercise and nutrition) and healthy-living attitudinal factor2 (alcohol, smoking/drugs and safety). The correlation coefficients range from .130 to .214. This correlation indicates that those who convey a positive attitude in regard to healthy-living attributes connected to exercise and nutrition as well as alcohol, smoking/drugs, and safety are more likely to portray travel behavior push

motivations related to Push1 or healthy-living. They are motivated to go to health spas, participate in fitness and wellness seminars, seek to develop healthy-living habits when they travel, bath in warm springs and water.

A closer examination of the results shows a significant negative correlation between healthy-living attitudinal factor 2 and push2 factor. The correlation coefficient is -.180. The significant negative correlation conveys the fact that a segment with a low healthy-living attitude in regard to variables related to alcohol, smoking or drugs, and safety tend to value thrills and excitement in a travel experience. The significant negative correlation in this case seems natural with the adventuresome and thrills variables of the excitement/thrills factor. The less safety is valued, the more the individual portrays travel behavior of push motivations related to excitement or thrills.

A significant correlation is witnessed between attitudinal factor 1 (exercise and nutrition) and push3 factor that is education. The correlation coefficient is .186. It may be interpreted that those individuals who have a positive healthy-living attitude in regard to exercise and nutrition tend to enjoy more nature-made attractions, historical sites, and treat travel as a learning experience.

A significant correlation is found between healthy-living attitudinal factor 1 and push 4 factor that is indulgence. On the other hand, a significant negative correlation is witnessed between healthy-living attitudinal factor 2 and push4 factor. The correlation coefficients range from -.204 to .133. The significant correlation between the healthy-living attitudinal factor 1 and

Table 4.13: Correlation between Healthy-Living (Attitudinal) Variables and Push Factors

Variables	Push 1	Push 2	Push 3	Push 4	Push 5
Attitudinal 1 = Exercise and Nutrition					
r=	.214	.015	.186	.133	.183
Sign. level	(.000)**	(.742)	(.000)**	(.004)**	(.000)**
Attitudinal 2 = Alcohol, smoking or drugs, and safety					
r=	.130	-.180	.068	-.204	.132
Sign. level	(.004)**	(.000)**	(.138)	(.000)**	(.004)**

Note: ** Correlation is significant at the 0.01 level (2-tailed)
*** Correlation is significant at the 0.05 level (2-tailed)**

Push1 = healthy-living. Push2 = excitement and thrills. Push3 = education. Push4 = indulgence. Push5 = escape.

indulgence may indicate that those who carry a positive attitude for exercise and nutrition tend to value being active while travelling. On the other hand, the significant negative correlation between healthy-attitudinal factor 2 and push4 factor may indicate that those with low healthy-living attitude concerning alcohol, smoking or drugs and safety tend to consider gourmet and "doing nothing at all" as important motivational variables when considering a trip.

A significant correlation is noticed between both healthy-living attitudinal factor 1 and 2 and push5 factor, that is escape. The correlation coefficients range from .132 to .182. It seems that those who have high healthy-living attitude when it comes to exercise and nutrition as well as alcohol, smoking or drugs, and safety tend to value motivational push factors of escape which involves breaking from routine, escape, and seeking safety or security.

Hypothesis 6:

There is no significant relationship between an individual's attitudinal healthy-living characteristics in general and his or her travel behavior of pull motivations.

The above hypothesis is tested using Pearson's correlation coefficient analysis with the objective to investigate the relationship between healthy-living (attitudinal) and travel behavior of pull motivations. Healthy-living (attitudinal) consists of the following two factors: factor 1 is exercise and nutrition and factor 2 is alcohol, smoking or drugs, and safety. Travel behavior of pull motivations consist of the following six factors: health and fitness, hygiene and the environment, history and nature, vigilance and health, arts and urban luxury.

The results of the correlation analysis **(Table 4.14)** portray significant relationships between selected healthy-living attitudinal factors and selected travel behavior of pull motivations which conveys support to the stated hypothesis (reject the null hypothesis).

Healthy-living attitudinal factor 1 as well as healthy-living attitudinal factor 2 correlate significantly with Pull1 factor, that is health and fitness. The correlation coefficients range from .120 to .254. Such correlation conveys that those who value exercise and nutrition as well as those who have a high healthy attitude when it comes to alcohol, smoking or drugs, and safety are more likely to portray travel behavior pull motivations related to Pull1 or health and fitness. That is, they are pulled by attributes in a destination such as accommodation with a health club or exercise facility, shopping with emphasis on health products (vitamins and herbal remedies), healthy local cuisine (emphasis on healthy cooking methods using vegetables, fruits, grains, seafood, and olive oil), the availability of nearby open-air running track and stretching out zone, educational tour packages with emphasis on boosting well being (physically and spiritually), developing healthy habits, accessibility to a gym with a daily or weekly rate (no membership required), mineral springs, and spas or health resorts (offer medical examinations and treatments).

A closer examination of the results shows a significant correlation between healthy-living attitudinal factor 2 on one side and pull2 factor or hygiene and the environment. The correlation coefficients range from .246 to .276. It can be interpreted that a segment with a high healthy-living attitude in regard to nutrition and fitness as well as alcohol, smoking or drugs, and safety

Table 4.14: Correlation between Healthy-Living (Attitudinal) Variables and Pull Factors

Variables	Pull 1	Pull 2	Pull 3	Pull 4	Pull 5
Attitudinal 1 = Exercise and Nutrition					
r =	.254	.276	.130	.285	.120
Sign. Level	(.000)**	(.000)**	(.004)**	(.000)**	(.009)***
Attitudinal 2 = Alcohol, smoking or drugs, and safety					
r =	.120	.246	.054	.371	.042
Sign. Level	(.009)**	(.000)**	(.235)	(.000)**	(.358)

Note: ** Correlation is significant at the 0.01 level (2-tailed)
*** Correlation is significant at the 0.05 level (2-tailed)**

Pull1= health and fitness. Pull2 = hygiene and the environment. Pull3 = history and nature. Pull4 = vigilance and health. Pull5 = arts and urban luxury.

tends to be pulled by attributes in a destination such as hygiene and cleanliness in facilities or services, beaches for swimming with umbrellas for sun protection, restaurants with emphasis on light cuisine, and environmental quality of air, water, and soil.

A significant correlation is found between healthy-living attitudinal factor 1 and pull3 factor, which is history and nature. The correlation coefficient is .285. It may be interpreted that those individuals who have a high healthy-living attitude in regard to exercise and nutrition tend to attach more importance to attributes such as campgrounds and trailers, outdoor activities such as hiking and climbing, national parks and forests, historical, archeological, or military sites and buildings.

A significant correlation is found between healthy-living attitudinal factor 1 (exercise and nutrition) as well as healthy-living attitudinal factor 2 and pull4 factor, which is vigilance and health. The correlation coefficient range between .371 and .285. It may be interpreted that a segment that has high healthy-living attitude on nutrition and exercise as well as on alcohol, smoking or drugs, and safety tend to attach a high degree of importance to healthy-oriented attributes such as smoking-free bars and night clubs, cafes serving alcohol-free beverages, local health-care emergency or facilities' standards, and the destination's regulations on seat belts and smoking in public places.

A significant correlation is found between healthy-attitudinal factor 1 and pull5 factor, which is arts and urban luxury. The correlation coefficients range is .120. It may be interpreted

that those who have a high healthy-living attitude on exercise and nutrition tend to enjoy big modern cities, luxury, and museums.

Hypothesis 7:

There is no significant relationship between an individual's healthy-living attitudinal characteristics in general and his or her way of seeking health-oriented travel information sources when planning for a vacation or travel experience.

The above hypothesis is tested using Pearson's correlation coefficient analysis with the objective to investigate the relationship between healthy-living (attitudinal) and information sources. Healthy-living attitudinal consists of factor 1 (nutrition and exercise) and factor 2 (alcohol consumption, smoking/drugs, and safety). Information sources consist of the following factors: (1) advice from general travel professionals such as general travel agents and tour operators, (2) advice from special interest travel professionals such as special interest travel agents or tour operators (health tourism), (3) general travel printed materials such as general travel brochures or travel guides and advertisements in general magazines, (4) special interest brochures or travel guides (health/fitness) and advertisements in health or fitness magazines, (5) word of mouth, and (6) the internet.

The results of the correlation analysis **(Table 4.15)** portray some relationships between the two healthy-living attitudinal factors and selected health-oriented travel information sources. This conveys support to the stated hypothesis (reject the null hypothesis). Advice from health travel professionals correlates significantly with both factors of healthy-living attitudinal

variables. The correlation coefficients range from .095 to .111. Such correlation conveys that those who have a relatively high healthy-living attitude for nutrition, exercise, alcohol, smoking or drugs, and safety tend to seek the advice of health travel professionals when planning their travel or vacation experience.

A significant correlation is witnessed between both factors of healthy-living attitudinal and both general printed materials and special interest brochures or travel guides (health/fitness) as well as advertisements in health or fitness magazines and the healthy-living behavioral factor of exercise level. The correlation coefficient range from .120 to .176. It can be interpreted that those individuals who have a high healthy-living attitude for nutrition, exercise, alcohol, smoking or drugs, and safety tend to rely on general travel printed materials as well as on health-oriented printed materials when planning for a vacation or a travel experience.

No correlation is detected between healthy-living attitudinal characteristics and word of mouth. It seems that regardless where an individual's attitude stands on healthy-living, he or she seeks word of mouth when planning for a vacation or travel experience. In regard to the internet,

Table 4.15: Correlation between Healthy-Living (Attitudinal) and Sources of Information

Variables	INFPRO	INFPROH	INFPRIG	INFPRIH	WM	INTERNET
1. Attitudinal 1 = exercise and nutrition						
r =	**.062**	**.095**	**.135**	**. 176**	**.022**	**114**
Sign. Level		**(.176)**	**(.038)***	**(.003)****	**(.000)****	**(.641)**
(.013)*						
2. Attitudinal 2 = alcohol, smoking or drugs, and safety						
r =	**.079**	**.111**	**.120**	**.112**	**.071**	**-.021**
Sign. Level		**(.087)**	**(.016)***	**(.009)****	**(.008)****	**(.121)**
(.651)						

Note: ** Correlation is significant at the 0.01 level (2-tailed)
*** Correlation is significant at the 0.05 level (2-tailed)**

INFPRO = information from general travel professionals
INFPROH = information from health tourism travel professionals
INFPRIG = general travel-related printed materials
INFPRIH = health tourism travel-related materials
WM = word of mouth

significant correlation is detected between healthy-living attitudinal factor 1 (exercise and nutrition) and the information source of the internet. The correlation coefficient is .114. It may be interpreted that those who have a positive attitude on fitness and nutrition tend to attach importance to the internet when planning for a vacation or trip experience.

Hypothesis 8:

There is no significant relationship between an individual's healthy-living attitudinal characteristics and his or her purpose of trip (including the number of trips) that he or she takes.

The above hypothesis is tested using Pearson's correlation coefficient analysis with the objective to investigate the relationship between healthy-living (attitudinal) characteristics which consist of factors related to exercise, nutrition, alcohol, smoking or drugs and, safety and purpose of trip. The purpose of trip variable consists of the following five factors: 1. Trip1 or the total number of trips taken in the last twelve months, 2. Trip2 or the total number of business trips taken in the last twelve months, 3. Trip3 or the total number of pleasure trips taken in the last twelve months, 4. Trip4 or the total number of trips taken in the last twelve months for attending meetings or conventions, and 5. Trip5 or the total number of mixed trips (pleasure, business, and conventions or meetings) that were taken in the last twelve months.

The results of the correlation analysis **(Table 4.16)** convey that there is no relationship between the selected healthy-living attitudinal factors and selected factors under purpose of trip (fail to reject the null hypothesis). Such result does not show consistency with the relationship that was found between one's healthy-living (behavioral) and the purpose of trip variable.

4.16: Correlation between Healthy-Living (Attitudinal) Variables and Purpose of Trip

Variables	Trip 1	Trip 2	Trip 3	Trip 4	Trip 5
1. Attitudinal 1 = exercise and nutrition					
r =	**-.031**	**-.081**	**.032**	**-.028**	**-.037**
Sign. Level	**(.495)**	**(.079)**	**(.483)**	**(.539)**	**(.420)**
2. Attitudinal 2 = alcohol, smoking or drugs, and safety					
r =	**-.061**	**-.075**	**.037**	**-.043**	**-.047**
Sign. Level	**(.182)**	**(.104)**	**(.418)**	**(.349)**	**(.312)**

Note: Trip1 = total number of trips taken in the last 12 months.
Trip2 = number of business trips taken in the last 12 months.
Trip3 = number of Pleasure trips taken in the last 12 months.
Trip4 = number of trips for attending meetings or conventions taken in the last 12 months.
Trip5 = total number of mixed trips taken in the last 12 months.

4.6 Hypothesis Testing (One Way ANOVA)

Hypothesis 9

There are no significant differences between an individual's healthy-living (behavioral) variables and his or her socio-demographic characteristics.

Gender

One-way analysis of variance is performed on healthy-living (behavioral) and socio-demographic characteristics. A significant difference is found between gender and the following healthy-living behavioral factors: exercise level, eating habits, smoking status, stress and coping, and safety. Statistics are presented in **Table 4.17**. It seems that males ($\bar{x}$ = 2.44) tend to have a healthier approach to exercise than females ($\bar{x}$ = 2.21). For eating habits, females ($\bar{x}$ = 3.05) are more health-conscious than males ($\bar{x}$ = 2.86). Females ($\bar{x}$ = 3.60) smoke less than and males ($\bar{x}$ = 3.38). On the other hand, males ($\bar{x}$ = 3.41) deal better with stress and coping than females ($\bar{x}$ = 3.24). Females ($\bar{x}$ = 3.54) follow a healthier approach to safety (wearing seat belts and avoid drinking and driving) than males ($\bar{x}$ = 3.32). No Tukey's multiple range tests are conducted since only two levels of gender exist and in this case F-test is identical to t-test.

Marital Status

When it comes to marital status, it is noticed that there is a significant difference between the different groups on the following variables: alcohol and drugs, smoking status, stress and coping, safety, and medical care.

Tukey's multiple range tests are conducted to reveal where significant differences between the groups exist. **Tables C.1 – C.7 (Appendix C)** provides the statistical results of Tukey's multiple range tests. The results revealed that for alcohol and drugs, married individuals tend to portray healthier lifestyle than singles. Those under the others category tend to consume more alcohol than married but less than singles. The same features apply to smoking status. For stress and coping, it is found that there is no difference between the three groups. For safety, married and others tend to follow a healthier approach to safety than singles. In regard to medical care, married are in the high-healthy category, whereas singles are in the low one. Others are not significantly different than married and singles.

Income

When it comes to income, it is noticed that there is a significant difference between the different groups on the following variables: eating habits, smoking status, and medical care.

Tukey's multiple range tests revealed that those with a high household income ($75,000 and above) tend to follow healthier eating habits than those with a lower income category ($25,000-$34,999).

For smoking, it is found that there is a significant difference between income categories. It seems that those with high income ($50,000 and above) tend to abstain more from smoking than those in the lower category ($25,000-$34,999). Those who make in the ($35,000 - $49,999) range are not significantly different from the above mentioned two categories.

