Abstract

MOHAN, LEON JAGDEO. An Examination of Variables Influencing the Travel Behavior of Professional Hockey Fans. (Under the direction of Dr. Larry Gustke).

Sport and tourism industries have major impacts on local, state, national, and international communities. These impacts include: social impacts, environmental impacts, political impacts, and economic impacts. People travel great distances to watch, participate, and venerate in sports. Therefore, it is important to gain an understanding of the travel behavior of sport tourists. This study focused on the travel behavior of professional hockey fans.

The purpose of this study was to identify and examine the variables that influence the travel behavior of professional hockey fans. There were three research questions addressed in this study. The first research question was, whether or not the strength of the team identification of fans plays a role in the decision to travel to watch their favorite team compete? The second research question was, what is the relationship between perceived destination image and fans' travel to the destination in order to watch their favorite team compete? The third question was, is there a relationship between perceived travel distance and attendance at road games?

To answer these questions an instrument was developed and distributed to fans of the Carolina Hurricanes of the National Hockey League. Data collection occurred at the RBC Center located in Raleigh, North Carolina. The data was analyzed using SPSS. The results of the analysis indicated that team identification, destination

image, and distance influenced the travel behavior of fans of professional hockey. The results of the analyses indicated that there was differences in respondents when they were categorized based on the type of ticket they purchased (season ticket holder, mini-plan purchaser, or day of game ticket purchaser) or when they attended a game (weekend game attendee or weekday game attendee).

The results of this study provide scholars and professionals in sport and tourism a better understanding of the variables that influence fans' travel. Partnerships between destination management organizations, professional sport teams, hoteliers and the travel industry should be developed utilizing this information to better serve and meet the needs of fans.

An Examination of Variables Influencing the Travel Behavior of Professional Hockey Fans

By

Leon J. Mohan

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Parks, Recreation and Tourism Management

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Approved By:

Dr. Gene Brothers	**Dr. Edwin Lindsay**
Dr. Michael Vasu	**Dr. Larry Gustke** **Chair of Advisory Committee**

Dedication

This dissertation is dedicated to my mom

Biography

Leon Jagdeo Mohan was born on November 17, 1974 in Bronx, New York to Premela and Jacob Mohan. He has a younger brother, Michael. Leon grew up in Stamford, CT and graduated from Stamford High School in 1992. After graduating from high school, he attended North Carolina State University, where he majored in Political Science. He graduated in 1996 with a Bachelor of Arts degree. Upon completion of his undergraduate studies, Leon continued his education at North Carolina State University. He entered the Department of Parks, Recreation and Tourism Management to pursue a Master of Arts degree. While in the program, he secured an internship with the media relations department of the Carolina Hurricanes of the National Hockey League. Leon graduated with a Master of Arts degree in 1997. The title of his project was “Impacts of Community Centers on At-Risk Youth.” The chair of his committee was Dr. Carolyn Love.

Upon graduation, Leon secured a position in the Scouting and Player Development department of the Montreal Expos (currently known as the Washington Nationals) of Major League Baseball. He later relocated back to Raleigh, North Carolina as he obtained a position as a Community Center Supervisor with Raleigh Parks and Recreation Department. After spending two years with Raleigh Parks and Recreation department, he moved to Fort Washington, Maryland to work for the

Maryland National Capital Park and Planning Commission as a Recreation Specialist.

In 2004, Leon moved back to Raleigh, North Carolina to pursue a Doctor of Philosophy in North Carolina State's Department of Parks, Recreation and Tourism Management. He entered the program in August of 2004. He received a part-time assistantship while working full-time with the North Carolina Department of Juvenile Justice and Delinquency Prevention. The title of his thesis was "An Examination of Variables Influencing the Travel Behavior of Professional Hockey Fans." Leon plans to continue his research in the area of sport tourism.

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I would like to thank my co-workers David Mills and Cecil Holt. Both of these individuals have given me a great deal of support and encouragement over the last couple of years. I will always remember that they were available to listen whenever something was bothering me. I consider both of them as not only people that I work with but as close friends.

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I would like to thank Joanne McDaniel. When I first began my studies as an undergraduate, I did not start off too well. I began to doubt whether I belonged in college. My sophomore year, I took a course with Joanne. At the beginning of the course, I struggled. She took me aside and worked with me. I will always remember that she took the time to help me improve my study habits and ultimately my grades. She gave me the confidence and the belief that I belonged in college. More than any other teacher, she has had the greatest impact on me. Joanne has also always been there to provide employment opportunities for me. Employment opportunities that have made it possible for me to pursue a Master of Arts degree and then a doctoral degree. She is another person that I am very lucky to have in my life.

I would like to thank my best friend and younger brother Michael. I could not ask for a better brother. He is always willing to listen and give me words of encouragement and support. My brother is one of the most unselfish and caring people I know. Whenever I need his help, he is always there to lend a helping hand. I know that when all else fails, I can always count on my little brother. I am very proud to have him as a brother and am very proud of all that he has accomplished at such a young age. His greatest accomplishment came on July 26, 2006 when he became a dad. I will always remember the first time I held my beautiful niece, Alexis.

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1. Introduction

1.1 Tourism and Sport

Tourism has been argued to be the world's largest industry, accounting for about 5.5% of the world's Gross National Product and 6% of the employment, and it has been growing fast (Glasson, Godfrey, & Godfrey, 1995). Most governments have encouraged the growth of tourism in their respective countries in order to encourage and initiate economic development. For poor countries, regions, towns and cities, tourism has been seen as the fast track to development. Hall (1995) stated that the main reason why governments, particularly in developing countries encourage tourism investment has been because of the expectations that it will contribute to economic development. It has also been argued that tourism should be seen as a means of development in a broader sense (Mathieson & Wall, 1982). These analysts described the broader sense of tourism to mean the potential of the industry to have direct socio-economic impacts on destination regions. This issue has been made clearer by Binns (1995), who stated that development should not only refer to economic matters but should encompass social, economic, environmental and ethical considerations such that its measurement may incorporate indicators of poverty, unemployment, inequality and self-reliance.

Sport tourism has been one area of tourism development that communities have used to develop tourism. Sport tourism has the ability to promote tourism beyond the event itself and can have wide-ranging impacts on communities, which is one reason why it is important to conduct research in the area of sport tourism. For example, people who attend an event may return for a vacation, or those who watch the event on television may decide to visit the destination at a later date. Collins (1997) wrote, “sports events can provide a tourist focus where nature has failed to do so, or can spread the use of accommodation into off-peak periods or stimulate accommodation provision.” The exposure afforded the town or city hosting the event can generate tourism in the form of individuals wishing to visit the community.

Researchers have identified that all sport tourism falls into one of three categories: active sport tourism, event sport tourism, and nostalgia sport tourism. Most researchers have focused on active and event sport tourism. Gibson (1998) defined active sport tourists as individuals who take part in sport while on vacation. Gammon and Robinson (2003) defined event sport tourists as those individuals who specifically travel (staying in places outside their usual environment) for passive involvement in competitive sport. Therefore, the sport is their prime motivational reason for travel. While event sport tourism has traditionally been the more popular of the two areas, active sport tourism has grown dramatically since mid-1970. The increased interest in active sport tourism can be attributed to a shift in tourists’ attitudes and beliefs. While baby boomers’ views toward sport has become concentrated on participation and health benefits of sport, preceding generations focused more on the entertainment aspect of sport. Increased disposable income among baby boomers has led to increased travel outside of their home community in order to participate and watch sport. The typical sport tourist can be classified into one of two generational categories, baby boomers or generation X'ers. The Recreation Roundtable, which is comprised of more than two-dozen top recreation industry executives, is committed to enhancing recreational opportunities in America through public/private partnerships. Delpy (1998) cited in the 1995 Recreation Roundtable reported that the average sport tourist is college educated, between 18 and 44 years of age, and relatively affluent, with an average income of more than $40,000 per year. The Recreation Roundtable also suggested that sport tourism is the vacation of choice throughout the year for many individuals fitting this demographic profile, as they participate in a range of sports – most frequently, golf and skiing. Similarly, sport tourism has rarely been differentiated from other forms of tourism, and has been relatively understudied (Glyptis, 1991).

Gibson (1998) pointed out that most research on sport tourism has been focused on economic impact. The focus on economic impact can be attributed to communities' decision to spend significant amounts of money to host events. In order to host an event, communities need to determine their carrying capacity. Carrying capacity is an important element in the decision making process for community leaders, as they need to make a determination on whether the community can accommodate an influx of visitors. This carrying capacity is determined based on the available infrastructure. Another key element of hosting an event is the determination of the types of improvements and additions to existing infrastructure that is needed. Once they have determined the additions and improvements, community leaders must weigh the cost of making these changes with the amount of economic benefit the event will produce for the community. Therefore, community leaders realize that by hosting an event there will be increased travel for sporting activities to their community, which they hope will produce greater economic benefit to their community.

Realizing the economic benefit that sport has on the tourism dollars generated by a community, researchers began to study and analyze sport tourism as an area of research. While the focus has been on the economic impact of sport tourism, there has been little research on the other impacts (social and environmental) that sport tourism has on communities. While it is important to acknowledge and understand the environmental impacts that sport tourism has on communities, this research will focus more on the economical and social impacts.

Gibson (1998) stated that there needs to be an expansion of the current literature in sport tourism, as there is increasing sport tourist activities and increasing interest in sport tourism as an area of study. Anecdotal data indicates that tourists' desire to watch or engage sport while traveling has increased substantially in recent years

(Hall, 1992; Kotler, Haider and Rein, 1993; Kurtzman and Zauhar, 1993; Palm, 1991). Similarly, a Belgian study found a 1,300% increase between 1967 and 1989 in tourists' demand for sport participation (Standevan & De Knop, 1999). The application of economic impact studies have not lead to improved marketing of communities for sport. Communities who are better able to use economic impact studies to develop effective marketing plans may be able to generate increased number of visitors in their communities. This increased number of visitors can lead to greater economic and social impacts on the community.

1.2 Purpose of the Study

The purpose of this study was to examine the variables that influence sport tourists decision-making and team-affiliated travel. The consumers in this study were identified as fans of the Carolina Hurricanes of the National Hockey League. Team affiliated travel was defined as any travel to a game that does not take place in the arena of the parent team of the individual fan. The dependant variable was defined as fans' travel behavior. Fans' travel behavior was operationalized as attendance at road games. Based on the literature review there were three independent variables that were identified as possible significant influences on fans' travel behavior. The first independent variable was team identification (Wann and Branscombe, 1993). The second independent variable was destination image (Beerli and Martin, 2004). The third independent variable was distance (Bale, 2003). The hypothesized relationships of these independent variables to the dependent variable (attendance) are shown in figure 1.1.

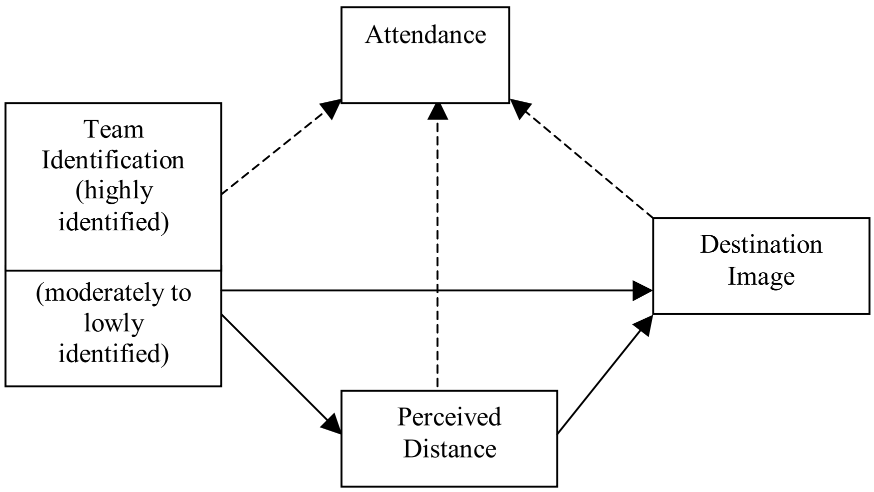

Figure 1.1 Variables Influencing Sport Fan Attendance at Road Games.

The purpose of this research was threefold. First, the research examined the strength of influence that each of the independent variables has on professional hockey fans' road games attendance. Secondly, the investigator attempted to develop a model that sport and tourism professionals can utilize in determining target markets for destination management organizations as well as determining potential increased fan support and revenue streams for individual teams. The final purpose of this research was to expand on the literature of a relatively new area of study in sport tourism. Specifically, the study expanded on the current knowledge of the even more limited area of research dedicated to sports fans travel to see their favorite teams play at distant venues. There were three research questions investigated in this study.

1. Does the strength of team identification play a role in the decision to travel to watch their team compete?

2. Is there a relationship between perceived destination image and travel to the destination to watch the favorite team compete?

3. What is the relationship between perceived travel distance and attendance at road games?

There are ten hypotheses associated with the three aforementioned research questions. The following hypotheses were explored in this study:

Hypotheses specific to research questions:

H_1: The stronger a fan identifies themselves as a fan of the team; the more likely they will travel to a road game.

H_0: The strength of identification that a fan has with a team is not related to their travel to a road game.

H_2: There is a relationship between destination image and travel to road games.

H_0: There is no relationship between destination image and travel to road games.

H_3: The greater the number of hours fans are willing to travel to watch their favorite team compete on the road, the greater the number of road games they are willing to attend.

H_0: The greater the number of hours fans are willing to travel to watch their favorite team compete on the road has no effect on the number of road games they are willing to attend.

H_4: There is a relationship between length of trip fans are willing to take to watch their favorite team compete and number of road games the fans will attend.

H_0: There is no relationship between length of trip fans are willing to take to watch their favorite team compete and number of road games the fans will attend.

H_5: Fans who show a stronger emphasis on destination image are more likely to take longer (in terms of days) trips to watch their team play.

H_0: Fans who show a stronger emphasis on destination image are not more likely to take longer (in terms of days) trips to watch their team play.

Related Hypotheses

H_6: There is a relationship between mode of transportation and amount of time fans are willing to travel to watch their favorite team compete.

H_0: There is no relationship between mode of transportation and amount of time fans are willing to travel to watch their favorite team compete.

H_7: The greater the number of home games attending the greater the number of road games the fan will attend.

H_0: The number of home games attending has no relation to the number of road games the fan will attend.

H_8: There are differences between the relationships of the independent variables and travel to road games based on weekend games attendees versus weekday games attendees.

H_0: There are no differences between the relationships of the independent variables and travel to road games based on weekend games attendees versus weekday games attendees.

H_9: There are differences between the relationships of the independent variables and travel to road games based on the type of ticket purchased.

H_0: There are no differences between the relationships of the independent variables and travel to road games based on the type of ticket purchased.

H_{10}: There is a relationship between the number of home games fans attend and the distance fans reside from the arena in which their favorite team competes.

H_0: There is no relationship between the number of home games fans attend and distance fans reside from the arena in which their favorite team compete.

1.3 Rationale for Research

As discussed earlier in this chapter, sport tourism as an area of research is still in its infancy. There have been numerous research studies conducted on the separate fields of sport and tourism, while investigation of the interrelatedness of the two fields has been limited. Both sport and tourism have major impacts on communities economically, socially, and politically. The two areas combined can transform a community from a downtrodden economically disadvantaged destination to a vibrant popular destination with a revitalized economy and an increased sense of community pride (Crompton, 2001). As more and more people are traveling for the purpose of sport whether it is to watch or actively participate, the impact they have on the communities they visit is significant. Therefore, it is important that destination management organizations, community leaders, sport managers, and scholars work together to conduct research in the area of sport tourism.

This research specifically examined areas of sport tourism that are relatively nonexistent in the literature. While there have been studies that have focused on fans of sports such as baseball, basketball and football, there is very little research that examines hockey fans.

Hockey has been considered the fourth major sport in the U.S behind baseball, basketball, and football. Communities are building multi-million dollar facilities (many at the expense of taxpayers) to accommodate professional hockey teams. An examination of the travel behavior of hockey fans would be significant in developing stronger relationships with current hockey fans as well increase fan bases for a sport that continues to lag behind the other three major sports in popularity. Destinations that have professional hockey teams also play host to visiting teams and fans. The revenue generated by fans can have social and environmental impacts on the community. Understanding the types of fans who are more likely to visit specific destinations can help to combat the negative impacts that these fans can have on the community. Research conducted in the area of event sport tourism has not focused on attendance by fans. The research that has been conducted on attendance has focused on home attendance by fans, while neglecting to road game attendance by fans. Revenue generated by local fans who attend home games does not have as great of an impact on the local economy as does revenue generate by fans who are visitors to the community. The revenue generated by local fans comes from dollars that are already in the community. These dollars may have been spent in the community on other activities if the team was not located in the community. On the other hand, revenue generated by visitors comes from outside the community. If the dollars were not spent at the sporting event, they may not have been introduced into the community at all. Therefore, it is important the research is conducted on the tourism aspect of sport.

2. Literature Review

2.1 Introduction

The following review of literature examined the concepts and influences on sport tourists' decision to travel to partake in a sporting activity as a spectator. The review began with an exploration of the community impacts of spectator sport travel. Consumer behavior and the concept of distance decay as it applies to this research were discussed. The roles of destination image, team identification and team success on the decision making process of consumers were examined. The review ended with an illustration of how sports can transform a destination.

2.1.1 Scope of Sport Tourism

People world-wide are participating more in sports and traveling to certain destinations for the pleasures and enjoyments of physical activities, amateur and / or professional (Zauhar, 2004). Zauhar (2004) goes on to say that sports travel has been gradually increasing for all levels and ages of society and that:

> "Sport tourism activities have generated enormous economic impacts – not considering the socio-cultural and intellectual benefits of tourism. A study of North American Convention Tourism Bureaux showed that sports accounted for 25 percent of the tourism receipts (WTTC, 1994). A 1994 analysis of 22 'Tourism Event Schedules', from seven world geographical regions, indicated that sport tourism activities represented 34 percent of the events (Research

> Unit, Sports Tourism International Council, 1995). This same study also showed that 42 percent of the scheduled days were sport tourism related. Accordingly, the Sports Tourism Index (STIX) calculated that the direct contribution of sport tourism activities to overall tourism equated to 32 percent. Based on growing domestic and international travel, the forecast for the year 2005 showed that the gross output of tourism world-wide would reach 7.9 trillion dollars (WTTC, 1994)."

As sport tourism activities continue to grow and gain an increasing role in tourism development, research on the area of sport tourism is likely to increase. The problem that arises for the sport tourism scholar as Gibson (1998) pointed out is the definition of sport tourism and which activities can be classified under this umbrella.

2.2 What is Sport Tourism?

2.2.1 Definition of Tourism

Tourism has been defined in many different ways over time. An early definition of tourism stated that a minimum of a 24-hour stay at a site was required for an individual to be considered a 'tourist' (Ritchie and Adair, 2004). The United Nations Conference on International Travel and Tourism of 1963 provided the generally accepted definition of tourists as temporary visitors who spend more than 24 hours in destinations other than their normal place of residence, whose journey is for the purpose of holiday-making, recreation, health, study, religion, sport, visiting family or friends, business or meetings (Sinclair, 1998). However, this has been modified to include an overnight stay, which according to Weaver and Oppermann (2000) is a significant improvement over the former criterion of a 24-hour stay. If a person's trip does not incorporate at least one overnight stay, then the term excursionist is usually applied (Weaver and Oppermann as cited by Ritchie and Adair, 2000). Dolnicar and Fluker (2003) illustrated this definition of tourism with their explanation of surf tourism,

> "surf tourism involves people traveling to either domestic locations for a period of time not exceeding 6 months, or international locations for a period of time not exceeding 12 months, who stay at least one night, and where the active participation in the sport of surfing, where the surfer relies on the power of the wave for forward momentum, is the primary motivation for destination selection."

Other common definitions of a tourist included travel based on various other parameters such as travel to a destination away from the home environment, travel beyond a specific distance in terms of mileage, and travel beyond a specific distance in terms of time. However, the definition utilizing the overnight stay parameter seems to be the most accepted primarily because these individuals have the most overall impact on a community in terms of positive and negative impacts socially and economically. The tourist who stays overnight will most likely spend more money in the community as the need for food and board is apparent. Because sport tourists have more time in a community they are also more likely to take part in traditional tourist activities such as sight seeing (Gibson 2004), thereby spending more dollars in the community than the excursionist. While the researcher agreed with Gibson's view that overnight visitors spend more money in the community, neglecting the excursionist would not give an accurate representation of the impact that a sporting event has on a community. The excursionist (people who are visiting a community outside of their home for a day) can spend a substantial amount of money in the community that they are visiting in the form of food, gas, merchandise, parking, and concessions. In order to get a true measure of the economic impact of a sporting event from a tourism standpoint, the researcher needed to account for all individuals that are not residents of the community. These included overnight tourists as well as day-trippers or excursionists. There is a large segment of any sporting event that is considered day-trippers/excursionists who attend an event and spend money in a community. The second issue of concern for the sport tourism scholars lies in the varying definitions of tourism. When identifying a sport tourist, does the scholar define them as only those persons who stay overnight at a destination, are they those persons who travel a certain distance or time from their home environment, or are they a combination of these parameters?

2.2.2 Definition of Sport

The definition of sport that some scholars continue to adhere to is Loy's (1968) classic definition, as identified by Parks and Quarterman (2003):

sport must-

1. be playlike in nature
2. involve some element of competition
3. be based on physical prowess
4. involve some elements of skill, strategy, and chance
5. have an uncertain outcome

Parks and Quarterman (2003) have also identified other definitions of sport that are commonly used by researchers. The definitions included:

- Snyder and Spreitzer (1989) defined sport as competitive human physical activity that is governed by institutional rules.
- VanderZwaag (1998) was more definitive: "Sport is a competitive physical activity, utilizing specialized equipment and facilities, with unique dimensions of time and space, in which the quest for records is of high significance."
- Pitts, Fielding, and Miller (1994) provided the broadest definition of sport by stating that sport is any activity, experience, or business enterprise focused on fitness, recreation, athletics, or leisure. In their view, sport does not have to be competitive, nor does it always require specialized equipment or rules; in fact, sport includes activities such as working out, running, and dancing.

While some of Loy's definition as well as Snyder and Spreitzer, and VenderZwaag's definitions are relevant, Pitt's definition seems to be more appropriate for today's sport industry. Why is it important for sport tourism scholars and professionals to have a clear definition of sport? In order to identify which activities can fall under the umbrella of sport tourism, scholars need to know exactly what sport is. In order to be considered a sport, does the activity have to involve: rules, competition, strategy, equipment, and/or a unique space. Traditional activities such as baseball, basketball, football, and hockey have always been considered sport. In the cases of non-traditional activities such as swimming, running and scuba diving many may consider them as sport. However, under the definitions that have been provided, it is not necessary to have rules, competition or strategy to take part in these activities. An example of the flaws in some of the definitions can be found in the example of the sport tourist who travels to an exotic location in order to go scuba diving. While there may or may not be rules governing scuba divers, there is no competition inherent in the activity. Another example can be found in the vacationer who goes for a jog. There are no rules, specialized equipment, nor are there any unique dimensions of time and space that are inherent with the person who decides to go for a jog. Even more confusing is the affect the media has on the definition of sport. The premier television station for sport entertainment in the United States is ESPN. ESPN promotes itself as the station that dedicates all of its programming seven days a week to sport. In recent years, ESPN has dedicated more and more coverage to poker. Therefore, the researcher asked the question as to whether or not poker is a sport. Under the original definition of physical prowess, poker does not fit into the category of sport, however, it does utilize a unique space, equipment, governed by rules, and involves intense competition. The ever-changing landscape of sport and the lack of a commonly accepted definition of sport make the determination of sport tourism an even more daunting task. There in lies another issue that the sport tourism scholar encounters.

2.2.3 Definition of Sport Tourism

Sport tourism as a field of study is a combination of sport and tourism, both of which are more widely researched areas. Gibson (1998) pointed out that there are many issues and concerns within the field that are in need of attention. The main issue that the author came across in the literature on sport tourism is its actual definition. There are many varying definitions of sport tourism from researchers in the field. It seems to be that the problem with identifying a clear widely accepted definition of sport tourism stems from the apparent varying definitions of the parent disciplines: sport and tourism.

Upon examining the previously discussed definitions of sport and tourism, a logical assumption can be made that a definition of sport tourism would incorporate the more accepted parts of each definition such as physical prowess and competition from sport and overnight stay from tourism. However, the literature suggests that there is no accepted definition of sport tourism that incorporates these parameters. Gibson (1998) pointed out that there has been a growing debate in the academic community over the definition of sport tourism. Gibson (1998) further supported the earlier assertions in this paper that some of the issues regarding widely accepted definitions of sport and tourism have affected the acceptance of a clear cut definition of sport tourism. She claimed that

> “some of this stems from an ongoing discussion as to whether or not sport should refer only to competitive, formally organized physical activities. Should sport also encompass physical activities that are not governed by rules and time, and where competition may be minimal? Another debate surrounds tourism. Exactly who is a tourist? How far do you have to travel to be labeled a tourist? Is there a difference between a day-tripper and a person who stays at least one night away from home? Why does it matter? If we are to effectively, gauge the economic and social impacts on our communities, we need to be able to identify the sport tourist.”

There are many definitions of sport tourism that included specific parameters of time, distance, competition, rules, and overnight stay such as Hinch and Higham’s (2004) definition that “sport tourism is sport based travel away from the home environment for a limited time, where sport is characterized by a unique set of rules, competition related to physical prowess and a playful nature.”   Contrastingly, there have been definitions of sport tourism that do not require the aforementioned parameters and have similar characteristics, which may be more appropriate for the sport tourism scholar to adhere to. These include:

1. Sport tourism includes travel to participate in a passive (e.g. sports events and sports museums) sport holiday or an active sport holiday (e.g. scuba diving, cycling, golf) and it may involve instances where either sport or tourism is the dominant activity or reason for travel (Standevan and Knop, 1999).
2. A number of definitions of sport tourism as provided by authors such as Gammon and Robinson (2003), Kurtzman and Zauhar (1993) and Delpy (1998) suggest that sport tourism entails the predetermined or incidental participation in or attendance at sports-based activities, by individuals or groups outside their home environment. Kurtzman and Zauhar (1993) further note that sport tourism activities can be categorized into five unique areas – resorts, cruises, attractions, tours and events.

As discussed one of the main issues that researchers have been faced with is the definition of sport tourism. Unlike other disciplines such as economics, medicine, and law where academics and professionals can adhere to widely accepted definitions and rules, the areas of sport, tourism, and sport tourism tend to be more subjective. The creation of commonly used definitions to identify what is sport, what is tourism, what is sport tourism and who is a sport tourist would go a long way in accurate and meaningful research. As research in the area of sport tourism stands, today, because of the lack of widely accepted definitions, not every research is operationalizing the variables in the same way. While one researcher may use one definition of a sport tourist, another may use a different definition. While they both are saying that they are researching sport tourists, they may in fact be studying two entirely different groups. One may include excursionist, as sport tourists while the other may not. There are a wide variety of sport tourists ranging from those who travel to participate and those who travel to watch for the purpose of sport. In the context of this study, the behavior of one particular group of sport tourists was examined. Specifically, the research focused on professional hockey fans' travel behaviors.

2.3 Sport Tourism Markets

2.3.1 Active Sport Tourism

The active sport tourism market is constituted of individuals who pursue physical involvement in competitive or non-competitive sports while traveling. Hinch and Higham (2004) discussed the various approaches to segmenting the active tourism market and provide an alternative approach:

> "In 1992, Gibson and Yiannakis introduced the term 'sportlover' to describe the growing travel market represented by individuals who are physically active and prefer to remain so while on holiday (Gibson, H. and Yiannakis, A., 1992). More recently, Delpy (1998) profiled the active sport tourist as physically active, college-educated, relatively affluent and 18-44 years old. Such a generalized approach fails to capture the diversity of the market segments that exist in active sport tourism. Numerous approaches to segmenting the active sport tourism

> market are evident, but not clearly stated, in the empirical research literature. These studies may be organized under the approaches to market segmentation identified by Swarbrooke and Horner (1999) as geographic, socio-economic, and demographic."

Geographic segmentation of the active sport tourism market has been based on visitor origins or market location. The geography of sport establishes the link between place of residence and opportunities to engage in certain sports in specified locations (Bale, 1989; Rooney & Pillsbury, 1992 as cited by Hinch and Higham, 2004). Hinch and Higham (2004) stated that the proximity to sports resources, be they natural (e.g. surf beaches), built (e.g. sports stadiums), or a combination of the two (e.g. ski resorts), bears upon the propensity to consume certain sports as competitors, participants and/or spectators.

Socio-economic market segmentation has been based upon variables like occupation and income. Participation in inexpensive, team-based contact sports such as street basketball and baseball are typical of lower socioeconomic urban youth in North America and Cuba (Thomson, 2000 as cited by Hinch and Higham, 2004). The upper social classes have been free to play sport midday, mid-week or out of season (by traveling to the opposite hemisphere), and have the resources to play in exclusive and secluded places: cloisters, country clubs and lodges, and private game reserves (Booth & Loy, 1999 as cited by Hinch and Higham, 2004).