ANALYSIS OF VARIANCE

Table 4.17: Healthy-Living (Behavioral) Variables and Socio-Demographic variables

Variables	Gender	Marital Status	Income	Age	Education
Exercise level	(.037)*	(.189)	(.570)	(.003)*	(.570)
Eating habits	(.002)*	(.109)	(.001)*	(.001)*	(.000)*
Alcohol and drugs	(.441)	(.000)*	(.350)	(.000)*	(.094)
Smoking status	(.004)*	(.026)*	(.003)*	(.260)	(.000)*
Stress and coping	(.001)*	(.030)*	(.230)	(.003)*	(.034)*
Safety	(.001)*	(.000)*	(.412)	(.000)*	(.488)
Medical care	(.934)	(.033)*	(.001)*	(.000)*	(.002)*

Note: ** Correlation is significant at the 0.01 level (2-tailed)
*** Correlation is significant at the 0.05 level (2-tailed)**

Education

In regard to education, it is noticed that there is a significant difference between the different groups on the following variables: eating habits, smoking status, stress and coping, and medical care.

Tukey's multiple range tests are conducted to reveal where significant differences between groups exist. For eating habits, it is found that those who have a high educational level (graduate school) have healthier eating habits than the rest.

For smoking status, it is found that those with a college-level educational background (graduate school and college-level) are healthier than the segment that has a lower educational level (high school). Individuals with a grade-level educational background are not significantly different from the above mentioned groups.

In regard to stress and coping, no multiple comparison is found between the groups. In other words there is no significant difference between the four groups when it comes to handling stress and coping.

For medical care, those with high school and graduate level educational backgrounds handle their medical care better than the segment that has a grade-level background. Individuals with a college-level educational background are not significantly different from the other groups.

Age

In regard to age, it is noticed that there is a significant difference between the different groups on the following variables: exercise level, eating habits, alcohol and drugs, stress and coping, safety, and medical care.

Tukey's multiple range tests are conducted to reveal where significant differences between groups exist. For exercise level, it seems that those who fall in the age group (26-36) exercise more than those who fall in the (37-55 as well as 56 and above) categories. On the other hand, the age group (18-25) is not significantly different than the other mentioned groups.

It is found that those who fall in the age group categories of (37-55 and 56 and above) tend to have healthier eating habits than those in the (18-25) age group. The age group (26-36) is not significantly different than the others when it comes to eating habits.

It is also found that the age group (56 and above) follows a healthier approach to alcohol and drugs than those in the age groups (18-25 and 26-36). Individuals in the age category (37-55) found to be not significantly different than the others when it comes to alcohol and drugs.

Under stress and coping, it is found that individuals in the age group category (56 and above) have a healthier approach to the mentioned healthy-living variable than individuals in the age group categories (37-55, 26-26, and 18-25).

For safety, individuals in the age group categories (37-55 and 56 and above) tend to value

the mentioned healthy-living variable the most. On the other hand, age categories (37-55 and 56 and above) tend to place less emphasis on safety.

And finally, individuals in age group categories (37-55 and 56 and above) tend to have a healthier approach to medical care than those in age group categories (18-25 and 26-36).

Hpothesis 10:

There is no significant relationship between an individual's healthy-living attitudinal characteristics and his or her socio-demographic characteristics.

Gender

One-way analysis of variance was performed on healthy-living (attitudinal) and socio-demographic characteristics. It is noticed that that there is a significant difference between gender and healthy-living attitudinal factor 1 (exercise and nutrition) as well as gender and healthy-living attitudinal factor 2 (alcohol, smoking /drugs and safety).

Females ($\overline{x} = 3.31$) tend to have a stronger healthy-living attitude for exercise and nutrition than males ($\overline{x} = 3.13$).

Females ($\overline{x} = 3.43$) tend also to have a stronger healthy-living attitude for alcohol, smoking or drugs, and safety than males ($\overline{x} = 3.27$). Tukey's multiple range tests are not conducted since only two gender groups exist.

Marital Status

It is also noticed that there is a significance difference between marital status categories and healthy-living attitudinal factor 2 (alcohol, smoking/drugs, and safety)

Tukey's multiple range tests are conducted to reveal where significant differences between groups exist and explore differences between groups. It was revealed that individuals who belong to the marital status categories of married and others tend to have a healthier attitude in regard to alcohol, smoking or drugs, and safety than singles.

Educational Level

It is also noticed that there is a significance difference between the different educational level categories and healthy-living attitudinal factor 1 (exercise and nutrition).

Tukey's multiple range tests are conducted. It was revealed that individuals with a graduate-level educational background tend to have a healthier attitude in regard to exercise and nutrition than individuals with college level and high school educational backgrounds. On the other hand, those that have a grade-level educational background are not significantly different than the other individuals in the other educational categories.

Age

It is also noticed that there is a significance difference between age categories and healthy-living attitudinal factor 2 (smoking, alcohol/drugs, and safety)

Tukey's multiple range tests are conducted. It was revealed that those who are 56 years and older tend to have a healthier attitude in regard to smoking, alcohol or drugs, and safety than those who are in the (18-26 years old) category. On the other hand, those who are in the (27-36 and 37-55) categories are not significantly different than the other individuals in the other age categories.

ANALYSIS OF VARIANCE

Table 4.18: Healthy-Living (Attitudinal) Variables and Socio-Demographic Variables

Variables	Gender	Marital Status	Income	Age	Education
1. Attitudinal Factor 1	(.000)*	(.082)	(.161)	(.053)	(.001)*
2. Attitudinal Factor 2	(.000)*	(.000)*	(.272)	(.000)*	(.360)

Note: Attitudinal Factor 1: exercise and nutrition
Attitudinal Factor 2: alcohol, smoking or drugs, and safety

Hypothesis 12

Healthy-living alone does not significantly influence the individual's travel behavior (push and pull factors, sources of information, and purpose of trip) when socio-demographic variables are constant or controlled.

The testing of Hypothesis 12 requires the use of multiple regression analysis to examine the interaction of selected variables.

4.7 Multiple Regression Analysis

Multiple regression analysis is defined as a statistical technique that supports the analysis of the relationship between a single dependent variable and several independent ones. The objective of such technique is to look at the independent's variable value to predict the dependent variable's one (Hair et al, 1987). The product should be what is known a "variate", that is the independent's variable linear combination that may predict best the dependent variable. The variables' weights convey their input to the overall prediction.

The linear regression model used is the following:

$$Y = \alpha + \beta 1 + \chi 1 + \beta 2 + \chi 2 + ... + \beta\eta\chi\eta + \gamma 1\omega 1 + \gamma 2\omega 2 ... \gamma\eta\omega\eta$$

Where Y is the dependent variable (push or pull factor) defined in the previous section. $\chi 1$ and $\chi 2$ are the socio-demographic variables. And 1 to $\omega\eta$ are the healthy –living behavioral categories. α and β are parameter coefficients that represent the corresponding weight for each variable. The larger the magnitude of the standardized parameter coefficient, the stronger the effect of the independent variable is on the dependent one.

The specific regression parameter estimates and the corresponding significance at (p = .05) in the model can be found in Tables D.1-D.22 (Appendix D). The parameters' significance carries an effect on the dependent variable.

Push Factor 1

Both socio-demographic and healthy living variables explain 10.4% of the variance in push1 factor or healthy-living. With socio-demographic variables, the moderating, being controlled for, the healthy-living categories explain an additional 4.2% of the variance of push1 factor or healthy-living based on change in R^2. This additional explanation of variance was statistically significant (p value = .006) at the .05 significance level. Therefore, the null hypothesis is rejected.

Push Factor 2

Both socio-demographic and healthy-living variables explain 22.2% of the variance in push factor 2 or excitement and thrills. With the socio-demographic variables, moderating, being controlled for, the healthy-living categories explain an additional 3.3% of the variance of push2 factor or excitement and thrills based on change in R^2. This additional explanation of variance was statistically significant (p = .011) at the .05 significance level. Therefore, the null hypothesis is rejected.

Push Factor 3

Both socio-demographic and healthy-living variables explain 8.2% of the variance in push3 factor or education. With socio-demographic variables, the moderating, being controlled for, the healthy-living categories only explain an additional 1.0% of the variance of push3 factor or education based on change in R^2. This additional explanation of variance was not statistically significant (p = .687) at the .05 significance level. Therefore, we fail to reject the null hypothesis.

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Push Factor 4

Both socio-demographic and healthy-living variables explain 13.3% of the variance of push4 factor or indulgence. With socio-demographic variables, the moderating, being controlled for, the healthy-living categories explain an additional 7.2% of the variance of push4 factor or indulge based on change in R^2. This additional explanation of variance was statistically significant (p = .000) at the .05 significance level. Therefore, the null hypothesis is rejected.

Push Factor 5

Both socio-demographic and healthy-living variables explain 5.2% of the variance of push5 factor or escape. With socio-demographic varables, the moderating, being controlled for, the healthy-living categories explain an additional 2.8% of the variance of push5 factor or escape based on change in R^2. This additional explanation of variance was not statistically significant (p = .083) at the .05 significance level. Therefore, we fail to reject the null hypothesis.

Pull Factor 1

Both socio-demographic and healthy-living variables explain 13.8% of the variance of pull1 factor or health and fitness. With socio-demographic variables, the moderating, being

controlled for, the healthy-living categories explain an additional 11.0% of the variance of pull1 factor or health and fitness based on change in R^2. This additional explanation of variance was statistically significant (p = .00) at the .05 significance level. Therefore, the null hypothesis is rejected.

Pull Factor 2

Both socio-demographic and healthy-living variables explain 12.8% of the variance of pull2 factor or hygiene and the environment. With socio-demographic variables, the moderating, being controlled for, the healthy-living categories explain an additional 4.5% of the variance of pull2 factor or hygiene and the environment based on change in R^2. This additional explanation of variance was statistically significant (p = .003) at the .05 significance level. Therefore, the null hypothesis is rejected.

Pull Factor 3

Both socio-demographic and healthy-living variables explain 7.6% of the variance of pull3 factor or history and nature. With socio-demographic variables, the moderating, being controlled for, the healthy-living categories explain an additional 4.2% of the variance of pull3 factor or history and nature based on change in R^2. This additional explanation of variance was statistically significant (p = .007) at the .05 significance level. Therefore, the null hypothesis is rejected.

Pull Factor 4

Both socio-demographic and healthy-living variables explain 19.7% of the variance of pull4 factor or vigilance and health. With socio-demographic variables, the moderating, being

controlled for, the healthy-living categories explain an additional 9.2% of the variance of pull4 factor or vigilance and health based on change in R^2. This additional explanation of variance was statistically significant (p = .00) at the .05 significance level. Therefore, the null hypothesis is rejected.

Pull Factor 5

Both socio-demographic and healthy-living variables explain 10.9% of the variance of pull5 factor or arts and urban luxury. With socio-demographic variables, the moderating, being controlled for, the healthy-living categories explain an additional 1.5% of the variance of pull5 factor or arts and urban luxury based on change in R^2. This additional explanation of variance was not statistically significant (p = .378) at the .05 significance level. Therefore, we fail to reject the null hypothesis.

Information From General Travel Professionals (INFPRO)

Both socio-demographic and healthy-living variables explain 9.0% of the variance of INFPRO. With socio-demographic variables, the moderating, being controlled for, the healthy-living categories explain an additional 2.7% of the variance of the above mentioned variable based on change in R^2. This additional explanation of variance was not statistically significant (p = .074) at the .05 significance level. Therefore, we fail to reject null hypothesis.

Information From Health Tourism Travel Professionals (INFPROH)

Both socio-demographic and healthy-living variables explain 4.3% of the variance of INFPROH. With socio-demographic varaibles, the moderating, being controlled for, the healthy-living categories explain an additional 3.4% of the variance of the above mentioned

variable based on change in R^2. This additional explanation of variance was statistically significant (p = .036) at the .05 significance level. Therefore, we reject the null hypothesis.

General Travel-Related Printed Materials (INFPRIG)

Both socio-demographic and healthy-living variables explain 9.5% of the variance of INFPROH. With socio-demographic variables, the moderating, being controlled for, the healthy-living categories explain an additional 1.1% of the variance of the above mentioned variable based on change in R^2. This additional explanation of variance was not statistically significant (p = .644) at the .05 significance level. Therefore, we fail to reject the null hypothesis.

Health Tourism Travel-Related Printed Materials (INFPRIH)

Both socio-demographic and healthy-living variables explain 21.7% of the variance of INFPRIH. With socio-demographic variables, the moderating, being controlled for, the healthy-living categories explain an additional 3.8% of the variance of the above mentioned variable based on change in R^2. This additional explanation of variance was statistically significant (p = .017) at the .05 significance level. Therefore, we reject the null hypothesis.

Word of Mouth

Both socio-demographic and healthy-living variables explain 5.7% of the variance of word of mouth as a source of information. With socio-demographic variables, the moderating, being controlled for, the healthy-living categories explain an additional 2.6% of the variance of the above mentioned variable based on change in R^2. This additional explanation of variance was

not statistically significant (p = .116) at the .05 significance level. Therefore, we fail to reject the null hypothesis.

Internet

Both socio-demographic and healthy-living variables explain 10.9% of the variance of the internet as a source of information. With socio-demographic variables, the moderating, being controlled for, the healthy-living categories explain an additional 2.0% of the variance of the above mentioned variable based on change in R^2. This additional explanation of variance was not statistically significant (p = .217) at the .05 significance level. Therefore, we fail to reject the null hypothesis.

Total Number of Trips Taken in the Last 12 months (TRIP 1)

Both socio-demographic and healthy-living variables explain 17.3% of the variance in trip1. With socio-demographic variables, the moderating, being controlled for, the healthy-living categories explain an additional 1.1% of the variance of the above mentioned variable based on change in R^2. This additional explanation of variance was not statistically significant (p = .550) at the .05 significance level. Therefore, we fail to reject the null hypothesis.

Number of Business Trips Taken in the Last 12 months (TRIP 2)

Both socio-demographic and healthy-living variables explain 24.6% of the variance in trip2. With socio-demographic variables, the moderating, being controlled for, the healthy-living categories explain an additional 1.1% of the variance of the above mentioned variable based on

change in R^2. This additional explanation of variance was not statistically significant ($p = .481$) at the .05 significance level. Therefore, we fail to reject the null hypothesis.

Number of Pleasure Trips Taken in the Last 12 months (TRIP3)

Both socio-demographic and healthy-living variables explain 9.0% of the variance in trip3. With socio-demographic variables, the moderating, being controlled for, the healthy-living categories explain an additional 3.2% of the variance of the above mentioned variable based on change in R^2. This additional explanation of variance was statistically significant ($p = .038$) at the .05 significance level. Therefore, we reject the null hypothesis.

Number of Trips for Attending Meetings/Conventions Taken in the Last 12 months (TRIP 4)

Both socio-demographic and healthy-living variables explain 11.0 % of the variance in trip4. With socio-demographic variables, the moderating, being controlled for, the healthy-living categories explain an additional 1.9% of the variance of the above mentioned variable based on change in R^2. This additional explanation of variance was not statistically significant ($p = .240$) at the .05 significance level. Therefore, we fail to reject the null hypothesis.

Total Number of Mix Trips Taken in the Last 12 months (TRIP 5)

Both socio-demographic and healthy-living variables explain 8.5 % of the variance in trip5. With socio-demographic variables, the moderating, being controlled for, the healthy-living categories explain an additional .8% of the variance of the above mentioned variable based on change in R^2. This additional explanation of variance was not statistically significant ($p = .818$) at the .05 significance level. Therefore, we fail to reject the null hypothesis.

4.8 Summary

This chapter presented and discussed the study's results. Statistical relationships between the independent variables (healthy-living behavioral and attitudinal) and the dependent variable (travel behavior) were examined with Pearson's correlation coefficient. Healthy-living behavioral as well as attitudinal and socio-demographic variables were evaluated using one-way ANOVA. Multiple regression analysis was conducted to examine the effects healthy-living behavioral on explaining travel behavior. A summary of the findings is presented in **(Exhibit 1)**.

Exhibit 4.1: A Summary of the Results of Hypotheses Testing and key Findings: Hypotheses 1 to 11

Hypothesis 1:

There is no significant relationship between an individual's behavioral healthy-living characteristics in general and his or her travel behavior of push motivations. The results of the correlation analysis revealed that there were some significant relationships found between healthy-living behavioral and most push factors, which conveys partial support to the stated hypothesis.

Hypothesis 2:

There is no significant relationship between an individual's behavioral healthy-living characteristics in general and his or her travel behavior of pull motivations. The results of the correlation analysis revealed that there were some significant relationships found between healthy-living behavioral and most pull factors, which conveys partial support to the stated hypothesis.

Hypothesis 3:

There is no significant relationship between an individual's behavioral healthy-living characteristics in general and his or her way of seeking health-oriented travel information sources when planning for a vacation or travel experience. The results of the correlation analysis revealed that there were significant relationships found between healthy-living behavioral characteristics and some health-related information sources, which conveys modest support to the stated hypothesis.

Hypothesis 4:

There is no significant relationship between an individual's behavioral healthy-living characteristics and his or her purpose of trip (including the number of trips) that he or she takes. The results of the correlation analysis revealed that there were significant relationships found between healthy-living behavioral and some of the purpose of trips variables, which conveys modest support to the stated hypothesis.

Hypothesis 5:

There is no significant relationship between an individual's attitudinal healthy-living characteristics and his or her travel behavior of push motivations. The results of the correlation analysis revealed that there were some significant relationships found between healthy-living attitudinal (exercise and nutrition as well as alcohol, smoking or drugs, and safety) and most push factors, which conveys strong support to the stated hypothesis.

Hypothesis 6:

There is no significant relationship between an individual's attitudinal healthy-living characteristics in general and his or her travel behavior of pull motivations. The results of the correlation analysis revealed that there were some significant relationships found between healthy-living attitudinal (exercise and nutrition as well as alcohol, smoking or drugs, and safety) and most pull factors, which conveys strong support to the stated hypothesis.

Hypothesis 7:

There is no significant relationship between an individual's attitudinal healthy-living characteristics in general and his or her way of seeking health-oriented travel information sources when planning for a vacation or travel experience. The results of the correlation analysis revealed that there were some significant relationships found between healthy-living attitudinal (exercise and nutrition as well as alcohol, smoking or drugs, and safety) and most health-related information sources, which conveys strong support to the stated hypothesis.

Hypothesis 8:

There is no significant relationship between an individual's attitudinal healthy-living characteristics and his or her purpose of trip (including the number of trips) that he or she takes. The results of the correlation analysis revealed that there were no significant relationships found between healthy-living attitudinal (exercise and nutrition as well as alcohol, smoking or drugs, and safety) and the majority of the purpose of trip's components, which conveys weak support to the stated hypothesis.

Hypothesis 9:

There are no significant differences between an individual's healthy-living (behavioral) variables and his or her socio-demographic characteristics. The results indicated that there were significant differences between gender and the following healthy-living behavioral characteristics: exercise level, eating habits, smoking status, stress and coping, and safety. In regard to marital status, there were significant differences between the different groups on the following variables: alcohol and drugs, smoking status, stress and coping, safety, and medical care. When it comes to income, a significant difference was noticed between the different groups on the following variables: eating habits, smoking status, and medical care. For education, a significance difference between the different groups was found on the following variables: eating habits, smoking status, stress and coping, and medical care. In regard to age, a significant difference between the different groups was found between the different groups on the following variables: exercise level, eating habits, alcohol and drugs, stress and coping, safety, and medical care.

Hypothesis 10:

There is no significant relationship between an individual's attitudinal healthy-living characteristics and his or her socio-demographic characteristics. A significant difference was found between gender and healthy-living attitudinal factors. In addition, significant differences were noticed between marital status and healthy-living

attitudinal factor 2 (alcohol, smoking or drugs, and safety). Moreover, significant difference was revealed between educational level and healthy-living attitudinal factor 1 (exercise and nutrition).

Hypothesis 11

There is no significant relationship between an individual's healthy-living behavior and travel behavior (controlling for socio-demographic variables). Results indicated that healthy-living behavior provides an additional explanation of variance in some push factors and the majority of pull factors. In regard to information sources, healthy-living behavior provides an additional explanation of variance in health-oriented information sources. And for the purpose of trip, healthy-living behavioral provides significance explanation of variance on the number of pleasure trips taken in the last 12 months.

CHAPTER FIVE

SUMMARY AND CONCLUSION

5.1 INTRODUCTION

The previous chapters provided background information that supports this research project, presented the conceptual framework, stated the research hypotheses, outlined the methods utilized in the study, and portrayed the statistical results. This chapter provides the following components: (1) a discussion of the study, (2) contribution of the study, (3) limitations of the study, and (4) recommendations for future research initiatives.

5.2 A SUMMARY OF THE STUDY'S FINDINGS

This exploratory study was implemented with the objective to look at the relationship between an individual's healthy-living patterns (behavioral and attitudinal) and his or her travel behavior and motivations (push and pull factors, sources of information, and purpose of trip). For such a purpose, Pearson's correlation coefficient analysis was undertaken to test the relationship between the mentioned variables. In addition, using ANOVA, the study examined if there were differences, between healthy-living (behavioral and attitudinal) and socio-demographic variables. By using Tukey's multiple comparison test, significant differences between the different groups were revealed. Finally, multiple regression analysis was undertaken with the objective to find out about the degree which healthy-living alone influences travel behavior while socio-demographic variables are constant or controlled for.

The overall findings of the study revealed that there seems to be a relationship between healthy living lifestyle and the individual's travel behavior. However, the direction and strength of this relationship show variations with respect to different dimensions of the healthy living construct and selected travel behavior questions. The specific findings of the study are presented in the following sections followed by implications.

It is important for one to look at the results of this study with caution in mind. For example, the study did not intend to exercise cause and effect or predict healthy-living behavior based on selected travel and socio-demographic variables. The interpretation of this study's results simply indicates the presence or absence of a relationship between a given healthy-living constructs and travel behavior.

The study reveals that those individuals who follow an exercise regime, eat healthy and consume, if any, a limited amount of alcohol and drugs (drugs or medications that affect one's mood or help one to relax or sleep) find the following reasons as important when considering taking a trip: health spas, fitness and wellness seminars, developing healthy habits, and bath in warm springs and water.

In addition, it was revealed that those who place less emphasis on safety (wearing a seat belt or avoiding drinking and driving) find the following reasons as important when considering taking a trip: finding thrills and excitement as well as being adventuresome. It was also found that those who follow an exercise regime tend to seek excitement/thrills and adventures while travelling through their participation in sports (attending a sports game or simply being involved in one).

This research also revealed that those who eat healthier tend to enjoy more the educational side

of travel. This may consist of nature-made attractions, historical sites, and treat travel as a learning experience.

It was found that those who smoke tend to find the following reasons as important when considering a vacation trip: breaking from daily habits and escaping from the ordinary. Such reasons may be interpreted that those who smoke tend, in general, to be stressed and yarn to escape and break from their daily routine. On the other hand, those who are stressed and have difficulties coping (unhappy) view travel as a means to escape from their reality and value security.

This research revealed that those who follow an exercise regime, eat healthy, and do not smoke are pulled by attributes in a destination such as: accommodation with a health club/exercise facility, shopping with emphasis on health products (vitamins and herbal remedies), healthy local cuisine (emphasis on cooking methods using vegetables, fruits, grains, seafood, and olive oil), the availability of nearby open-air running track, or stretching out one, educational tour packages with an emphasis on boosting one's well being (physically and spiritually/developing healthy habits), accessibility to a GYM with a daily/weekly rate (no membership is required), mineral springs, and spas/health resorts (offer medical examinations and treatments.

It was also found that those who have healthy eating habits and do not smoke are pulled by attributes in a destination such as: hygiene and cleanliness in facilities/services, beaches for swimming with umbrellas for sun protection, restaurants with emphasis on light cuisine, and the environmental quality of air, water, and soil.

This research revealed that those who eat healthier tend to attach more importance to attributes such as campgrounds and trailers, outdoor activities such as hiking and climbing, national parks and forests, and historical, archeological, or military buildings. On the other hand, they tend to score low on medical care (may be attributed to sunburn due to sun exposure).

It was also revealed that those who have healthy eating habits, consume, if any, limited amount of alcohol and abstain from drugs, do not smoke, and value safety such as seat belts and avoid drinking and driving) tend to be pulled by the following attributes in a destination: smoking-free bars and night clubs, cafes serving alcoholic-free beverages, local health-care emergency or facilities' standards, and the destination's regulations on seat belt and smoking in public areas.

It was found that those who are pulled by big modern cities, appreciate luxurious facilities or services and museums and art galleries tend to score lower on the safety variable (wear a seat belt less and drink and drive more).

In regard to health-oriented information sources, it was found that those who score high on coping and stress, as well as medical care, tend to place an emphasis on seeking general travel professionals to get advised before they travel. On the other hand, those who follow a healthy regime of exercise tend to value advice from health-related travel professionals such as special interest (health tourism) travel agents/tour operators. They also value special interest brochures/travel guides (health/fitness) as well as advertisements in health/fitness magazines. Another finding that is related to information sources, those who score healthy on alcohol/drugs tend to value the internet the least when it comes to seeking information while planning for a trip.

In regard to the purpose of trip and the number of trips taken, it was revealed that those who consume more alcohol and drugs tend to take a fewer number of trips per year. Another observation was related to safety and the total number of trips taken. Those individuals who place less emphasis on safety-related issues such as wearing a seat belt, or driving under the influence of alcohol had a lower total number of trips taken in the last twelve months. In addition, it was also found that the consumption of alcohol and drugs have an influence on the total number of pleasure trips and even the total number of mixed trips (pleasure, business, and meetings/conventions) taken by the individual. The more the alcohol/drugs consumption, the less the number of trips.

In regard to healthy-living attitudinal, it seems that those who carry a positive attitude for healthy-living issues related to exercise, eating habits, safety, and alcohol and drug use tend to place a good degree of importance over healthy-oriented reasons to travel such as: bath in warm springs and mineral waters, enjoy health spas (relaxation, saunas, yoga, muscle development, beauty treatments, and weight reduction programs, be cleansed physically and spiritually, developing healthy-living habits, participate in fitness and wellness seminars, seek health-care services – medical examinations, special diets, vitamin-complex intakes, transvital injections, and herbal remedies). On the other hand, individuals who have a low healthy-living attitude in regard to alcohol, smoking/drugs, and safety tend to place importance on reasons such as finding thrills and excitement, participating in sports, and being daring and adventuresome.

It was revealed that those who carry a positive attitude for proper nutrition and exercise, tend to value traveling through places that are important in history, and learning new things and increasing his

or her knowledge as well as enjoying nature-made attractions and historical sites. On the other hand, it was observed that those who have low healthy-living attitude in regard to smoking, alcohol/drugs, and safety tend to view low healthy-living travel-related motivational variables such as indulging in gourmet cuisine and doing nothing at all as important reasons to travel.

In addition, it was found that individuals who carry a positive attitude for both proper nutrition and exercise, as well as smoking, alcohol/drugs and safety tend to be pulled to the following attributes in a destination: accommodation with a health club/exercise facility, shopping with emphasis on health products (vitamins and herbal remedies), healthy local cuisine (emphasis on healthy cooking methods using vegetables, fruits, grains, seafood, olive oil), the availability of nearby open-air running track and stretching out zone, educational tour packages with emphasis on boosting well being (physically and spiritually/developing healthy habits), accessibility to a GYM with a daily/weekly rate (no membership required), mineral springs and spas/health resorts (offer medical examinations and treatments). In addition, such individuals value hygiene and cleanliness in facilities/services, beaches for swimming with umbrellas for sun protection, restaurants with emphasis on light cuisine, and environmental quality of air, water, and soil.

It was revealed that those who place particular importance on healthy habits when it comes to smoking, alcohol or drugs, and safety tend to view the following attributes in a destination as important: smoking-free bars and night clubs, cafes serving alcohol-free beverages, local health-care emergency/facilities' standards, and the destination's regulations on seat belt and smoking in public places.

In regard to sources of information preferences, it was found that those who have high healthy-living attitude for nutrition, exercise, alcohol, smoking/drugs, and safety tend to rely on both general travel printed materials as well as health-oriented ones when planning for a vacation or a travel experience. In addition, those who have a positive attitude for nutrition and exercise tend to value the internet as a source of information to plan for their vacation or travel experience. The next section depicts the individual's healthy-living behavioral and attitudinal and their links to his or her socio-demographic characteristics.

5.3 Healthy-Living (Behavioral) and Socio-Demographic Variables

The results of the comparisons that were done between different socio-demographic variables and healthy-living components revealed the following:

- For gender, females tend to have healthier eating habits, smoke less, and consider more seriously safety measures. On the other hand, males tend to exercise more and deal better with stress and coping.
- For marital status, it was revealed that married individuals tend to have healthier habits when it comes to alcohol/drugs consumption, smoking, safety, and medical care.
- For income, it seems that those who make $50,000 and above tend to be in the healthiest category, meaning that higher income is associated with healthier living habit.
- For educational background, it was found that the higher the educational background the more healthy tendencies the individual has (especially those with a graduate-level background)..
- For age, it seems that those who are 37 and above tend to portray healthier behavioral habits than the rest.

These behavioral findings are also consistent with the healthy living attitudes of travelers. The next section presents a summary of healthy-living behavioral variables' contributions to explaining variations in an individual's travel behavior.

5.4 The Individual's Healthy-Living (Behavioral) Role in Interpreting His or Her Travel Behavior

It was found that an individual' s healthy-living behavioral plays a role in explaining an individual's motives to pursue healthy-living type of travel such as: bath in warm springs and mineral waters, enjoy health spas (relaxation, saunas, yoga, muscle development, beauty treatments, and weight reduction programs), be cleansed physically and spiritually, developing healthy-living habits, participate in fitness and wellness seminars, seek health-care services (medical examinations, special diets, vitamin-complex intakes, transvital injections, and herbal remedies).

In addition, unhealthy-living behavioral does also play a role in explaining an individual's motives for finding thrills and excitement, participating in sports, and being daring and adventuresome, being physically active, doing nothing at all, and indulging in gourmet cuisine.

However, healthy-living behavioral does not play a role in explaining the following travel behavior variables: traveling through places that are important in history, learning new things, increasing one's knowledge, traveling through places rich in made-made attractions, and traveling through urban areas.

In regard to pull factors of travel motivations, it was found that healthy-living behavioral explains the majority of the factors. Some of the explained variables are the following: accommodation with a health club/exercise facility, shopping with emphasis on health products (vitamins and herbal remedies), healthy local cuisine (emphasis on healthy cooking methods using vegetables, fruits, grains, seafood, and olive oil), the availability of nearby open-air running track and stretching out zone,

educational tour packages with emphasis on boosting well being (physically and spiritually/developing healthy habits), accessibility to a GYM with a daily/weekly rate (no membership required), mineral springs and spas/health resorts (offer medical examinations and treatments).