The demographic segmentation of sport tourism showed that the active participation in sports varies on the basis of age (Loverseed, 2001 as cited by Hinch and Higham, 2004). The most popular participation in sports in the United States in 2000 included: recreational swimming, recreational walking and bowling. Activities such as fitness walking, treadmill exercises and stretching, and sports such as golf and fishing, are the preference of the seniors market (55 years and older), while basketball, soccer and baseball are favored by the youth market (6-17 years old) (Hinch and Higham, 2004). Gibson, Attle, and Yiannakis (1998) provided another demographic analysis of the active sport tourism market from a lifespan perspective. They profile the active sport tourist market in the early adulthood (17-39 years old), middle adulthood (40-59 years old) and late adulthood (60-91 years old) life stages. Gibson et al. (1998) stated that while active sport tourism proves to be pursued particularly by those in early adulthood, a sizeable number of both men and women chose sport oriented vacations in middle and late adulthood as well.

2.3.2 Event Sport Tourism

Event sport tourism, in its most prominent guise, involves travel to experience sporting events, where the body of spectators usually outweighs a small number of typically elite competitors (Getz, 1998 as cited by Hinch and Higham, 2004). The most widely researched examples of event sport tourism include the Olympic Games and the Soccer World Cup. Hinch and Higham (2004) suggested:

> “sports competition may or may not be the primary attraction of a sports

> event. The Wimbledon lawn tennis championship may be attended for its heritage and traditional value, the America's Cup for reasons of fashion and exclusivity, and the Superbowl for commercial and business purposes. Large-scale spectator sports events may, then, attract tourists for whom the sporting competition is a coincidental or secondary factor in their attendance."

A distinction within the event sport tourism market can be further segmented into two groups: elite event sport tourism and non-elite event sport tourism.

Numerous avenues of tourism development may be associated with elite sport events. Hinch and Higham (2004) cited a coordinated effort by the planners of the Sydney 2000 Olympic Games. The outcome of this effort was effective destination promotion, successful pre-Games training and acclimation camps, the stimulation of convention and incentive travel, the promotion of pre and post-Games travel itineraries and the minimization of diversion and aversion effects (Faulkner, 1998 as cited by Hinch and Higham, 2004). Leveraging elite sports events requires a clear understanding of the tourism development opportunities that exist beyond Games-induced travel (Hinch and Higham, 2004). Event sport tourism markets vary from one event to another. Faulkner (1998 as cited by Hinch and Higham, 2004) employed the term 'sport junkies' to describe tourists who visit a destination specifically to attend a sporting event, but demonstrate little propensity to engage in pre- and post-event itineraries. Not only are these types of tourists likely to displace other types of tourists at a destination, they may be associated with specific negative impacts that are unique to this market segment (Faulkner, 1998 as cited by Hinch and Higham, 2004). Alternatively, sport spectators may engage in a more casual relationship with the sports that they follow. In these cases general interest and match attendance can shift in response to wins and losses, the state of the venue, the appearance of star players and a change in the weather (Stewart, B., 2001 as cited by Hinch and Higham, 2004).

Destinations that are unable to host large-scale sporting events due to capacity constraints may compete to attract competitive but non-elite sport tourism events. Hinch and Higham (2004) cited a study by Chogahara and Yamaguchi (1998) on the National Sports Festival for the Elderly in Japan:

> "The study identifies that participants tend to engage in a wide range of tourist activities, particularly sightseeing and visiting hot spas both during and following the completion of the event. This study confirms that those who participate in less competitive sports events are more likely to take advantage of opportunities to engage in tourist activities at a destination."

The distinction between elite and non-elite sport tourism is important when segmenting the sport tourism market. Carmichael and Murphy (1996 as cited by Hinch and Higham, 2004) suggested that event sport tourists should be differentiated on the basis of spectatorship and participation, the latter including athletes, officials and coaches. This may be of benefit when distinguishing the tourist motivations between those who attend elite sports events, and those who travel to participate in non-elite sports events.

2.3.3 Levels of Fanship

The extent to which people are interested in and follow sports and sport teams ranges from occasionally watching a televised game or attending a live event, to owning season tickets and attending or watching as many games as possible. One result of a strong connection to a sport team is that an individual feels a sense of personal success when the team wins and a sense of loss when the team loses. The growth and interest in research on sport spectators and fans has been grounded in a multi-disciplinary approach drawing theoretically from sociology, psychology, consumer behavior and marketing (Funk, and James, 2001). Beginning with the work of Cialdini, Borden, Thorne, Walker, Freeman, and Sloan (1976), understanding the relationship between spectators or fans and sport teams continues to be a topic of much interest (e.g., Fisher & Wakefield, 1998; Melnick, 1993; Murrell & Dietz, 1992; Wakefield and Sloan, 1995; Wann, 1997; Wann & Branscombe, 1990, 1993; Zillmann, Bryant, & Sapolsky, 1989 as cited by Funk, D. and James, J., 2001). Despite efforts to understand the unique characteristics of “fandom” in spectator sport (Hirt, Zillmann, Erickson, & Kennedy, 1992; Sloan, 1989; Zillmann & Paulus, 1993), research in this area remains fragmented and inconsistent (Funk and James, 2001).

Funk and James (2001) present a model that categorized the different levels of fan connection to a team:

> "The Psychological Continuum Model (PCM) specified the general parameters in which a relationship between an individual, sport or athlete is mediated. Within the PCM framework, the object-related connection (e.g., a sport or team) was considered interchangeable. Much of the discussion, however, was devoted to athletic teams. Four general stages operating along a vertical continuum are conceptualized to characterize the various psychological connections that sport spectators and fans may form with specific sports and teams.
>
> 1. The initial floor, **Awareness**, denotes when an individual first learns that certain sports, and/or teams exist, but does not have a specific favorite.
> 2. The second floor, **Attraction**, indicates when an individual acknowledges having a favorite team or favorite sport based upon various social-psychological and demographic-based motives.
> 3. On the third floor, **Attachment**, a psychological connection forms creating various degrees of association between the individual and the sport object (e.g., a favorite team). Attachment represents the degree or strength of association based upon the perceived

importance attached to physical and psychological features associated with a team or sport.

4. Finally, on the fourth floor, **Allegiance**, an individual has become a loyal (or committed) fan of the sport or team. Allegiance results in influential attitudes that produce consistent and durable behavior."

Kerstetter and Kovich (1997) reported significant differences for enjoyment (attraction) and sign (the value associated with supporting the team – the importance to an individual that others recognize that he or she is a supporter of the team) among people who attend women's college basketball games. For booster club members sign was a significant factor; for other respondents sign was not significant. Booster club members, therefore, typically have had a stronger association with the sport or team that they are supporting. For these types of individuals it is important for them that others know that he or she supports a specific team. There are many reasons as to why these individuals feel the need to be a part of a group in order to be recognized for their support. Individuals derive "strength and a sense of identity" from their connections to social groups (Kelman, 1961 as cited by Fisher and Wakefield, 1998). The degree to which a membership or affiliation affects self-definition was defined by the strength of the individual's group identification. Stronger identification leads the individual to attribute desirable characteristics of the group to the self, and to assume a greater similarity with other group members (Stotland, Zander, & Natsoulas, 1961 as cited by Fisher and Wakefield, 1998). The key term to focus on is 'similar characteristics.' The need to feel a connection with a social group that has like characteristics is the attraction that brings individuals to join booster clubs. There also is the perception that the fans who are the most supportive of a team and have the most interaction with the team are those who are members of the booster club.

Based on the review of literature, there has been a lack of research dedicated to booster clubs. The literature that the researcher found dedicated to booster clubs has primarily focused on collegiate booster clubs and has ignored booster clubs of professional sports teams. Research on fans of the National Hockey League has been very limited when compared to research on fans of the other three major professional sports in the United States. The lack of research has been even more prevalent on the topic of National Hockey League booster clubs. Furthermore, the research on collegiate booster clubs has paid little attention to the booster club members' psychological motivations and behaviors. Rather the focus of the research has been on the financial support that booster clubs provide to college athletic programs in terms of scholarships, capital improvement projects, and other resources they provide to the athletic program through the generation of dollars from its members. The author believed that booster clubs for National Hockey League teams are a market segment that the teams are not capturing as effectively as they should. While booster clubs of professional teams can play an important role in increasing fandom, promoting the team, and generating revenue for the team, the impact that they have on the team does not compare to the impact that collegiate booster clubs have on the athletic program they are supporting. This distinction between levels of impact between collegiate and professional booster clubs may be one of the reasons as to why professional teams focus little attention of marketing to this group. The author believed that booster clubs can have a greater impact on the team if a strong relationship between the team and the booster club exists. By promoting the team, booster clubs can increase the fan-base of the team, which can lead to increased revenue. Even if a team sells out their arena every night there is still revenue that can be generated by increasing the fan-base in the form of merchandise sales, television rights, and corporate sponsorship. It can be assumed that the larger the fan-base, the more the team can charge companies for sponsorship and the more they can charge television stations to carry their games. Increased revenue can then lead to the addition of better players, which can result in improved team performance. However, by not developing a strong relationship with booster clubs they are ignoring a group that is one of its strongest supporters and possibly one of its most effective marketing tools.

2.4 National Hockey League

Once a recreational sport primarily played in Northern Europe, hockey has evolved into one of the most popular sports played throughout the world. Most historians place the roots of hockey in the chilly climes of northern Europe, specifically Great

Britain and France, where field hockey was a popular summer sport more than 500 years ago. When the ponds and lakes froze in winter, it was not unusual for the athletes who fancied the sport to play a version of it on ice (Davidson and Steinbreder, 1997). Not surprisingly, the earliest North American games were played in Canada. British soldiers stationed in Halifax, Nova Scotia, were reported to have organized contests on frozen ponds in and around that city in the 1870s, and about that same time in Montreal students from McGill University began facing off against each other at a downtown ice rink. The continent's first hockey league was said to have been launched in Kingston, Ontario, in 1885, and it included four teams (Davidson and Steinbreder, 1997). Hockey became so popular that games were soon being played on a regular basis between clubs from Toronto, Ottawa, and Montreal. The English Governor General of Canada, Lord Stanley of Preston, was so impressed that in 1892 he bought a silver bowl with an interior gold finish and decreed that it be given each year to the best amateur team in Canada. That trophy has come to be known as the Stanley Cup and is awarded today to the franchise that wins the National Hockey League playoffs (Davidson and Steinbreder, 1997). Hockey was a strictly amateur affair until 1904, when the first professional league was created - oddly enough in the United States. Known as the International Pro Hockey League, it was based in the iron-mining region of Michigan's Upper Peninsula. That operation went out of business in 1907, but then an even bigger league emerged three years later, the National Hockey Association (NHA) and shortly after that came the Pacific Coast League (PCL). In 1914, a transcontinental championship series was arranged between the two, with the winner getting the coveted cup of Lord Stanley. League play was suspended during World War I. After the war, a whole new organization that would be known as the National Hockey League (NHL) was established. At its inception, the NHL boasted five franchises- the Montreal Canadiens, the Montreal Wanderers, the Ottawa Senators, the Quebec Bulldogs, and the Toronto Arenas. The league's first game was held Dec. 19, 1917 (Davidson and Steinbreder, 1997). Over time the league underwent many changes as new teams were added and other teams were retracted because of financial difficulties. Table C.1 in appendix C shows the history of expansion and retraction of the number of teams that made up the NHL.

The NHL consisted of only Canadian teams until the 1924-25 season in which the first American team was established (Boston Bruins). NHL expansion during the early years primarily consisted of teams located in the northern part of the United States with the inclusion of teams such as Pittsburgh (1925-26), New York, Detroit, and Chicago (1926-27). It was not until mid-1960 that the NHL began a large-scale expansion effort with teams in new markets such as the Midwest (St. Louis Blues) and two teams on the west coast (Los Angeles Kings and California Golden Seals). The NHL expansion continued into the southern region of the United States with the inclusion of Atlanta for the 1972-73 season. However, Atlanta’s initial tenure in the NHL did not last very long as the team moved during the 1980-81 season to Calgary. The NHL re-entered the southern market twelve years later when the Tampa Bay Lightning entered the league during the 1992-93 season. The NHL continued its growth in the southern market with another team in Florida (1993-94) and teams in Dallas (1993-94), North Carolina (1997-98), Nashville (1998-99), as well as the re-entry of Atlanta (1999-2000). The expansion of the National Hockey League into the American marketplace can be attributed to population size and strength of the American economy. Bale (2003) and Kidd (1970) described the transformation of the geographic distribution of National Hockey League teams as the Americanization of Canada:

> "In 1917, all North American professional ice hockey teams were in Canada. By mid-1970 only three of the eighteen National Hockey League teams were in Canada and only five of the World Hockey Association's fourteen teams were so located. Kidd (1970) views such developments as part of the Americanization of Canada and observes that 'not surprisingly this non-Canadian Organization (i.e. The National Hockey League) has rarely acted in the best interest of the Canadian community. Given the commercialization of the game its Americanization is inevitable.' It is not grass roots interest but the television revenues which accrue from the more densely populated USA which are of greater geographic significance."

Aside from its geographical changes, the league has, also, undergone changes including rules changes, expansion into new markets, and labor disputes most of which were attempts to gain popularity. As it has expanded into markets that are not traditionally considered hockey towns as well as dealt with labor disputes, one in which an entire season was cancelled, the league continues to rank fourth among the four major sports in popularity with the American people. The National Basketball League, Major League Baseball, and the National Football League have continued to be considered more popular than the National Hockey League.

The gap in popularity among the three major sports and the National Hockey League has been exhibited in the television deals that each league has with various networks. While the other three leagues have large television contracts with the major networks such as ABC, NBC, CBS, and ESPN, the National Hockey League currently has a contract with a rather new network called the Outdoor Life Network and their television contract with NBC is drastically smaller in comparison to NBC's contract with the National Football League. Therefore, as the league enters the new markets, the importance of developing a strong fan base and maintaining that fan base becomes even more imperative. Although the NHL ranks behind the other three sports leagues in popularity, it has seen average attendance figures over the last fourteen years (the point at which the NHL began expansion into the southern market) steadily increase as shown by table C.2 in appendix C. However, as table C.2 also illustrates, average attendance figures for the five teams located in the southeast division has fluctuated over the same time period. In some cases, the changes in average attendance were rather drastic such as the decrease of 3,551 per game that the Tampa Bay Lightning experienced from the 1996-97 season to the 1997-98 season.

The state of the league currently is that it is in the second year of play after cancelling an entire season as well as undergoing significant rules changes. Immediately following the cancellation of the 2004-2005 season, the league received a backlash of negative criticism from the media and fans. However, after returning to the ice for the 2005-2006 season, the overall average NHL attendance has increased to an all-time high. As previously stated, it is imperative that the league capitalizes on the current level of success in attendance in order to increase identification. One of the main objectives of any sport organization is to turn the casual fan into a diehard fan that typically will spend more money on team related items. The researcher, therefore, examines the behavior of professional hockey fans in this study.

There are three independent variables that influence the behavior of professional hockey fans. Each of these variables will be discussed in detail. The concept of distance decay, in terms of perceived distance, is the independent variable that the investigator hypothesized has the most impact on consumer behavior. The research incorporated literature from the following areas: geography, marketing, sports, and tourism. Few studies have examined the influence of distance decay on home game attendance, season ticket sales, and viability of professional sport teams. The research that has focused on distance decay affecting attendance on road games is even more limited. While conducting the review of sport literature, the investigator was unable to find any publications discussing fans attendance at road games. Due to the lack of studies in this area of research, the investigator determined that incorporating research from the three main areas (team affiliation, distance decay, and destination image) would provide a more valid explanation of fans travel to road games.

2.5 Economic Impact Studies of Professional Spectator Sport Tourism

2.5.1 Positive Economic Impact

The spectator sports industry has grown rapidly in the last few decades and is still growing all over the world (King, 2002). In North America, $26.17 billion was spent on spectator sport, including ticket, concession, parking, and merchandise (King, 2002). An examination of the economic impact of two of the four major professional sports postseason play in recent years illustrate a positive impact. As illustrated by table 2.1, Coates and Humphreys (2002) described that postseason play can generate a substantial amount of revenue especially for single game postseason play such as the Superbowl. Aside from the common ways of generating revenue at spectator sport events such as tickets, concession, parking and merchandise, Coates and Humphreys (2002) added that the impact on the host city in the form of tourism related activities such as hotels, transportation, and food and entertainment is accentuated during postseason play.

Table 2.1 Reported Impact of Postseason Events

Event	*Location*	*Year*	*Total Economic Impact (millions of dollars)*
Baseball playoffs	San Francisco, CA	1989	105.0
Super Bowl	San Diego, CA	1989	166.0
Super Bowl	New Orleans, LA	1990	263.0
Super Bowl	Tampa, FL	1991	124.9
Super Bowl	Minneapolis, MN	1992	123.6
Baseball playoffs	Philadelphia, PA	1993	40.0
Super Bowl	Atlanta, GA	1994	135.0
Super Bowl	Miami, FL	1995	346.0
World Series	New York, NY	1996	39.2
Super Bowl	Phoenix, AZ	1996	281.7
World Series	Miami, FL	1997	45.0
Baseball playoffs	New York, NY	1998	79.8
Football playoffs	St. Louis, MO	2000	93.4
Baseball playoffs	St. Louis, MO	2000	33.6
World Series	New York, NY	2000	42.0

SOURCE: Humphreys (1994) and Porter (1999).

Another example of the economic impact on a smaller scale that sport tourism can have on a community can be seen in the examination of expenditures by Atlanta Falcons' fans and visitors in 1984 as cited by Bale (2003). Attending Falcons' home games over 321,000 times in 1984, fans spent nearly $12 million into the city's economic system. Table 2.2 illustrates a categorization of Atlanta Falcons home games associated expenditure by fans (local and out of town), teams, and visiting press during the 1984 season.

Table 2.2 Summary of Expenditures by Atlanta Falcons' fans and visitors, 1984

	Sources of expenditure (thousands of dollars)				
Objects of expenditure	**Local Fans**	**Out of Town Fans**	**Teams**	**Visiting Press**	**Total**
Tickets	5,040	2,160			7,200
Concessions	658	282			940
Parking	168	82			250
Food/Drink	453	1,092	32	30	1,607
Other entertainment		322	6	9	337
Lodging		750	74	64	888
Gasoline	110	272			382
Shopping		239			239
Parking (non-sport)	37	15			52
Buses	47	11	16		74
Taxi				9	9
TOTAL	**6,513**	**5,225**	**128**	**112**	**11,978**

Source: Schaffer and Davidson, 1985.

Bale (2003) explains that the impact of the Atlanta Falcons home games on the economy of the community cannot be understated. It is possible, of course, that money spent by local fans would have been spent in Atlanta anyway, but if it is assumed that the 96,000 out-of-town fans brought new money into the Atlanta economic system it is clearly an economic advantage. Furthermore, visiting press and visiting teams will spend money in the city in a variety of ways. In addition to the expenditures shown in table 2.2, the purchases and payments made by the Falcons football team must be included. For many services, an overwhelming proportion of expenditures and payments are made locally (e.g. transportation, construction, eating and drinking, employee salaries) and in 1984 the total local expenditures made by the Falcons exceeded $15,051,000. The money spent in the community as a result of the Falcons home games actually had a greater impact on the economy than the approximately $15,051,000. Many economic studies use the concept of the multiplier effect when determining economic impact. The multiplier effect takes into consideration the more complicated elements of economic impact in which there are measurements of the indirect and induced impacts of the visitor spending. These impacts arise because the money spent by the visitors circulates within the economy. This process arises because the businesses in which visitors spend money make purchases from other local businesses and residents use income earned as a result of visitor spending to purchase goods and services locally. An example of this was the case of a Falcons' home game where a fan purchases a hot dog from a concessionaire. The money received from this purchase would be used by the concessionaire to purchase more hot dogs from the grocery store. The grocery store, in turn, would use a portion of the fee paid by the concessionaire to purchase the hot dog from a wholesaler. In this case the money by the fan is multiplied several times over into the economy. This is called the multiplier effect. The precise value of the multiplier will depend on the proportion of any increment of additional income spent in the local system, with allowances being made for 'leakages' out of the local economy. When the multiplier works its way through the Atlanta system, Schaffer and Davidson (1985) estimated that the extra money brought into Atlanta by the Falcons in 1984 amounted to $24.7 million. Of this, $17.3 million was spent locally and stimulated economic activity valued at $37.1 million. All this activity resulted in $16 million in incomes to local households while the local and state governments obtained revenues which together exceeded $4.6 million.

Bale (2003) also described other instances in which sport tourism positively impacts the local economic system. When the ratio of revenues to expenditures by non-residents attending spectator sports were calculated for the city of San Diego, it was found that the city received 3.36 times more than it spent on sports visitors (if they enjoyed their hotel accommodations). However, the revenue/expenditure ratio varied considerably if other forms of accommodation were used. For a rented cottage it was 2.50 and for day trippers it was 1.66. In a sense, of course, the accommodation was a surrogate for income and the city naturally earns less if sports spectators are day trippers (Murphy, 1985).

2.5.2 Negative Economic Impact

There has been, however, a large contingent of researchers in the sports, economics, and tourism fields who believe that there is little if any economic impact on certain aspects of sport tourism, primarily with stadium funding through public dollars. The literature on stadium financing overwhelmingly suggests that the construction of a major league stadium through public funding has no positive impact and in fact can have a negative impact on the economy. The positive economic benefits of stadium development are as yet unproven. The preponderance of research on the economic impact of major sporting venues illustrated that these facilities are not economically beneficial to their cities (Baade and Dye, 1990; Rosentraub and Swindell, 1991; Baade, 1994; Baim, 1994; Baade, 1995; Baade, 1996a; Baade, 1996b; Rosentraub, 1997; Noll and Zimbalist, 1997; Hudson, 1999; Coates and Humphries, 1999).

In the USA, having studied cities before and after the development of stadiums serving professional sport, Baade (1995) concluded that the developments were not statistically significant in determining growth in real per capita income. Baade's data, covering the period 1959-1987, suggested that there was little point in a city or region investing in stadium development for economic gain. Further, Rosentraub and Swindell (1993) concluded that not investing in a minor league baseball stadium seemed actually to have encouraged economic development in Fort Wayne, Indiana (Jones, 2001). The economic effects of stadium investments, casino projects, convention centers, and other entertainment amenities generally show up on the negative side of the balance sheet, and in the few cases when they do not, their effects are highly localized. They are localized in that the middle and upper classes gain the most, while the lower classes tend to be negatively impacted through relocation. A perfect example of the negative impact on the lower class can be illustrated by the current revitalization effort in Raleigh, NC. While the construction of a major sport and entertainment facility in the late 1990's does not play a role in this example, the construction of a new state of the art convention center does. In an attempt to continue the growth of the city and put the city on the map as a major tourist destination, the city has decided to spend hundreds of millions of dollars to revitalize its downtown area. Major construction of the convention center, high-rise buildings to accommodate businesses and high-income residences, as well as infrastructure are currently taking place. The current residents of the downtown area, who are generally of lower income status, seem to have been forgotten in this effort. The small minority business owners are being bought out and residents are being relocated, as they are unable to afford the high cost of living in the downtown area. There is great resentment to the project from current downtown residents as well as those who have already been driven out of the area.

Furthermore, cost overruns in the construction phase, high public subsidies for operating expenses and debt service, sweetheart deals for professional sports team owners, overoptimistic job creation projections, the unlikelihood of stimulating ancillary development beyond the immediate neighborhood, and the absence of evidence that new entertainment venues actually increase total regional entertainment spending means that such projects almost never pay for themselves (Rosentraub, 1997). A prime example of the debate regarding public funding of a professional sporting venue can be found in Washington, D.C. While the mayor and other leaders have been strong proponents of public funding for a new baseball park for the Washington Nationals, many of the current residents have been against it. There have been many studies as to whether the construction of a new baseball park would economically benefit the District, many of which make the case that it would be economically disadvantageous to the District. Coates and Humphreys (2004) concluded in their analysis of stadium funding across the nation that, "the net economic impact of professional sports in Washington, D.C., and the 36 other cities that hosted professional sports teams over nearly 30 years, was a reduction in real per capita income over the entire metropolitan area. A baseball team in D.C. might produce intangible benefits. Rooting for the team might provide satisfaction to many local baseball fans. They believed that is hardly a reason for the city government to subsidize the team. Coates and Humphreys (2004) argued that D.C. policymakers should not be mesmerized by faulty impact studies that claim that a baseball team and a new stadium can be an engine of economic growth. Impact studies rarely consider what economists call the substitution effect. Indeed, not all of the spending generated around and in the stadium is new spending, and not all the taxes on that spending are net new tax revenues. As sport- and stadium-related activities increase, other spending declines because people substitute spending on sports for other spending. That is called the substitution effect. If the stadium simply displaces dollar-for-dollar spending that would have occurred otherwise, there are no net benefits generated." In Coates and Humphreys study they examined cities with one or more professional franchises and found the following:

> "The presence of pro sports teams in the 37 metropolitan areas in our sample had no measurable positive impact on the overall growth rate of real per capita income in those areas.
>
> The presence of pro sports teams had a statistically significant negative impact on the level of real per capita income in our sample of metropolitan areas.
>
> The presence of pro sports teams had a statistically significant negative impact on the retail and services sectors of the local economy.
>
> The average effect on employment in the services sector of a city's economy was a net loss of 1,924 jobs as a result of the presence of a professional sports team.

> The presence of pro sports teams tended to raise wages in the hotels and other lodgings sector by about $10 per year. But it tended to reduce wages per worker in eating and drinking establishments by about $162 per year.
>
> The presence of pro sports teams tended to raise the wages of workers in the amusements and recreation sector by $490 per year. However, this sector includes the professional athletes whose annual salaries certainly raise the average salary in this sector by an enormous amount. As it turns out, those workers most closely connected with the sports environment who were not professional athletes saw little improvement in their earnings as a result of the local professional sports environment."

Prior to the claims of Coates and Humphreys that public funding of major sporting venues is not economically advantageous to cities, Lazere (2003) made basically the same arguments in his analysis of the research on stadium funding for the Washington Nationals, as he found the following:

> **"Baseball would not create good jobs for DC residents.** Most of the jobs directly created by stadiums are day-of-game jobs, such as in concessions, which are part-time and have low pay and limited benefits. Moreover, the Williams administration (mayor of Washington, D.C.) estimated only about one-third of the jobs resulting from a team would go to DC residents. The $339 million subsidy would create no more than 380 jobs for DC residents,

which means the cost to the city for each job filled by a DC resident would be $900,000.

Baseball does not boost the local economy. Andrew Zimbalist, a leading sports economist, wrote earlier this year: “There are very few fields of economic research that produce unanimous agreement. Yet every independent economic analysis of the impact of stadiums has found no predictable positive effect on output or employment. Some studies have even concluded that there is a possible negative impact.” This perhaps surprising finding largely reflects the fact that families and individuals who spend money to attend a baseball game spend less on other forms of entertainment than they would in the absence of a stadium.

A baseball stadium is unlikely to spur economic development in the area around it. Economic research has found that sports stadiums, which are not in use most days of the year, are not a major catalyst for development in surrounding areas. While some DC officials point to the MCI Center and give it credit for the resurgence of downtown, it is more reasonable to see the downtown housing and commercial boom as part of the District’s overall economic resurgence, which has occurred in many areas of the city.”

Lazere (2003) further contended that, "the overwhelming consensus from economic scholars was that baseball teams produce few economic benefits and may in fact have negative effects." He points out that three factors help explained these results.

> **"Baseball teams create poor-quality jobs.** In addition to the players, most teams employ roughly 100 people in their front offices. The majority of the jobs created by a team are day-of-game jobs, such as in concessions. These tend to be part-time and have low pay and limited benefits.

.

> **Baseball teams do not lead to increases in total entertainment spending.** Economic research suggested that families and individuals have relatively fixed budgets for entertainment, as well as fixed amounts of time to spend on leisure activities. Attendance and spending at a new baseball stadium typically results in reduced spending elsewhere. In summarizing the research, the National Conference of State Legislatures notes: "Many economists have found that using public dollars to finance sports stadiums does not provide a good return on the investment since sporting events are generally attended by local residents with limited disposable income. Money spent on sports is money that may have been spent elsewhere." As a result, the new jobs created by a DC baseball stadium would be offset by reduced employment in other parts of the area. The economic analysis prepared by DC officials does not take this offsetting effect into account and instead implies that all jobs created by a baseball stadium would increase overall employment in DC.

Revenues earned by baseball teams do not get recycled in the local economy. Roughly half of a baseball team's revenue goes into player salaries, and much of the remainder goes to the owners, and neither group tends to spend their earnings locally. A study commissioned by baseball supporters in Virginia assumed that 80 percent of player salaries would be spent outside the state. Moreover, spending at a baseball stadium is likely to result in reduced spending at smaller businesses owned by local residents, who are much more likely than players and owners to spend their incomes locally. For this reason, a new team could actually hurt the local economy. Indeed, some economic research shows that baseball teams lead to reductions in area incomes."

The research on the economic benefits of attracting a professional franchise and constructing a new state of the art stadium or arena overwhelmingly suggested that there is no economic benefit.

Therefore, with a lack of agreement on the impact and role of sport tourism in our society, as stated earlier by Gibson (1998) the literature in sport tourism needs continued growth, it would make sense that the increase in research on this area should include spectator sport tourism because of its overall impact on communities, states, and countries.

2.6 Consumer Behavior

The theoretical perspective that was utilized to guide the dissertation research was consumer theory with a focus on the behavioral aspect of the theory. There was also an examination of the impact of Newton's gravity theory on consumer behavior. Figure 2.1 depicts a model that illustrates the author's proposal of gravity theory in relation to the overarching consumer theory. Gravity theory in this context was assumed to be a subset of consumer theory as it is hypothesized to be a major influential factor in the consumer decision-making process.