Moreover, additional explained variables are the following: value hygiene and cleanliness in facilities/services, beaches for swimming with umbrellas for sun protection, restaurants with emphasis on light cuisine, and environmental quality of air, water, and soil, smoking-free bars and night clubs, cafes serving alcohol-free beverages, local health-care emergency/facilities' standards, the destination's regulations on seat belt, and smoking in public places. Nature and history-related components are also explained: campgrounds and trailer parks, outdoor activities such as hiking and climbing, national parks and forests, and historical, archeological or military sites and buildings.

However healthy-living does not seem to explain pull variables related to museums and art galleries, big modern cities, and luxurious facilities/services.

When it comes to information sources, it was noticed that healthy-living behavior components do play a role in explaining the following information sources: information from health tourism travel professionals and health tourism travel-related printed materials. However, Healthy-living does not explain the following: information from general travel professionals, general travel-related printed materials, word of mouth, and the internet.

When it comes to explaining the purpose of trips/total number of trips taken in the last 12 months, healthy-living seems to play a role in explaining the number of pleasure trips taken in the last

12 months. The healthier the individual's behavior is, the more trips are taken by him or her.

5.5 IMPLICATIONS OF THE RESEARCH FINDINGS

a. Marketing and Management Implications

The results of this study offer immense practical applications for destinations as well as various organizations that have direct as well as indirect links to the hospitality and tourism industry.

The concept of healthy-living is finding a strong niche in the U.S. market. Today, more U.S. citizens continue to improve their standings on healthy-living issues at the behavioral and attitudinal levels. The trend is positioned to continue and the segment is growing. As individuals from various U.S. geographical areas and social backgrounds are getting more years of higher education. And as employment opportunities with competitive salaries continue to grow, a healthy-living lifestyle will be more strongly positioned to spread further among more members of the American society. In addition, the media has been playing a vital role in reinforcing healthy-living behavioral and attitudinal issues among Americans. Various television channels are presenting more programs than ever that address health-related issues, reinforcing the message to become active and be a healthy vigilant citizen. Moreover, health-oriented sections in newspapers and magazines are being made available to consumers. This is not to mention the growing number of purely and well segmented healthy-living related printed materials that are widely available to the American public.

The 1990's have witnessed different happenings with healthy-living connotations taking place in the U.S. Some examples are: smoking-free flights, smoking-free bars and nightclubs in the state of California, organic meals options as part of a meal service during a flight, more organic products on

supermarkets' shelves, several U.S. states' lawsuits against tobacco companies, more gyms in lodging facilities of various categories, more light meals options at restaurants (even at steakhouses!), more alcohol-free beverages options, the growth of coffee-shops (alcohol-free) in numbers and popularity in the American market, etc.

Therefore, healthy-living is a justifiable trend in the U.S. The findings of this research certainly aid in supporting the hospitality and tourism industry' s awareness of such issues and its quest to satisfy this growing segment's needs and wants. The hospitality and tourism industry is consumer-led and thus needs to approach product development, promotion, packaging, partnership, and human resources development form its market's perspectives. And this study offers some perspectives through its preliminary nature.

Destinations, as well as organizations, desiring to understand better the importance which the healthy-living segment places on reasons to travel (push) can benefit from the components found through the push factor "healthy-living". Such reasons could be incorporated in advertising campaigns and other communication strategies that portray to the healthy-living consumer the push factor(s) that integrate with the aspects of a vacation that he or she finds as important. For example, the support presented by a lodging facility to the development of healthy habits through fitness/wellness seminar or a workshop depicting issues related to healthy cooking and a responsible exercise regime may draw a consumer's attention to the facility. Another practical implication, is for destinations to show the different push factors that appeal to the healthy-living segment with healthy-living habits in regard to exercise, diet, and alcohol/drugs and the positive outcomes of being a healthy person (depicting feelings instead of just the destination's attributes). The portrayal of activities in health spas or bathing in warm

springs and mineral waters and the destination's support for the development of healthy-living habits through seminars and workshops would certainly draw the attention of the healthy-living segment. Tour operators could incorporate such issues in its package development strategy by emphasizing the possibility to satisfy consumers' preferences (combining spas, seminars, nature, and mineral springs and waters).

Some of the healthy-oriented pull factors and their relationships with healthy-living habits may certainly present practical implications to destinations and suppliers when considering promotion, product development, partnership, programming, and packaging.

Destinations could depict in their marketing campaigns the following features: the availability of mineral springs, spas/health resorts, the local cuisine's healthy aspects, the availability of shopping properties specialized in vitamins and herbal products, hygiene and cleanliness standards of its facilities, restaurants with light cuisine emphasis, the destination's environmental quality of air, water, and soil, beaches with umbrellas for sun protection, smoking-free bars and nightclubs, alcohol-free cafes, and the destination's local heath-care emergency facility's standards. Lodging facilities could partner with local health centers for seminars on health and fitness or with a GYM for guests to use. In addition, Joint packages may be created between a lodging facility and a local natural attraction such as mineral springs to boost healthy-living guests' satisfaction and patronage. In addition, the availability of a restaurant with an emphasis on light cuisine emphasis or a nearby open-air running track could be promoted as part of the facility.

Airlines as well as lodging facilities may introduce "sounds of nature" in their audio-visual systems

and may also feature visual programs on the destination's healthy-living supply components or just feature talk programs that boost the consumer's sense of well being. Herbal teas may also be featured in a lodging facility's guestroom basket or in an in-flight meal service instead of the regular tea and coffee.

Pamphlets with a clear title connected to "healthy-living" could be made available to guests by information centers, lodging facilities and others. Such printed materials may feature the various destination's offerings of healthy-living components (places to shop for health-related products; light restaurants; national parks and forests; smoking-free coffee-shops; etc).

Health travel professionals may use the outcomes of this study to incorporate more itineraries (from the ones mentioned above) in their packages. In addition, various tourism hospitality and tourism suppliers as well as destinations may also consider advertising in health/fitness magazines and special interest brochures/travel guides (health/fitness). The segment with high healthy-living standing on exercise has indicated such sources as important.

The next section presents the study's theoretical implications.

b. Theoretical Implications

Although previous research in tourism motivation and travel behavior has alluded to the importance of the relationship between destination attributes and reason for travel (Baloglu and Uysal, 1996), there has not been any study that specifically attempted to establish a connection between travel behavior and healthy-living habits in selecting a destination or the perceived importance of healthy-living behavior in a vacation decision making process. This exploratory study has introduced to the

field of travel and tourism the guidelines to healthy–living through its conceptualized framework of healthy-living and travel behavior. The conceptual framework was empirically tested, which revealed that the relationship between an individual's stand on healthy-living issues and his or her travel behavior does correlate in most cases**.** The general hypothesis of the study supports the notion that there is a reciprocal interaction between the healthy-living habits of travelers and their travel behavior with respect to selected travel motivations of push and pull factors, information sources, and trip types. The study also revealed that socio-demographic variables may serve as moderating variables in understanding the relationship between healthy-living behavior and different aspects of an individual's travel behavior. The uniqueness of this exploratory study is based on the fact that the guidelines to healthy-living have not been introduced in the literature of travel and tourism. A healthy-living behavioral construct was adapted and a healthy-living attitudinal scale was developed. In addition, specific push and pull factors of motivations, and information sources with healthy-living connotations were supported and further delineated as part of travel behavior that would not be previously considered. Such additions and findings augment the content and scope of reasons for travel that were discussed and empirically investigated in the past (Dann, 1977). In addition, such information and additions enhance our understanding of today's travelers who value destinations that offer an environment conducive to practicing healthy-living habits.

This study also should be well placed under the lifestyle and travel behavior category. Oppedijk, Van Veen and Verhallen (1986) stressed on the importance to not just consider socio-demographic variables when explaining a segment's travel behavior. The perceived importance of the interaction between healthy-living behavior and travel behavior also implies that certain habits and practices of individuals may correspond to certain benefits and expectations that are valued and obtained from travel

experiences and at the destination site. Such information combined with demographic information may be of great help in understanding better the behavior of travelers to destinations. This research certainly adds to lifestyle studies in tourism and sheds further light on the complexity and nature of travel behavior.

The study also concurs with studies (Cohen 1972, Mannel and Iso-Ahola, 1987, Plog 1987, Schmidhauser, 1989) that travel behavior in the context of motivation is multidimensional. Travelers seek to satisfy not one single need but a number of distinct needs simultaneously. Such needs also include socio-psychological and physical functions that can be fulfilled through travel such as the need to recover from physical and physiological stress and keeping the physical and mental well being. This is also consisting with Mannel and Iso-Ahola 's two dimensions of motivational forces that operate simultaneously to bring travel behavior; first, the desire for change from one's daily routine (i.e. escaping) and, second, the desire to obtain intrinsic personal and interpersonal rewards from travel behavior (i.e. seeking). Therefore, the examination of the reciprocal interaction between healthy-living and travel behavior is of immense value in understanding not only the complexity of travel behavior but also useful in segmenting markets, designing promotional programs and packages, and decision making about destination development. Marketers and destination promoters in tourism should keep in mind that the most successful products are those which respond best to a bundle of needs within a market segment, and should give careful consideration to matching a traveler's diverse needs to a destination's attributes (Mcintosh and Goeldner 1990, Cha, McCleary, and Uysal 1995).

5.4 RECOMMENDATIONS FOR FUTURE RESEARCH

The exploratory nature of this study incorporates healthy-living as a component to use in

predicting travel behavior. The research revealed significant findings in regard to those individuals with healthy-living lifestyle and their travel behavior. Future research could use more travel behavior variables in seeking to understand further the segment's travel behavior. For example, accessibility, marketed image, formed negative/positive destination images, and quality of services issues could be added for such a purpose.

This study was limited to U.S. citizens only due to the healthy guidelines set by the United States Department of Agriculture. A similar study could be conducted in another country with adjusted healthy-living guidelines. In addition, comparison studies may also be conducted between U.S. market and a foreign one in regard to healthy-living patterns and travel behavior.

Also it is suggested a survey that is more representative of the nation should be done. That survey could make findings more general and draw a stronger connection between healthy-living and travel behavior.

Researchers in the future may look at cause and effect connections between travel and healthy-living and may develop directional hypotheses.

5.5 CONCLUSION

The results of this study provided empirical evidence and explanation on the nature of the connection between healthy -living habits of U.S. citizens and their travel characteristics with respect to push and pull factors of travel motivations, information sources, and trip types**.** Building on previous research which had demonstrated that travel behavior depends on an individual's value system

(personality and attitude), the study uncovered unexplored elements that affect travel behavior, and examined the relationship between healthy-living and the mentioned travel behavior variables.

Theoretical and practical basis for investigating individuals' with high healthy-living status reaction to travel behavior component were established. The findings unveiled elements of value which such segment carries. Moreover, they confirmed the interrelationship of the different healthy-living constructs with appropriate push and pull factors as well as sources of information with healthy connotations. Suggestions for moving the conceptual framework forward were proposed.

Since healthy-living is a growing trend in the U.S., it would be beneficial to further conduct studies connected with specific supply components in the tourism industry for example: airlines, lodging, foodservice, etc. The mentioned studies can provide information in regard to preferences that are suitable to each sector.

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Appendix A

Survey Instrument

Survey instrument: Healthy-Living and Travel behavior

SECTION I

1. HEALTHY-LIVING (BEHAVIORAL)

Please circle the appropriate number. Thank you.

<u>Exercise Level</u>

1. **Aerobic Exercises** How many times per week do you engage in aerobic exercise of at least 20 to 30 minutes duration **(activities such as cycling, swimming, aerobic dance, jogging, active sports, or brisk walking)?**

    1. Don't have a regular exercise program
    2. Once per week
    3. Twice per week
    4. Three or four times per week
    5. Five or more times per week

2. **Strength Exercises** How often do you do strength building exercises such as sit-ups, Push-ups, or use weight training equipment?

    1. Don't do strength building exercises
    2. Once per week
    3. Twice per week
    4. Three or more times per week

<u>Eating Habits</u>

3. **Meat and Protein Foods** Indicate the kinds of meat and/or protein foods you usually Eat.

    1. Eat regular cuts of red meat, hamburgers, hot dogs, and luncheon meats
    2. Eat a combination of regular meats and some poultry or fish
    3. Eat only lean meats, skinless poultry, or fish
    4. Eat very little red meat, mostly the white meat of poultry or fish
    5. Seldom or never eat meat; eat vegetable proteins

4. **Dairy Products and Eggs**. Indicate the kinds of dairy products you usually eat.
   High-fat *dairy products include****: ice cream, sour cream, yellow cheese, whole milk****, eggs, and butter*.
   Low-fat *dairy products include*: ***skim milk, low-fat yogurt or cottage cheese, egg whites or egg substitutes***.

   1. Nearly always eat the high-fat products
   2. Eat mostly the high-fat products, some low
   3. Eat both about the same
   4. Eat primarily low-fat products, some high-fat
   5. Eat only low-fat products or none at all

5. **Desserts** Indicate the kind of desserts you usually eat.
   High-fat *desserts include****: cake, donuts, pastry, pie, ice cream, custard, and chocolate.***
   Low-fat *desserts include*: ***fruit salads, gelatins, melons, grapes, dried fruit, home baked goods using vegetable fat in moderate amounts***.

   1. Nearly always eat the high-fat products
   2. Eat mostly the high-fat desserts, some low-fat
   3. Eat both about the same
   4. Eat primarily low-fat, or rarely eat desserts
   5. Eat only low-fat desserts or none at all

6. **Cooking Fats and Food Preparation** Indicate the way you usually prepare food, or the kind of food you usually eat.
   High-fat *methods:* ***pan frying or deep fat frying, primarily use shortening, add frequently butter, margarine, oils or other fats to foods for flavoring, use regular amount of these fats called for in recipes, and use creamy or full fat dressings***.
   Low-fat *methods:* ***broil, bake, boil, or steam, primarily use vegetable oil (sparingly), flavor food with seasonings, keep added fat very low in cooking, and use low-fat dressings***.

   1. Food nearly always cooked the high-fat way
   2. Food mostly cooked the high-fat way
   3. Food cooked both ways about the same
   4. Food cooked primarily the low-fat way
   5. Food prepared only the low-fat way

7. **Breads and Grains** Indicate the kind of breads you usually eat
Refined grain *products*: ***white bread, rolls, biscuits, crackers, regular pancakes and waffles, white rice, typical breakfast cereals, typical baked goods***.
Whole grain *products*: ***whole grain bread and rolls, whole grain pancakes and waffles, whole grains used in baked goods, brown rice, oatmeal and other whole grain cereals***.

1. Nearly always eat refined grain products
2. Eat mostly refined grain products
3. Eat both about the same
4. Eat primarily whole grain products
5. Eat only whole grain products

8. **Fruits and vegetables** How often do you eat fruits and vegetables?
A serving is: ***1 cup fresh, ½ cup cooked, 1 medium size fruit, ¾ cup juice.***

1. Five or more servings per day
2. Four servings per day
3. Three servings per day
4. Two servings per day
5. One serving or less per day

9. **Fast Foods** How often do you eat fast food meals such as hamburgers, tacos, fried chicken, hot dogs, french fries, milk shakes, etc.?

1. Nearly every day
2. Several times per week
3. Few times per month
4. Seldom or never

10. **Salt** How often do you add salt to your food or eat salty foods (chips, pickles, soy sauce)?

1. Seldom or never
2. Some meals
3. Majority of meals
4. Nearly every meal

Alcohol and Drugs

11. **Number of Drinks** In the past two weeks, on the days that you drank an alcoholic Beverage, how many drinks did you have per day on the average?