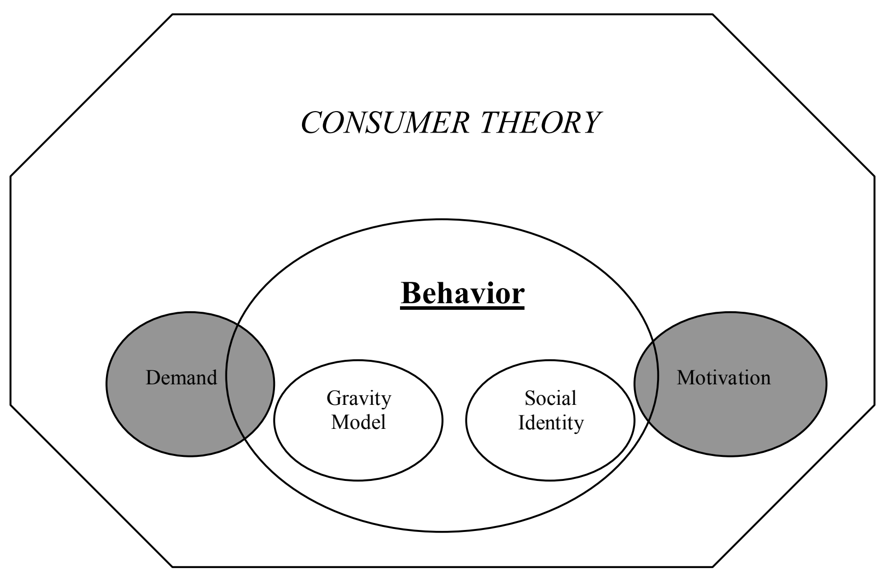

Figure 2.1 Illustration of Relation of Examined Theories

The overarching consumer theory gave a broad and general basis for a deeper analysis of the independent variables. Key ideas of consumer theory included:

consumer motivation (seeks to answer why a decision was made), consumer demand (seeks to answer how much desire of an item does the consumer have), and consumer behavior (seeks to answer questions about the action of the consumer to or not to consume the item). Within the gravity model, distance decay as well as social identity (in terms of team affiliation) can have an impact on consumer behavior. Prior to analyzing and examining the relevance of consumer theory to the study, a definition and historical perspective of consumer theory was necessary.

A consumer was defined as one that absorbs or purchases goods and/or services for direct use or ownership. In the case of this study, the consumer was identified as fans, more specifically fans of the Carolina Hurricanes of the National Hockey League. Behavior was defined as the manner in which one acts or reacts in response to external or internal stimuli. Once again for the purpose of this study, behavior was identified as attendance at road games. Moreover, consumer behavior consisted of the activities that people engage in when selecting, purchasing, and/or using products and/or services so as to satisfy needs and desires. Thus, the author defined consumer behavior as fans' decision attendance at road games of their favorite team.

Perception had been identified by researchers as one of the key components in the consumer decision-making process, which ultimately leads to their behavior. The consumer decision-making process as defined by Ittersum (2001) is a four-step process in which the consumer identifies a need, engages in a pre-purchase search for information, perceives and evaluates alternatives, and makes a choice. In relation to this study, the author examined the variables (destination image, distance, and team affiliation) that influence professional hockey fans' perception. The author examined the role of aesthetics and speed on professional hockey fans' decision of whether to travel to road games or not. The aesthetic perception of the destination in which the road game takes place has an affect on sport fans' behavior as well as the distance of the destination from the home site are vital components to explore when researching sport fans' behavior.

2.7 Distance Decay

The variables that were examined relating to consumer decision-making include team identification, destination image, and distance decay. Distance decay, a vital component of Newton's gravity theory, was the primary focus of examination for this study. Contrary to popular belief at the time, Newton discovered that the attraction between two objects is affected by the distance between the two objects rather than solely being affected by the mass of the two objects. Therefore, Newton believed that the distance between two objects plays some role in the amount of attraction the two objects have with each other. This concept is known as distance decay. The concept of distance decay was introduced with Newton's model of planetary attraction or gravity. Distance decay theory, borrowed from the literature in geography, predicts that demand will peak at some distance relatively close to a source market and then decline exponentially as distance increases. There are a variety of gravity models that attempt to explain the attraction between objects, some of these models use some form of attraction between places to determine the magnetic effect and some type of force decay when there is an increase in distance (distance decay). The decreased level of interaction between various objects when there is an increase in distance between the objects can possibly be explained by an analysis of transaction costs. Distance has a hindering effect on human interaction because there are increasing consequences in time and cost associated with long-distance and more expensive transactions. The concept is predicated on the belief that distance exerts a frictional effect on demand. This negative effect is called the friction of distance. Based on the concept of the friction of distance, it can be inferred that most types of interaction between objects occur over short distances. As the distance between the objects increases, the amount of interaction between the two objects decreases. An example of this notion can be illustrated as the following: we tend to have more interaction with our neighbors or co-workers who we have a relatively short distance to travel to in order to interact as opposed to the family member who lives halfway across the country, who we may see occasionally throughout the year, especially during the holidays.

John Bale, a leading researcher in the field of geography, applied the concept of distance decay to the field of sports in his publication *Sport Geography.* An example of how the concept of distance decay can be applied to the sport arena can be found in a baseball fan's decision to travel to a minor league baseball game versus a major league baseball game. For instance, a fan may be more likely to attend a minor league baseball game that takes place five minutes from their home community than attend a major league baseball game that requires a five-hour drive in order to attend. The fan as a consumer must weigh a couple of different factors when deciding which of the two events to attend. As consumers, making rational decisions that maximize our benefits, we weigh the transactional costs of time and money, which is relative to the increase in distance. The consumer or fan in this case who deems the cost and/or time to travel to attend a major league baseball game as greater than the cost and/or time to travel to attend a minor league baseball game, while obtaining relatively the same benefit, may be more likely to attend the minor league game. Most importantly to this research, distance decay described the decline of attraction with increasing distance from its point of origin. Similar to a magnetic field, distance-decay can be represented by an object surrounded by rings with decreasing interaction to the center as distance increases, (illustrated by Figure 2.2).

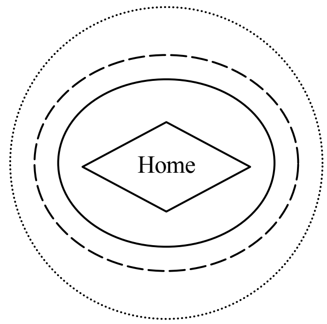

Figure 2.2 Model of Distance Decay between Points of Increasing Distance

Figure 2.2 can be applied to a sport example that illustrates the effect of distance on interaction. Figure 2.3 illustrates how the model of distance decay can be applied to a sport setting.

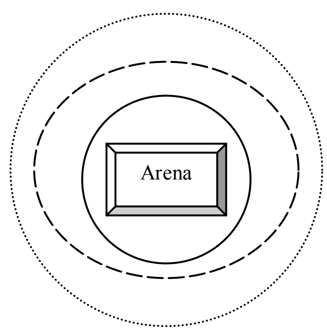

Figure 2.3 Model of Distance Decay between Points of Increasing Distance Applied to a Sport Setting

The solid circle that surrounds the arena can be identified as residents of the city in which the arena is located. These residents tend to have the greatest interaction with the arena because of proximity. The solid dotted circle can be identified as residents of the state but not the city in which the arena is located. These individuals have a greater distance to travel to the arena, which relates to less interaction with the arena. The faded dotted line can be identified as citizens across the country but not the state in which the arena is located. These individuals have even less interaction with the arena than the other two groups because they have an even greater distance to travel. As distance from the arena increases, travel costs increase. Although travel costs may increase as distance increase, there may still be a need for the product or service. If there is a strong demand for the product or service, where the product or service is the closest in proximity to the consumer even if it is at a great distance, consumers after weighing the transactional costs may still be likely to consume the product or service.

For example, the Super Bowl is an event that takes place once per year. A sport fan may weigh the transaction cost of attending the event, which may take place on the other side of the country and determine that because the Super Bowl occurs annually and there is a great demand for attending the event, that the benefits outweigh the transactional costs.

The predicted interaction between two places is directly proportional to the size of the places (populations) and inversely proportional to the distance between the places (Jakle, Brunn, and Roseman, 1976 as cited by Walmsley and Jenkins, 1992). In general, large places tend to interact more frequently than small places, and places that are close together tend to interact more frequently than those places that are farther apart. Therefore, it is important for professional leagues and their respective teams to be able to determine the type and strength of interaction surrounding communities have with the destination in which they will locate a team. When determining the market for the new team and forecasting its future, teams must be able to understand the size of the population in their home community as well as surrounding communities. It is just as important to determine the extent to which their ability to attract fans is hindered by the proximity of other franchises in the same sport. The competition between teams for fans that are relatively close to each other plays an important role in deciding the relocation of teams. The concept of central place theory best illustrates the geographic distribution of professional sport franchises. Bale (2003) described the concept of central place theory as the following:

> The main function of a sports place is to provide sports outlets for a surrounding hinterland. Sports places are therefore centrally located within their market areas.
>
> The greater the number of sports provided, the higher the order of the sports place.
>
> Low-order sports places provide sporting facilities that are used by small

> catchment areas; the threshold population needed for the viability of a low-order place is small.
>
> Higher order places are fewer in number and are more widely spaced. They have large population thresholds.
>
> A hierarchy of sports places exists in order to make as efficient as possible the arrangement of sports opportunities for (a) consumers who wish to minimize their travel to obtain the sport they want and (b) producers of sport who must maintain a minimum threshold to survive.
>
> The placement of sport facilities and franchises are integral to the financial success of the franchises. Placing these franchises in highly populated areas can impact attendance figures of home and road games.

The act of traveling requires an investment of time, money, or effort (Hawley 1950, as cited by Rengert, Piquero, and Jones 1999) resulting in a trade-off being made between travel time and time spent at the end destination. As distance increases, demand will decline exponentially. Time-space compression, brought about by advances in transportation and communication technologies, has increasingly moderated the rate of decline over geographic distance but has not completely eliminated the distance decay phenomenon (McKercher and Lew, 2003). Figure 2.4

represents an idealized distance decay curve (Bull 1991). The curve peaks close to the origin and then declines as the perceived costs of travel distance and time increase. Greer and Wall (1979) explained that the sloped shape is a function of decreasing demand with distance and a geometrically increasing supply of recreational opportunities as distance increases.

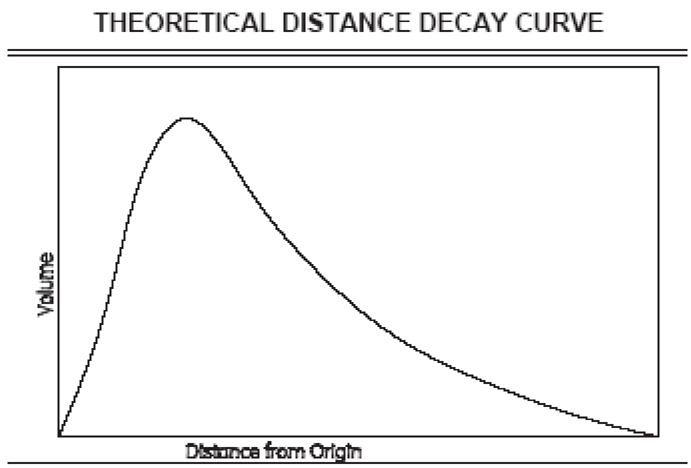

Figure 2.4 Theoretical Distance Decay Curve

Source: Greer and Wall, 1979.

Unlike decay relationships noted for other activities (e.g., shopping, commuting, and crime) where demand peaks and then decays almost immediately, the peak demand for the tourism distance decay curve occurs at some relatively short distance from home. This pattern illustrates that people must travel a minimum distance before they feel sufficiently removed from their home environment to make an overnight holiday journey worthwhile (McKercher and Lew, 2003). McKercher and Lew's examination of the effect of distance decay on destination choice for international pleasure tourists from Hong Kong, who traveled by air, validates the relationship exhibited in figure 2.4. In their telephone survey interviews of 952 residents in which 315 respondents participated, they analyzed the distances in increments of 500 miles of those respondents who took an overnight travel with the point of origin as Hong Kong. As illustrated by figure 2.5, a greater portion of travel occurs within 2,000 miles of the origin, while anything beyond the 2,000-mile range decreases dramatically. An explanation for a slight increase of travel beyond the 4,000-mile range may be attributed to destination image. According to McKercher and Lew, trip purpose has a moderating effect on the distance people are willing to travel. In particular, Visiting Friends and Relatives (VFR) appear to have a greater impact on travel to longer distances than other pleasure tourists. Furthermore, in McKercher and Lew's study of international tourists from Hong Kong, a total of 39 respondents (or 12.3%) indicated that their pleasure trip included a VFR component. However, VFR trips represented a disproportionately large share of travel to distant destinations such as Australia (4 of 7 trips recorded), West Coast of North Carolina (6 of 12), and Eastern Canada (4 of 5).

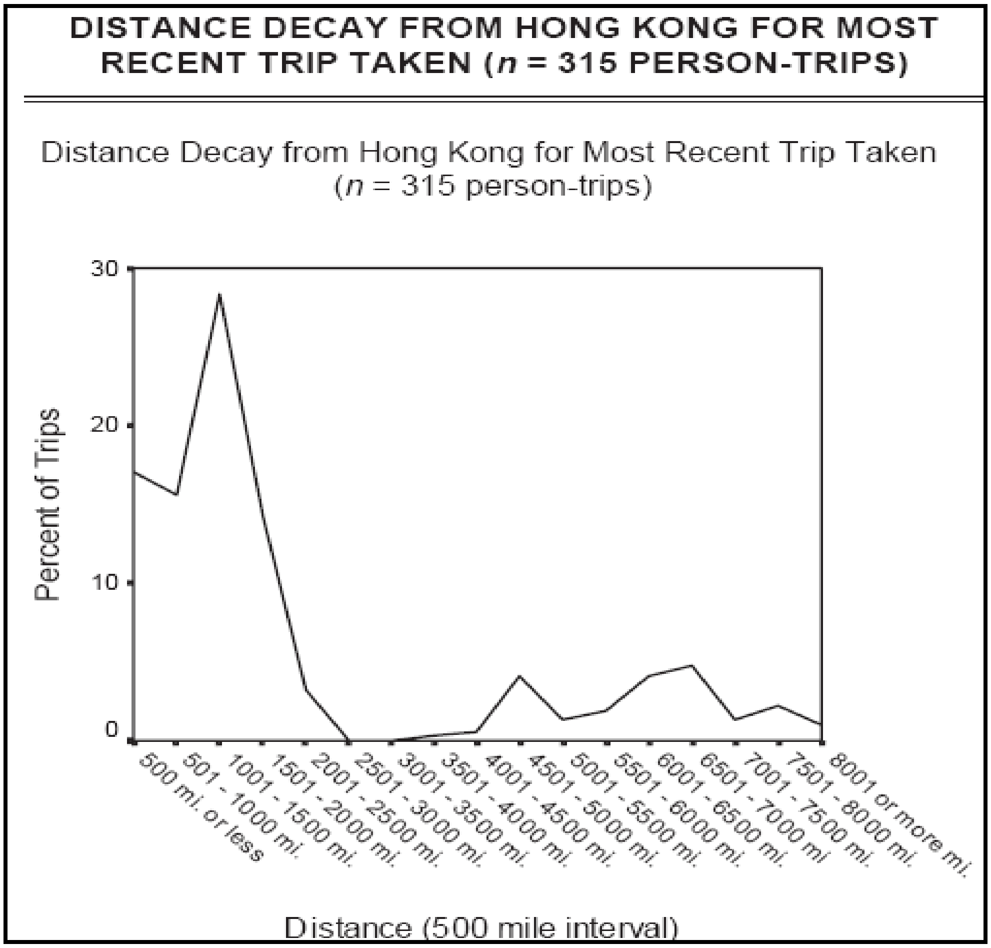

Figure 2.5 Distance Decay from Hong Kong for Most Recent Trip Taken
(n=315 Person-Trips)

SOURCE: McKercher and Lew, 2003

An important point of emphasis within the distance decay model is the relationship between two points (the point of origin and the destination). The distance decay model under the friction of distance concept makes the following assumptions about the relationship between the two points: as the distance between two points increase, the attraction between the two points decrease; and two points that are larger in population tend to have a stronger attraction than two points that are smaller in population. Friction of distance is the basis of the much used gravity model of travel behavior. This model emphasizes the earlier assertion that the likelihood of travel between two places is proportionately related to the size of the two places, and inversely proportional to some function of the distance between two places as noted by researchers in the area of geography (Jakle, Brunn, and Roseman, 1976 as cited by Walmsley and Jenkins, 1992). It is probably impossible to specify all the factors that might be involved in the demand for a particular recreation area. However, it would appear that there are a variety of factors that might influence attendance, in some degree, at a particular outdoor recreation area in a specified time period (year, a summer session, a week, or even a day) (Clawson and Knetsch, 1966).

2.7.1 Time and Cost

The two commonly accepted determinants of distance under the distance decay model are time and cost. As figures 2.4 and 2.5 illustrate, there will be a decline with distance from a given sports environment (this applies to both top-level and recreational sports) as potential ‘consumers’ are necessarily confronted with the increasing costs of overcoming the friction of distance (Bale, 2003). Clawson and Knetsch (1966) went on to list the following as just some of the factors: individual’s average leisure and the time distribution of that leisure, the recreation’s innate attractiveness as judged by the average user, the recreation area’s climatic and weather characteristics, the time required to travel from home to the area and return, and the monetary costs involved in a recreation visit to the area. In addition to monetary expenditures, transportation costs include the investment made by tourists in physical effort and time resources to overcome the friction of distance. To prevent vacation costs from spiraling, individuals are likely to have a stated distance constraint beyond which they may be unwilling to undertake vacation travel (Cook and McCleary, 1983). Clawson and Knetsch (1966) described the recreational experience as occurring in five separate phases, two of which are directly associated to travel as shown in figure 2.6.

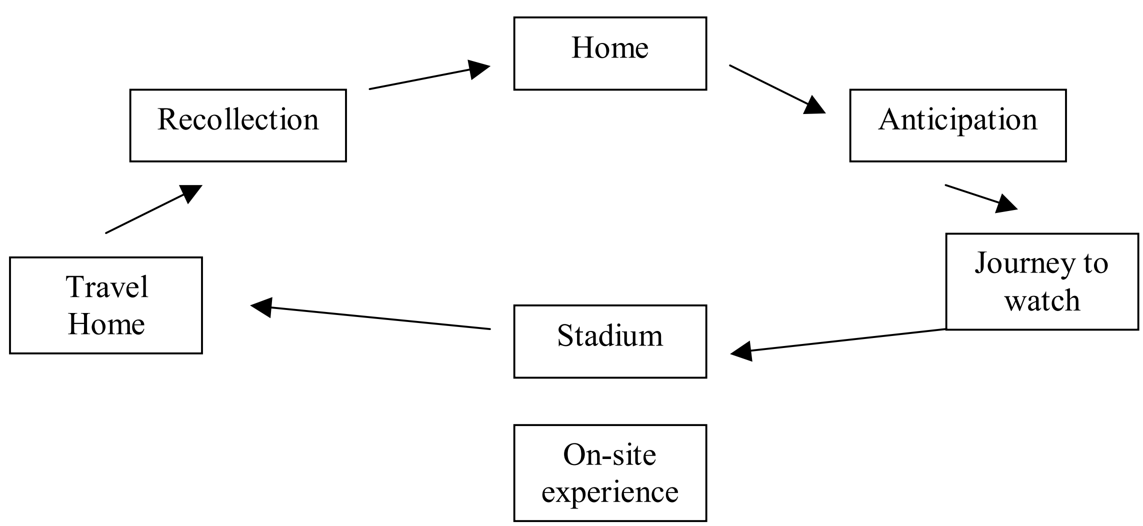

Figure 2.6 Five Phases of Recreational Experience

Source: Clawson and Knetsch, 1966.

One of the major phases of any recreational activity is travel to the actual site. In almost every instance, some travel is required, even if it is only a short walk or bicycle ride to a local playground. The time required for travel, both absolutely and relative to the time spent at the site, may vary greatly; so may the cost of the travel. The variations have a major effect upon the amount of time that visitors have for recreational activities. While some travelers may positively value the travel to a location, others may see it as a necessary evil, and may thereby devalue the overall trip (Clawson and Knetsch, 1966).

2.7.2 Perception of Distance

Increased usage of air travel for recreational purposes has led to a decrease in time associated with the travel to destinations of a greater distance. In some cases, the costs associated with this type of travel may actually be less than the cost of travel to a destination that is within a closer distance. Therefore, this research recognized the importance of the fan's perception of distance when determining whether or not to travel and how this perception is different for venues at different distances.

In many instances of travel to a destination, the route that is taken to reach the destination may play a role in the perception of distance. A route that is considered visually appealing to the traveler may be perceived as shorter in distance than one that may not be as appealing. If a travel route is unattractive, or if a mode of travel is uncomfortable, or otherwise tends to be burdensome on travelers, then the distance traveled almost surely reduces recreation use beyond the point to which dollar and time costs would have reduced it (Clawson and Knetsch, 1966). In the case of air travel, this type of explanation may not apply, however in instances where the traveler's mode of transportation is via automobile it can greatly impact the traveler's perception. When the consumer has a positive perception of the distance to the destination, their perceived distance may actually be less than the actual distance. This perceived distance might also affect the consumer's perception of travel distance to a specific location in relation to other locations. An example of this phenomenon can be exhibited by figure 2.7, which illustrates a consumer's perceived distance to a distant location in relation to perceived distance to destinations that is closer in distance. While point D in actual mileage is further than points A, B, and C, the perception of the distance that the consumer has may be less than the actual distance. Therefore, they may perceive the distance to point D to be less than the distance to the other three points as illustrated by the dotted line in figure 2.7.

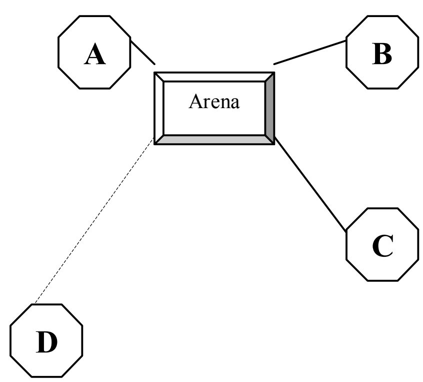

Figure 2.7 Relationship of Perceived Vs. Actual Distance

2.7.3 Importance of Cognitive Distance

Cadwallader (1976) suggested that the subject of cognitive distance is worth serious research attention because it influences not fewer than three critical decisions in the travel behavior; 'whether to go or stay'; 'where to go'; and 'what route to take' (Walmsley and Jenkins, 1992). The first reference to the phenomenon of cognitive distance was Brennan's (1948) observation that shopping centers in a downtown direction were preferred by consumers to shopping centers in an out-of-town direction, even when the latter was geographically closer. However, it was not until the work of Thompson (1963) that the whole question of cognitive distance received serious attention. Thompson examined the behavior of shoppers in San Francisco and found that estimates by shoppers of the distance to shopping centers proved to be exaggerated relative to real distance, with distances to centers that were visited being more accurately estimated than distances to centers that were not visited (Walmsley and Jenkins, 1992). Ankomah's (1995) research of 600 non-student households of College Station, Texas, in which he measured the relationship between travelers' cognitive distance estimates and actual physical distance produced results that illustrated the differences in cognitive distance and actual distance. When asked, "how far do you think each destination is in actual mileage from College Station" Ankomah found that as actual distance increased, respondents' estimates of cognitive distance increased, but less than proportionately. If cognitive distance estimates are substantially greater than actual distance, then the perceived extra distance may be a factor in people deciding not to select a particular destination (Ankomah, 1995). Additional pertinent information that resulted from this study was the identification of the three most important factors that respondent's cited when determining a travel destination: distance, attractions, and vacation cost. Vacation cost and distance are evidently intertwined as one influences the other. This study examined distance in terms of time and cost as perceived by the individual rather than actual distance in terms of mileage.

2.8 Destination Image

Hockey fans must weigh various variables when deciding whether or not to travel to see their team play on the road. One of those key variables that this research identified is the concept of destination image. Destination image has been defined in many different ways by various authors as table 2.3 illustrates (Gallarza, Gil, and Calderon, 2002).

Table 2.3 Selected Definitions of Product, Place and Destination Image

Hunt (1971): Impressions that a person or persons hold about a state in which they do not reside
Markin (1974): Our own personalized, internalized and conceptualizing understanding of what we know
Lawson and Bond-Bovy (1977): An expression of knowledge, impressions, prejudice, imaginations and emotional thoughts an individual has of a specific object or place
Crompton (1979): An image may be defined as the sum of beliefs, ideas, and impressions that a person has of a destination
Dichter (1985): The concept of image can be applied to a political candidate, a product, and a country. It describes not individual traits or qualities but the total impression and entity makes on the minds of others
Reynolds (1985): An image is the mental construct developed by the consumer on the basis of a few selected impressions among the flood of total impressions. It comes into being through a creative process in which selected impressions are elaborated, embellished and ordered
Embacher and Buttle (1989): Image is comprised of the ideas or conceptions held individually or collectively of the destination under investigation. Image may comprise both cognitive and evaluative components
Fakeye and Crompton (1991): Image is the mental construct developed by a potential tourist on the basis of a few selected impressions among the flood of total impressions
Kotler et al (1994): The image of a place is the sum of beliefs, ideas, and impressions that a person holds of it
Gartner (1993), (1996): Destination images are developed by three hierarchically interrelated components: cognitive, affective, and conative
Santos Arrebola (1994): Image is a mental representation of attributes and benefits soughts of a product
Parenteau (1995): Is a favorable or unfavorable prejudice that the audience and distributors have of the product or destination

SOURCE: Gallarza, Gil, and Calderon, 2002

Drawing from earlier work by Gunn (1972) and MacCannell (1976), Leiper identified three components of an attraction system; a nucleus, a tourist, and a marker. A nucleus is 'the central element in all tourist attractions, and might be any feature or characteristic of a place that a person visits or contemplates visiting for tourism.' The nucleus is the main reason that the traveler chooses to make the trip. Different degrees of significance may be acknowledged by classifying nuclei into primary, secondary, and tertiary levels. He stated that tourists are a subset of travelers and are defined as 'persons contemplating or making overnight trips to the extent that their behavior involves leisure experiences which include personal contact with features or characteristics of places visited.' A marker, the third component, 'is an item of information or image, received by a tourist, about anything which could be a nucleus of an attraction.' Markers may perform a number of functions, including trip motivation, destination selection, itinerary planning, activity selection, nucleus identification, name connotation, and souvenirs (Dredge, 1999). The marker plays a significant role in the tourist's decision on choosing a destination. A marker that is positive as perceived by the tourist can entice the tourist to visit the destination. On the other hand, a marker that is negative (e.g. information on high crime rates in the destination on the news) can deter a tourist from visiting the location. A destination region is a location that a person chooses to visit for at least one night in order to experience some feature or characteristic perceived as satisfying a leisure time experience (Leiper 1990, 1995). Many authors agreed that the Tourism Destination Image (TDI) research line emerged from Hunt's work of 1971 (Driscoll, Lawson and Niven 1994; Echtner and Ritchie 1991; Embacher and Buttle 1989; Fakeye and Crompton 1991; Gartner and Hunt 1987; Reilly 1990; Sternquist Witter 1985). From this time onwards, there have been numerous and varied approaches to its study (Calderon, Gil, and Gallarza, 1998). Among the topics within the tourism destination image realm that have been researched include: conceptualization and dimensions; destination image formation process (static and dynamic); assessment and measurement of destination image; influence of distance on destination image; destination image change over time; and destination image management policies (positioning, promotion, etc.) (Calderon, Gil, and Gallarza, 1998).

The ultimate goal of destinations engaging in marketing is to attract tourists by influencing their travel decision-making and choice (Tasci and Garnter, 2007). The importance of destination image in decision-making has been universally acknowledged, since it affects the individual's subjective perception and consequent behavior and destination choice (Chon 1990, 1992; Echtner and Ritchie 1991; Stabler 1988; Telisman-Kosuta 1989). For destination marketing professionals there is great subjectivity in providing a tourism service: images are mixed with impressions about residents, retailers, other tourists, and/or employees (Calderon, Gil, and Gallarza, 1998). The intangibility of tourism service can hinder image assessment as it depends on invisible elements of pre-visit selection and a pre-taste of the destination (Fakeye and Crompton, 1991). Tourists traveling to new destinations are dependent on images and information (e.g. media, promotional brochures, and word of mouth) that they receive. These images and information can paint an accurate picture or a misleading picture of the destination. The tourist makes their decision on these images and information prior to selecting a destination to visit. Consequently, in tourism research, images are a key component of the tourist's decision-making process, all because perceptions, rather than reality are what motivate consumers to act or not act (Guthrie and Gale 1991:555 as cited by Gallarza, Gil, and Calderon, 2002).