    1. Did not drink in the past year
    2. None in the past 2 weeks
    3. One drink
    4. Two drinks
    5. Three to four drinks
    6. Five or more drinks

12. **Drugs** How often do you use drugs or medications that affect your mood, help you relax, or sleep?

    1. Frequently, every week
    2. Sometimes, monthly
    3. Rarely, few times/year
    4. Never

Smoking Status

13. **Smoking Status** Mark the appropriate response
    1. Have never smoked
    2. Quit smoking, 2 or more years ago
    3. Quit smoking, less than 2 years ago
    4. Smoke pipe or cigar only
    5. Smoke less than 10 cigarettes per day
    6. Smoke 10 or more cigarettes per day

14. **Smokeless Tobacco.** Do you use smokeless tobacco?

    1. Yes
    2. No

Stress and Coping

15. **Stress and Coping Status.** Mark the response that describes how you feel you are currently coping with life.

    1. Seldom stressed, coping very well
    2. Sometimes stressed, coping fairly well
    3. Often stressed, trouble coping at times
    4. Heavily stressed, often have trouble coping
    5. Excessively stressed, unable to cope

16. Energy Level Have you felt tired, worn out, used-up, or exhausted during the past Month?

1. The majority of the time
2. Less than half of the time
3. Only occasionally
4. Seldom or never

17. Happiness. All in all, how happy are you these days?

1. Very happy
2. Pretty happy
3. Not too happy
4. Very unhappy

Safety

18. Seat Belts. When driving or riding in a car, how often do you wear a seat belt?

1. Always
2. Majority of the time
3. Less than half the time
4. Only occasionally

19. **Drinking and Driving** During the past year, how many times did you drive when you perhaps had too much to drink or ride with such a person? (It takes about 1 hour per drink to clear the mind of the effects of alcohol.)

1. Never drink, or never drive after drinking
2. Once
3. Twice
4. More than twice

20. **Sex.** If you have multiple sexual partners, how often do use condoms/preventive measures (*if you have one sexual partner select #5. If you abstain from sex select #6*)

1. Always
2. Majority of the time
3. Less than half of the time
4. Only occasionally
5. Have one sexual partner
6. Abstain from sex

Medical Care

21. **Office Visits** How many visits have you made during the past 12 months to a physician's office, emergency room, psychiatrist, chiropractor, or other health care professionals?

    1. None
    2. One
    3. Two
    4. Three to five
    5. Six to nine
    6. Ten or more

22. **Sick Days** How many days did you miss from work due to sickness or injury during the past 12 months?

    1. None
    2. One or two days
    3. Three to four days
    4. Five to eight days
    5. Nine to thirteen days
    6. Fourteen or more days

23. **Blood Pressure** Indicate your usual blood pressure.

    1. 120/80 or below
    2. (121-139)/(81-89)
    3. (140-159)/(90-94)
    4. 160/95 or higher
    5. Don't know

24. **Cholesterol** Indicate your usual blood cholesterol level.

    1. 180 or below
    2. 181-199
    3. 200-239
    4. 240 or higher
    5. Don't know

25. **Personal Physician** Do you currently have a personal physician?
    1. Yes
    2. No

26. **Sunburn.** How often do you get a sunburn?
    1. Never
    2. 1 time per year
    3. 2-3 times per year
    4. 4+ times per year

27. **Regular Exams.** Mark all health exams you have had in the last 1-3 years.
    1. Rectal or bowel exam
    2. Physical exam
    3. Pap smears
    4. Flu vaccine

2. HEALTHY-LIVING (ATTITUDINAL)

A. For each statement on this page, "X" one box to show your agreement.

	Strongly Agree	Don't Strongly Agree	Agree	Disagree
I believe it is important for one to exercise on a regular basis	( )	( )	( )	( )
I believe it is not important for one to limit consumption of red meat	( )	( )	( )	( )
I believe it is important for one to limit consumption of high-fat desserts	( )	( )	( )	( )
I believe it is important to eat whole grain products	( )	( )	( )	( )
I believe **it is not** important to eat 5 servings or more of fruits and vegetables per day	( )	( )	( )	( )
I believe it is important to limit fast food consumption	( )	( )	( )	( )
I believe it is important to limit alcohol drinking to not more than 2 drinks per day	( )	( )	( )	( )
One **should not** consume alcohol	( )	( )	( )	( )
I believe **it is not** important for one's own and others' health not to smoke	( )	( )	( )	( )
I believe it is important not to consume drugs (e.g.Cocaine; marijuana)	( )	( )	( )	( )
I believe it is important for one to wear a seat belt (Safety)	( )	( )	( )	( )
I believe it is important not to drink and drive	( )	( )	( )	( )
I believe **it is not** important to use condoms/preventive measures	( )	( )	( )	( )
I believe it is important to undergo a comprehensive physical exam every one or two years	( )	( )	( )	( )

SECTION II

1. Travel Motivations and Behavior

A. Please imagine that you are thinking of taking a vacation trip. For each statement on this page, "X" one box to show how important that reason is to you when considering such a trip. Please start at the item indicated.

	VERY IMPORTANT	*SOMEWHAT IMPORTANT*	*NOT VERY IMPORTANT*	*NOT AT ALL IMPORTANT*
Breaking from my daily living habits	( )	( )	( )	( )
Traveling through places				
that are important in history	( )	( )	( )	( )
Finding thrills and excitement	( )	( )	( )	( )
Participating in sports	( )	( )	( )	( )
Traveling to places where I feel safe/secure	( )	( )	( )	( )
Being physically active	( )	( )	( )	( )
Doing nothing at all	( )	( )	( )	( )
Escaping from the ordinary	( )	( )	( )	( )
Feeling at home away from home	( )	( )	( )	( )
Learning new things, increasing my knowledge	( )	( )	( )	( )
Being daring and adventuresome	( )	( )	( )	( )
Traveling through places rich				
in nature-made attractions	( )	( )	( )	( )
Developing healthy-living habits	( )	( )	( )	( )
Traveling through urban areas	( )	( )	( )	( )

	VERY IMPORTANT	*SOMEWHAT IMPORTANT*	*NOT VERY IMPORTANT*	*NOT AT ALL IMPORTANT*
Indulging in gourmet cuisine/ Pastries	( )	( )	( )	( )
Participate in fitness and Wellness seminars	( )	( )	( )	( )
Seek health-care services (medical				
examinations, special diets, vitamin-complex intakes, transvital injections, herbal remedies, etc…)	( )	( )	( )	( )
Bathe in warm springs and mineral Waters	( )	( )	( )	( )
Be cleansed physically and Spiritually	( )	( )	( )	( )
Enjoy health spas (such as relaxation, saunas, yoga, muscle development, beauty treatments, weight reduction programs)	( )	( )	( )	( )

B. When choosing a destination for a vacation trip, different things are important to different people. Listed below are a number of items. For each item, please "X" one box to show how important that item is to <u>YOU</u> in a vacation destination.

	VERY IMPORTANT	*SOMEWHAT IMPORTANT*	*NOT VERY IMPORTANT*	*NOT AT ALL IMPORTANT*
Accommodation with a health				
club/exercise facility	( )	( )	( )	( )
Shopping with emphasis on health products (vitamnins & herbal remedies)	( )	( )	( )	( )
hygiene and Cleanliness in facilities/services	( )	( )	( )	( )
Beaches for swimming with Umbrellas for sun protection	( )	( )	( )	( )
Restaurants with emphasis on light cuisine	( )	( )	( )	( )
Healthy local cuisine (emphasis				
On healthy cooking methods With vegetables, fruits, grains, Seafood and olive oil)	( )	( )	( )	( )
Environmental quality of air, Water and soil	( )	( )	( )	( )
<u>Smoking-free bars and night</u> Clubs	( )	( )	( )	( )
The availability of nearby open air running track and stretching out zone	( )	( )	( )	( )
Cafes serving alcoholic-free Beverages	( )	( )	( )	( )
Local health-care emergency/ facilities' standards	( )	( )	( )	( )

	VERY IMPORTANT	*SOMEWHAT IMPORTANT*	*NOT VERY IMPORTANT*	*NOT AT ALL IMPORTANT*
Casinos and gambling	**( )**	**( )**	**( )**	**( )**
Educational tour packages with emphasis on boosting well-being (physically and spiritually – developing healthy habits)	**( )**	**( )**	**( )**	**( )**
The destination's regulations On seat belt and smoking in Public places	**( )**	**( )**	**( )**	**( )**
Accessibility to a GYM with A daily/weekly rate (no membership required)	**( )**	**( )**	**( )**	**( )**
Fast food restaurants	**( )**	**( )**	**( )**	**( )**
Clothes optional resorts/ Beaches	**( )**	**( )**	**( )**	**( )**
Campgrounds and trailer Parks	**( )**	**( )**	**( )**	**( )**
Museums and art galleries	**( )**	**( )**	**( )**	**( )**
Outdoor activities such as Hiking and climbing	**( )**	**( )**	**( )**	**( )**
National Parks and forests	**( )**	**( )**	**( )**	**( )**
Historical, archeological or Military sites and buildings	**( )**	**( )**	**( )**	**( )**
Big modern cities	**( )**	**( )**	**( )**	**( )**
Luxury facilities/services	**( )**	**( )**	**( )**	**( )**
Mineral springs	**( )**	**( )**	**( )**	**( )**
Spas/Health resorts (offer medical examinations & treatments**)**	**( )**	**( )**	**( )**	**( )**

C. INFORMATION SOURCES

When seeking **an information source** to plan for a vacation or a travel experience, different sources are important to different people. Listed below are a number of information sources. For each item, please **"X"** one box to show how important that source is to **YOU** in planning for a vacation or a travel experience.

	VERY IMPORTANT	***SOMEWHAT*** IMPORTANT	***NOT VERY*** IMPORTANT	***NOT AT ALL*** IMPORTANT
General Travel Agents	( )	( )	( )	( )
General Brochures /Travel Guides	( )	( )	( )	( )
Friends/Family Members	( )	( )	( )	( )
General Tour Operators	( )	( )	( )	( )
Advertisements in general Magazines	( )	( )	( )	( )
Special Interest Travel Agents /Tour Operators (health/fitness)	( )	( )	( )	( )
Special Interest Brochures /Travel Guides (health/fitness)	( )	( )	( )	( )
Advertisements in Health/Fitness Magazines	( )	( )	( )	( )
Direct Mail from Destinations	( )	( )	( )	( )
The Internet	( )	( )	( )	( )

D. PURPOSE OF TRIP

Please circle the appropriate number.

1. In the last 12 months, **how many trips** have you taken?

0 1 2 3 4 5 6 7 8 9 10 10+

2. Among the trips that you have taken in the last 12 months, how many trips were **purely for business purposes**?

0 1 2 3 4 5 6 7 8 9 10 10+

3. Among the trips that you have taken in the last 12 months, how many trips were **purely for pleasure purposes**?

0 1 2 3 4 5 6 7 8 9 10 10+

4. Among the trips that you have taken in the last 12 months, how many trips were **purely for attending meetings/conventions**?

0 1 2 3 4 5 6 7 8 9 10 10+

5. Among the trips that you have taken in the last 12 months, how many trips were **a mix of business/pleasure/meetings and conventions**?

0 1 2 3 4 5 6 7 8 9 10 10+

SECTION III

. Please indicate **your age** _____

. Gender: ( ) Male ( ) Female

. Marital Status:

( ) Single ( ) Married ( ) Divorced/ Widowed/ Separated

. What was **the last year of school** you have completed? **(Please circle one)**

Grade *school*	*High school*	*College*	*Graduate school*
1 2 3 4 5 6 7 8	**9 10 11 12**	**13 14 15 16**	**17 18 19 20 21+**

. What is your approximate **household income before taxes**?

( )	Under $25,000	( )	$50,000 to $74,999
( )	$25,000 to $34,999	( )	$75,000 to $99,999
( )	$35,000 to $49,000	( )	$100,000 or more

YOUR TIME IS APPRECIATED. I THANK YOU!

Appendix B

Descriptive Analyses

Table B.1: Healthy-Living (Behavioral)

Variable	Frequency (N=477)	Percent
Exercise Level		
Aerobic Exercises		
Don't have a regular exercise program	164	34.4
Once per week	47	9.9
Twice per week	94	19.7
Three or four times per week	108	22.6
Five or more times per week	61	12.8
Strength Exercises		
Don't do strength exercises	252	52.8
Once per week	67	14.0
Twice per week	64	13.4
Three or more times per week	92	19.3
Eating Habits		
Meat and Protein Foods		
Eat regular cuts of red meat, hamburgers, hot dogs and luncheon meats	43	9.0
Eat a combination of regular meats and some poultry or fish	197	41.3
Eat only lean meats, skinless poultry, or fish	82	17.2
Eat very little red meat, mostly the white meat of poultry or fish	143	30.0
Seldom or never eat meat; eat vegetable protein	10	2.1
Dairy Products and Eggs		
Nearly eat the high-fat products	52	10.9
Eat mostly the high-fat products, some low	87	18.2
Eat both about the same	121	25.4
Eat primarily low-fat products, some high-fat	181	37.9
Eat only low-fat products or none at all	35	7.3
Desserts		
Nearly always eat the high-fat products	54	11.3
Eat mostly the high-fat desserts, some low-fat	83	17.4
Eat both about the same	158	33.1
Eat primarily low-fat, or rarely eat desserts	139	29.1
Eat only low-fat desserts or none at all	42	8.8
Cooking fats and food preparation		
Food nearly always cooked the high-fat way	22	4.6
Food mostly cooked the high-fat way	48	10.1
Food cooked both ways about the same	122	25.6
Food cooked primarily the low-fat way	236	49.5
Food prepared only the low-fat way	48	10.1

Table B.1 (continued): Healthy-Living (Behavioral)

Variable	Frequency (N=477)	Percent
Eating Habits (continued)		
Breads and Grains		
Nearly always eat refined grain products	63	13.2
Eat mostly refined grain products	88	18.4
Eat both about the same	149	31.2
Eat primarily whole grain products	139	29.1
Eat only whole grain products	32	6.7
Fruits and Vegetables*		
Five or more servings per day	23	4.8
Four servings per day	43	9.0
Three servings per day	127	26.6
Two servings per day	159	33.3
One serving or less per day	121	25.4
Fast Foods		
Nearly every day	29	6.1
Several times per week	130	27.3
Few times per month	208	43.6
Seldom or never	106	22.2
Salt*		
Seldom or never	170	35.6
Some meals	149	31.2
Majority of meals	116	24.3
Nearly every meal	38	8.0
Alcohol and Drugs		
Number of drinks*		
Did not drink in the past year	79	16.6
None in the past two weeks	66	13.8
One drink	111	23.3
Two drinks	91	19.1
Three to four drinks	78	16.4
Five or more drinks	51	10.7
Drugs		
Frequently, every week	37	7.8
Sometimes, monthly	33	6.9
Rarely, few times/year	87	18.2
Never	318	66.7

Note: *items were reversed coded

Table B.1 (continued): Healthy-Living (Behavioral)

Variable	Frequency (N=477)	Percent
Eating Habits (continued)		
Breads and Grains		
Nearly always eat refined grain products	63	13.2
Eat mostly refined grain products	88	18.4
Eat both about the same	149	31.2
Eat primarily whole grain products	139	29.1
Eat only whole grain products	32	6.7
Fruits and Vegetables*		
Five or more servings per day	23	4.8
Four servings per day	43	9.0
Three servings per day	127	26.6
Two servings per day	159	33.3
One serving or less per day	121	25.4
Fast Foods		
Nearly every day	29	6.1
Several times per week	130	27.3
Few times per month	208	43.6
Seldom or never	106	22.2
Salt*		
Seldom or never	170	35.6
Some meals	149	31.2
Majority of meals	116	24.3
Nearly every meal	38	8.0
Alcohol and Drugs		
Number of drinks*		
Did not drink in the past year	79	16.6
None in the past two weeks	66	13.8
One drink	111	23.3
Two drinks	91	19.1
Three to four drinks	78	16.4
Five or more drinks	51	10.7
Drugs		
Frequently, every week	37	7.8
Sometimes, monthly	33	6.9
Rarely, few times/year	87	18.2
Never	318	66.7

Note: *items were reversed coded.