Many of the definitions of destination image in table 2.3, share a common characteristic in that destination image entail some sort of mental impression or perception. Perception is simultaneously subjective (changes from person to person) and comparative (involves perceptions among various objects). The subjective character of image is universally acknowledged. Image always corresponds to an internal processing of some perception, and not everyone has the same perceptions. Therefore, image is always subjective (Gallarza, Gil, and Calderon, 2002). This perception influences the traveler's willingness to choose a destination site. There is no clearly defined conceptual base leading destination image studies, especially the ones investigating causality between destination image and other concepts (Tasci and Gartner, 2007). There are many factors that contribute to the perception of a traveler's destination image, including but not limited to accessibility, distance from point of origin, and attributes specific to the destination. The effect of distance in terms of its effect on overall familiarity, and knowledge with and propensity to travel to a destination has been the focus of a number of studies (Crompton, 1979; Fakeye and Crompton, 1991; Gartner and Hunt, 1987; Goodrich, 1977 as cited by Tasci and Gartner, 2007). Crompton (1979) studied the influence of the geographical location of subjects with respect to the destination studied. Telisman-Kosuta (1989) affirmed the positive correlation between the consumer's physical distance from the destination and his/her level of perception of it. The greater the distance, the greater the distortion of reality, and the shorter the distance, the greater the meaning of the details (Gallarza, Gil, and Calderon, 2002). Related professional and academic papers have proposed a number of scales to determine the different attributes relevant to measuring perceived image. A review of the principal scales of destination image (Baloglu and McCleary 1999; Calantone, Di Benetton, Hakam and Bojanic 1989; Chon, Weaver and Kim 1991; Echtner and Ritchie 1993; Fakeye and Crompton 1991; Gartner 1989; Gartner and Hunt 1987; Gartner and Shen 1992; Goodrich 1978; Hu and Ritchie 1993; Hunt 1975; Phelps 1986; Walmsley and Jenkins 1993) revealed a lack of homogeneity with respect to the attributes which define an individual's perceptions. Therefore, there is not a common scale that has been widely accepted by most researchers when measuring perceived destination image. Similarly, it was evident that most studies have failed to establish the validity and reliability of the scales, casting doubt on their psychometric properties. Indeed, only three of the reviewed works, namely that of Echtner and Ritchie (1993) and those of Baloglu and McCleary (1999), had effectively determined the reliability of the scales used. This lack of a universally accepted, valid, and reliable scale for the measurement of image led to the proposal of a list of variables incorporating every aspect of a destination which could potentially be used as an instrument of measurement. All factors influencing the image assessments made by individuals were incorporated and classified into twelve dimensions (see table 2.4).

Table 2.4 Dimensions/Attributes Determining the Perceived Destination Image

Natural Resources	**General Infrastructure**	**Tourist Infrastructure**
Weather	Development and quality of roads, airports and ports	Hotel and self-catering accommodation
Temperature	Private and public transport facilities	Number of beds
Rainfall	Development of health services	Categories
Humidity	Development of telecommunications	Quality
Hours of sunshine	Development of commercial infrastructures	Restaurants
Beaches	Extent of building development	Number
Quality of seawater		Categories
Sandy or rocky beaches		Quality
Length of the beaches		Bars, discotheques and clubs
Overcrowding of beaches		Ease of access to destination
Wealth of countryside		Excursions at the destination
Protected nature reserves		Tourist centers
Lakes, mountains, deserts, etc.		Network of tourist information
Variety and uniqueness of flora and fauna		
Tourist Leisure and Recreation	**Culture, History and Art**	**Political and Economic Factors**
Theme parks	Museums, historical buildings, monuments, etc.	Political stability
Entertainment and sports activities	Festival, concerts, etc.	Political tendencies
Golf, fishing, hunting, skiing, scuba diving, etc.	Handicraft	Economic development
Water parks	Gastronomy	Safety
Zoos	Folklore	Crime rate
Trekking	Religion	Terrorist attacks
Adventure activities	Customs and ways of life	Prices
Casinos		
Night life		
Shopping		
Natural Environment	**Social Environment**	**Atmosphere of the Place**
Beauty of the scenery	Hospitality and friendliness of the local residents	Luxurious
Attractiveness of the cities and towns	Underprivilege and poverty	Fashionable
Cleanliness	Quality of life	Place with a good reputation
Overcrowding	Language barriers	Family-oriented destination
Air and noise pollution		Exotic
Traffic congestion		Mystic
		Relaxing
		Stressful
		Fun, enjoyable
		Pleasant
		Boring
		Attractive or interesting

SOURCE: Beerli and Martin, 2004

The selection of the attributes used in designing a scale will depend largely on the attractions of each destination, on its positioning, and on the objectives of the assessment of perceived image, which will also determine whether specific or more general attributes are chosen (Beerli and Martin, 2004).

2.9 Team Identification

Before discussing the implications of team identification on attendance, it is important to discuss a team's identification. Bale (2003) gave a good description of a team's identification. The area from which a team draws its support is called a fan region or identification, the size of which varies from club to club. In general, Bale identified three factors that may be said to be of prime importance in defining a team's identification spatial extent.

1. The size of the city in which the team is located.
2. The existing quality of the club's performance, since supporters are somewhat responsive to the win/loss record of their team.
3. The quality of the opposing team.

The strength of team identification over which a club exerts its influence may be doubled during a period of a week if its opponents change from being a bottom to a top-of-division club (Bale, 2003). Other factors affecting attendances include local intervening sporting events, and other opportunities, the nature of the facilities at the ground and the weather. The level of identification can be seen at various levels of intensity based on the individual fan. The various levels of identification can be found within the concept of team identification.

Team identification was defined as a fan's psychological connection to a team. Mael and Ashforth (1992) defined team identification as the sense of oneness with or belongingness to a sport team. Wann and Branscombe (1993) suggested that persons who strongly identify with a specific team, relative to those spectators moderate or low in identification tend to have the following characteristics:
report more involvement with the team, display a more ego-enhancing pattern of attribution for the team's successes, have more positive expectations concerning future team performances, exhibit greater willingness to invest larger amounts of time and money in order to watch the team play, and are more likely to believe that fans of the team they are identified with possess special qualities.

Wann (1997) developed a Spectator Sports Identification Scale, in which he found that fans can be placed into one of three categories: highly identified, moderately identified, and lowly identified. For highly identified fans, the role of team follower is a central component of their identity. Conversely, for lowly identified fans, the role of team follower is only a peripheral component of their self-concept (Crocker & Major, 1989). A highly identified fan associates their favorite team as part of their identity. An example of this can be displayed when a highly identified fan and a lowly identified fan are asked about the outcome of a contest in which their favorite team played. While the highly identified fan would respond with 'we' won or lost, the lowly identified fan may respond with either 'we' won or if the team loses, use the name of the team rather than 'we'. This association with a team based on team success can be explained by a phenomenon called Basking in Reflected Glory (Birg), which is a process that involves the tendency to publicize one's association with a successful other or group, even when that association is trivial or casually meaningless, to enhance one's social image (Cialdini & DeNicholas, 1989; Cialdini & Richardson, 1980). On the other hand, the disassociation with a team based on team failure can be explained by a phenomenon called Cutting Off Reflected Failure (Corf) which is a process that refers to people's tendency to decrease their association with an unsuccessful other or group, to protect their social image (Snyder, Lassegard, & Ford, 1986). Previous research has shown that highly identified fans supported their team during unsuccessful periods more so than are those who are lower in team identification (Wann & Branscombe, 1990). Pooley (1978) suggested that casual sports spectators simply observe an athletic event and when it is over, they soon forget about it. On the other hand, the committed sports fan continues his interest until the intensity of feeling toward the team becomes so great that parts of every day are devoted to either his team or in some instances, to the broad realm of sports in general. Individuals who are deeply committed to a sports team should differ from the less identified in terms of their investment of time and money, attendance records at performances, and attribution patterns for game outcomes. According to Wann's (1993) study on team identification, persons high in identification were more involved and invested in the team, were more positive in their acknowledgement concerning the team's performance and predictions for the future, viewed other spectators as special, and felt it was more important for their friends to be fans of this team, than did those who were moderate or low in identification with the team. This was consistent with Schurr, Wittig, Ruble, & Ellen, A (1987) who found that identification predicted attendance at home games.

Team identification and consumer loyalty appeared to be closely related. Team identification in the sport literature was similar in definition to customer loyalty from the marketing literature. It was also commonly agreed that customer loyalty contains two dimensions-*attitudinal loyalty and behavioral loyalty* (Backman & Crompton, 1991; Day, 1969; Dick & Basu, 1994; Jacoby, 1971; Mahoney, Howard, & Madrigal, 2000). Jacoby (1971) defined behavioral loyalty as "the overt act of selective repeat purchasing based on evaluative psychological decision process, while brand loyalty attitudes are the underlying predispositions to behave in such a selective fashion. Furthermore, previous consumer research has shown that individuals who are more involved with a product or service are more likely to have positive evaluations and higher commitment to that product or service (Beatty, Kahle, & Homer, 1988; Mano & Oliver, 1993; Oliver & Bearden, 1983). In the case of this study, the act of purchasing or repeat purchasing was identified as the consumer's attendance to games of their favorite team.

Researchers in the area of sport have examined the relationship between team identification and attendance to games of the favorite team. The consumer's decision to attend a sporting event, particularly at the professional level, includes a substantial commitment in money and time. Therefore, the degree of identification with the team may influence the fan's willingness to invest substantial amounts of time and money. Melnick (1993) noted that the most loyal and committed fans are those who are willing to stand in long ticket lines. Thus, they should be willing to pay the greatest amount of money for tickets. Wann's (1993) study on team identification also examined fans investment in watching their team play. In his analyses, he found that highly identified spectators recall investing greater amounts of money and time in their attempts to see their team play. Schurr, Witting, Ruble, and Ellen (1988) argued that the degree of identification with the team should be related to sporting event attendance. Attendance is one of the primary revenue sources for many professional sports teams (Howard, 1999). Competition for the leisure and entertainment dollar is fierce and has forced marketers to examine the determinants of fan attendance. Researchers have explored the demographic segmentation of fan bases (e.g., Graham, 1994), factors influencing fans' decisions to attend (e.g., Wall & Myers, 1989; Zhang, Pease, Hui, & Michaud, 1995), and consumers' personal attachments to players, teams, and sports (e.g., Mahoney & Howard, 1998).

Researchers who use the terms '*team identification' or 'group identification'* to refer to the notion of fan's attachment (i.e., attitudinal loyalty) have also found the direct effect of team identification on intention to attend future games (Wakefield and Sloan, 1995) as well as actual attendance (e.g., Fisher & Wakefield, 1998; Murrell & Dietz, 1992). Murrell and Dietz (1992) found that students' identity with their colleges has a positive effect on game attendance at collegiate sports events. Wakefield and Sloan (1995) believed that spectators who have little loyalty to the team (e.g., friends or family members who may go to the game with a loyal fan) may be largely influenced by the sportscape because they have little reason otherwise to attend. That is, fans with a higher identification with a team are more likely to attend the team's future games, while fans with lower identification tend to switch attendance to other teams irrespective of a team's performance (Harada & Matsuoka, 1999). Therefore, with greater access to reach distant destinations, which leads to an increase in recreational opportunity, the act of attending a game of a consumer's favorite team may be diminished based on their strength of team identification. Therefore those fans who are lowly identified, as described by Wann (1993), with a team may be more likely to choose some other recreational opportunity to explore rather than attend a game of their favorite team. Those fans, who are highly identified, regardless of increased recreational opportunity, may attend a game of their favorite team. Hill and Green (2000) also conducted a study in which they examined repeat attendance as a function of degree of identification and team success. The results of their study illustrated that loyalty to the home team positively and significantly predicts attendance intentions for both home and visiting supporters at ANZ Stadium, home of the highly successful (premiership winning) Brisbane Broncos. In this case, not only does team loyalty impact repeat attendance but so does team success.

2.10 Team Success

There are substantial publications demonstrating that winning teams are more attractive to fans than are losing teams (Baade & Tiehen, 1990; Becker & Suls, 1983; Kahle, Kambara, & Rose, 1996; Wakefield and Sloan, 1995). For both the highly identified and lowly identified fans, team success can influence their decision to attend a game of their favorite team. However, the influence of team success can be of a greater impact on the lowly identified fan, as the highly identified fan would be more likely to support their team regardless of record. In the case of the lowly identified fan, aside from team performance, factors other than team success may also influence their willingness to attend a game. For instance, stadium factors (e.g. large number of amenities, nostalgia of the stadium, service quality) have been shown to have some influence on this group of fans. If winning teams are more attractive to fans, then the service elements offered by the stadium may be less important to fans of those teams than are service elements in a stadium where a losing team plays. In other words, stadium factors would be expected to be particularly important in those instances where they are needed to compensate for poor on field performances by the team (Hill and Green, 2000) in which case, team success may account for some but not most of the variation in attendance. Zhang, Pease et al. (1997) found spectators at minor league ice hockey games were less concerned with winning, and more concerned with amusement and enjoyment of the game. The promotional efforts and stadium surroundings were stronger influences on attendance at minor league hockey games than team performance. Therefore, it can be hypothesized that not in all cases is the relationship between winning and fan support consistent. While some teams, like the Colorado Rockies, have been able to sustain high attendance levels in the face of consistent subpar team performance (a losing record in its first four years in Coors Field), a number of high performing teams like the Atlanta Braves and the Arizona Diamondbacks experienced consistent attendance erosion after the first year in their new ballparks. For example, the Diamondbacks' attendance dropped almost 20% the year after they advanced to the National League Championship Series. One explanation for this phenomenon can be attributed to stadium and atmospheric effects. Lobozewicz (1981) and Thornes (1977) suggested that regional differences in the physical environment clearly influence sporting performances. Temperature, wind, soil, rainfall and relief (to name a few factors) vary from place to place and affect sporting outcomes in a variety of ways. The Colorado Rockies moved into a new stadium with a variety of desirable amenities that many of the older stadiums did not have. The thin air in Colorado has an impact on the game itself. Since the Rockies began play at Coors Field, the stadium has seen an exorbitant number of home runs when compared to any of the other stadiums. It has been generally believed that fans, especially those who are lowly identified to the sport of baseball, enjoy watching players hit home runs rather than watching a low scoring game. Therefore, the belief that a fan may be entertained at a game by seeing a high scoring game with a lot of home runs may influence their willingness to attend and moreover return to the stadium. The Diamondbacks and the Braves have been known to have low scoring games in which pitching dominates. Therefore, there usually is a lack of home runs in their contests. In these cases, the highly identified fan may still attend their games, while the lowly identified fan may find some other recreational activity to invest their time and money on. The importance of attracting lowly identified fans as well as highly identified fans cannot be understated as Parks and Quarterman (2003) suggested that only 20% of the fans in attendance at any given contest are true fans of the sport, while the other 80% of fans in attendance go to games for everything else but the game. However, research on attendance and team performance has consistently illustrated that the two are linked. Successful team performance and game outcomes lead to consumer satisfaction and stimulate further attendance, whereas poor team performance and game outcomes lead to dissatisfaction, which, in turn, results in decreasing attendance (Greenstein & Marcum, 1981; Hansen & Gauthier, 1989). Regression models used to predict annual Major League Baseball attendance have shown that various aspects of fielding a competitive team appear to affect season attendance (Baade & Tiehen, 1990; Domazlicky & Kerr, 1990; Noll, 1974).

Researchers in the area of sport have commonly accepted that the best way to determine team success is to define it by the team's winning percentage. However, there has been a growing belief among scholars that team performance can be better identified on a team by team basis. In this view, the belief is that each team has different expectations of success and winning percentage alone may not be the only determinant of team success. Team performance, commonly expressed as home team winning percentage, has often been identified as a strong predictor of attendance (Whitney, 1988). This has been found to be true in major league professional sports (Baade & Tiehen, 1990; Greenstein & Marcum, 1981; Whitney, 1988), minor league professional sports (Pan, Gabert, McGaugh, & Branvold, 1997), and intercollegiate sports (DeSchriver, 1999; Wells, Southall, & Peng., 2000). In intercollegiate athletics, DeSchriver (1999) and Wells et al. (2000) each found that previous season winning percentage was positively correlated with spectator attendance in NCAA Division II football. DeSchriver and Jensen (2002) extended this work to evaluate the effects of both current and previous season winning percentages on attendance. Their study found the effect of the previous season's winning percentage diminished over the course of the season while the current season's winning percentage is likely to have more influence as the season progresses (Shackelford and Greenwell, 2005). Shackelford and Greenwell (2005) in their study of women's sports (basketball, soccer, softball, and volleyball) attendance in Division 1 athletics found that a team's prior season winning percentage was a significant predictor for each sport. In fact, this variable had the highest correlation for every sport except volleyball. Similar to results from studies on men's sports (e.g., DeSchriver, 1999; Wells et al., 2000), winning is an important determinant in women's attendance, and may be the most important determinant. Winning teams attract attention both on campus and in the media. DeSchriver and Jensen (2002) also conducted a study on determinants of spectator attendance at NCAA Division II football contests. The results of their study suggested that both current and previous year winning percentages are positively related to attendance. It was also shown that the effect of previous season winning on attendance diminishes while the effect of current season winning increases as the season progresses. By interacting winning percentage with time, it was shown that the effect of winning in the current season increases over the course of a season while the impact of the previous season's winning percentage on attendance decreased as the season progressed. In relation to this study, the investigator identified the win-loss records for the five teams in the southeast division. Table C.3 in appendix C indicates the win-loss records from the period of 1992-2006.

2.11 Transformation of a Destination Through Sports

There have been many articles written on the positives and negatives of public financing of major sports arenas. Depending on the author and their agenda, a reader can find arguments for both positive and negative impacts for public funding. Crompton (2001) wrote that advocates for sports facilities have utilized five lines of argument to generate support for public spending on these projects:

1) economic impacts from visitors due to increased spending (new money),

2) stimulation of other development (spin-off development),

3) increased community visibility,

4) enhanced community image, and

5) psychic income.

Chapin (2002) further categorized these impacts into what he calls four non-economic dimensions:

1. social/psychic impacts
2. image impacts
3. political impacts
4. development impacts.

Chapin described each of these dimensions as the following:

> ***Social/psychic impacts*** *refer generally to the enjoyment provided by sports and sports facilities to citizens in a community. Economists use the term "consumption values" to capture this idea. While it is widely understood that consumption values exist and are substantial, these benefits are very hard to quantify (Noll and Zimbalist, 1997). However, Noll and Zimbalist (1997) noted that it is possible that these benefits outweigh the public's costs for a new sports facility.*
>
> ***Image impacts*** *captures the concept that a city may experience benefits from being a "major league city", home to a franchise from one of the four*

dominant sports leagues in North America. Proponents routinely cite image building as one of the primary benefits of building a new stadium or arena. Image related impacts include increased community visibility and an ability to better compete for relocating businesses and households. The status of being a major league city is one that has driven many cities to vigorously pursue major league sports, as cities like Jacksonville, Indianapolis, and Nashville pursued and eventually acquired teams through massive investments in sports facilities. While most analysts agree that there are image impacts following a new sports facility, identifying these and quantifying these impacts has been difficult. To be sure, having a major league sports team allows smaller cities like Green Bay, San Jose, and Memphis to have a national and international marketing presence not likely available to them otherwise.

***Political impacts** refer, not surprisingly, to the political costs and benefits that flow from a sports facility. Because sports facilities are high profile projects, they offer opportunities for politicians to rally a community around redevelopment efforts, in the process catapulting a leader to higher political office. For example, William Donald Schaeffer's efforts to redevelop downtown Baltimore, including support for plans for two new downtown stadiums, played a role in his ascendancy to the state's governorship.*

> ***Development impacts*** *refer to physical redevelopment in the area immediately surrounding and in the district encompassing a new sports facility. Proponents have argued that sports facilities can potentially catalyze new development within the surrounding area because of large investments in the district and the volume of activity generated by events at a new facility. Crompton (2001) characterized these development impacts as one of two types: complimentary development and proximate development. Complimentary development refers to new or reused buildings that specifically take advantage of the crowds generated by events. Proximate development refers to development that occurs because of a more general upturn in the fortunes of the district or to take advantage of new infrastructure provided for the new stadium or arena. Some evidence indicates that development impacts are a potential benefit of investment in a new sports facility. Danielson (1997) cited several cities (St. Louis, Atlanta, New Orleans) where areas around new facilities experienced new development, both complementary and proximate.*

Furthermore, the key factor of Chapin's argument that most proponents of public financing of major sports arenas emphasize is the argument that the building of a major sports arena and the subsequent attraction of a major league franchise will enhance the community's image as a major player in the tourism industry. Smith and Judd (1982) made the argument that "the urban growth consequent on infrastructure development creates benefits which trickle down from the corporations, property developers, sports teams, and stadium operators who are the initial beneficiaries to the wider community - largely in the form of employment growth."

The attraction of a major league franchise can:

1. generate national exposure for the destination through media coverage
2. generate increased visitor attendance which would necessitate improved infrastructure
3. boost hotel, restaurant, merchandising, and entertainment patronage from visitors as well as community members
4. revitalize downtown areas through construction of hotels, restaurants, and other businesses
5. attract businesses to relocate to the community thereby creating jobs

The aforementioned benefits are just some of the benefits that the attraction of major league franchise can have on a destination. A few examples of these benefits and how these franchises can transform a destination into a tourism hotspot can be found in the following case studies.

Denver, CO (Reich, 2001)

> Less than a decade ago, Denver had only two professional sports venues. Today, after aggressive lobbying by local government officials and significant public support, the Mile High City is home to three new sports facilities and three championship contenders. In short, the introduction of major professional sports into Denver, and the construction of three new, state-of-the-art sports facilities, has vaulted Denver from a sleepy mountain community to one of the nation's leading hotspots.
>
> Denver, Colorado is the smallest metropolitan area (ranked 19th with a population 2,365,345) in the U.S. to have one team in each major professional sport (baseball, basketball, football and hockey). In 1997, Sporting News declared Denver to be the #1 Sports City in America, both for its great fan support and for its abundance of recreational opportunities.

In the following examples, the cities examined how the construction of a major league facility would fit into their current revitalization plans. This approach is different that many other cities that build their revitalization efforts around the major league facility, thereby making it the centerpiece of the effort.

Los Angeles, CA (Faia)

A couple of years ago ground was broken on L.A. Live!, a 3.8 million-square foot retail and entertainment district surrounding the Staples Center. Although the arena provides a critical anchor, the district also boasts long-hour uses, including a hotel, offices, restaurants and a jazz club. Since the plan was accepted, numerous residential projects have been planned for adjacent and nearby parcels in downtown Los Angeles.

Baltimore, MD (Faia)

Baltimore, perhaps the most recognizable in terms of its early success in integrating Oriole Park and Ravens Stadium into the city's core, proved that sports development could be constructed on city blocks, on a waterfront, and in the midst of historic buildings—in Baltimore's case, all critical components of the city's character and identity. Both Baltimore stadiums were built with views from their seats of the surrounding city. Old warehouses were redeveloped to contain retail and office space, and a linear plaza next to Oriole Park was planned to create a vibrant pedestrian friendly public space with logical links to the dynamic Inner Harbor, nearby museums, retail and restaurants, and hotels and the convention center. Other cities have followed suit, using Baltimore as the original model for their own facilities, with sites and design that express the best the city has to offer.

In the cases of Denver, Los Angeles, and Baltimore as well as others such as Philadelphia, Pittsburgh, and Cleveland, the overall impact that the construction of a major sporting venue can have on the revitalization of a destination cannot be understated. As stated earlier, the construction of a major sporting venue can immediately thrust the city into the category of a major tourist destination. The key for destination planners is the integration of the major sporting venue into the overall destinations marketing plan. Each one of the cities that host a major league sports team boasts that they have such a team in their marketing campaigns. These marketing plans are all done in an effort to attract visitors to the destination.

There are also negative social impacts that the attraction of a major league franchise can have on a destination. Public funding of new facilities in some cases can be better utilized in other areas. Recently, there was much cause for disapproval for the construction of a new baseball stadium for the recently relocated Washington Nationals. Opponents of the construction argued that the $339 million of public subsidy can better be utilized to improve the hospitals as well as the education system both of which annually ranks close to the bottom nationally. They also argued that the money could better be spent to decrease crime rates, which consistently ranks towards the top nationally. Destinations also must recognize that once they have approved to publicly fund a major sporting venue and it has been built, that there is no turning back. The image of a quaint, small, quiet town will be lost. Improved and increased infrastructures are sure to be part of any facility construction plans. Increased visitor usage, population growth, traffic, and congestion can all result in the attraction of a major league franchise. If the franchise, after the lease ends, decides to relocate because of a better offer from another location, the destination is stuck with a major sporting facility and the costs of it.

2.12 Summary

The concept of distance decay, in terms of perceived distance, was the independent variable that the investigator hypothesized has the most impact on consumer behavior. Few studies have examined the influence of distance decay on home game attendance, season ticket sales, and viability of professional sport teams. The research focusing on distance decay affecting attendance on road games is even more limited. While conducting the review of sport literature, the investigator was unable to find any publications discussing fans attendance at road games. Due to the lack of studies in this area of research, the investigator determined that incorporating research from the four main areas (fan attendance, team affiliation, distance decay, and destination image) would provide a more valid explanation of fans travel to road games. Specifically, the research examined the factors influencing hockey fans decision to travel to road games.

While there are many studies that examine consumer decision making in sports, there are few studies that specifically address the issue of fan attendance and even less research dedicated to exploring fan attendance at road games. Distance decay and tourist behavior (Clawson and Knetsch, 1966; Ankomah, 1995; and McKercher and Lew, 2003) factors affecting fan attendance to college basketball and football home games (Hill and Green, 2000; and Shackelford and Greenwell, 2005) and destination image (Gallarza, Saura, and Garcia, 2002; Andsager and Drzewiecka, 2002; and Beerli and Martin, 2004) have been researched. This study will combine the four areas to determine the role each play in the consumer decision-making process of whether or not to travel to a road game of their favorite professional hockey team. This study expanded on these areas of research by investigating professional hockey fans and travel to road games, both of which, little attention has been given. As the National Hockey League recently underwent a strike year in which an entire season was cancelled because of labor disputes as well as the league's position in identification remaining low (behind the national basketball association, major league baseball, and national football league), the importance of nurturing and growing the current fan-base is vital to the league's success. In particular, as the league has expanded to new markets in the south that traditionally have not been known as hockey towns, it becomes imperative that the teams in the new markets focus on fan development. In the tourism industry, visitors' bureaus work endlessly to market their destinations and increase tourism, thereby generating greater revenue for their area. The results of this study will be beneficial to the hockey teams, tourism destinations, and fans. From the perspective of the hockey team, this research could be beneficial in creating new streams of revenue. By providing packages for various destinations that the team will be visiting, the team can generate additional revenue. The team also can use such a program to nurture their relationship with existing fans that may have a strong identification with the team. They can also use such a program to develop and strengthen team identification with other fans. Strengthening their relationship with the booster club as well as building new relationships opens the door for additional revenue. As fans feel as though they are a part of the team, they may be more likely to purchase products and services associated with the team. The destination can benefit from this type of research as destination management organizations will have identified potential consumers of their area and can efficiently market their destination. Identifying these potential consumers would assist the destination in effectively developing packages (including restaurant, accommodations, and entertainment). The fans will benefit as it gives them another opportunity to explore other destinations as well as see their favorite team play with fellow fans at possibly lesser costs. They also can develop stronger relationships with the team, which can lead to an even stronger team identity.

3. Methodology

3.1 Introduction

The investigator studied the aforementioned hypotheses by examining the behavior of Carolina Hurricanes fans. The study of Carolina Hurricanes fans began in April of 2006. Individual fans of professional hockey were the unit of analysis for the research. The questionnaire that was used was divided into three major parts, each measuring a different variable that the investigator previously identified. The variables were as follows: team identification, destination image, and distance decay. A fourth part of the questionnaire measured team success. This part of the questionnaire was used to determine professional hockey fans' perception of the term team success. Information gathered from this part of the questionnaire will be used in future research to measure team success. The responses were collected and analyzed to develop an understanding of the relationship between professional hockey fans travel behavior and the independent variables: team identification, destination image, and distance decay. This chapter describes the hypotheses, sampling, questionnaire, and the analysis of the data.

3.2 Sampling Procedures

Initially, the investigator attempted to examine the behavior of booster club members of the five teams located in the Southeast division of the National Hockey League. The five teams that were identified were as follows: Atlanta Thrashers, Carolina

Hurricanes, Florida Panthers, Tampa Bay Lightning, and Washington Capitals. The investigator conducted a pre-test survey of booster club members of the Carolina Hurricanes in April of 2006. The Carolina Hurricanes' booster club was chosen because they presented the greatest opportunity for the investigator to conduct a pre-test survey while obtaining other vital information through personal interviews. Information gathered during the pre-test survey, personal interviews, and literature review were used in creating the questionnaire that would eventually be distributed to all five-booster clubs in the division via a web-based survey. There was a lack of response from four of the five booster clubs, which led to a refocusing of the research by the investigator. The unit of analysis for the research was shifted from booster clubs to individual fans of the Carolina Hurricanes. A second pre-test survey was conducted in January of 2007. The pre-test survey was distributed to hockey fans at one of the local sports bars that supported the Carolina Hurricanes. The information gathered from the second pre-test survey was used to guide the development of the final questionnaire that was distributed for data collection for this research.

3.2.1 Study Location

The distribution of the survey instrument took place at the RBC Center located in Raleigh, NC. The RBC Center is the arena in which the Carolina Hurricanes of the National Hockey League play their home games. The RBC Center was chosen because of convenience of data collection from fans of professional hockey. The investigator was located in Raleigh, NC and the RBC Center was the closest venue for professional hockey for data collection. Another reason for the decision to conduct sampling at the RBC Center is the relationship that the investigator developed with the RBC Center and Carolina Hurricanes staff. This relationship led to the willingness by the RBC Center staff and Carolina Hurricanes staff to allow the investigator to conduct sampling at the venue.

After discussion with team personnel from the fan promotions and marketing departments, five locations within the RBC Center were deemed most appropriate to conduct sampling of fans. A major proportion of the fans that attend events at the RBC Center enter the building at the two main ticket window entrances. There are also two secondary entrances located at the north and south entrances of the arena. While the number of fans who enter through these two entrances is not as great as the main entrances, there are still large amounts of fans that enter through these entrances. In order to collect data from season ticket holders a fifth location was identified as appropriate for sampling. Within the main concourse there is a booth dedicated to season ticket holders. Season ticket holders tend to stop by the season ticket booth to converse with their ticket representative. Therefore, in order to obtain the best possible sample of the different types of fans who attend professional hockey games surveyors were strategically placed as follows: two individuals located at the two main entrances, one individual located at the north entrance, one individual located at the south entrance, and one individual located at the season ticket holder booth.