Table B.1 (continued): Healthy-Living (Behavioral)

Variable	Frequency (N=477)	Percent (%)
Smoking Status		
Smoking Status*		
Have never smoked	280	58.7
Quit smoking, 2 or more years ago	93	19.5
Quit smoking, less than 2 years ago	19	4.0
Smoke pipe or cigar only	18	3.8
Smoke less than 10 cigarettes per day	31	6.5
Smoke 10 or more cigarettes per day	34	7.1
Smokeless Tobacco		
Yes	21	4.4
No	453	95.0
Stress and Coping		
Stress and Coping Status*		
Seldom stressed, coping very well	119	24.9
Sometimes stressed, coping fairly well	261	54.7
Often stressed, trouble coping at times	73	15.3
Heavily stressed, often have trouble coping	16	3.4
Excessively stressed, unable to cope	1	.2
Energy Level		
The majority of the time	61	12.8
Less than half of the time	95	19.9
Only occasionally	244	51.2
Seldom or never	74	15.5
Happiness*		
Very happy	181	37.9
Pretty happy	254	53.2
Not too happy	32	6.7
Very unhappy	6	1.3
Safety		
Seat Belts*		
Always	345	72.3
Majority of the time	77	16.1
Less than half of the time	18	3.8
Only occasionally	34	7.1
Drinking and Driving*		
Never drink, or never drive after drinking	309	64.8
Once	65	13.6
Twice	32	6.7
More than twice	68	14.3

Note: *items were reversed coded.

Table B.1 (Continued): Healthy-Living Behavioral

Variable	Frequency (N=477)	Percent
Medical Care		
Sick Days*		
None	235	49.3
One or two days	150	31.4
Three to four days	48	10.1
Five to eight days	24	5.0
Nine to thirteen days	7	1.5
Fourteen or more days	8	1.7
Personal Physician*		
Yes	353	74.0
No	119	24.9
Sunburn*		
Never	129	27.0
1 time per year	218	45.7
2-3 times per year	110	23.1
4+ times per year	17	3.6

Note: items were reversed coded.

Table B.2: Healthy-Living (Attitudinal)

Item	*Strongly Agree* 4		3		2		*Strongly Disagree* 1		Mean	Std. Dev.
	N	**%**	**N**	**%**	**N**	**%**	**N**	**%**		
I believe it is important for one to exercise on a regular basis	**301**	63.1	**172**	36.1	**4**	.8	**0**	**0**	**3.62**	**.50**
I believe **it is not** important for one to limit consumption of red meat*	**29**	6.1	**138**	28.9	**216**	45.3	**94**	19.7	**2.79**	**.83**
I believe it is important for one to limit consumption of high-fat desserts	**187**	39.2	**252**	52.8	**25**	5.2	**12**	2.5	**3.29**	**.68**
I believe it is important to eat whole grain products	**175**	36.7	**241**	50.5	**51**	10.7	**6**	1.3	**3.24**	**.69**
I believe **it is not** important to eat 5 servings or more of fruits and vegetables per day*	**14**	2.9	**127**	26.6	**224**	47.1	**110**	23.1	**2.90**	**.78**
I believe it is important to limit fast food consumption	**244**	51.2	**208**	43.6	**17**	3.6	**7**	1.5	**3.45**	**.64**
I believe it is important to limit alcohol Drinking to not more than 2 drinks per day	**193**	40.5	**207**	43.4	**57**	11.9	**16**	3.4	**3.22**	**.78**
One **should not** consume alcohol	**46**	9.6	**51**	10.7	**237**	49.7	**139**	29.1	**2.01**	**.89**
I believe **it is not** important for one's Own and others' health not to smoke*	**25**	5.2	**39**	8.2	**91**	19.1	**317**	66.5	**3.49**	**.86**
I believe it is important not to consume illegal drugs (e.g. cocaine; marijuana)	**327**	68.6	**91**	19.1	**35**	7.3	**22**	4.6	**3.52**	**.82**
I believe it is important for one to wear A seat belt (safety)	**355**	74.4	**104**	21.8	**13**	2.7	**5**	1.0	**3.70**	**.57**
I believe it is important not to drink and Drive	**382**	80.1	**86**	18.0	**5**	1.0	**2**	.4	**3.78**	**.46**
I believe **it is not** important to use condoms/preventive measures*	**14**	2.9	**19**	4.0	**84**	17.6	**355**	74.4	**3.65**	**.70**
I believe it is important to undergo A comprehensive physical exam Every One or two years	**203**	42.6	**238**	49.9	**32**	6.7	**4**	.8	**3.34**	**.64**

Note: Respondents were asked to "X" one box to show their agreement. A four point Likert-type scale was used to measure each item: 4 = strongly agree; 3 = somewhat agree; 2 = disagree; 1 = strongly disagree

*** Items were reverse coded**

Table B.3: Travel Motivation of Push Factors

Push Factors	Very Important 1		2		3		Not Important At All 4		Mean	Std. Dev.
	N	%	N	%	N	%	N	%		
Breaking from my daily living habits	**209**	43.8	**188**	39.4	**64**	13.4	**16**	3.4	**1.76**	**.81**
Traveling through places that are Important in history	**128**	26.8	**230**	48.2	**105**	22.0	**13**	2.7	**2.01**	**.77**
Finding thrills and excitement	**134**	28.1	**201**	42.1	**117**	24.5	**23**	4.8	**2.06**	**.85**
Bath in warm springs and mineral Waters	**33**	6.9	**95**	19.9	**224**	47.0	**124**	26.0	**2.92**	**.86**
Participating in sports	**56**	11.7	**151**	31.7	**169**	35.4	**101**	21.2	**2.66**	**.94**
Travelling to places where I feel Safe/secure	**249**	52.2	**170**	35.6	**45**	9.4	**11**	2.3	**1.62**	**.75**
Being physically active	**161**	33.8	**234**	49.1	**70**	14.7	**11**	2.3	**1.85**	**.75**
Doing nothing at all	**26**	5.5	**147**	30.8	**166**	34.8	**138**	28.9	**2.87**	**.89**
Escaping from the ordinary	**205**	43.0	**226**	47.4	**33**	6.9	**8**	1.7	**1.67**	**.68**
Feeling at home away from home	**114**	23.9	**198**	41.5	**134**	28.1	**27**	5.7	**2.22**	**1.69**
Enjoy health spas (such as relaxation, saunas, yoga, muscle development, beauty treatments and weight reduction programs)	**75**	15.7	**115**	24.1	**163**	34.2	**120**	25.2	**2.69**	**1.02**
Learning new things, increasing My knowledge	**223**	46.8	**212**	44.4	**38**	8.0	**4**	.8	**1.63**	**.67**
Being daring and adventuresome	**88**	18.4	**219**	45.9	**125**	26.2	**44**	9.2	**2.26**	**.86**
Be cleansed physically and Spiritually	**105**	22.0	**176**	36.9	**144**	30.2	**51**	10.7	**2.30**	**.93**
Traveling through places rich in Nature-made attractions	**167**	35.0	**246**	51.6	**58**	12.2	**5**	1.0	**1.79**	**.69**
Developing healthy-living habits	**152**	31.9	**186**	39.0	**114**	23.9	**25**	5.2	**2.02**	**.88**
Travelling through urban areas	**37**	7.8	**146**	30.6	**228**	47.8	**64**	13.4	**2.67**	**.80**

Table B.3 (continued): Travel Motivation of Push Factors

Push Factors	Very Important 1		2		3		Not Important At All 4		Mean	Std. Dev.
	N	%	N	%	N	%	N	%		
Indulging in gourmet cuisine/pastries	**61**	12.8	**167**	35.0	**175**	36.7	**71**	14.9	**2.54**	**.90**
Participate in fitness and wellness Seminars	**34**	7.1	**108**	22.6	**211**	44.2	**121**	25.4	**2.88**	**.87**
Seek health care services (medical Examinations, special diets, Vitamin-complex intakes, Transvital injections, herbal Remedies, etc,…)	**46**	9.6	**86**	18.0	**168**	35.2	**174**	36.5	**2.99**	**.97**

Note: Respondents were asked to imagine taking a vacation trip and to "X" one box to show how important that reason is to him or her when considering such a trip. The scale ranged from 1 = Very Important to 4 = Not At All Important

Table B.4: Travel Motivation of Pull Factors

Pull Factors	Very Important 1		2		3		Not Important At All 4		Mean	Std. Dev.
	N	%	N	%	N	%	N	%		
Accommodation with a health club/ Exercise facility	**56**	11.7	**138**	28.9	**201**	42.1	**82**	17.2	**2.65**	**.90**
Shopping with emphasis on health Products (vitamins & herbal remedies)	**18**	3.8	**51**	10.7	**252**	52.8	**156**	32.7	**3.14**	**.75**
Hygiene and cleanliness in facilities/ Services	**332**	69.6	**115**	24.1	**20**	4.2	**10**	2.1	**1.39**	**.67**
Beaches for swimming with umbrellas For sun protection	**125**	26.2	**193**	40.5	**120**	25.2	**38**	8.0	**2.15**	**.90**
Restaurants with emphasis on light Cuisine	**72**	15.1	**189**	39.6	**179**	37.5	**37**	7.8	**2.38**	**.83**
Healthy local cuisine (emphasis on Healthy cooking methods with Vegetables, fruits, grains, seafood and Olive oil)	**86**	18.0	**190**	39.8	**159**	33.3	**42**	8.8	**2.33**	**.87**
Environmental quality of air, water and Soil	**206**	43.2	**206**	43.2	**54**	11.3	**10**	2.1	**1.72**	**.74**
Smoking-free bars and night clubs	**153**	32.1	**109**	22.9	**116**	24.3	**92**	19.3	**2.31**	**1.12**
The availability of nearby open running Track and stretching out zone	**37**	7.8	**84**	17.6	**212**	44.4	**143**	30.0	**2.99**	**.98**
Cafes serving alcoholic-free beverages	**51**	10.7	**94**	19.7	**181**	37.9	**151**	31.7	**2.90**	**.97**
Local health-care emergency/ Facilities' standards	**156**	32.7	**188**	39.4	**103**	21.6	**30**	6.3	**2.01**	**.89**
Casinos and gambling	**14**	2.9	**91**	19.1	**162**	34.0	**208**	43.6	**3.19**	**.84**
Educational tour packages with Emphasis on boosting well-being (physically and spiritually – developing healthy habits)	**35**	7.3	**126**	26.4	**197**	41.3	**117**	24.5	**2.83**	**.88**
The destination's regulations on seat belt And smoking in public places	**86**	18.0	**141**	29.6	**147**	30.8	**101**	21.2	**2.55**	**1.01**

Table B.4 (continued): Travel Motivation of Pull Factors

Pull Factors	Very Important 1		2		3		Not Important At All 4		Mean	Std. Dev.
	N	%	N	%	N	%	N	%		
Accessibility to a GYM with a daily/weekly Rate (no membership required)	**43**	9.0	**114**	23.9	**180**	37.7	**140**	29.4	**2.87**	**.94**
Fast food restaurants	**16**	3.4	**103**	21.6	**198**	41.5	**159**	33.3	**3.05**	**.83**
Clothes optional resorts/beaches	**37**	7.8	**94**	19.7	**120**	25.2	**225**	47.2	**3.12**	**.98**
Campgrounds and trailer parks	**24**	5.0	**85**	17.8	**159**	33.3	**208**	43.6	**3.16**	**.89**
Museums and art galleries	**105**	22.0	**215**	45.1	**110**	23.1	**46**	9.6	**2.20**	**.89**
Outdoor activities such as hiking And climbing	**86**	18.0	**219**	45.9	**113**	23.7	**56**	11.7	**2.29**	**.90**
National parks and forests	**129**	27.0	**235**	49.3	**86**	18.0	**24**	5.0	**2.01**	**.81**
Historical, archeological or Military sites and buildings	**128**	26.8	**219**	45.9	**101**	21.2	**26**	5.5	**2.05**	**.84**
Big modern cities	**49**	10.3	**181**	37.9	**180**	37.7	**63**	13.2	**2.54**	**.85**
Luxury facilities/services	**92**	19.3	**197**	41.3	**133**	27.9	**54**	11.3	**2.31**	**.91**
Mineral springs	**23**	4.8	**83**	17.4	**223**	46.8	**147**	30.8	**3.04**	**.82**
Spas/health resorts (offer Medical examinations and Treatments)	**37**	7.8	**79**	16.6	**202**	42.3	**158**	33.1	**3.01**	**.90**

Note: Respondents were asked to "X" one box to show how important that item is to him or her when choosing a vacation destination. The scale ranged from 1 = Very Important to 4 = Not At All Important.