3.2.2 Acquisition of Samples

Data for this study were acquired by convenience sampling over a two-day period. Therefore, the data obtained may be biased and may not be representative of all professional hockey fans. Even though the research was conducted using a convenience sample the results will provide valuable information about fan behavior, especially the behavior of fans attendance at home games and fan support for their team while the team is away playing road games. The investigator determined that in order to obtain the best possible sampling of the population of hockey fans there was a need to conduct sampling during a weekday game and a weekend game. The reasoning for this determination is to reduce any bias that may be associated with fans that attend a weekday game as opposed to those who attend a weekend game. The investigator believed that there may be some differences in the demographics of the two groups therefore it was necessary to sample at both types of occasions. Although, the research is focused on road game attendance, the investigator decided that the best possible way to survey fans of the Carolina Hurricanes would be to distribute the surveys at the home games for the Carolina Hurricanes. In professional sports there is a great degree of difficulty identifying fans of visiting teams unlike college sports where those fans are seated in the same sections. After discussion with personnel from the Carolina Hurricanes, the investigator was given two specific dates in which the team would allow sampling to occur. Two dates were deemed sufficient for this research since fans tend to attend more than one game and hockey fans tend to be similar in behavior. The two dates that were chosen were: Saturday, February 3rd versus the Boston Bruins and Thursday, February 15th versus the New York Rangers.

A total of 1500 surveys were distributed between the two sampling dates. Surveyors were able to only distribute 600 surveys during the 1st day of sampling in which the total attendance for the game was 18,665. On the 2nd day of sampling, surveyors distributed 900 surveys in which the total attendance was 17,255. Table 3.1 illustrates the percentage of surveys distributed, collected, and attendance figures.

Table 3.1 Survey Distribution of Professional Hockey Fans at the RBC Center.

Date	Day	Attendance	Distributed	Returned	Response rate
Feb. 3	Saturday	18,665	600	357	59.5 %
Feb 15	Thursday	17,255	900	467	51.9%
TOTAL		**35,920**	**1,500**	**824**	**54.9%**

Prior to sampling, the investigator attended two Carolina Hurricanes home games to determine the most appropriate techniques for distribution of surveys. Based on observation and conversation with team personnel, the investigator determined that party sizes of fans that attend the games were 3-4 people. Therefore, surveyors were instructed to distribute surveys to every third person in line or entering the arena. The investigator also determined that 40% of fans attending games arrive at the entrances 1 hour before the game starts, while 60% of fans attending games arrive at the entrances ½ hour or less prior to the start of the game. Realizing that there may be differences in demographics between those who arrive 1 hour before as opposed to those who arrive later, surveyors distributed 40% of surveys to those who arrived 1 hour prior to game time and 60% to those who arrived ½ hour or less prior to game time. The investigator also determined that 75% of those fans that attended games entered through the two main entrances; therefore surveyors distributed 75% of surveys to those fans that entered through the two main entrances. Table 3.2 shows the number of surveys that were distributed at each location during each day of surveying.

Table 3.2 Sampling of Professional Hockey Fans by Location at the RBC Center.

	Number of Surveys Distributed	
Location / Time	***February 3***	***February 15***
Main Entrance #1 (1 hr prior to game)	90	135
Main Entrance #1 (<1/2 hr prior to game)	135	202
Main Entrance #2 (1 hr prior to game)	90	135
Main Entrance #2 (<1/2 hr prior to game)	135	202
North Entrance (1 hr prior to game)	20	30
North Entrance (<1/2 hr prior to game)	30	45
South Entrance (1 hr prior to game)	20	30
South Entrance (<1/2 hr prior to game)	30	45
Season Ticket Booth (1 hr prior to game)	20	30
Season Ticket Booth (<1/2 hr prior to game)	30	46
TOTAL	**600**	**900**

After sampling was completed on February 3, the investigator re-evaluated the sampling technique to improve distribution of surveys. The main area of concern was the lack of willingness to complete surveys by those individuals near the season ticket booth. The surveyor located near the season ticket booth stood on the restroom side of the booth. On the second day of sampling, the surveyor was moved to the team shop side of the season ticket booth. Fans' willingness to complete surveys increased because of the relocation. Another adjustment that was made in sampling occurred at the four entrances. During the first day of sampling surveyors were instructed to begin distributing surveys as fans entered the arena. The investigator learned through observation that a large number of fans waited in long lines prior to the opening of the doors. Therefore, on the second day of sampling, surveyors were instructed to begin distribution of surveys ten minutes prior to the opening of doors. This led to an increased number of fans that were willing to complete surveys as they waited in line.

During the surveying of fans, the investigator made some visual observations. Based on observation, the investigator determined the following characteristics of respondents:

1. Party sizes of fans that attend weekend games tend to be larger than party sizes of fans that attend weekday games.
2. More families tend to attend games on the weekends as compared to games on weekdays.
3. There were not any differences in age, ethnicity, and gender of fans for both days and both times of surveying on each day.

3.3 Variables

There were three independent variables associated with this study. The first independent variable was team identification. This variable measures the degree to which each fan identifies himself/herself as a fan of their favorite team. The second independent variable was the image of the destination. This takes into account the perception that the fan has on the destination in which the road games takes place. The third independent variable was the distance between the home arena of the fan's favorite team to the arena of the opposing team. Aspects of this variable that the author took into consideration during the development of the survey instrument were: time and cost as it relates to perceived distance.

The dependent variable of travel behavior was defined as the actions of fans including: number of regular season home and road games attending (with road games defined as games played by the parent team that are not located in the home arena) and (with home games defined as games played by the parent team that are located in the home arena).

3.4 Research Questions and Hypotheses

There were three purposes for this study. First, the research examined the strength of influence that each of the independent variables have on fans attendance at road games. Secondly, the investigator attempted to develop a model that sport and tourism professionals can utilize in determining target markets for destination management organizations as well as determining potential increased fan support and revenue streams for individual teams. The final purpose of this research is to expand on the literature of a relatively new area of study in sport tourism. Specifically, the study expands on the current knowledge of the even more limited area of research dedicated to sports fans travel to see their favorite teams play at distant venues. There were three research questions investigated in this study:

1. Does the strength of team identification play a role in the decision to travel to watch their team compete.

2. Is there a relationship between perceived destination image and travel to the destination to watch the favorite team compete?

3. What is the relationship between perceived travel distance and attendance at road games?

There were ten hypotheses associated with the three aforementioned research questions. The following hypotheses were explored in this study:

Hypotheses specific to research questions:

H_1: The stronger a fan identifies themselves as a fan of the team; the more likely they will travel to a road game.

H_0: The strength of identification that a fan has with a team is not related to their travel to a road game.

H_2: There is a relationship between destination image and travel to road games.

H_0: There is no relationship between destination image and travel to road games.

H_3: The greater the number of hours fans are willing to travel to watch their favorite team compete on the road, the greater the number of road games they are willing to attend.

H_0: The greater the number of hours fans are willing to travel to watch their favorite team compete on the road has no effect on the number of road games they are willing to attend.

H_4: There is a relationship between length of trip fans are willing to take to watch their favorite team compete and number of road games the fans will attend.

H_0: There is no relationship between length of trip fans are willing to take to watch their favorite team compete and number of road games the fans will attend.

H_5: Fans who show a stronger emphasis on destination image are more likely to take longer (in terms of days) trips to watch their team play.

H_0: Fans who show a stronger emphasis on destination image are not more likely to take longer (in terms of days) trips to watch their team play.

Related Hypotheses

H_6: There is a relationship between mode of transportation and amount of time fans are willing to travel to watch their favorite team compete.

H_0: There is no relationship between mode of transportation and amount of time fans are willing to travel to watch their favorite team compete.

H_7: The greater the number of home games attending the greater the number of road games the fan will attend.

H_0: The number of home games attending has no relation to the number of road games the fan will attend.

H_8: There are differences between the relationships of the independent variables and travel to road games based on weekend games attendees versus weekday games attendees.

H_0: There are no differences between the relationships of the independent variables and travel to road games based on weekend games attendees versus weekday games attendees.

H_9: There are differences between the relationships of the independent variables and travel to road games based on the type of ticket purchased.

H_0: There are no differences between the relationships of the independent variables and travel to road games based on the type of ticket purchased.

H_{10}: There is a relationship between the number of home games fans attend and the distance fans reside from the arena in which their favorite team competes.

H_0: There is no relationship between the number of home games fans attend and distance fans reside from the arena in which their favorite team competes.

3.5 Questionnaire Design and Distribution

A questionnaire was developed based on previous research that was identified by the literature review. The questionnaire was divided into three major areas, each of which measured a specific independent variable: team identification, destination image, and distance decay. The 22-question survey examined the relationship between the three independent variables (team identification, destination image, distance decay) to the dependent variable (travel behavior). The survey included both open ended and closed ended questions. The questions measuring the variables team identification and destination were in the form of indexes with 8-point Likert scale questions. The numbers 1 through 8 represent the degree to which a respondent exhibited the behavior proposed in the question. A 1 represented the least disagreement and an 8 represented the most agreement with the statement.

The Spectator Sport Team Identification developed by Daniel Wann (1993) was incorporated into the questionnaire in order to gather pertinent information on team identification. Wann's Spectator Sport Team Identification measures numerous components of the strength of fandom that individual fans have towards a given team.

The second part of the questionnaire measured the strength of destination image on professional hockey fans' decision to travel. Through the literature review the investigator identified twelve dimensions of perceived destination image as developed by Beerli and Martin (2004). These twelve dimensions (natural resources; general infrastructure; tourist infrastructure; tourist, leisure and recreation; culture, history and art; political and economic factors; natural environment; social environment; and atmosphere of place) drew upon attributes and attractions identified by researchers in the area of destination image. Under each of the twelve dimensions are lists of attributes that the literature identified as important factors in determining destination image. Based on the literature review on destination image and personal interviews with the Carolina Hurricanes booster club members and fans, the investigator incorporated into the questionnaire the attributes deemed pertinent to this study.

The third part of the questionnaire measured the impact of distance decay on fans' decision to travel. Drawing upon the literature in geography, specifically distance decay, and consumer behavior, the investigator measured the perception of distance. The factors that were identified as contributing to the perception of distance are: perception of time to travel, perception of cost in term of dollars, and perception of distance in terms of mileage. Realizing that fans, depending on distance, may travel utilizing different modes of transportation to watch their team compete, the investigator asked respondents about their preferred mode of transportation. Understanding the usage of different modes of transportation to different sites may give the investigator an understanding of the role of transportation mode in relation to distance as it affects professional hockey fans' decision making.

After conducting a thorough review of the literature and interview of leading scholars in the area of sport, the investigator concluded that there was no instrument that has been developed that measures team success from the point of view of the fan. Discussion on the topic of team success led the investigator to the belief that there may not be a valid and reliable measure of team success as success can be defined differently for different teams. In the future, the author plans to conduct research specifically on team success from the point of view of the fan. The outcome of the team success research could be the development of a team success instrument. Therefore, while the investigator has the attention of the respondents, the investigator asked a couple of questions to determine the different ways that fans measure team success.

Tables 3.3 and 3.4 illustrate the variables identified in this survey as well as the questions that measure each variable and the level of measurement for each one.

Table 3.3 Independent Variables Used in This Study

Variable	Measure	Level of Measurement
Team Identification	Index Developed from 6 Likert Scale Questions #3-8.	Interval
Destination Image	Index Developed from 13 Likert Scale Questions #9A - #9M.	Interval
Distance Decay	Question #10 & #11	Nominal
	#12 (4 categories);	Categorical
	#13	Nominal
	#14 (3 categories)	Categorical
	#15 (6 categories)	Categorical
Team Success	Question #16	Nominal
	#17 (2 categories)	Categorical

Table 3.4 Dependent Variables Used in This Study

Variable	Measure	Level of Measurement
Travel	Question #11	Nominal
	#15 (6 categories)	Categorical

3.6 Validity

When conducting research, one of the main concepts that researchers address is the validity of the study. Validity refers to the degree to which a study accurately assesses the specific concept that the researcher is attempting to measure. "The most common definition of validity is epitomized by the question: Are we measuring what we think we are measuring? The emphasis in the question is on what is being measured" (Kerlinger and Lee, 2000). Two types of validity that researchers commonly use in their research are content and face validity.

3.6.1 Content Validity

Content validity is the representativeness or sampling adequacy of the content – the substance, the matter, and the topic – of a measuring instrument (Kerlinger and Lee, 2000). Content validity for this study was addressed in different ways. To ensure that the study accurately measured team identification, the investigator conducted a thorough review of the literature on team identification. Experts in the field of sport and team identification, overwhelmingly suggest that Wann's Spectator Sport Team Identification instrument is the best measure of team identification. The review of literature suggested that all measures of destination image could be categorized into twelve dimensions (Beerli and Martin, 2004). After consulting with experts in the area of tourism, the investigator determined the specific measures of destination image that are most appropriate for this study. The content validity associated with distance decay was addressed in conversation with experts in the fields of sport and tourism. Additionally, the review of literature on the concept of distance decay identified the specific measures of distance decay as agreed upon by experts in the field of geography such as Cook and McCleary, 1983. Finally, two pre-test surveys as well as conversation with various levels of fandom of the Carolina Hurricanes was conducted to determine the appropriate measures of their travel behavior.

3.6.2 Face Validity

“Face validity is concerned with how a measure or procedure appears. Does it seem like a reasonable way to gain the information the researchers are attempting to obtain? Does it seem well designed? Does it seem as though it will work reliably?” (Fink, 1995). The investigator addressed the face validity of the research by conducting a pre-test survey of graduate students at North Carolina State University. The graduate students were asked if they understood each of the questions and their meaning. The investigator also asked each of the graduate students whether they believed the survey adequately measured each variable. The investigator further addressed face validity by conducting a pre-test survey of a group of Carolina Hurricanes booster club members. The same questions were asked of these individuals as those asked to the graduate students. Once the population of study shifted from booster club to all fans of the Carolina Hurricanes an additional pre-test survey was conducted to improve the face validity. This pre-test was conducted at one of the local sports bars that supported the Carolina Hurricanes, as this group was a better representation of the population of study.

3.7 Reliability

Reliability is the extent to which an experiment, test, or any measuring procedure yields the same result on repeated trials (Fink, 1995). One measure of reliability is internal consistency, which determines how consistent the questions on a survey are in measuring the characteristics, attitudes, or qualities that they are supposed to measure. According to Fink (2006), using internal consistency as a measure of reliability is effective when the researcher is using several items to measure one attitude of characteristic. Therefore, the measuring of the internal consistency of the scales for team identification and destination image was deemed useful. Cronbach's Alpha estimate was utilized to measure the internal consistency of the team identification and destination image scales. The team identification scale variables produced an alpha of .79. The investigator conducted a second reliability analysis on the team identification scale. In the second analysis, the investigator tested the reliability of the scale based on cases (weekend vs. weekday attendees). The reliability scores were .8285 and .7671. The destination image scale variables produced an alpha of .93. The investigator conducted a second reliability analysis on the destination image scale. In the second analysis, the investigator tested the reliability of the scale based on cases (weekend vs. weekday attendees). The reliability scores were .9366 and .9284. Based on these estimates, the scales that were used in the study showed an acceptable level of reliability.

3.8 Review of Analysis

The analysis of the data began with producing descriptive statistics for the entire data, which can be found in Appendix B. Based on the descriptive statistics, the investigator determined that some adjustments were required when conducting further analyses of the data. Utilizing linear regression through the SPSS program, the investigator examined the relationship between the independent variables (team identification, destination image, and distance) and the dependent variable (travel behavior. Two items were identified as representation of travel behavior. The two items were number of road games attended and length of trip fans would take to watch their favorite team compete. Additive indices were created for the independent variables: team identification and destination image. These additive indices were used in the analyses of the relationship between these two independent variables and travel behavior. In Wann's research on team identification an additive index of team identification was used, therefore the investigator determined that using an additive index of team identification would be most appropriate. An additive index of destination image was used because the destination image index was new and was a more conservative approach. The mean scores that were produced for the 13 items in the destination index indicated that cost of accommodations and safety of the destination city might be stronger indicators of destination image. Therefore, the investigator decided to weight items cost of accommodations and safety of the destination city in all regression analyses including destination image. The items were weighted by SPSS. Weighting of the items gives the items different weights (by simulated replication) for statistical analysis. In SPSS, the values of the weighted variable indicate the number of observations represented by single responses in the dataset. SPSS excludes missing values for the weighted variables. The mean scores and histograms that were produced during descriptive analyses for the distance variable indicated that adjustments needed to be made in analyses of the relationship between distance and travel behavior. Specifically, the investigator determined that responses to distance in mileage from the Carolina Hurricanes home arena needed to be weighted as the histogram for this item showed a majority of the fans resided in close proximity of the arena. The investigator also decided to examine all of the previously discussed relationships based on cases. Therefore, the investigator re-analyzed all of the relationships based on groups (weekend vs. weekday games attendees; type of ticket purchaser). The final section of the analysis examined the aforementioned relationships based on demographics (gender, level of education, household income, and household representation). Furthermore, statistics that require random sampling were applied because this study was a first time investigation of the relationships of the variables investigated.

3.10 Limitations

There are certain limitations associated with this study. The sample size of the study was predominantly fans of the Carolina Hurricanes therefore the investigator was unable to generalize the findings to all fans of professional hockey or sport fans.

There may be differences in the population of sports fans in differing sports as well as differing geographic locations. For example, the New York Rangers may be able to draw fans from a greater distance to home games due to the transportation system than the Carolina Hurricanes because of the nature of their surroundings. The utilization of public transportation from greater distances may be more prominent in a large metropolitan city such as New York as opposed to a smaller city such as Raleigh. The ability to draw fans from a greater distance may lead to a greater number of fans traveling to road games as team affiliation may be strengthened.

A second limitation in generalizing the findings to a greater population is the fact that the Carolina Hurricanes are playing in a season following winning the Stanley Cup. The success of the team in the prior season may lead to an increased fan base as well as an increase in team identity among fans.

A third limitation in generalizing the findings to a greater population is the length of time the team has been in existence. The Carolina Hurricanes moved to North Carolina in 1996, therefore they do not have the history of a team in a hockey town such as the Detroit Red Wings. Detroit Red Wings fans may be more loyal to their team and have strong team identification as opposed to a team in a relatively new market such as the Carolina Hurricanes.

A fourth limitation of the findings is a result of the data collection. Fans who are consumers of alcoholic beverages may be underrepresented in this study. The surveys were distributed at points of entrance, which meant that fans that were consumers of alcoholic beverages could not be identified.

A fifth limitation of the findings may also result from the data collection. The location of the return box for the surveys was located on the west side of the concourse. While fans had the opportunity to return their surveys to the surveyor that handed them the survey, fans also had the option to return the survey at a specific location. Fans who were seated on the east side of the concourse may be underrepresented because of the distance they need to travel from their seat to the return box.

A final limitation of the findings is associated with the destination image index. An additive scale was used to measuring destination image. While it can be argued that factor analysis would be more appropriate to identify the factors underlying the index, the more conservative approach of using an additive scale was preferred because this was a first time investigation of these destination image variables. Further research should include a factor analysis of the destination image variables included in the scale.

4. Results

4.1 Introduction

This chapter describes the results of the data analysis. First, the investigator discussed the analysis of the relationship between independent variables (team identification, destination image, and distance) to the dependant variable (travel behavior). Second, the investigator discussed whether or not there were any differences between respondents that completed surveys during a weekday game versus those completed surveys during a weekend game. Next the investigator discussed the differences between respondents who were classified as season ticket holders, mini-plan purchasers, and game day attendees. The final section of this chapter discussed the demographics of respondents. The descriptive results for each question of the survey can be found in Appendix B.

4.2 Independent Variables

There were three independent variables that were examined for this study. The independent variables were team identification, destination image, and distance. The following is a review of the analysis for each of the independent variables.

4.2.1 Team Identification Variable

The investigator determined that team identification might be an important variable in fans travel behavior. Wann (1997) developed a Team Identification Survey, which has been utilized by various researchers to examine fans' team identification. The Team Identification Survey was utilized in this study. Responses to the six-question index ranged on a scale from a minimum response of 1 to a maximum response of 8. The means for the six items ranged from 5.73 to 7.17 (see table 4.1).

Table 4.1 Items included in team identification index

	Mean	**Std. Deviation**	**Range**	**Min**	**Max**
1. How important to YOU is it that YOUR team wins	6.87	1.35	7	1	8
2. How strongly do your FRIENDS see YOU as a fan of YOUR favorite team	7.07	1.33	7	1	8
3. During the season, how closely do you follow YOUR favorite team via ANY of the following: a) in person or on television, b) on the radio, c) television news or a newspaper, and/or d) the Internet	7.17	1.31	7	1	8
4. How important to YOU is being a fan of YOUR favorite team	7.06	1.29	7	1	8
5. How much do you dislike the greatest rivals of YOUR favorite team	5.73	2.03	7	1	8
6. How often do YOU display the team's name or insignia at your place of work, where you live, and/or on your clothing	6.44	1.88	7	1	8

Responses to the six questions were used to create an additive index, which ranged from 6 to 48. The mean score for the 824 responses for the team identification index was 40.3 (see figure 4.1).

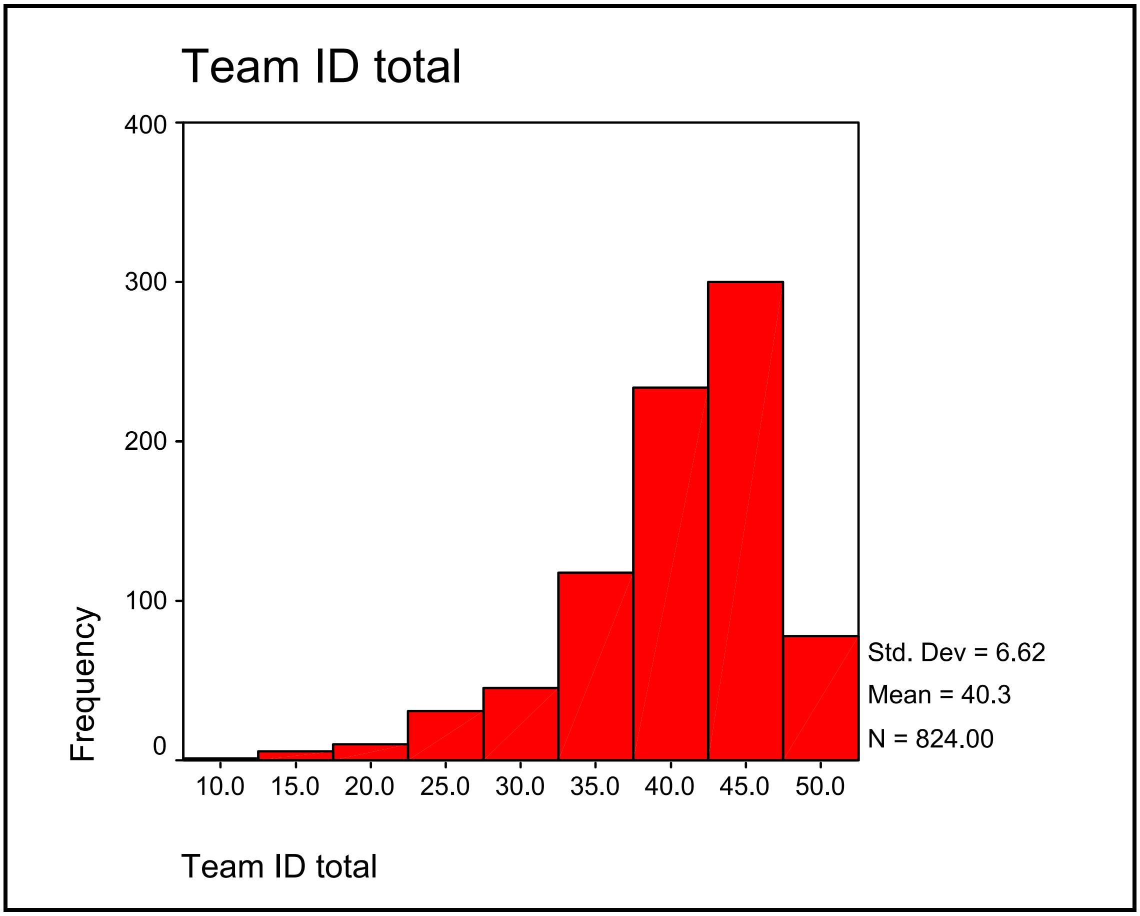

Figure 4.1 Team Identification Index
(Frequency of responses by professional hockey fans)

Index scores for respondents were classified into three categories as discussed in section 2.6 of chapter 2. Scores ranging from 6 to 19.99 were classified as lowly identified. Scores ranging from 20 to 33.99 were classified as moderately identified. Scores ranging from 34 to 48 were classified as highly identified. As shown in Table

4.2, 1.2% of fans were classified as lowly identified, 12.4% of fans were classified as moderately identified, and 86.6% of fans were classified as highly identified.

Table 4.2 Team Identification Index
(Frequency of responses by professional hockey fans)

		Frequency	Percent	Valid Percent	Cumulative Percent
Lowly Identified Fans	8	1	.1	.1	.1
	13	3	.4	.4	.5
	15	3	.4	.4	.8
	18	1	.1	.1	1.0
	19	2	.2	.2	1.2
	20	2	.2	.2	1.5
Moderately Identified Fans	21	4	.5	.5	1.9
	22	2	.2	.2	2.2
	23	4	.5	.5	2.7
	24	8	1.0	1.0	3.6
	25	8	1.0	1.0	4.6
	26	4	.5	.5	5.1
	27	7	.8	.8	5.9
	28	3	.4	.4	6.3
	29	13	1.6	1.6	7.9
	30	10	1.2	1.2	9.1
	31	9	1.1	1.1	10.2
	32	10	1.2	1.2	11.4
	33	18	2.2	2.2	13.6
	34	22	2.7	2.7	16.3
Highly Identified Fans	35	29	3.5	3.5	19.8
	36	17	2.1	2.1	21.8
	37	32	3.9	3.9	25.7
	38	26	3.2	3.2	28.9
	39	35	4.2	4.2	33.1
	40	52	6.3	6.3	39.4
	41	62	7.5	7.5	47.0
	42	59	7.2	7.2	54.1
	43	68	8.3	8.3	62.4
	44	74	9.0	9.0	71.4
	45	75	9.1	9.1	80.5
	46	51	6.2	6.2	86.7
	47	32	3.9	3.9	90.5
	48	78	9.5	9.5	100.0
	Total	824	100.0	100.0	

Utilizing linear regression, the investigator analyzed the relationship between the team identification scale and the number of road games that fans were planning on attending for the 2006-07 season. The number of road games attending was assumed to be an indicator of travel behavior. While individually the items included in the team identification index did not show a significant relationship to the number of road games respondents were planning on attending there seemed to be some relationship between the number of road games respondents were planning on attending and how often the individual displayed their favorite team's insignia or logo as evident by a significance level of .175 (see table 4.3). When the relationship between the additive team identification index and number of road games was analyzed the results of the analysis produced a significance value of .005, which indicated that team identification was a predictor for number of road games attending (see table 4.4).

Table 4.3 Relationship between team identification (individual items) and the reported number of road games professional hockey fans planned on attending.

		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
Model		B	Std. Error	Beta		
1	(Constant)	-.377	.947		-.398	.691
	Importance of team winning to you	-7.554E-02	.117	-.026	-.644	.520
	How strongly friends see you as a fan	.133	.151	.046	.877	.381
	How closely do You follow the team	-8.757E-02	.151	-.030	-.582	.561
	Importance of being a fan	.170	.166	.056	1.021	.308
	Dislike of rivals	1.088E-02	.072	.006	.151	.880
	How often do you display team name or insignia	.127	.094	.063	1.356	.175

a Dependent Variable: Number of road games attending

Table 4.4 Relationship between team identification index and the reported number of road games professional hockey fans planned on attending.

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	111.926	1	111.926	7.798	.005
	Residual	11252.206	784	14.352		
	Total	11364.132	785			

a Predictors: (Constant), Team ID total
b Dependent Variable: Number of road games attending

4.2.2 Destination Image Variable

A review of the principal scales used to measure destination image was conducted through the literature review. Based on previous research (Baloglu and McCleary 1999; Calantone, Di Benetton, Hakam and Bojanic 1989; Chon, Weaver and Kim 1991; Echtner and Ritchie 1993; Fakeye and Crompton 1991; Gartner 1989; Gartner and Hunt 1987; Gartner and Shen 1992; Goodrich 1978; Hu and Ritchie 1993; Hunt 1975; Phelps 1986; Walmsley and Jenkins 1993) the investigator identified 13 items that were common characteristics of destination image. These 13 characteristics were used to create a destination image index (see table 4.5) in this study.

Table 4.5 Descriptive Statistics of items included in destination image index for professional hockey fans.

	Mean	Std. Deviation	Range	Min	Max
1. Opponent's Record	3.44	2.41	7	1	8
2. Star players on opposing team	4.02	2.35	7	1	8
3. Weather	4.00	2.44	7	1	8
4. Cleanliness of the city	4.12	2.38	7	1	8
5. Entertainment	4.35	2.31	7	1	8
6. Shopping	3.52	2.66	7	1	8
7. Cultural appeal	3.95	2.30	7	1	8
8. Friendliness / Hospitality	5.17	2.33	7	1	8
9. Proximity of accommodations to venue	5.29	2.34	7	1	8

Table 4.5 Continued

	Mean	**Std. Deviation**	**Range**	**Min**	**Max**
10. Cost of accommodations	5.43	2.27	7	1	8
11. Safety	5.90	2.31	7	1	8
12. Family oriented	4.85	2.50	7	1	8
13. Things to do and see	5.04	2.32	7	1	8

Responses to the 13-question index ranged on a scale from a minimum response of 1 to a maximum response of 8. Responses to the 13 questions were used to create an additive index, which ranged from 13 to 104. The mean score for the responses was 58.5 (see figure 4.2).

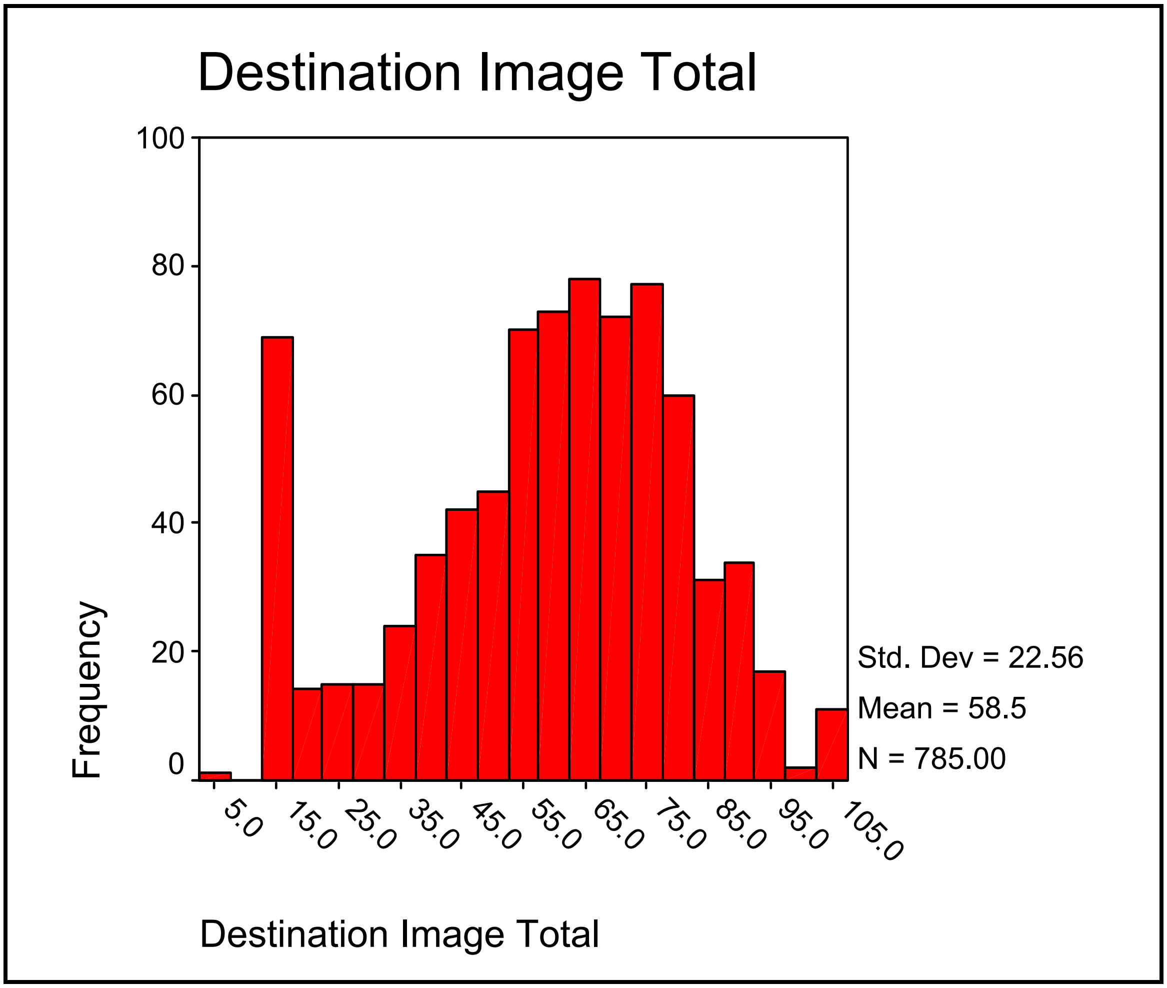

Figure 4.2 Destination Image Index
(frequency of responses by professional hockey fans)

Further examination of the destination image index, led the investigator to conclude that items 10 and 11 (cost of accommodations and safety) might be stronger indicators of importance given to destination image. Therefore, the investigator in a second analysis of the data weighted items 10 and 11 of the index. This produced a mean of 65.7 for destination image index weighted by cost of accommodation (see figure 4.3) and a mean of 65.6 for destination image index weighted by safety of destination (see figure 4.4).

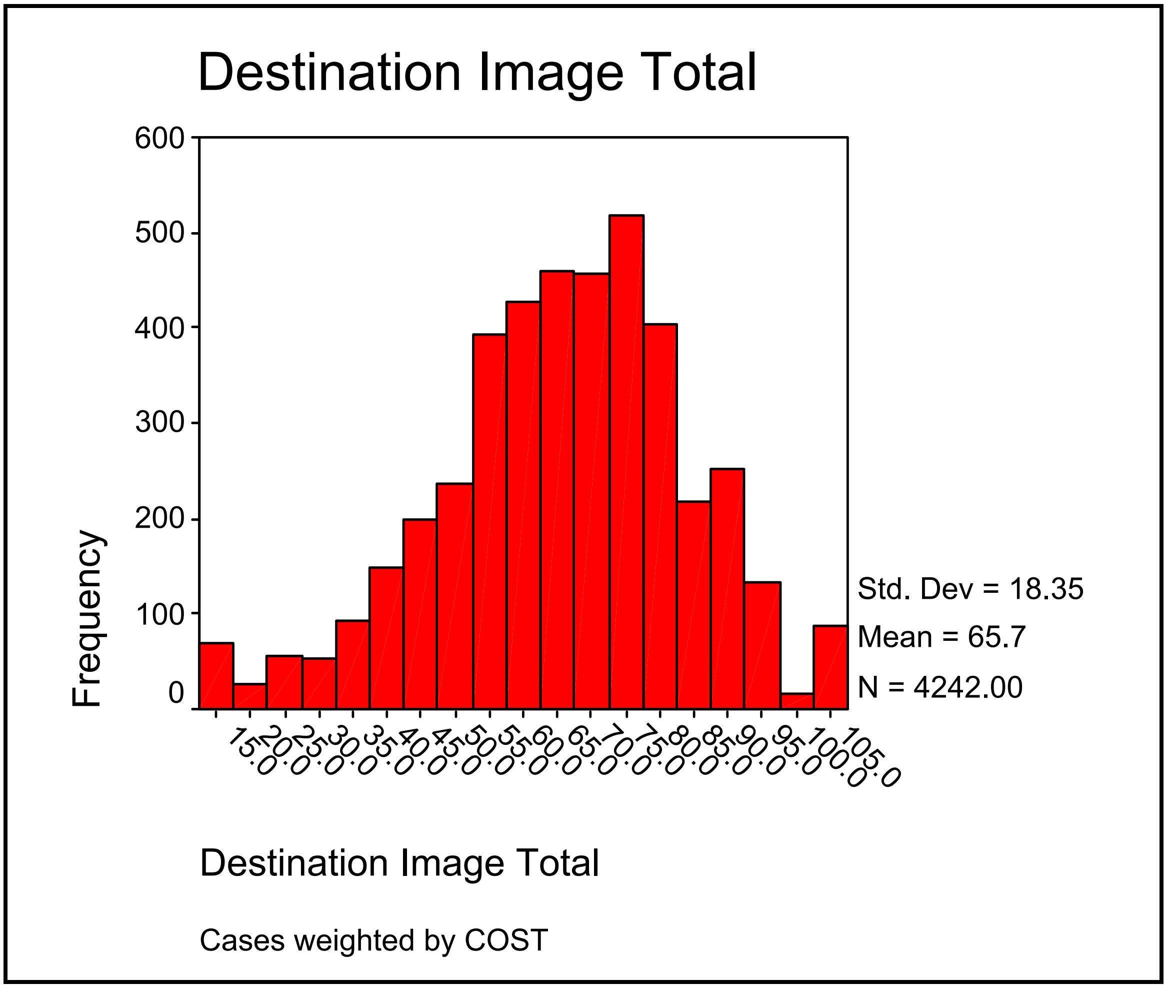

Figure 4.3 Destination Image (cost of accommodation weighted) Index (frequency of responses by professional hockey fans)

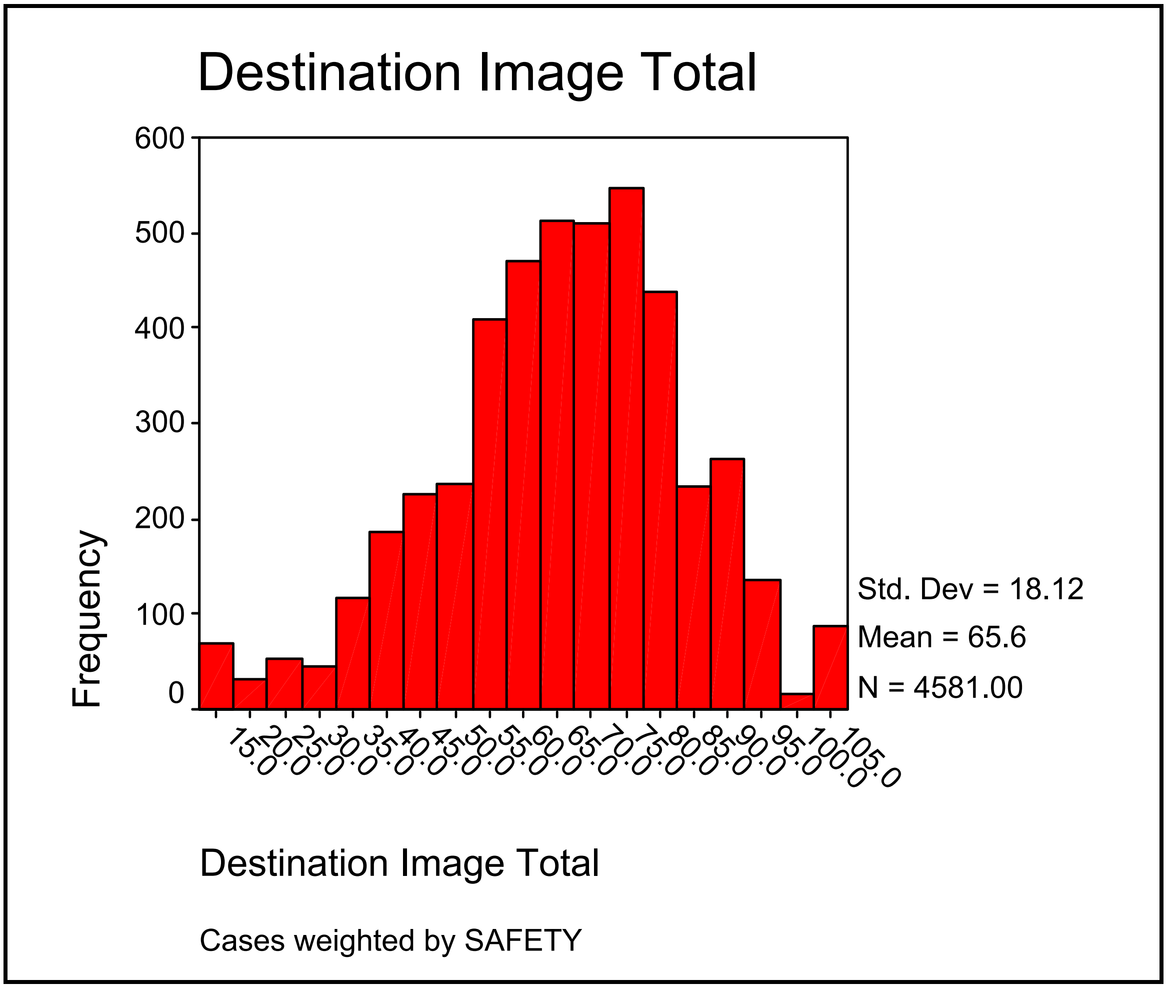

Figure 4.4 Destination Image (safety of destination weighted) Index (frequency of responses by professional hockey fans)

Based on the 13-question index in which a minimum response was 1 and maximum response was 8, the range for the destination image index was 13 to 104. The un-weighted destination image index produced a range of 3 to 104 based on the responses given (see Appendix B table B22). Recalculating the responses using a weighted destination image index produced a new range of 3 to 120 (see Appendix B table B23).

Utilizing linear regression, the investigator analyzed the relationship between the destination image scale and the reported number of road games professional hockey fans planned on attending for the 2006-07 season. The number of road games was determined to be an indicator of travel behavior, therefore was deemed as the dependent variable. The un-weighted 13 individual items of the destination image index produced a significance value range of .013 to .989. Specifically, the results of the analysis indicate that there was a relationship between the reported number of road games professional hockey fans planned on attending and individual items from the destination index (importance of weather, importance of entertainment, importance of hospitality, importance of proximity to venue, and importance of cost of accommodations). The results of the analysis of the un-weighted destination image index produced a significance value of .031, which indicated that destination image was a predictor for the number of road games professional hockey fans planned on attending (see tables 4.6 and 4.7).

Table 4.6 Relationship between destination image index (individual items) and the reported number of road games professional hockey fans planned on attending.

		Unstandardized Coefficients		**Standardized Coefficients**	**t**	**Sig.**
Model		**B**	**Std. Error**	**Beta**		
1	(Constant)	1.690	.406		4.164	.000
	Importance of opponent's record	1.519E-02	.077	.010	.199	.843
	Importance of star players	7.080E-02	.080	.046	.890	.374

Table 4.6 Continued

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
Model	**B**	**Std. Error**	**Beta**		
Importance of weather	-.167	.067	-.113	-2.484	.013
Importance of cleanliness of city	3.072E-02	.091	.020	.339	.735
Importance of entertainment	.191	.104	.123	1.833	.067
Importance of shopping	9.772E-02	.100	.062	.974	.331
Importance of cultural appeal	-8.176E-02	.102	-.052	-.803	.422
Importance of hospitality	-.191	.104	-.124	-1.844	.066
Importance of proximity to venue	.179	.101	.117	1.781	.075
Importance of cost of accommodations	-.195	.098	-.125	-1.996	.046
Importance of safety	-1.419E-03	.100	-.001	-.014	.989
Importance of family oriented	6.450E-02	.078	.045	.826	.409
Importance of things to see and do	-1.012E-02	.097	-.007	-.105	.917

a Dependent Variable: Number of road games attending

Table 4.7 Relationship between destination image index and the reported number of road games professional hockey fans planned on attending.

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	304.159	13	23.397	1.863	.031
	Residual	8751.372	697	12.556		
	Total	9055.530	710			

a Predictors: (Constant), Importance of things to see and do, Importance of weather, Importance of opponent's record, Importance of family oriented, Importance of cost of accommodations, Importance of shopping, Importance of star players, Importance of cleanliness of city, Importance of hospitality, Importance of cultural appeal, Importance of safety, Importance of proximity to venue, Importance of entertainment
b Dependent Variable: Number of road games attending

The investigator re-analyzed the data using the weighted scores for cost of accommodations and safety. The results of the analysis using weighted scores for cost of accommodations produced a significance value of <.001, which indicated that destination image was a predictor for the number of road games professional hockey fans planned on attending (see table 4.8).

Table 4.8 Relationship between destination image index (weighted-cost of accommodations) and the reported number of road games professional hockey fans planned on attending.

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1287.314	13	99.024	11.179	.000
	Residual	34130.755	3853	8.858		
	Total	35418.068	3866			

a Predictors: (Constant), Importance of things to see and do, Importance of weather, Importance of opponent's record, Importance of cost of accommodations, Importance of family oriented, Importance of shopping, Importance of star players, Importance of hospitality, Importance of safety, Importance of proximity to venue, Importance of cleanliness of city, Importance of cultural appeal, Importance of entertainment
b Dependent Variable: Number of road games attending

The results of the analysis using weighted scores for safety of destination produced a significance value of <.001 which also indicated that destination image was a predictor for number of road games attending (see table 4.9).

Table 4.9 Relationship between destination image index (weighted-safety of destination) and the reported number of road games professional hockey fans planned on attending.

Model		**Sum of Squares**	**df**	**Mean Square**	**F**	**Sig.**
1	Regression	2773.979	13	213.383	20.479	.000
	Residual	43512.164	4176	10.420		
	Total	46286.143	4189			

a Predictors: (Constant), Importance of things to see and do, Importance of weather, Importance of opponent's record, Importance of safety, Importance of cost of accommodations, Importance of family oriented, Importance of shopping, Importance of star players, Importance of hospitality, Importance of cleanliness of city, Importance of proximity to venue, Importance of cultural appeal, Importance of entertainment
b Dependent Variable: Number of road games attending

When deciding to travel to watch a team compete on the road, fans must determine how long in term of days and nights they are willing to travel. There are many factors that can affect fans' decision on length of trip. One of the main variables that might affect the length of the trip is the destination image. Therefore, the investigator analyzed the relationship between destination image and the length of trip fans are willing to take to watch their favorite team compete. The independent variable in this analysis was destination image and the dependent variable was length of trip. The results of the analysis produced a significance level of .013, which indicated that destination image was a predictor for the length of stay (see table 4.10).

Table 4.10 Relationship between destination image and length of trip taken by fans of professional hockey.

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	42.831	13	3.295	2.085	.013
	Residual	1123.272	711	1.580		
	Total	1166.102	724			

a Predictors: (Constant), Importance of things to see and do, Importance of weather, Importance of opponent's record, Importance of family oriented, Importance of cost of accommodations, Importance of shopping, Importance of star players, Importance of cleanliness of city, Importance of hospitality, Importance of cultural appeal, Importance of safety, Importance of proximity to venue, Importance of entertainment
b Dependent Variable: Type of trip

The investigator re-analyzed the relationship between destination image and length of trip using weighted responses for items: cost of accommodations and safety of destination. These items were deemed as stronger indicators of destination image. The results of the analysis indicated a stronger relationship between destination image and length of trip when cost of accommodations and safety of destination were weighted (see tables 4.11 and 4.12).

Table 4.11 Relationship between destination image and length of trip by fans of professional hockey (cost weighted).

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	207.381	13	15.952	10.958	.000
	Residual	5710.971	3923	1.456		
	Total	5918.353	3936			

a Predictors: (Constant), Importance of things to see and do, Importance of weather, Importance of opponent's record, Importance of safety, Importance of cost of accommodations, Importance of shopping, Importance of family oriented, Importance of star players, Importance of hospitality, Importance of proximity to venue, Importance of cleanliness of city, Importance of cultural appeal, Importance of entertainment
b Dependent Variable: Type of trip

Table 4.12 Relationship between destination image and length of trip by fans of professional hockey (safety weighted).

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	231.484	13	17.806	11.651	.000
Residual	6503.049	4255	1.528		
Total	6734.533	4268			

a Predictors: (Constant), Importance of things to see and do, Importance of weather, Importance of opponent's record, Importance of safety, Importance of cost of accommodations, Importance of family oriented, Importance of shopping, Importance of star players, Importance of hospitality, Importance of cleanliness of city, Importance of proximity to venue, Importance of cultural appeal, Importance of entertainment
b Dependent Variable: Type of trip

4.2.3 Distance Decay Variable

The investigator identified distance as a variable that may influence travel behavior. As discussed in section 2.4, the act of traveling requires an investment of time, money, or effort (Hawley 1950, as cited by Rengert, Piquero, and Jones 1999) resulting in a trade-off being made between travel time and time spent at the end destination. As distance increases, demand will decline exponentially. Dating back to Newton's law of gravity, there have been many researchers who have examined the relationship between increased distance and travel behavior. The investigator proposed that figure 2.3 would illustrate the declining interaction between various points to the arena as distance increases.

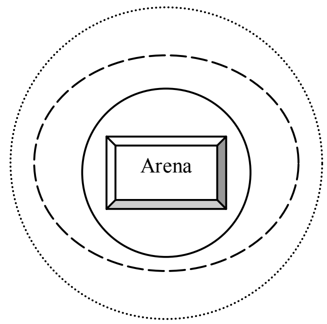

Figure 2.3 Model of Distance Decay between Points of Increasing Distance Applied to a Sport Setting

The first item that was examined as part of the analysis on the relationship between distance and travel behavior was mileage. Question #22 of the survey asked respondents to indicate their zip code. The investigator transformed the zip codes indicated into actual mileage. The actual mileage was the difference between the zip code indicated and the zip code of the RBC Center (Home of the Carolina Hurricanes). Using linear regression, the investigator analyzed the relationship between the mileage (independent variable) and the number of home games attending (dependent variable). The distances were then classified into categories of mileage that were in increments of 10 (0-10, 11-20, 21-30, 31-40, 41-50, 51-60, 61-70, 71-80, 81-90, 101-110, 111-120, 121-130, 131-140, 141-150, 151+). The descriptive statistics for mileage show that a majority (79.6%) of fans attending home games lived within 50 miles of the arena with over 90% of fans living within 100 miles of the arena (see table 4.13).

Table 4.13 Frequency of distance in mileage from home to RBC Center for fans of professional hockey.

Category	Frequency	Valid Percent	Cumulative Percent
0-10	284	34.4	35.3
11-20	173	21.0	56.8
21-30	140	16.9	74.2
31-40	28	3.3	78.3
41-50	16	1.9	79.6
51-60	22	2.7	82.4
61-70	10	1.2	83.6
71-80	22	2.5	86.3
81-90	20	2.3	88.8
91-100	16	1.9	90.8
101-110	2	0.2	91.1
111-120	3	0.4	91.4
121-130	5	0.5	92.0
131-140	13	1.5	93.7
141-150	12	1.3	95.2
151+	39	4.8	100.0
Missing	18		
System	1		
Total	824	100.0	

After a closer examination of the data, the investigator decided to weight the data while conducting the analysis. The results of the analysis produced a significance level of <.001. Therefore, distance was a predictor for the number of home games fans attended (see table 4.14).

Table 4.14 Relationship between distance in mileage and the reported number of home games professional hockey fans planned on attending.

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	464312.549	1	464312.549	2803.028	.000
	Residual	5125111.418	30940	165.647		
	Total	5589423.967	30941			

a Predictors: (Constant), Miles
b Dependent Variable: Number of home games attending

A second item that was examined to measure the relationship between distance and travel behavior was the number of hours that fans were willing to travel to see their favorite team compete on the road. The descriptive statistics for number of hours fans were willing to travel produced a mean of 6.4 and standard deviation of 5.27. Upon a closer examination of the data, the investigator decided to remove the response of 72 from the dataset, as it seemed to be an outlier in the data. A second set of descriptive statistics produced a mean of 6.3 with a standard deviation of 4.72 (see figure 4.5).

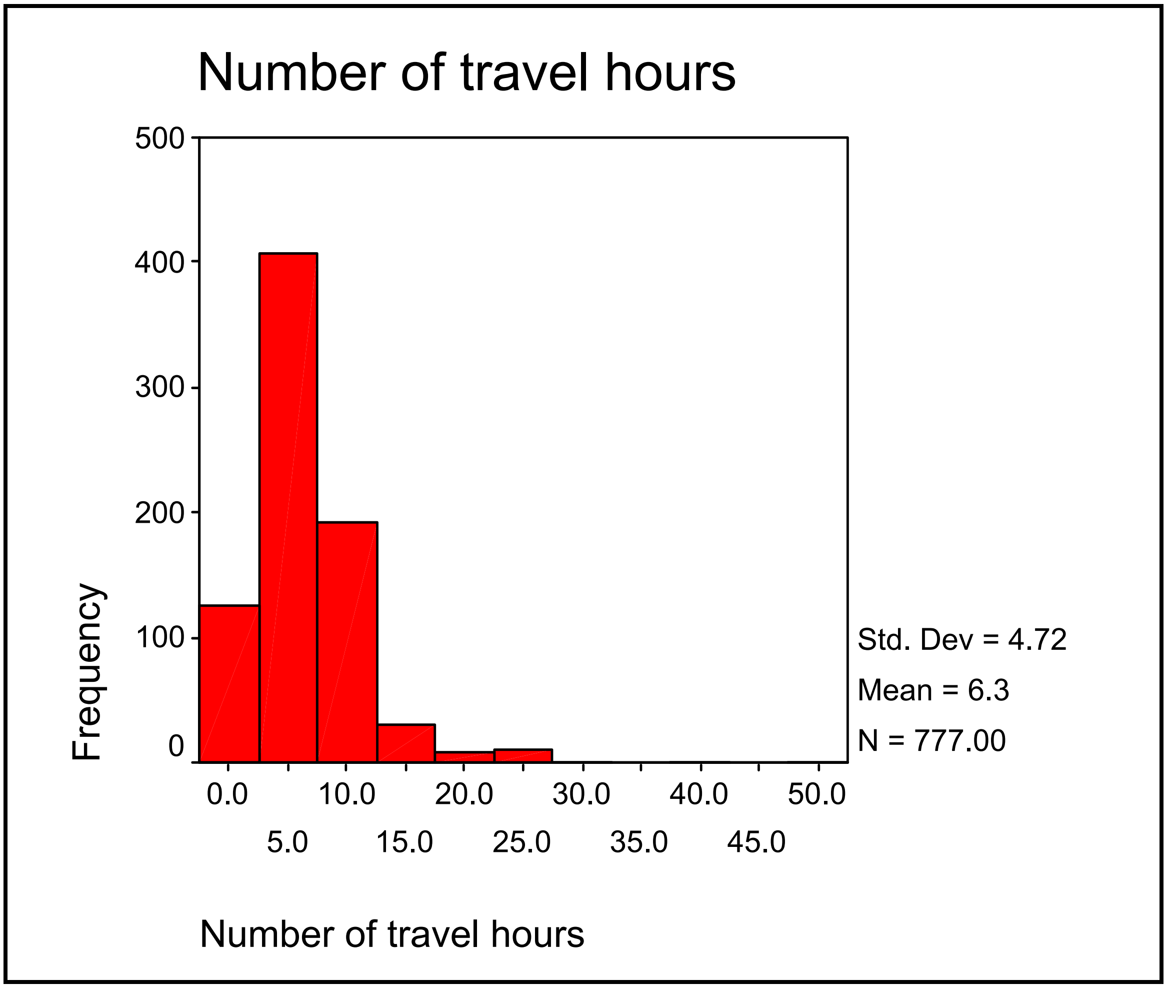

Figure 4.5 Number of travel hours (re-calculated) from home to RBC Center by fans of professional hockey.

Using linear regression, the results of the analysis of the relationship between number of road games attending (dependent variable) and number of hours (independent variable) fans are willing to travel to see their favorite team compete produced a significance level of <.001 (see table 4.15). Based on the results of the analysis, the number of hours fans are willing to travel to see their favorite team compete was a predictor for the number of road games they will attend.

Table 4.15 Relationship between travel hours and the reported number of road games professional hockey fans planned on attending.

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	526.838	1	526.838	42.854	.000
	Residual	9158.900	745	12.294		
	Total	9685.738	746			

a Predictors: (Constant), Number of travel hours
b Dependent Variable: Number of road games attending

A common factor that influences the distance a fan is willing to travel to watch their favorite team compete is cost. Cook and McCleary (1983) discussed that when an individual decides to travel there is normally a specific distance in which they are willing to travel as they must weigh the cost and time associated with travel. The investigator identified three main ways in which individuals measure the cost of a trip. Cost can be associated with the amount of time the trip takes. Cost can be associated with the distance between the destination and the point of origin. Cost can be associated with the dollar amount paid for the trip. The investigator analyzed which measurement of cost is most common among hockey fans. A cross-tabulation of importance of cost from the destination index and the three measurements of cost was conducted. The results of the cross-tabulation indicated that a majority of fans (207 out of 313 or 66%) that placed a high importance on the cost of accommodations also measured cost based on the dollar cost of the entire trip (see table 4.16).

Table 4.16 Importance of cost of accommodations and consideration of travel cross-tabulation

Count

		Consideration of travel Cost in terms of dollars for travel portion of the trip	Amount of travel time the trip takes	Distance in miles from your home	Total
Importance of cost of accommodations	1	41	35	17	93
	2	6	10	4	20
	3	11	14	7	32
	4	37	24	7	68
	5	52	31	16	99
	6	76	45	12	133
	7	105	34	23	162
	8	102	24	25	151
Total		430	217	111	758

A key element of any travel decision is the mode of transportation utilized. Based on the pre-test survey as well as face to face interviews, the investigator determined that there are four primary modes of transportation that are used by fans of professional hockey. The four types of transportation are automobile, airplane, motor coach, and train. An analysis was conducted to determine the relationship between preferred mode of transportation and the number of hours fans were willing to travel to see their favorite team compete. The results of the analysis produced a significance level of <.001, which indicates that mode of transportation, was a predictor for the number of hours that fans are willing to travel (see table 4.17).

Table 4.17 Relationship between mode of transportation and number of travel hours from home to RBC Center by fans of professional hockey.

Model		**Sum of Squares**	**df**	**Mean Square**	**F**	**Sig.**
1	Regression	4940.949	1	4940.949	47.066	.000
	Residual	518177.169	4936	104.979		
	Total	523118.118	4937			

a Predictors: (Constant), Mode of transportation
b Dependent Variable: Number of travel hours

After conducting an analysis on the relationship between mode of transportation and number of travel hours, the author investigated the relationship between mode of transportation and the reported number of road games professional hockey fans planned on attending. The results of the analysis produced a significance level of .283 (see table 4.18), which indicated that the relationship between mode of transportation and the number of road games professional hockey fans planned on attending does not seem to be significant.