Appendix C

Tukey's Multiple Range Test Results

Table C.1: Tukey's Multiple Comparison Test
Marital Status and Healthy-Living Behavioral

Variable	Marital	Marital Categories	Significance
Alcohol and Drugs	**1**	2	.000
		3	.324
	2	1	.000
		3	.382
	3	1	.324
		2	.382
Smoking Status	**1**	2	**.020**
		3	.797
	2	1	.020
		4	.566
	3	1	.697
		2	.566
Stress and Coping	**1**	2	.131
		3	.708
	2	1	.131
		3	.069
	3	1	.708
		2	.069
Safety	**1**	2	.000
		3	.020
	2	1	.000
		4	.462
	3	1	.020
		2	.462
Medical Care	**1**	2	.034
		3	.938
	2	1	.034
		4	.350
	3	1	.938
		2	.350

Table C.2: Tukey's Multiple Comparisons Test
Income and Healthy-Living Behavioral

Variable	Income	Income Categories	Significance
Eating Habits	**1**	2	.988
		3	.975
		4	.201
		5	.999
		6	.075
	2	1	.988
		3	.708
		4	.037
		5	.896
		6	.010
	3	1	.975
		2	.708
		4	.517
		5	.998
		6	.233
	4	1	.201
		2	.037
		3	.517
		5	.222
		6	.997
	5	1	.999
		2	.896
		3	.998
		4	.222
		5	.066
	6	1	.075
		2	.010
		3	.233
		4	.997
		5	.066
Smoking Status	**1**	2	.049
		3	.312
		4	1.000
		5	1.000
		6	.997
	2	1	.049
		3	.855
		4	.009
		5	.031
		6	.030
	3	1	.312
		2	.855
		4	.097
		5	.248
		6	.262

Table C.2 (continued): Tukey's Multiple Comparisons Test

Income and Healthy-Living Behavioral

Variable	Income	Income Categories	Significance
Smoking Status	**4**	1	1.000
.		2	. 009
		3	. 097
		5	1.000
		6	.986
	5	1	1.000
		2	.031
		3	.248
		4	1.000
		6	.999
	6	1	.997
		2	.030
		3	.262
		4	.986
		5	.999
Medical Care	***1***	*2*	*.116*
		3	.774
		4	.002
		5	.095
		6	.004
	2	1	.116
		3	.654
		4	.990
		5	1.000
		6	.999
	3	1	.774
		2	.654
		4	.067
		5	.686
		6	.110
	4	1	.002
		2	.990
		3	.067
		5	.866
		6	.999
	5	1	.095
		2	1.000
		3	.686
		4	.866
		5	.954
	6	1	.004
		2	.999
		3	.110
		4	.999
		5	.954

Table C.3: Tukey's Multiple Comparisons Test
Education and Healthy-Living Behavioral

Variable	education	education Categories	Significance
Eating Habits	1	2	.280
		3	.145
		4	.047
	2	1	.280
		3	.292
		4	.000
	3	1	.145
		2	.292
		4	.008
	4	1	.047
		2	.000
		3	.008
Smoking Status	1	2	.908
		3	.556
		4	.432
	2	1	.908
		3	.003
		4	.000
	3	1	.556
		2	.003
		4	.527
	4	1	.432
		2	.000
		3	.527
Stress & Coping	1	2	.898
		3	.995
		4	.944
	2	1	.898
		3	.055
		4	.894
	3	1	.995
		2	.055
		4	.153
	4	1	.944
		2	.894
		3	.153
Medical Care	1	2	.020
		3	.063
		4	.030
	2	1	.020
		3	.067
		4	.862
	3	1	.063
		2	.067
		4	.220
	4	1	.030
		2	.862
		3	.220

Table C.4: Tukey's Multiple Comparisons Test
Age and Healthy-Living Behavioral

Variable	Age	Age Categories	Significance
Exercise Level	**1**	2	.457
		3	.424
		4	.653
	2	1	.457
		3	.001
		4	.179
	3	1	.424
		2	.001
		4	1.000
	4	1	.653
		2	.040
		3	1.000
Eating Habits	**1**	2	.077
		3	.000
		4	.000
	2	1	.077
		3	.308
		4	.118
	3	1	.000
		2	.308
		4	.742
	4	1	.000
		2	.118
		3	.742
Alcohol & Drugs	**1**	2	1.000
		3	.121
		4	.015
	2	1	1.000
		3	.061
		4	.007
	3	1	.121
		2	.061
		4	.454
	4	1	.015
		2	.007
		3	.454
Stress & Coping	**1**	2	.998
		3	.998
		4	.013
	2	1	.998
		3	.974
		4	.002
	3	1	.998
		2	.974
		4	.003

Table C.4 (continued): Tukey's Multiple Comparisons Test
Age and Healthy-Living Behavioral

Variable	Age	Age Categories	Significance
Stress & Coping	**4**	1	.013
		2	.002
		3	.003
Safety	**1**	2	.705
		3	.003
		4	.000
	2	1	.705
		3	.026
		4	.000
	3	1	.003
		2	.026
		4	.045
	4	1	.000
		2	.000
		3	.045
Medical Care	**1**	2	.912
		3	.007
		4	.000
	2	1	.912
		3	.014
		4	.000
	3	1	.007
		2	.014
		4	.072
	4	1	.000
		2	.000
		3	.072

Table C.5: Tukey's Multiple Comparisons Test
Marital Status and Healthy-Living Attitudinal Factor 2(Alcohol, Smoking/Drugs and Safety)

Variable	Marital Status	Marital Status Categories	Significance
Attitudinal Factor 2	**1**	2	.000
		3	.005
	2	1	.000
		3	.884
	3	1	.005
		2	.884

Table C.6: Tukey's Multiple Comparisons Test
Education and Healthy-Living Attitudinal (1 – Exercise and Nutrition)

Variable	Education	Education Categories	Significance
Attidudinal Factor 1	**1**	2	.290
		3	.199
		4	.075
	2	1	.290
		3	.728
		4	.009
	3	1	.199
		2	.728
		4	.015
	4	1	.075
		2	.009
		3	.015

Table C.7: Tukey's Multiple Comparisons Test
Age and Healthy-Living Attitudinal (2 – Smoking, Alcohol/Drugs, and Safety)

Variable	Age	Age Categories	Significance
Attidudinal Factor 2	**1**	2	.442
		5	.005
		6	.000
	2	1	.442
		5	.158
		6	.008
	3	1	.005
		3	.158
		4	.305
	4	1	.000
		4	.008
		5	.305

Appendix D

Results of Multiple Regression Analyses

Table D.1: Multiple Regression Analysis – Push1 (Healthy-Living)

Independent Variable In Model	B	std. Error	Sign. Of B P value	R^2	Change	Sig. F Change in R^2
(Constant)	2.641	.235	.000			
Age	5.721E-04	.003	.830			
Gender	.272	.064	.000*			
School	-1.290E-02	.012	.290			
Income	-1.897E-02	.023	.419			
Married	-.115	.071	.105	.062	.062	.000*
(Constant)	2.960	.341	.000			
Age	9.058E-04	.003	.753			
Gender	.293	.067	.000*			
School	-1.688E-02	.012	.175			
Income	-1.812E-02	.023	.440			
Married	-.104	.072	.147			
EXELEVEL	6.661E-02	.028	.019*			
EATHABIT	8.668E-02	.054	.106			
ALDRUGS	.109	.038	.005*			
SMOKEST	-1.675E-02	.040	.679			
STRESSCO	-1.834E-02	.055	.737			
SAFETY	-.117	.049	.018*			
MEDICARE	1.556E-02	.064	.809	.104	.042	.006*

Table D.2: Multiple Regression Analysis – Push 2 (Excitement and Thrills)

Independent Variable In Model	B	std. Error	Sign. Of B P value	R^2	Change	Sig. F Change in R^2
(Constant)	1.194	.226	.000			
Age	-2.179E-02	.003	.000*			
Gender	-.180	.062	.004*			
School	2.589E-03	.012	.825			
Income	4.975E-03	.023	.826			
Married	-.100	.068	.143			
				.189	20.570	.000*
(Constant)	1.611	.329	.000			
Age	-2.079E-02	.003	.000*			
Gender	-.143	.065	.028*			
School	1.864E-03	.012	.877			
Income	-3.223E-03	.023	.887			
Married	-6.783E-02	.069	.327			
EXELEVEL	8.439E-02	.027	.002*			
EATHABIT	2.4441E-02	.052	.637			
ALDRUGS	1.025E-02	.037	.780			
SMOKEST	-4.481E-03	.039	.909			
STRESSCO	2.744E-02	.053	.602			
SAFETY	-9.157E-02	.048	.056			
MEDICARE	8.572E-02	.062	.167			
				.222	2.660	.011*

Table D.3: Multiple Regression Analysis – Push3 (Education)

Independent Variable In Model	B	std. Error	Sign. Of B P value	R^2	Change	Sig. F Change in R^2
(Constant)	2.435	.171	.000			
Age	1.513E-03	.002	.437			
Gender	.186	.047	.000*			
School	1.943E-02	.009	.029*			
Income	-4.027E-02	.017	.019*			
Married	-9.138E-02	.052	.077	.072	.072	.000*
(Constant)	2.606	.253	.000			
Age	6.197E-04	.002	.771			
Gender	.171	.050	.001*			
School	1.650E-02	.009	.074			
Income	-3.981E-02	.017	.022*			
Married	-9.849E-02	.053	.064			
EXELEVEL	-1.379E-03	.021	.948			
EATHABIT	6.859E-02	.040	.084			
ALDRUGS	1.900E-02	.028	.501			
SMOKEST	-4.403E-03	.030	.883			
STRESSCO	1.907E-02	.040	.637			
SAFETY	8.888E-03	.037	.809			
MEDICARE	-2.092E-02	.048	.660	.082	.010	.687

Table D.4: Multiple Regression Analysis – Push4 (Indulge)

Independent Variable In Model	B	std. Error	Sign. Of B P value	R^2	Change	Sig. F Change in R^2
(Constant)	3.423	.196	.000			
Age	-5.392E-03	.002	.016*			
Gender	.176	.053	.001*			
School	2.422E-02	.010	.017*			
Income	4.860E-02	.020	.013*			
Married	-.103	.059	.081			
				.061	.061	.000*
(Constant)	2.416	.280	.000			
Age	-1.967E-03	.002	.404			
Gender	.203	.055	.000*			
School	3.138E-02	.010	.002*			
Income	4.779E-02	.019	.013*			
Married	-7.403E-02	.059	.208			
EXELEVEL	-3.116E-02	.023	.180			
EATHABIT	-.119	.044	.007*			
ALDRUGS	-7.567E-02	.031	.016*			
SMOKEST	-2.568E-02	.033	.439			
STRESSCO	-3.902E-02	.045	.383			
SAFETY	9.320E-03	.041	.818			
MEDICARE	-.131	.053	.013*			
				.133	.072	.000*

Table D.5: Multiple Regression Analysis – Push5

Independent Variable In Model (1)	B	std. Error	Sign. Of B P value	R^2	Change	Sig. F Change in R^2
(Constant)	1.828	.178	.000			
Age	-6.317E-04	.002	.755			
Gender	.145	.049	.003*			
School	-1.250E-03	.009	.893			
Income	-7.247E-03	.018	.684			
Married	3.324E-02	.054	.537			
				.024	.024	.058
(2)						
(Constant)	1.679	.261	.000			
Age	2.355E-04	.002	.915			
Gender	.128	.052	.013*			
School	-5.167E-03	.010	.555			
Income	-8.264E-03	.018	.646			
Married	4.183E-02	.055	.446			
EXELEVEL	2.631E-02	.022	.226			
EATHABIT	-6.548E-03	.041	.873			
ALDRUGS	1.834E-03	.029	.950			
SMOKEST	6.340E-02	.031	.041*			
STRESSCO	-.100	.042	.017*			
SAFETY	-4.483E-02	.038	.237			
MEDICARE	3.802E-02	.049	.440			
				.052	.028	.083

Table D.6: Multiple Regression Analysis – Pull1 (Health and Fitness)

Independent Variable In Model	B	std. Error	Sign. Of B P value	R^2	Change	Sig. F Change in R^2
(Constant)	2.827	.222	.000			
Age	-2.464E-03	.003	.329			
Gender	.142	.060	.019*			
School	-8.278E-03	.012	.472			
Income	1.818E-02	.022	.412			
Marital	.144	.067	.032*			
				.028	.028	.026*
(Constant)	3.470	.311	.000			
Age	-2.302E-03	.003	.379			
Gender	.131	.061	.033*			
School	-2.032E-02	.011	.073			
Income	1.203E-02	.021	.573			
Married	-.126	.065	.053			
EXELEVEL	.111	.026	.000*			
EATHABIT	.179	.049	.000*			
ALDRUGS	6.004E-02	.035	.084			
SMOKEST	4.372E-02	.037	.236			
STRESSCO	9.190E-03	.050	.853			
SAFETY	-8.727E-02	.045	.053			
MEDICARE	-9.021E-03	.058	.877			
				.372	.110	.000*

Table D.7: Multiple Regression Analysis – Pull2 (Hygiene /Environ.)

Independent Variable In Model	B	std. Error	Sign. Of B P value	R^2	Change	Sig. F Change in R^2
(Constant)	2.637	.197	.000			
Age	5.079E-03	.002	.024*			
Gender	.298	.054	.000*			
School	-3.190E-04	.010	.969			
Income	1.774E-02	.020	.367			
Marital	3.933E-02	.059	.508			
				.084	.084	.000*
(Constant)	2.839	.285	.000			
Age	4.013E-03	.002	.096			
Gender	.249	.056	.000*			
School	-1.193E-02	.010	.252			
Income	1.330E-02	.020	.498			
Married	1.282E-02	.060	.475			
EXELEVEL	-2.312E-03	.024	.922			
EATHABIT	.158	.045	.000*			
ALDRUGS	1.873E-02	.032	.557			
SMOKEST	8.415E-02	.034	.013*			
STRESSCO	-2.205E-02	.046	.629			
SAFETY	-7.075E-02	.041	.088			
MEDICARE	3.034E-03	.054	.955			
				.128	.045	.003*

Table D.8: Multiple Regression Analysis – Pull3 (History and Nature)

Independent Variable In Model	B	std. Error	Sign. Of B P value	R^2	Change	Sig. F Change in R^2
(Constant)	2.004	.226	.000			
Age	-3.493E-03	.003	.175			
Gender	-.127	.062	.040*			
School	9.173E-03	.012	.434			
Income	-3.614E-02	.023	.110			
Marital	-7.118E-02	.068	.297			
				.033	.033	.010*
(Constant)	2.199	.329	.000			
Age	-3.965E-03	.003	.153			
Gender	-.144	.065	.027*			
School	2.070E-03	.012	.863			
Income	-3.421E-02	.023	.131			
Marital	-8.016E-02	.069	.246			
EXELEVEL	-1.223E-02	.027	.654			
EATHABIT	.150	.052	.004*			
ALDRUGS	5.838E-02	.037	.112			
SMOKEST	-2.422E-03	.039	.950			
STRESSCO	6.213E-02	.053	.238			
SAFETY	-1.066E-02	.048	.823			
MEDICARE	-.149	.062	.016*			
				.076	.042	.007*

Table D.9: Multiple Regression Analysis – Pull4 (Vigilance and Health)

Independent Variable In Model	B	std. Error	Sign. Of B P value	R^2	Change	Sig. F Change in R^2
(Constant)	3.240	.251	.000			
Age	1.141E-02	.003	.000*			
Gender	.374	.068	.000*			
School	-7.704E-03	.013	.554			
Income	-3.052E-02	.025	.223			
Marital	6.146E-02	.076	.417			
				.105	.105	.000*
(Constant)	4.159	.353	.000			
Age	8.009E-03	.003	.007*			
Gender	.299	.070	.000*			
School	-2.447E-02	.013	.058			
Income	-2.015E-02	.024	.406			
Marital	-1.844E-02	.074	.804			
EXELEVEL	6.255E-03	.029	.831			
EATHABIT	8.915E-02	.055	.108			
ALDRUGS	9.588E-02	.039	.015*			
SMOKEST	.190	.042	.000*			
STRESSCO	2.145E-02	.056	.704			
SAFETY	3.883E-02	.051	.448			
MEDICARE	-1.511E-02	.066	.820			
				.197	.092	.000*

_Table D.10: Multiple Regression Analysis - Pull 5 (Arts and Urban Luxury)

Independent Variable In Model	B	std. Error	Sign. Of B P value	R^2	Change	Sig. F Change in R^2
(Constant)	3.157	.222	.000			
Age	-3.123E-03	.003	.216			
Gender	.351	.060	.000*			
School	2.390E-02	.011	.038*			
Income	3.564E-02	.022	.108			
Marital	-.173	.067	.010*			
				.093	.093	.000*
(Constant)	2.835	.327	.000			
Age	-1.996E-03	.003	.469			
Gender	.365	.065	.000*			
School	2.397E-02	.012	.045			
Income	3.229E-02	.022	.151			
Marital	-.151	.069	.028*			
EXELEVEL	-3.238E-02	.027	.233			
EATHABIT	3.444E-02	.051	.502			
ALDRUGS	2.929E-05	.036	.999			
SMOKEST	1.544E-03	.039	.968			
STRESSCO	3.800E-02	.052	.467			
SAFETY	-8.672E-02	.047	.065			
MEDICARE	-7.461E-02	.061	.226			
				.109	.015	.378