Table 4.18 Relationship between mode of transportation and the reported number of road games professional hockey fans planned on attending

Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	17.208	1	17.208	1.155	.283
	Residual	11292.317	758	14.898		
	Total	11309.525	759			

a Predictors: (Constant), Mode of transportation
b Dependent Variable: Number of road games attending

An important part of the decision making process for fans when deciding whether or not to travel to see their favorite team play is the length of the trip. As the length of a trip increases, the cost associated with the trip increases. Therefore, an analysis of the relationship between length of trip in terms of days and nights (independent variable) and number of road games attending (dependent variable) was conducted. The results of the analysis produced a significance level of <.001, which indicated that the length of the trip that fans are willing to take impacts the number of road games they attend (see table 4.19).

Table 4.19 Relationship between type of trip and number of road games attending by fans of professional hockey.

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	257.855	1	257.855	18.550	.000
	Residual	10550.321	759	13.900		
	Total	10808.176	760			

a Predictors: (Constant), Type of trip
b Dependent Variable: Number of road games attending

The investigator attempted to determine whether there is a relationship between the reported number of home games and the reported number of road games professional hockey fans planned on attending. Prior to the analysis, the investigator believed that the more home games fans attending the more road games they were likely to attend. The results of the analysis confirmed the investigator's hypothesis with a significance level of .015 (see table 4.20).

Table 4.20 Relationship between the reported number of home games and the reported number of road games professional hockey fans planned on attending.

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	86.137	1	86.137	5.937	.015
	Residual	11229.573	774	14.508		
	Total	11315.710	775			

a Predictors: (Constant), Number of home games attending
b Dependent Variable: Number of road games attending

4.2.4 Weekday Vs. Weekend Comparison

The second phase of the data analysis was conducted to determine whether there were any differences between individuals who attend games on the weekend as opposed to individuals who attend games during the week. The investigator observed during data collection slight differences in the demographics between the group of respondents who attended the weekend game and the group of respondents who attended the weekday game. Some of the demographic differences observed include: smaller groups attending during the week and more families with children attending weekend games. A more detailed analysis of the surveyed fans and each group of respondents will be discussed later in this chapter.

4.2.4.1 Weekday Vs. Weekend Comparison (Team Identification)

The investigator examined the relationship between team identification and the number of road games fans planned on attending. The results of the analysis for the entire group indicated that team identification was a predictor for number of road games fans planned on attending. The significance level of the analysis was .005. When a second analysis was conducted in which respondents were placed into either the weekend group or the weekday group there seemed to be a difference on the relationship between team identification and the number of road games fans planned on attending. The results of the group that attended the weekend game against the Boston Bruins produced a stronger significance level of .004 when compared to the results of the group that attended the weekday game against the New York Rangers, which produced a significance level of .125 (see table 4.21).

Table 4.21 Relationship between team identification and the reported number of road games professional hockey fans planned on attending (weekend vs. weekday comparison).

Survey Distribution	Model		Sum of Squares	df	Mean Square	F	Sig.
Versus Boston	1	Regression	58.057	1	58.057	8.618	.004
		Residual	2290.554	340	6.737		
		Total	2348.611	341			
Versus New York	1	Regression	47.795	1	47.795	2.362	.125
		Residual	8943.365	442	20.234		
		Total	8991.160	443			

a Predictors: (Constant), Team ID total
b Dependent Variable: Number of road games attending

4.2.4.2 Weekday Vs. Weekend Comparison (Destination Image)

The investigator examined the relationship between destination image and number of road games attending. The results of the analysis for the entire group indicated that destination image when un-weighted produced a significance level of .031. The destination image index was weighted separately for safety of destination and cost of accommodations. Each of the results produced a significance level of <.001. Therefore, destination image in each of these instances was deemed to be a predictor for the number of road games fans planned on attending. The investigator further examined the relationship between destination image and number of road games by analyzing whether the relationship changes between varying groups. The results of the analysis for both groups (the weekend game against the Boston Bruins and weekday game against the New York Rangers) produced significance levels of <.001 (see table 4.22), which indicated that destination image was a predictor for number of road games both groups planned on attending.

Table 4.22 Relationship between destination image and the reported number of road games professional hockey fans planned on attending (weekend vs. weekday comparison).

Survey Distribution	Model		Sum of Squares	df	Mean Square	F	Sig.
Versus Boston	1	Regression	234.350	13	18.027	4.851	.000
		Residual	6060.462	1631	3.716		
		Total	6294.812	1644			
Versus New York	1	Regression	1770.296	13	136.177	11.021	.000
		Residual	27281.843	2208	12.356		
		Total	29052.139	2221			

a Predictors: (Constant), Importance of things to see and do, Importance of opponent's record, Importance of weather, Importance of safety, Importance of cultural appeal, Importance of proximity to venue, Importance of star players, Importance of family oriented, Importance of cleanliness of city, Importance of cost of accommodations, Importance of hospitality, Importance of shopping, Importance of entertainment
b Predictors: (Constant), Importance of things to see and do, Importance of weather, Importance of opponent's record, Importance of cost of accommodations, Importance of family oriented, Importance of hospitality, Importance of star players, Importance of shopping, Importance of proximity to venue, Importance of safety, Importance of cleanliness of city, Importance of entertainment, Importance of cultural appeal
c Dependent Variable: Number of road games attending

A closer inspection of the specific items of the destination image index showed that there were differences between fans who attended the weekday game as opposed to the fans who attended the weekend game. The results of the analysis indicated that certain items of the destination image index were stronger predictors for the number of road games that one group planned on attending and may not be as strong of a predictor for the other group (see table 4.23).

Importance of star players on the opposing team was less of a predictor of number of road games that weekend attendees planned on attending than fans who attended the weekday game as significance levels were .840 vs. <.001. Importance of the weather of the destination city was less of a predictor of number of road games that weekend attendees planned on attending than fans who attended the weekday game as significance levels were .654 vs. <.001. Importance of the entertainment in the destination city was less of a predictor of number of road games that weekend attendees planned on attending than fans who attended the weekday game as significance levels were .911 vs. <.001. Importance of the hospitality in the destination city was less of a predictor of number of road games that weekend attendees planned on attending than fans who attended the weekday game as significance levels were .490 vs. .068. Importance of safety in the destination city was less of a predictor of number of road games that weekend attendees planned on attending than fans who attended the weekday game as significance levels were .493 vs. <.001.

Importance of the cleanliness of the destination city was less of a predictor of number of road games that weekday attendees planned on attending than fans who attended the weekend game as significance levels were .966 vs. .034. Importance of shopping opportunities in the destination city was less of a predictor of number of road games that weekday attendees planned on attending than fans who attended the weekend game as significance levels were .859 vs. .038.

Table 4.23 Relationship between destination image and the reported number of road games professional hockey fans planned on attending (weekend vs. weekday comparison – individual items).

Survey Distribution	Model		Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig.
	1	(Constant)	1.222	.227		5.376	.000
		Importance of opponent's record	9.307E-02	.026	.114	3.615	.000
		Importance of star players	5.663E-03	.028	.006	.202	.840
		Importance of weather	-1.065E-02	.024	-.013	-.449	.654
		Importance of cleanliness of city	-6.598E-02	.031	-.078	-2.117	.034
		Importance of entertainment	-4.359E-03	.039	-.005	-.111	.911
Versus Boston		Importance of shopping	7.194E-02	.035	.083	2.078	.038
		Importance of cultural appeal	2.765E-03	.032	.003	.087	.931
		Importance of hospitality	-2.563E-02	.037	-.025	-.691	.490
		Importance of proximity to venue	.113	.038	.109	2.985	.003
		Importance of cost of accommodations	-.178	.041	-.150	-4.344	.000
		Importance of safety	2.619E-02	.038	.024	.686	.493
		Importance of family oriented	-6.714E-02	.028	-.081	-2.408	.016

Table 4.23 Continued

	Model		Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig.
		Importance of things to see and do	8.907E-02	.036	.090	2.504	.012
Versus New York	1	(Constant)	2.957	.367		8.060	.000
		Importance of opponent's record	-.108	.042	-.070	-2.545	.011
		Importance of star players	7.157E-02	.043	.046	1.649	.099
		Importance of weather	-.220	.036	-.145	-6.024	.000
		Importance of cleanliness of city	-2.188E-03	.052	-.001	-.042	.966
		Importance of entertainment	.276	.056	.167	4.974	.000
		Importance of shopping	-9.882E-03	.056	-.006	-.178	.859
		Importance of cultural appeal	5.985E-02	.059	.037	1.009	.313
		Importance of hospitality	-.109	.060	-.061	-1.823	.068
		Importance of proximity to venue	.324	.058	.166	5.559	.000
		Importance of cost of accommodations	-.162	.065	-.071	-2.513	.012
		Importance of safety	-.293	.063	-.142	-4.614	.000
		Importance of family oriented	9.766E-02	.043	.061	2.276	.023
		Importance of things to see and do	-.145	.056	-.081	-2.615	.009

a Dependent Variable: Number of road games attending

Earlier in this chapter, the investigator examined the relationship between destination image and the length of trip fans are willing to take to see their favorite team compete. The results of the analysis produced a significance level of .013, which indicated that destination image was an indicator for the length of trip that fans were willing to take to watch their favorite team compete. When a comparison of the weekend group and the weekday groups was conducted the results of the analysis indicated that there were some differences between the two groups. The responses from the weekday group produced a significance level of .035, while the responses from the weekend group produced a significance level of .114 (see table 4.24). Therefore, destination image was a stronger predictor for the length of the trip for fans who attended the weekday game as opposed to fans who attended the weekend game.

Table 4.24 Relationship between destination image and length of trip taken by fans of professional hockey (weekend vs. weekday comparison).

Survey Distribution	Model		Sum of Squares	df	Mean Square	F	Sig.
Versus Boston	1	Regression	31.906	13	2.454	1.505	.114
		Residual	489.193	300	1.631		
		Total	521.099	313			
Versus New York	1	Regression	36.590	13	2.815	1.843	.035
		Residual	606.261	397	1.527		
		Total	642.852	410			

a Predictors: (Constant), Importance of things to see and do, Importance of opponent's record, Importance of weather, Importance of family oriented, Importance of shopping, Importance of cost of accommodations, Importance of star players, Importance of cleanliness of city, Importance of cultural appeal, Importance of hospitality, Importance of safety, Importance of entertainment, Importance of proximity to venue
b Predictors: (Constant), Importance of things to see and do, Importance of weather, Importance of opponent's record, Importance of family oriented, Importance of proximity to venue, Importance of star players, Importance of shopping, Importance of hospitality, Importance of cleanliness of city, Importance of cost of accommodations, Importance of safety, Importance of entertainment, Importance of cultural appeal
c Dependent Variable: Type of trip

The investigator further examined the relationship between destination image and length of trip by separately weighting items cost of accommodations and safety of destination city. The results of the analysis when the cost of accommodations was weighted produced a significance level of <.001 for the weekend group and the weekday group (see table 4.25). Therefore, when cost of accommodations was weighted, destination image was a predictor for length of trip for both groups.

Table 4.25 Relationship between destination image and length of trip taken by fans of professional hockey (weekend vs. weekday comparison – cost of accommodations weighted).

Survey Distribution	Model		Sum of Squares	df	Mean Square	F	Sig.
Versus Boston	1	Regression	95.096	13	7.315	4.891	.000
		Residual	2457.311	1643	1.496		
		Total	2552.407	1656			
Versus New York	1	Regression	213.792	13	16.446	11.825	.000
		Residual	3151.555	2266	1.391		
		Total	3365.347	2279			

a Predictors: (Constant), Importance of things to see and do, Importance of opponent's record, Importance of weather, Importance of safety, Importance of cultural appeal, Importance of proximity to venue, Importance of star players, Importance of family oriented, Importance of cleanliness of city, Importance of cost of accommodations, Importance of shopping, Importance of hospitality, Importance of entertainment
b Predictors: (Constant), Importance of things to see and do, Importance of weather, Importance of opponent's record, Importance of cost of accommodations, Importance of family oriented, Importance of hospitality, Importance of star players, Importance of shopping, Importance of proximity to venue, Importance of safety, Importance of cleanliness of city, Importance of entertainment, Importance of cultural appeal
c Dependent Variable: Type of trip

The results of the analysis when the safety of the destination city was weighted produced a significance level of <.001 for the weekend group and the weekday group (see table 4.26). Therefore, when the safety of the destination city was weighted, destination image was a predictor for length of trip for both groups.

Table 4.26 Relationship between destination image and length of trip taken by fans of professional hockey (weekend vs. weekday comparison – safety of destination weighted).

Survey Distribution	Model		Sum of Squares	df	Mean Square	F	Sig.
Versus Boston	1	Regression	149.004	13	11.462	7.345	.000
		Residual	2791.633	1789	1.560		
		Total	2940.637	1802			
Versus New York	1	Regression	246.638	13	18.972	13.145	.000
		Residual	3538.946	2452	1.443		
		Total	3785.585	2465			

a Predictors: (Constant), Importance of things to see and do, Importance of opponent's record, Importance of weather, Importance of safety, Importance of shopping, Importance of cost of accommodations, Importance of star players, Importance of family oriented, Importance of cleanliness of city, Importance of cultural appeal, Importance of proximity to venue, Importance of hospitality, Importance of entertainment
b Predictors: (Constant), Importance of things to see and do, Importance of weather, Importance of star players, Importance of safety, Importance of family oriented, Importance of proximity to venue, Importance of opponent's record, Importance of shopping, Importance of hospitality, Importance of cost of accommodations, Importance of cleanliness of city, Importance of entertainment, Importance of cultural appeal
c Dependent Variable: Type of trip

4.2.4.3 Weekday Vs. Weekend Comparison (Distance)

Earlier in this chapter the investigator discussed the importance for the need to examine the relationship between distance and travel behavior. Analysis on the relationship between distance in terms of mileage and the reported number of home games professional hockey fans planned on attending produced a significance level of <.001. The investigator conducted another analysis to determine whether there were any differences between the weekend group and the weekday group. The analysis of the relationship between distance in mileage and the reported number of home games fans planned on attending produced a significance level of <.001 for each group (see table 4.27), which indicated that distance in mileage was a predictor for the number of home games fans planned on attending.

Table 4.27 Relationship between distance in mileage and the reported number of home games professional hockey fans planned on attending (weekday vs. weekend comparison).

Survey Distribution	Model		Sum of Squares	df	Mean Square	F	Sig.
Versus Boston	1	Regression	142446.853	1	142446.853	882.303	.000
		Residual	2624998.449	16259	161.449		
		Total	2767445.302	16260			
Versus New York	1	Regression	331079.844	1	331079.844	2054.541	.000
		Residual	2365452.975	14679	161.145		
		Total	2696532.820	14680			

a Predictors: (Constant), Miles
b Dependent Variable: Number of home games attending

The next relationship that the investigator examined was the relationship between number of hours fans were willing to travel to watch their favorite team compete and the number of road games they planned on attending for the 2006-07 season. When the analysis was conducted on the total responses collected the significance level was <.001, which indicated that the number of hours fans were willing to travel to watch their favorite team compete was a predictor for the number of games they planned on attending for the 2006-07 season. Analyses were conducted on this relationship for each group (weekend game attendees and weekday game attendees). The results of the analyses for both groups produced significance levels of <.001 (see table 4.28), which indicated that the number of hours fans were willing to travel to watch their favorite team compete was a predictor for the number of road games they planned on attending.

Table 4.28 Relationship between number of travel hours and the reported number of road games professional hockey fans planned on attending (weekday vs. weekend comparison).

Survey Distribution	Model		Sum of Squares	df	Mean Square	F	Sig.
Versus Boston	1	Regression	137.446	1	137.446	19.767	.000
		Residual	13586.854	1954	6.953		
		Total	13724.300	1955			
Versus New York	1	Regression	29816.958	1	29816.958	1020.300	.000
		Residual	79985.279	2737	29.224		
		Total	109802.237	2738			

a Predictors: (Constant), Number of travel hours
b Dependent Variable: Number of road games attending

Another key element of any travel decision is the mode of transportation utilized. An analysis was conducted to determine the relationship between preferred mode of transportation and the number of hours fans are willing to travel to see their favorite team compete. The results of the analysis produced a significance level of <.001, which indicated that mode of transportation, was a predictor for the number of hours that fans are willing to travel. The investigator conducted another analysis of the relationship between preferred mode of transportation and number of hours fans were willing to travel to see their favorite team compete. In this analysis, the investigator examined this relationship based on cases: attendees of the weekend game and attendees of the weekday game. The relationship for each group produced significance levels of .988 for attendees of the weekend game and .735 for attendees of the weekday game (see table 4.29). The results of the analysis indicated that there is no relationship between mode of transportation and number of hours fans are wiling to travel for each group.

Table 4.29 Relationship between mode of transportation and travel hours from home to RBC Center for fans of professional hockey (weekday vs. weekend comparison).

Survey Distribution	Model		Sum of Squares	Df	Mean Square	F	Sig.
Versus Boston	1	Regression	3.545E-03	1	3.545E-03	.000	.988
		Residual	5133.228	331	15.508		
		Total	5133.231	332			
Versus New York	1	Regression	2.997	1	2.997	.115	.735
		Residual	11172.836	429	26.044		
		Total	11175.833	430			

a Predictors: (Constant), Mode of transportation
b Dependent Variable: Number of travel hours

The author investigated the relationship between mode of transportation and number of road games attending. The results of the analysis produced a significance level of .283 (see table 4.18), which indicated that the relationship between mode of transportation and the reported number of home games professional hockey fans planned on attending does not seem to be significant. The author further analyzed the relationship between mode of transportation and the reported number of home games fans planned on attending by splitting the cases by weekend and weekday games attendees. The results of the analysis indicated that while there was no relationship between mode of transportation and the number of road games the weekend game attendees planned on attending (.709). However, there seemed to be some relationship between mode of transportation and the number of road games the weekday game attendees planned on attending as the results of the analysis produced a significance level of .177 (see table 4.30).

Table 4.30 Relationship between mode of transportation and the reported number of road games professional hockey fans planned on attending (weekday vs. weekend comparison).

Survey Distribution	**Model**		**Sum of Squares**	**Df**	**Mean Square**	**F**	**Sig.**
Versus Boston	1	Regression	.995	1	.995	.140	.709
		Residual	2326.853	327	7.116		
		Total	2327.848	328			
Versus New York	1	Regression	37.942	1	37.942	1.825	.177
		Residual	8919.872	429	20.792		
		Total	8957.814	430			

a Predictors: (Constant), Mode of transportation
b Dependent Variable: Number of road games attending

An important part of the decision making process for fans when deciding whether or not to travel to see their favorite team play is the length of the trip. As the length of a trip increases, the cost associated with the trip increases. Therefore, an analysis of the relationship between length of trip in terms of days and nights (independent variable) and the reported number of home games professional hockey fans planned on attending (dependent variable) was conducted. The results of the analysis produced a significance level of <.001, which indicated that the length of the trip that fans are willing to take impacts the number of road games they planned on attending. The investigator conducted a more detailed analysis of the relationship between length of trip and the planned number of road games attending by splitting the cases by weekday vs. weekend games attendees. As shown in table 4.31, the results of the analysis indicated that the relationship between the variables was stronger for the weekday game attendees (significance level of <.001) when compared to the weekend game attendees (significance level of .072).

Table 4.31 Relationship between type of trip and the reported number of road games professional hockey fans planned on attending (weekday vs. weekend comparison).

Survey Distribution	Model		Sum of Squares	df	Mean Square	F	Sig.
Versus Boston	1	Regression	17.839	1	17.839	3.248	.072
		Residual	1795.723	327	5.492		
		Total	1813.562	328			
Versus New York	1	Regression	304.728	1	304.728	15.137	.000
		Residual	8656.251	430	20.131		
		Total	8960.979	431			

a Predictors: (Constant), Type of trip
b Dependent Variable: Number of road games attending

The investigator attempted to determine whether there was a relationship between the number of home games fans attending and the reported number of home games professional hockey fans planned on attending. Prior to the analysis, the investigator believed that the more home games fans planned on attending the more road games they planned on attending. The results of the analysis confirmed the investigator's hypothesis with a significance level of .015. A closer examination of the relationship between planned number of homes games attending and the planned number of road games attending was conducted. The cases were split into weekday games attendees and weekend games attendees. The results of the analysis indicated that the relationship between planned number of homes games and the planned number of road games attending was similar for both groups as the significance levels were .096 and .090 (see table 4.32).

Table 4.32 Relationship between number of home games and the reported number of road games professional hockey fans planned on attending (weekday vs. weekend comparison).

Survey Distribution	Model		Sum of Squares	df	Mean Square	F	Sig.
Versus Boston	1	Regression	19.268	1	19.268	2.794	.096
		Residual	2324.401	337	6.897		
		Total	2343.670	338			
Versus New York	1	Regression	58.924	1	58.924	2.883	.090
		Residual	8891.021	435	20.439		
		Total	8949.945	436			

a Predictors: (Constant), Number of home games attending
b Dependent Variable: Number of road games attending

4.2.5 Type of Ticket Purchaser

The third phase of the data analysis was conducted to determine whether there were any differences in the types of ticket purchasers. Based on face-to-face interviews with personnel from the Carolina Hurricanes, the investigator determined that fans were categorized into three distinct purchasing modes. The three modes of purchasing tickets were season ticket holders, mini-plan purchasers, and day of game ticket purchasers. In previous sections of this chapter, the investigator examined the relationship of numerous variables and travel behavior. The investigator also conducted a more detailed analysis of the data by splitting the cases into weekend and weekday games attendees. The investigator believed that there might also be some differences in these relationships based on the type of ticket purchaser a fan may be.

4.2.5.1 Type of Ticket Purchaser Comparison (Team Identification)

The investigator examined the relationship between team identification and number of road games attending. The results of the analysis for the entire group indicated that team identification was a predictor for number of road games attending. The significance level of the analysis was .005. When a third analysis was conducted in which respondents were placed into the three groups of ticket purchasers there seemed to be a difference in the relationship between team identification and number of road games attending. The results of the group that were day of game ticket purchasers produced a stronger significance level of .058 when compared to the results of the group that were season ticket holders, which produced a significance level of .417 and mini-plan purchaser, which produced a significance level of .225 (see table 4.33).

Table 4.33 Relationship between team identification and the reported number of road games professional hockey fans planned on attending (type of ticket purchaser comparison).

Purchasing of tickets	Model		Sum of Squares	df	Mean Square	F	Sig.
Season ticket holder	1	Regression	84.314	6	14.052	1.013	.417
		Residual	3745.412	270	13.872		
		Total	3829.726	276			
Mini-plan purchaser	1	Regression	108.992	6	18.165	1.374	.225
		Residual	3411.634	258	13.223		
		Total	3520.626	264			
Day of game ticket purchaser	1	Regression	207.714	6	34.619	2.070	.058
		Residual	3762.131	225	16.721		
		Total	3969.845	231			
Missing	1	Regression	6.000	5	1.200	.	.
		Residual	.000	0	.		
		Total	6.000	5			

a Predictors: (Constant), How often do you display team name or insignia, Importance of team winning to you, Dislike of rivals, How closely do You follow the team, Importance of being a fan, How strongly friends see you as a fan
b Predictors: (Constant), How often do you display team name or insignia, Importance of team winning to you, Dislike of rivals, How strongly friends see you as a fan, How closely do You follow the team, Importance of being a fan
c Predictors: (Constant), How often do you display team name or insignia, Importance of team winning to you, Dislike of rivals, How strongly friends see you as a fan, Importance of being a fan
d Dependent Variable: Number of road games attending

A closer examination of the individual items of the team identification index showed that there were certain items that may be stronger predictors of number of road games attending. For each type of ticket purchaser, the items that may be stronger predictors are different. While dislike of rivals (.035) may be a stronger predictor for season ticket holders, how closely the fan follows the team (.095) was a stronger predictor for mini-plan purchasers and dislike of rivals (.035) and how often the fan displays the team's logo or insignia were stronger predictors for day of game ticket purchasers (see table 4.34).

Table 4.34 Relationship between team identification (individual items) and the reported number of road games professional hockey fans planned on attending (type of ticket purchaser comparison)

Purchasing of tickets	Model		Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig.
Season ticket holder	1	(Constant)	.661	2.286		.289	.773
		Importance of team winning to you	-.184	.201	-.059	-.917	.360
		How strongly friends see you as a fan	.210	.318	.052	.660	.510
		How closely do You follow the team	-.129	.297	-.032	-.436	.663
		Importance of being a fan	.142	.287	.038	.494	.621
		Dislike of rivals	.255	.120	.136	2.114	.035
		How often do you display team name or insignia	-.114	.166	-.048	-.685	.494
Mini-plan purchaser	1	(Constant)	.406	1.965		.207	.836
		Importance of team winning to you	-.215	.211	-.070	-1.020	.309
		How strongly friends see you as a fan	.255	.310	.072	.822	.412

Table 4.34 Continued

Purchasing of tickets	Model		Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig.
		How closely do You follow the team	-.449	.268	-.130	-1.674	.095
		Importance of being a fan	.328	.266	.106	1.233	.219
		Dislike of rivals	4.049E-02	.121	.022	.334	.739
		How often do you display team name or insignia	.194	.171	.089	1.138	.256
Day of game ticket purchaser	1	(Constant)	-.598	1.396		-.429	.669
		Importance of team winning to you	9.709E-02	.203	.036	.478	.633
		How strongly friends see you as a fan	6.961E-02	.228	.029	.305	.761
		How closely do You follow the team	.316	.277	.125	1.140	.256
		Importance of being a fan	-.171	.340	-.063	-.502	.616
		Dislike of rivals	-.289	.136	-.152	-2.123	.035
		How often do you display team name or insignia	.293	.162	.157	1.808	.072
Missing	1	(Constant)	-7.000	.000		.	.

Table 4.34 Continued

Purchasing of tickets	Model		Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig.
		Importance of team winning to you	1.000	.000	.943	.	.
		How strongly friends see you as a fan	1.000	.000	1.414	.	.
		Importance of being a fan	.500	.000	.731	.	.
		Dislike of rivals	-.500	.000	-.990	.	.
		How often do you display team name or insignia	-1.000	.000	-2.055	.	.

a Dependent Variable: Number of road games attending

4.2.5.2 Type of Ticket Purchaser (Destination Image)

The investigator examined the relationship between destination image and the reported number of road games professional hockey fans planned on attending. The results of the analysis for the entire group indicated that destination image when un-weighted produced a significance level of .031. The destination image index was weighted separately for safety of destination and cost of accommodations. Each of the results produced a significance level of <.001. Therefore, destination image in each of these instances was deemed to be a predictor for the planned number of road games attending. The investigator further examined the relationship between destination image and the reported number of road games fans planned on attending by analyzing whether the relationship changes between varying groups. The cases were split into the three types of ticket purchasers. The results of the analysis for season ticket holders and day of game ticket purchasers produced significance levels of <.05 (see table 4.35), which indicated that destination image is a predictor for number of road games attending for season ticket holders and day of game ticket purchasers. However, destination image was not a strong predictor for the planned number of road games attending for mini-plan purchasers. The results of the analysis produced a significance level of .157, which indicated that there was some relationship for mini-plan purchasers.

Table 4.35 Relationship between destination image and the reported number of road games professional hockey fans planned on attending (type of ticket purchaser comparison).

Purchasing of tickets	**Model**		**Sum of Squares**	**df**	**Mean Square**	**F**	**Sig.**
Season ticket holder	1	Regression	201.779	13	15.521	1.832	.039
		Residual	2016.633	238	8.473		
		Total	2218.413	251			
Mini-plan purchaser	1	Regression	222.940	13	17.149	1.407	.157
		Residual	2743.252	225	12.192		
		Total	2966.192	238			
Day of game ticket purchaser	1	Regression	435.929	13	33.533	1.946	.027
		Residual	3411.053	198	17.228		
		Total	3846.981	211			
Missing	1	Regression	7.500	7	1.071	.	.
		Residual	2.415E-14	0	.		
		Total	7.500	7			

a Predictors: (Constant), Importance of things to see and do, Importance of weather, Importance of opponent's record, Importance of cost of accommodations, Importance of family oriented, Importance of shopping, Importance of star players, Importance of cleanliness of city, Importance of proximity to venue, Importance of safety, Importance of entertainment, Importance of cultural appeal, Importance of hospitality
b Predictors: (Constant), Importance of things to see and do, Importance of weather, Importance of opponent's record, Importance of family oriented, Importance of shopping, Importance of star players, Importance of proximity to venue, Importance of cleanliness of city, Importance of hospitality, Importance of entertainment, Importance of cultural appeal, Importance of safety, Importance of cost of accommodations
c Predictors: (Constant), Importance of things to see and do, Importance of star players, Importance of weather, Importance of family oriented, Importance of cost of accommodations, Importance of opponent's record, Importance of cultural appeal, Importance of cleanliness of city, Importance of shopping, Importance of safety, Importance of hospitality, Importance of entertainment, Importance of proximity to venue
d Predictors: (Constant), Importance of things to see and do, Importance of entertainment, Importance of hospitality, Importance of proximity to venue, Importance of opponent's record, Importance of cost of accommodations, Importance of safety
e Dependent Variable: Number of road games attending

The investigator examined the relationship between destination image and the length of trip fans were willing to take to see their favorite team compete. The results of the analysis produced a significance level of .013, which indicated that destination image was an indicator for the length of trip that fans were willing to take to watch their favorite team compete. When a comparison of the three different groups of ticket purchasers was conducted the results of the analysis indicated that there were some differences between the three groups. The responses from season ticket holders produced a significance level of .050, while the responses from mini-plan purchasers produced a significance level of .201 and day of game ticket purchasers produced a significance level of .523 (see table 4.36). Therefore, destination image was a stronger predictor for the length of the trip for fans who were season ticket holders as opposed to fans who were either mini-plan purchasers or day of game ticket purchasers.