Table D.12: Multiple Regression Analysis - INFPRO*

Independent Variable In Model	B	std. Error	Sign. Of B P value	R^2	Change	Sig. F Change in R^2
(Constant)	3.154	.256	.000			
Age	1.231E-02	.003	.000*			
Gender	.203	.070	.004*			
School	-1.982E-04	.013	.988			
Income	-4.950E-02	.026	.053			
Marital	3.341E-02	.077	.666			
				.062	.062	.000*
(Constant)	3.874	.375	.000			
Age	9.705E-03	.003	.002*			
Gender	.217	.074	.004*			
School	1.993E-03	.014	.884			
Income	-5.577E-02	.026	.031*			
Marital	3.225E-02	.079	.683			
EXELEVEL	-2.801E-02	.031	.370			
EATHABIT	2.464E-02	.059	.676			
ALDRUGS	-5.019E-03	.042	.905			
SMOKEST	-2.279E-03	.044	.959			
STRESSCO	.121	.060	.044*			
SAFETY	-4.518E-02	.054	.406			
MEDICARE	.173	.071	.015*			
				.090	.027	.074

Table D.14: Multiple Regression Analysis – INPROH*

Independent Variable In Model	B	std. Error	Sign. Of B P value	R^2	Change	Sig. F Change in R^2
(Constant)	2.817	.313	.000			
Age	2.395E-03	.004	.497			
Gender	5.028E-02	.085	.553			
School	-1.470E-02	.016	.363			
Income	6.730E-03	.031	.827			
Marital	-.160	.094	.089			
				.010	.010	.518
(Constant)	3.449	.453	.000			
Age	3.308E-03	.004	.387			
Gender	.102	.090	.259			
School	-1.617E-02	.017	.331			
Income	2.128E-03	.031	.945			
Marital	-.143	.095	.134			
EXELEVEL	.101	.038	.007*			
EATHABIT	5.234E-02	.071	.462			
ALDRUGS	5.848E-02	.051	.249			
SMOKEST	-2.919E-02	.054	.587			
STRESSCO	.100	.072	.167			
SAFETY	-8.244E-02	.066	.209			
MEDICARE	2.225E-03	.085	.979			
				.043	.034	.036*

Table D.15: Multiple Regression Analysis – INFPRIG*

Independent Variable	B	std. Error	Sign. Of B P value	R^2	Change	Sig. F Change in R^2
(1)						
(Constant)	2.604	.211	.000			
Age	8.073E-03	.002	.001*			
Gender	.258	.057	.000*			
School	-2.518E-02	.011	.022*			
Income	-5.568E-03	.021	.791			
Marital	-2.165E-02	.064	.734	.084	.084	.000*
(2)						
(Constant)	2.424	.310	.000			
Age	1.002E-02	.003	.000*			
Gender	.287	.062	.000*			
School	-2.279E-02	.011	.045*			
Income	-8.091E-03	.021	.705			
Marital	-5.620E-03	.065	.932			
EXELEVEL	2.067E-02	.026	.424			
EATHABIT	-7.505E-02	.049	.125			
ALDRUGS	-2.873E-02	.035	.408			
SMOKEST	2.122E-02	.037	.565			
STRESSCO	1.639E-02	.050	.741			
SAFETY	-2.495E-02	.045	.513			
MEDICARE	-2.741E-02	.059	.640	.095	.011	.644

Table D.16: Multiple Regression Analysis – INFPRIH*

Independent Variable	B	std. Error	Sign. Of B P value	R^2	Change	Sig. F Change in R^2
(1)						
(Constant)	2.948	.284	.000			
Age	2.378E-03	.003	.461			
Gender	8.313E-02	.077	.283			
School	-8.181E-03	.015	.579			
Income	1.342E-03	.028	.962			
Marital	-.123	.086	.153			
				.009	.009	.561
(2)						
(Constant)	3.246	.413	.000			
Age	4.693E-03	.003	.179			
Gender	.118	.082	.149			
School	-1.306E-02	.015	.387			
Income	-6.530E-03	.028	.818			
Marital	-9.141E-02	.087	.294			
EXELEVEL	.103	.034	.003*			
EATHABIT	4.011E-02	.065	5.37			
ALDRUGS	1.882E-02	.046	.684			
SMOKEST	4.024E-02	.049	.412			
STRESSCO	3.931E-02	.066	.552			
SAFETY	-.114	.060	.058			
MEDICARE	-1.897E-02	.078	.808			

Table D.17: Multiple Regression Analysis – Word of Mouth

Independent Variable In Model	B	std. Error	Sign. Of B P value	R^2	Change	Sig. F Change in R^2
(1)						
(Constant)	1.890	.253	.000			
Age	-4.369E-03	.003	.129			
Gender	.144	.069	.038*			
School	2.083E-02	.013	.113			
Income	-4.134E-02	.025	.101			
Marital	5.039E-02	.077	.511			
				.031	.031	.017*
(2)						
(Constant)	2.159	.371	.000			
Age	-4.802E-03	.003	.125			
Gender	.176	.073	.017*			
School	2.189E-02	.014	.106			
Income	-3.435E-02	.025	.177			
Marital	2.672E-02	.078	.732			
EXELEVEL	-1.912E-02	.031	.536			
EATHABIT	1.015E-02	.058	.862			
ALDRUGS	9.094E-02	.041	.028*			
SMOKEST	-1.506E-02	.044	.732			
STRESSCO	.134	.059	.024*			
SAFETY	-4.488E-02	.054	.407			
MEDICARE	-.102	.070	.145			
				.057	.026	.116

Table D.18 Multiple Regression Analysis – Internet

Independent Variable In Model	B	std. Error	Sign. Of B P value	R^2	Change	Sig. F Change in R^2
(1)						
(Constant)	2.457	.332	.000			
Age	-1.778E-02	.004	.000*			
Gender	.128	.091	.159			
School	3.496E-02	.017	.043*			
Income	.133	.033	.000*			
Marital	.191	.100	.057			
				.090	.090	.000*
(2)						
(Constant)	2.454	.487	.000			
Age	-1.828E-02	.004	.000*			
Gender	7.744E-02	.097	.424			
School	2.917E-02	.018	.102			
Income	.126	.033	.000*			
Marital	-.193	.103	.061			
EXELEVEL	-2.373E-02	.041	.559			
EATHABIT	7.158E-02	.076	.350			
ALDRUGS	-.122	.054	.025*			
SMOKEST	5.479E-02	.058	.343			
STRESSCO	6.930E-02	.078	.375			
SAFETY	.114	.071	.108			
MEDICARE	-9.776E-02	.092	.288			
				.109	.020	.217

Table D.19: Multiple Regression Analysis – Trip1*

Independent Variable In Model	B	std. Error	Sign. Of B P value	R^2	Change	Sig. F Change in R^2
(1)						
(Constant)	**4.230**	**1.127**	**.000**			
Age	2.749E-02	.013	.034*			
Gender	-.972	.307	.002*			
School	.124	.058	.034*			
Income	.737	.113	.000*			
Marital	-.756	.340	.027*			
				.161	.161	.000*
(2)						
(Constant)	5.598	1.663	.001*			
Age	-2.500E-02	.014	.077			
Gender	-1.053	.329	.001*			
School	.117	.061	.054			
Income	.701	.115	.000*			
Marital	**-.639**	.349	.068			
EXELEVEL	-.125	.138	.366			
EATHABIT	.186	.262	.478			
ALDRUGS	-.346	.186	.063			
SMOKEST	7.968E-02	.197	.687			
STRESSCO	-4.426E-03	.266	.987			
SAFETY	-5.219E-02	.241	.829			
MEDICARE	-8.663E-02	.313	.782			
				.173	.011	.550

Table D.20: Multiple Regression Analysis – Trip2*

Independent Variable In Model	B	std. Error	Sign. Of B P value	R^2	Change	Sig. F Change in R^2
(1)						
(Constant)	2.280	1.286	.077			
Age	-3.030E-02	.015	.041*			
Gender	-2.422	.351	.000*			
School	.143	.067	.033*			
Income	.775	.129	.000*			
Marital	.137	.388	.725			
				.235	.235	.000*
(2)						
(Constant)	4.697	1.897	.014*			
Age	-2.837E-02	.016	.078			
Gender	-2.598	.376	.000*			
School	.127	.069	.067			
Income	.766	.131	.000*			
Marital	.233	.398	.560			
EXELEVEL	-6.696E-02	.158	.671			
EATHABIT	.311	.299	.299			
ALDRUGS	-9.098E-02	.213	.669			
SMOKEST	-4.501E-02	.225	.842			
STRESSCO	-.660	.306	.032*			
SAFETY	-4.995E-02	.275	.856			
MEDICARE	2.105E-02	.358	.953			
				.246	.932	.481

Table D.21: Multiple Regression Analysis – Trip 3*

Independent Variable In Model	B	std. Error	Sign. Of B P value	R^2	Change	Sig. F Change in R^2
(1)						
(Constant)	1.521	.923	.100			
Age	-1.318E-02	.011	.213			
Gender	.758	.252	.003*			
School	7.342E-02	.048	.125			
Income	.258	.092	.159			
Marital	-.924	.279	.001*			
				.058	.058	.000*
(2)						
Constant)	-2.726E-02	1.348	.984			
Age	-1.223E-02	.011	.285			
Gender	**.**799	.267	.003*			
School	6.907E-02	.049	.160			
Income	.221	.093	.018*			
Marital	-.892	.284	.002*			
EXELEVEL	2.253E-02	.112	.841			
EATHABIT	5.845E-02	.212	.783			
ALDRUGS	-.315	.152	.039			
SMOKEST	.203	.161	.210			
STRESSCO	.662	.215	.002*			
SAFETY	1.060E-02	.195	.957			
MEDICARE	-.123	.254	.629			
				.090	.032	.038*

Table D.22 Multiple Regression Analysis – Trip4*

Independent Variable In Model	B	std. Error	Sign. Of B P value	R^2	Change	Sig. F Change in R^2
(1)						
(Constant)	.618	.892	**.489**			
Age	9.343E-03	.010	.360			
Gender	.829	.244	.001*			
School	-6.745E-02	.046	.144			
Income	-.324	.089	.000*			
Marital	-6.656E-02	.269	.805			
				.091	.091	.000*
(2)						
(Constant)	2.065	1.309	.115			
Age	9.022E-03	.011	.417			
Gender	.933	.260	.000*			
School	-5.907E-02	.048	.216			
Income	-.313	.090	.001*			
Marital	-.149	.275	.588			
EXELEVEL	6.722E-02	.109	.538			
EATHABIT	-.161	.206	.434			
ALDRUGS	4.251E-02	.147	.772			
SMOKEST	-1.446E-02	.155	.926			
STRESSCO	.515	.210	.014*			
SAFETY	.194	.190	.307			
MEDICARE	-.297	.247	.230			
				.110	.019	.240

Table D.23: Multiple Regression Analysis –Trip5*

Independent Variable In Model	B	std. Error	Sign. Of B P value	R^2	Change	Sig. F Change in R^2
(1)						
(Constant)	.401	.919	.663			
Age	-3.919E-03	.010	.709			
Gender	-.531	.251	.035*			
School	4.845E-02	.048	.308			
Income	.397	.092	.000*			
Marital	-.439	.277	.114			
				.077	.077	.000*
(2)						
(Constant)	.696	1.358	.608			
Age	-6.826E-04	.012	.953			
Gender	-.516	.271	.057			
School	5.321E-02	.049	.282			
Income	.385	.094	.000*			
Marital	-.419	.285	.143			
EXELEVEL	6.942E-03	.113	.951			
EATHABIT	-.241	.215	.263			
ALDRUGS	-.231	.152	.129			
SMOKEST	.134	.161	.407			
STRESSCO	6.933E-02	.218	.750			
SAFETY	.102	.197	.606			
MEDICARE	-5.101E-03	.256	.984			
				.085	.008	.818

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EDUCATION

Virginia Polytechnic Institute and State University, Blacksburg, VA

- Ph.D., Tourism & Hospitality Marketing & Planning, July 1999.

The George Washington University, Washington, DC

- MBA, Marketing of Services, December 1990.
  G.P.A., 3.5/4.0
- MA, Tourism Development & Travel Administration, December 1989
  G.P.A., 4.0/4.0
  Academic Scholarship (1988 - 1991)

University of Arizona, Tucson, AZ, August 1987

- BS, Business Administration,
  G.P.A., 3.1/4.0
  Academic Scholarship (1984 - 1987)

EXPERIENCE

Assistant Professor, ***The University of southern Mississippi***, Hattiesburg, MS
(Fall 1997 - Present)

Courses Taught:

- Hospitality Finance
- Purchasing in the Hospitality Industry
- Tourism Dimensions
- Hotel, Restaurant and Lodging Management
- Tourism Development
- Bar and Beverage Management
- Hospitality Marketing Management

Service Projects:

- Tourism Improvement Plan for the City of Hattiesburg (Spring 1998)
- Tourism Inventory/Audit for Hattiesburg and Biloxi (Fall 1998)
- Tourism Improvement Plan for the Mississippi Coast (Spring 1999)

Consultant, *Patisseries Aouni Hallab*, Lebanon (Established 1881)
(Intermittently 1982 - Present)

Functions:

Quality control, training, marketing
Activities, and customer service.

Teaching Assistant, *Virginia Polytechnic Institute and State University,* Blacksburg, VA.
(Fall 1996 - Spring 1997)

Functions:

- Hospitality Finance
- Introduction to Travel and Tourism

Project Coordinator, ***The World Bank Group,***
Washington, DC
(November 1994 - March 1995)

Functions:

Assisted in the planning, organizing and marketing of the first regional Hospitality and Tourism Development conference in the Middle East.

Administrative Assistant, *Navy Federal Credit Union,*
Vienna, VA
(October 1993 - October 1994)

Functions:

Provided logistical support to the Sales and Delivery Department

Research Assistant, ***Virginia Polytechnic Institute and State University***, Blacksburg, VA.
(Fall 1992 and Spring/Summer 1993)

Functions:

Worked for the Economic Development Office and Assisted in the Tourism Accreditation Program of the New River Valley area (A Community-based Tourism Project).

Market Researcher, *Inter.Continental Hotels* -
The Regional Sales Office - Washington, DC
(Summer and Fall 1991)

Functions:
Market research: The Meeting Market.

Resident Assistant, *The International Student House*,
Washington, DC
(Spring 1991)

Functions:

Planned and promoted multicultural/recreational programs for 90 international residents.

Major projects & case studies, *The George Washington University*, Washington, DC
(Spring 1989 - Fall 1990)

- Tahiti
  Marketing the destination of Tahiti.
- Tourism Development
  The Positive and Negative Socio-cultural, Physical, and Economic Aspects of Tourism Development.

Teaching Assistant, *The George Washington University*,
Washington, DC
(Spring 1988)

Functions:

- Assisted in teaching an Introduction to Travel & Tourism Class. Monitored and corrected exams.

PRESENTATIONS

- **"Japanese Tourists' Perception of The U.S. and Canada As Tourist Destinations"**,
Current Travel & Tourism Issues Seminar, Virginia Polytechnic Institute and State University, Blacksburg, VA (May 1993)

• **"A Sensible Tourism Model: Systematic Approach To Tourism Planning"**,
Northeastern Recreation Research Symposium, NY (April 1997)

WORK IN PROGRESS

- **"Vegetarianism: Analyis and Recommendations"**
- **"The American market's perception of Baklava - A Sweet Pastry"**

HONOR SOCIETIES

BETA GAMMA SIGMA
The Honor Society For Collegiate Schools of Business.

LEADERSHIP ACTIVITIES

The Hariri Foundation Alumni Association
Washington, DC - Vice President
(1991)

The Travel and Tourism Research Association,
The Virginia Tech Chapter

Vice President - Finance and Events
(1992-1993)

President
(1996-1997)

SKILLS

Fluent in English, French and Arabic