Table 4.36 Relationship between destination image and length of trip taken by fans of professional hockey (type of ticket purchaser comparison).

Purchasing of tickets	Model		Sum of Squares	df	Mean Square	F	Sig.
Season ticket holder	1	Regression	30.529	13	2.348	1.762	.050
		Residual	323.954	243	1.333		
		Total	354.482	256			
Mini-plan purchaser	1	Regression	23.411	13	1.801	1.321	.201
		Residual	310.758	228	1.363		
		Total	334.169	241			
Day of game ticket purchaser	1	Regression	24.315	13	1.870	.940	.512
		Residual	409.735	206	1.989		
		Total	434.050	219			
Missing	1	Regression	7.333	5	1.467	.	.
		Residual	.000	0	.		
		Total	7.333	5			

a Predictors: (Constant), Importance of things to see and do, Importance of weather, Importance of opponent's record, Importance of family oriented, Importance of cost of accommodations, Importance of shopping, Importance of star players, Importance of cleanliness of city, Importance of proximity to venue, Importance of hospitality, Importance of entertainment, Importance of safety, Importance of cultural appeal

b Predictors: (Constant), Importance of things to see and do, Importance of weather, Importance of opponent's record, Importance of family oriented, Importance of shopping, Importance of star players, Importance of proximity to venue, Importance of cleanliness of city, Importance of hospitality, Importance of entertainment, Importance of cultural appeal, Importance of safety, Importance of cost of accommodations

c Predictors: (Constant), Importance of things to see and do, Importance of star players, Importance of weather, Importance of family oriented, Importance of cost of accommodations, Importance of opponent's record, Importance of shopping, Importance of hospitality, Importance of cleanliness of city, Importance of safety, Importance of cultural appeal, Importance of entertainment, Importance of proximity to venue

d Predictors: (Constant), Importance of things to see and do, Importance of entertainment, Importance of cultural appeal, Importance of opponent's record, Importance of cost of accommodations

e Dependent Variable: Type of trip

The investigator further examined the relationship between destination image and length of trip by separately weighting items cost of accommodations and safety of destination city. The results of the analysis when the cost of accommodations was weighted produced a significance level of <.001 for all three types of ticket purchasers (see table 4.37). Therefore, when cost of accommodations was weighted, destination image was a predictor for length of trip for all three groups.

Table 4.37 Relationship between destination image and length of trip taken by fans of professional hockey (type of ticket purchaser comparison – cost of accommodations weighted).

Purchasing of tickets	**Model**		**Sum of Squares**	**df**	**Mean Square**	**F**	**Sig.**
Season ticket holder	1	Regression	157.486	13	12.114	10.070	.000
		Residual	1661.353	1381	1.203		
		Total	1818.839	1394			
Mini-plan purchaser	1	Regression	94.978	13	7.306	6.113	.000
		Residual	1573.933	1317	1.195		
		Total	1668.911	1330			
Day of game ticket purchaser	1	Regression	83.113	13	6.393	3.630	.000
		Residual	2055.605	1167	1.761		
		Total	2138.718	1180			
Missing	1	Regression	44.967	5	8.993	5854685 0387833 600.000	.000
		Residual	4.992E-15	24	2.080E-16		
		Total	44.967	29			

a Predictors: (Constant), Importance of things to see and do, Importance of weather, Importance of opponent's record, Importance of cost of accommodations, Importance of family oriented, Importance of shopping, Importance of safety, Importance of proximity to venue, Importance of star players, Importance of cleanliness of city, Importance of hospitality, Importance of cultural appeal, Importance of entertainment
b Predictors: (Constant), Importance of things to see and do, Importance of weather, Importance of opponent's record, Importance of safety, Importance of proximity to venue, Importance of star players, Importance of shopping, Importance of family oriented, Importance of hospitality, Importance of cleanliness of city, Importance of cultural appeal, Importance of cost of accommodations, Importance of entertainment

c Predictors: (Constant), Importance of things to see and do, Importance of star players, Importance of weather, Importance of safety, Importance of cost of accommodations, Importance of opponent's record, Importance of shopping, Importance of family oriented, Importance of hospitality, Importance of cultural appeal, Importance of cleanliness of city, Importance of proximity to venue, Importance of entertainment
d Predictors: (Constant), Importance of things to see and do, Importance of star players, Importance of cultural appeal, Importance of entertainment, Importance of weather
e Dependent Variable: Type of trip

The results of the analysis when the safety of the destination city was weighted produced a significance level of <.001 for all three types of ticket purchasers (see table 4.38). Therefore, when the safety of the destination city is weighted, destination image is a predictor for length of trip for all three groups.

Table 4.38 Relationship between destination image and length of trip taken by fans of professional hockey (type of ticket purchaser comparison – safety of destination weighted).

Purchasing of tickets	Model		Sum of Squares	df	Mean Square	F	Sig.
Season ticket holder	1	Regression	183.292	13	14.099	11.140	.000
		Residual	1917.405	1515	1.266		
		Total	2100.697	1528			
Mini-plan purchaser	1	Regression	136.702	13	10.516	8.335	.000
		Residual	1775.187	1407	1.262		
		Total	1911.889	1420			
Day of game ticket purchaser	1	Regression	174.864	13	13.451	7.462	.000
		Residual	2300.042	1276	1.803		
		Total	2474.906	1289			
Missing	1	Regression	43.793	5	8.759	6881897988237630.000	.000
		Residual	2.917E-14	23	1.268E-15		
		Total	43.793	28			

a Predictors: (Constant), Importance of things to see and do, Importance of weather, Importance of opponent's record, Importance of cost of accommodations, Importance of family oriented, Importance of shopping, Importance of safety, Importance of hospitality, Importance of star players, Importance of proximity to venue, Importance of cleanliness of city, Importance of cultural appeal, Importance of entertainment
b Predictors: (Constant), Importance of things to see and do, Importance of weather, Importance of opponent's record, Importance of safety, Importance of proximity to venue, Importance of shopping, Importance of star players, Importance of family oriented, Importance of cleanliness of city, Importance of hospitality, Importance of cost of accommodations, Importance of cultural appeal, Importance of entertainment
c Predictors: (Constant), Importance of things to see and do, Importance of star players, Importance of weather, Importance of safety, Importance of cost of accommodations, Importance of cultural appeal, Importance of family oriented, Importance of opponent's record, Importance of hospitality, Importance of shopping, Importance of cleanliness of city, Importance of proximity to venue, Importance of entertainment
d Predictors: (Constant), Importance of things to see and do, Importance of hospitality, Importance of cost of accommodations, Importance of entertainment, Importance of safety
e Dependent Variable: Type of trip

4.2.5.3 Type of Ticket Purchaser (Distance)

Earlier in this chapter the investigator discussed the importance for the need to examine the relationship between distance and travel behavior. Analysis on the relationship between distance in terms of mileage and the reported number of home games professional hockey fans planned on attending produced a significance level of <.001. The investigator conducted another analysis to determine whether there were any differences between the three types of ticket purchasers. The analysis of the relationship between distance in mileage and the planned number of home games attending produced a significance level of <.05 for each group (see table 4.39), which indicated that distance in mileage was a predictor for the planned number of home games attending. However, there seemed to be a stronger relationship between distance in mileage and the planned number of home games attending for season ticket holders and mini-plan purchasers as evidenced by significance levels of <.001 when compared to day of game ticket purchasers (significance level of .035).

Table 4.39 Relationship between distance in mileage and the reported number of home games professional hockey fans planned on attending (type of ticket purchaser comparison).

Purchasing of tickets	Model		Sum of Squares	df	Mean Square	F	Sig.
Season ticket holder	1	Regression	329612.153	1	329612.153	2936.846	.000
		Residual	873624.686	7784	112.233		
		Total	1203236.840	7785			
Mini-plan purchaser	1	Regression	197883.563	1	197883.563	2148.806	.000
		Residual	738009.275	8014	92.090		
		Total	935892.838	8015			
Day of game ticket purchaser	1	Regression	373.747	1	373.747	4.426	.035
		Residual	1267446.363	15009	84.446		
		Total	1267820.110	15010			
Missing	1	Regression	40.584	1	40.584	.142	.707
		Residual	36259.478	127	285.508		
		Total	36300.062	128			

a Predictors: (Constant), Miles
b Dependent Variable: Number of home games attending

The next relationship that the investigator examined was the relationship between number of hours fans were willing to travel to watch their favorite team compete and the number of road games they planned on attending for the 2006-07 season. When the analysis was conducted on the total responses collected the significance level was <.001, which indicated that the number of hours fans were willing to travel to watch their favorite team compete was a predictor for the number of road games they planned on attending for the 2006-07 season. Analyses were conducted on this relationship for each of the three types of ticket purchasers. The results of the analyses for all three groups produced differing results. While number of travel hours was not a predictor of the planned number of road games attending for season ticket holders (.436), there was a stronger relationship between the two variable for mini-plan purchasers (.069) and day of game ticket purchasers (<.001, see table 4.40).

Table 4.40 Relationship between number of travel hours and the reported number of road games professional hockey fans planned on attending (type of ticket purchaser comparison).

Purchasing of tickets	**Model**		**Sum of Squares**	**df**	**Mean Square**	**F**	**Sig.**
Season ticket holder	1	Regression	8.846	1	8.846	.609	.436
		Residual	3735.340	257	14.534		
		Total	3744.185	258			
Mini-plan purchaser	1	Regression	24.822	1	24.822	3.324	.069
		Residual	1904.314	255	7.468		
		Total	1929.136	256			
Day of game ticket purchaser	1	Regression	783.762	1	783.762	54.815	.000
		Residual	3174.220	222	14.298		
		Total	3957.982	223			
Missing	1	Regression	3.534	1	3.534	5.316	.069
		Residual	3.324	5	.665		
		Total	6.857	6			

a Predictors: (Constant), Number of travel hours
b Dependent Variable: Number of road games attending

Another key element of any travel decision is the mode of transportation utilized. An analysis was conducted to determine the relationship between preferred mode of transportation and the reported number of hours fans were willing to travel to see their favorite team compete. The results of the analysis produced a significance level of <.001, which indicated that mode of transportation, was a predictor for the number of hours that fans were willing to travel. The investigator conducted another analysis of the relationship between preferred mode of transportation and the reported number of hours fans were willing to travel to see their favorite team compete. In this analysis, the investigator examined this relationship based on the three types of ticket purchasers. The results of the analysis of the relationship for each group produced significance levels that indicated there is no relationship between mode of transportation and number of hours fans are willing to travel. The significance level for season ticket holders was .710. The significance level for mini-plan purchasers was .484. The significance level for day of game ticket purchasers was .792 (see table 4.41).

Table 4.41 Relationship between mode of transportation and travel hours from home to RBC Center for fans of professional hockey (type of ticket purchaser comparison).

Purchasing of tickets	Model		Sum of Squares	df	Mean Square	F	Sig.
Season ticket holder	1	Regression	2.611	1	2.611	.138	.710
		Residual	5133.667	272	18.874		
		Total	5136.277	273			
Mini-plan purchaser	1	Regression	8.525	1	8.525	.492	.484
		Residual	4349.223	251	17.328		
		Total	4357.747	252			
Day of game ticket purchaser	1	Regression	2.056	1	2.056	.070	.792
		Residual	6698.505	228	29.379		
		Total	6700.561	229			
Missing	1	Regression	1.429E-02	1	1.429E-02	.001	.977
		Residual	77.700	5	15.540		
		Total	77.714	6			

a Predictors: (Constant), Mode of transportation
b Dependent Variable: Number of travel hours

Another important part of the decision making process for fans when deciding whether or not to travel to see their favorite team play is the length of the trip. As the length of a trip increases, the cost associated with the trip increases. Therefore, an analysis of the relationship between length of trip in terms of days and nights (independent variable) and the reported number of road games professional hockey fans planned on attending (dependent variable) was conducted. The results of the analysis produced a significance level of <.001, which indicated that the length of the trip that fans were willing to take impacted the number of road games they planned on attending. The investigator conducted a more detailed analysis of the relationship between length of trip and the planned number of road games attending by splitting the cases based on the three types of ticket purchasers. As shown in table 4.42, the results of the analysis indicated that the relationship between the variables is stronger for day of game ticket purchasers (significance level of <.001) when compared to mini-plan purchasers (significance level of .072) There was no relationship between type of trip and the planned number of road games attending for season ticket holders as was evidenced by significance level of .601 (see table 4.42).

Table 4.42 Relationship between type of trip and the reported number of road games professional hockey fans planned on attending (type of ticket purchaser comparison).

Purchasing of tickets	Model		Sum of Squares	df	Mean Square	F	Sig.
Season ticket holder	1	Regression	3.986	1	3.986	.275	.601
		Residual	3789.223	261	14.518		
		Total	3793.209	262			
Mini-plan purchaser	1	Regression	37.438	1	37.438	3.264	.072
		Residual	2959.624	258	11.471		
		Total	2997.062	259			
Day of game ticket purchaser	1	Regression	327.983	1	327.983	20.714	.000
		Residual	3641.862	230	15.834		
		Total	3969.845	231			
Missing	1	Regression	4.909	1	4.909	18.000	.013
		Residual	1.091	4	.273		
		Total	6.000	5			

a Predictors: (Constant), Type of trip
b Dependent Variable: Number of road games attending

The investigator attempted to determine whether there was a relationship between the number of home games fans attending and the reported number of road games fans planned on attending. Prior to the analysis, the investigator believed that the more home games fans planned on attending the more road games they planned on attending. The results of the analysis confirmed the investigator's hypothesis with a significance level of .015. A closer examination of the relationship between the planned number of home games and number of road games attending was conducted. The cases were split into three types of ticket purchasers. The results of the analysis indicated that the planned number of home games attending was a predictor for the planned number of road games attending for day of game ticket purchasers (significance level of <.001). The results of the analysis indicated that there was some relationship between the planned number of home games attending and the planned number of road games attending for season ticket holders (significance level of .157). The results of the analysis indicated that there was no relationship between the planned number of homes games attending and the planned number of road games for mini-plan purchasers (significance level of .227, see table 4.43).

Table 4.43 Relationship between the reported number of home games and reported number of road games professional hockey fans planned on attending (weekday vs. weekend comparison).

Purchasing of tickets	Model		Sum of Squares	df	Mean Square	F	Sig.
Season ticket holder	1	Regression	28.006	1	28.006	2.013	.157
		Residual	3785.048	272	13.916		
		Total	3813.055	273			
Mini-plan purchaser	1	Regression	19.496	1	19.496	1.465	.227
		Residual	3501.130	263	13.312		
		Total	3520.626	264			
Day of game ticket purchaser	1	Regression	457.968	1	457.968	29.797	.000
		Residual	3488.888	227	15.370		
		Total	3946.856	228			
Missing	1	Regression	.502	1	.502	.431	.536
		Residual	6.998	6	1.166		
		Total	7.500	7			

a Predictors: (Constant), Number of home games attending
b Dependent Variable: Number of road games attending

4.2.6 Demographic Comparison

The final section of this chapter focuses on the relationship between demographics of respondents and the reported number of road games professional hockey fans planned on attending for the 2006-07 season. There were five demographic questions that respondents were asked. The five questions asked respondents to indicate the following: gender, level of education, household income, household representation and zip code. For this section, analysis of the relationship between zip code and the planned number of road games attending was omitted because discussion on this analysis can be found in earlier sections of this chapter.

The first demographic question asked respondents to indicate their gender. Responses to this question were either male or female. The results of the analysis on the relationship between gender and the planned number of road games attending produced a significance level of .882 (see table 4.44). This indicated that there was no relationship between gender and the planned number of road games attending.

Table 4.44 Relationship between gender and the reported number of road games professional hockey fans planned on attending

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.319	1	.319	.022	.882
	Residual	11361.625	783	14.510		
	Total	11361.944	784			

a Predictors: (Constant), What is your gender
b Dependent Variable: Number of road games attending

The second demographic question asked respondents to indicate their highest level of education on a scale of 1 to 21+. The results of the analysis on the relationship between highest level of education and the reported number of road games professional hockey fans planned on attending produced a significance level of .632 (see table 4.45). This indicated that there was no relationship between level of education and the planned number of road games attending.

Table 4.45 Relationship between level of education and the reported number of road games professional hockey fans planned on attending

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.822	1	2.822	.229	.632
	Residual	9054.098	735	12.319		
	Total	9056.920	736			

a Predictors: (Constant), Highest level of education
b Dependent Variable: Number of road games attending

The third demographic question asked respondents to indicate their household income. This was an open-ended question in which respondents were asked to write in their household income in terms of thousands of dollars per year. The results of the analysis on the relationship between household income and the reported number of road games professional hockey fans planned on attending produced a significance level of .075 (see table 4.46), which indicated that there was some relationship between household income and the planned number of road games attending.

Table 4.46 Relationship between household income and the reported number of road games professional hockey fans planned on attending.

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	48.878	1	48.878	3.186	.075
	Residual	8991.372	586	15.344		
	Total	9040.250	587			

a Predictors: (Constant), What is your household income (in terms of thousands)
b Dependent Variable: Number of road games attending

The fourth demographic question asked respondents to indicate their household representation. Based on United States census surveys six categories of households were identified. The categories were as follows: single no children, single with children under 18; single with children 18 and over; married with no children; married with children under 18; married with children 18 and over. Respondents were asked to identify that best described their household. The results of the analysis on the relationship between household representation and the reported number of road games professional hockey fans planned on attending produced a significance level of .199 (see table 4.47), which indicated that there might be some relationship between household representation and the planned number of road games attending.

Table 4.47 Relationship between household representation and the reported number of road games professional hockey fans planned on attending.

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	24.152	1	24.152	1.652	.199
	Residual	11270.927	771	14.619		
	Total	11295.079	772			

a Predictors: (Constant), Household representation
b Dependent Variable: Number of road games attending

In chapter 5, the investigator will discuss the conclusions of the research based on the results.

5. Conclusions and Recommendations

5.1 Introduction

The investigator conducted this study in order to examine the variables that affect the travel behavior of fans of professional hockey. Data collection was conducted at two home games (one weekend game and one weekday game) of the Carolina Hurricanes. The descriptive results of the analysis can be found in Appendix B. The investigator described the results of the analysis in chapter 4. This chapter provides a discussion of the results including a discussion on the relationship between the independent variables and the dependent variable. In addition, the chapter offers practical applications of the results as well as discussing the research questions and hypotheses. The chapter concludes with a discussion on the challenges of the research and need for future research.

5.2 Discussion of Results

There were three research questions and ten hypotheses that the investigator examined in this study. The investigator used linear regression to analyze the relationship between the independent variables and the dependent variables.

5.2.1 Research Question #1 (Team Identification and Travel Behavior for all Respondents)

The first research question that the investigator explored was ‘does the strength of team identification play a role in professional hockey fans decision to travel to watch their favorite team compete on the road?’ There was one hypothesis associated with this research question, which is:

$H_{1:}$ The stronger the fan identifies themselves as a fan of the team, the more likely they will travel to watch their favorite team compete on the road.

$H_{0:}$ The strength of team identification that fans have with their favorite team has no relation to their decision to travel to watch their favorite team compete on the road.

The results of the analysis supported H_1 (see table 4.4). Based on the data and the results of the analysis, the investigator was able to state that the stronger the fan identifies himself or herself as a fan of the team the more likely they will travel to watch their favorite team compete on the road. The investigator through further analysis was able to determine whether or not the supported hypothesis held true for specific groups of the population.

5.2.1.1 Research Question #1 (Team Identification and Travel Behavior for Weekend vs. Weekday Attendees)

While the results of the analysis supported H_1 for fans of professional hockey who attend games during the weekend it does not support H_1 for fans who attend games during weekdays (see table 4.22). Therefore, the investigator was able to state that professional hockey fans who attend games during the weekend and have a strong team identification are more likely to attend road games of their favorite team than fans who have a strong team identification and attend games during the week.

5.2.1.2 Research Question #1 (Team Identification and Travel Behavior for Type of Ticket Purchaser)

As discussed earlier, H_1 was supported for fans of professional hockey that purchase their tickets during the day of the game (see table 4.34). However, the results did not support H_1 for fans that are either season ticket holders or purchasers of mini-plans. Therefore, the investigator was able to conclude that professional hockey fans that purchase their tickets during the day of the game and have a strong team identification are more likely to attend road game of their favorite team than fans who have a strong team identification and are either season ticket holders or purchasers of mini-plans.

5.2.2 Research Question #2 (Destination Image and Travel Behavior for all Respondents)

The second research question that the investigator explored was 'is there a relationship between fans of professional hockey perceived image of a destination and their decision to travel to the destination to watch their favorite team compete.' This research question was expressed in the following two hypotheses:

$H_{2:}$ There is a relationship between destination image and travel to road games.

$H_{0:}$ There is no relationship between destination image and travel to road games.

$H_{5:}$ Fans who have a higher score on the destination image index are more likely to take longer trips (in terms of days) to watch their favorite team compete.

$H_{0:}$ Fans who have a higher score on the destination image index are not more likely to take longer trips (in terms of days) to watch their favorite team compete.

H_2 (see tables 4.8, 4.9 and 4.10) and H_5 (see tables 4.11, 4.12 and 4.13) were supported in this study. Based on the results, the investigator was able to conclude that there was a relationship between destination image and travel behavior. Also, fans who score higher on the destination image index are more likely to take longer trips (in terms of days) to watch their favorite team compete. The investigator further analyzed H_2 and H_5 by examining whether both hypotheses held true for specific groups of those surveyed.

5.2.2.1 Research Question #2 (Destination Image and Travel Behavior for Weekend vs. Weekday Attendees)

The results of the study supported H_2 for fans that attend games during the weekend as well as fans that attend games during the week (see table 4.23). Therefore, the investigator was able to conclude that the relationship between perceived destination image and travel to road games is significant for both groups of fans.

H_5 was also supported for fans that attend games during the weekend as well as during the week (see tables 4.26 and 4.27). Therefore, the investigator concluded that fans that show a stronger emphasis on destination image are more likely to take longer trips (in terms of days) to watch their favorite team compete regardless of whether they attend games during the weekend or during the week.

5.2.2.2 Research Question #2 (Destination Image and Travel Behavior for Type of Ticket Purchaser)

The results of the study supported H_2 for fans that are season ticket holders or purchase their tickets during the day of the game (see table 4.36). However, the results did not support H_2 for fans that purchase mini-plans. Therefore, the investigator concluded that fans who are season ticket holders or purchasers of tickets during the day of the game are more likely to have their decision to travel influenced by their perception of the destination city than fans who purchase mini-plans.

H_5 was supported for all types of ticket purchasers (see tables 4.38 and 4.39). Therefore, the investigator is able to state that fans that score higher on the destination image index are more likely to take longer trips (in terms of days) to watch their favorite team compete regardless of the type of ticket they purchase.

5.2.3 Research Question #3 (Distance and Travel Behavior for all Respondents)

The third research question that the investigator examined was 'what is the relationship between perceived travel distance and attendance at road games.' Although the research question examined travel to road games, the investigator determined that it is necessary to include a hypothesis, which examines the relationship between distance between home and arena and number of home games attending. Another hypothesis examined the relationship between home games attending and road games attending. This research question was expressed in the following five hypotheses:

H_3: The greater the number of hours fans are willing to travel to watch their favorite team compete on the road, the greater the number of road games they are willing to attend.

H_0: The greater the number of hours fans are willing to travel to watch their favorite team compete on the road has no effect on the number of road games they are willing to attend.

H_4: There is a relationship between length of trip fans are willing to take to watch their favorite team compete and number of road games the fans will attend.
H_0: There is no relationship between length of trip fans are willing to take to watch their favorite team compete and number of road games the fans will attend.

H_6: There is a relationship between mode of transportation and amount of time fans are willing to travel to watch their favorite team compete.
H_0: There is no relationship between mode of transportation and amount of time fans are willing to travel to watch their favorite team compete.

H_7: The greater the number of home games fans attend the greater the number of road games the fan will attend.
H_0: The number of home games fans attend has no relation to the number of road games the fan will attend.

H_{10}: There is a relationship between the number of home games fans attend and distance of fans place of residence to the arena in which their favorite team compete.

H_0: There is no relationship between the number of home games fans attend and distance of fans place of residence to the arena in which their favorite team compete.

The results of the study supported H_3 (see table 4.16). Based on the data and the analysis, the investigator concluded that there is a relationship between the number of hours that fans of professional hockey are willing to travel to watch their favorite team compete on the road and the number of road games they attend.

The results of the study supported H_4 (see table 4.20). Based on the data and the analysis, the investigator concluded that there is a relationship between the length of the trip that fans of professional hockey are willing to take to watch their favorite team compete and the number of road games they attend.

H_6 was supported in this study (see table 4.18). Based on the data and the analysis, the investigator concluded that there is a relationship between the mode of transportation that fans of professional hockey prefer to use when traveling to road games and the number of hours they are willing to travel to watch their favorite team compete.

H_7 was supported in this study (see table 4.21). Based on the data and the analysis, the investigator concluded that there is a relationship between number of home games that fans of professional hockey attend and the number of road games they attend.

The results of the study supported H_{10} (see table 4.15). Based on the data and the analysis, the investigator concluded that there is a relationship between the number of home games that fans of professional hockey attend and the distance of their home to the arena that their favorite team competes in.

The investigator through further analysis was able to state whether or not the supported hypothesis held true for specific groups of the population.

5.2.3.1 Research Question #3 (Distance and Travel Behavior for Weekend vs. Weekday Attendees)

The results of the study supported H_3 (see table 4.29). Therefore, the investigator was able to determine that the greater the number of hours fans are willing to travel to watch their favorite team compete on the road, the greater the number of road games they attend for both groups.

Although H_4 was supported for fans of professional hockey that attend games during the week (see table 4.32), the results did not support H_4 for fans that attend games during the weekend. There is a relationship between the length of the trip and the number of road games for fans that attend games during the week, while the relationship does not apply to fans that attend games during the weekend.

H_6 was refuted for both groups (see table 4.30). When the respondents are split into groups of weekend attendee and weekday attendee the relationship between mode of transportation that fans of professional hockey are willing to use when traveling to watch their favorite team compete and the amount of time they are willing to travel is affected.

The results of the study did not support H_7 when respondents were grouped based on weekday and weekend attendance (see table 4.33). While this suggested that there is no relationship between the number of road games and number of home games that both groups attend, it is important to note that significance level of both analysis were .096 and .090 respectively. This suggested that there might be some slight relationship.

The results supported H_{10} for both groups (see table 4.28). Regardless of whether fans attend games during the week or during the weekend the distance of their home to the arena influences the number of home games they attend.

5.2.3.2 Research Question #3 (Distance and Travel Behavior for Type of Ticket Purchaser)

The results of the study supported H_3 for fans that purchase tickets during the day of the game (see table 4.41). However, the results of the study did not support H_3 for fans that purchase season tickets or mini-plans. The investigator was able to determine that the relationship that the greater the number of hours day of game ticket purchasers are willing to travel to watch their favorite team compete on the road, the greater the number of road games they attend. This relationship does not apply for season ticket holders or mini-plan purchasers.

Based on the study, the results supported H_4 for fans of professional hockey that purchase ticket during the day of the game (see table 4.43). However, the results did not support H_4 for fans that purchase season tickets or mini-plans. Therefore, there was a relationship between the length of the trip and the number of road games for fans who purchase tickets during the day of the game, while the relationship does not apply to fans that purchase season tickets or mini-plans.

H_6 was refuted for all types of ticket purchasers (see table 4.42). When the respondents are split into groups of type of ticket purchased the relationship between mode of transportation that fans of professional hockey are willing to use when traveling to watch their favorite team compete and the amount of time they are willing to travel is affected.

Although H_7 was supported for fans that purchase tickets during the day of the game (see table 4.44), the results of the study did not support H_7 for fans who purchase season tickets or mini-plans. Therefore, the investigator was to conclude that the relationship between home games and road games attend applies only to fans that purchase tickets during the day of the game and not to season ticket holders or fans purchasing mini-plans.

The results supported H_{10} for all types of ticket purchasers (see table 4.40). Therefore, the investigator was able to determine that regardless of whether type of ticket purchaser fans may be the distance of their home to the arena influences the number of home games they attend.

5.2.4 Demographics for all Respondents

Based on the study, the results did not suggest that there is any relationship between travel behavior and gender (see table 4.45), level of education (see table 4.46), family makeup (see table 4.48). However, the results did show that there is some relationship between attendance at road games and household income (see table 4.47). Therefore, the investigator was able to determine that demographic variables such as gender, level of education, and family makeup have no influence on fans of professional hockey attendance at road games.

5.3 Applications

5.3.1 Theoretical Applications

This framework for this study was based on the application of two theories: consumer behavior theory and gravity theory. Based on the literature review, the investigator identified that consumer behavior theory (which seeks to answer questions about the action of the consumer to or not to consume the item) is a subset of consumer theory and interrelated with consumer motivation theory (seeks to answer why a decision was made) and consumer demand theory (seeks to answer how much desire of an item does the consumer have) (see figure 2.1). Upon closer examination of these theories, the investigator determined that consumer behavior theory best applies to the study. In this study the consumer was identified as professional hockey fans. The investigator sought to answer questions about their action to or not to travel to watch their favorite team compete on the road.

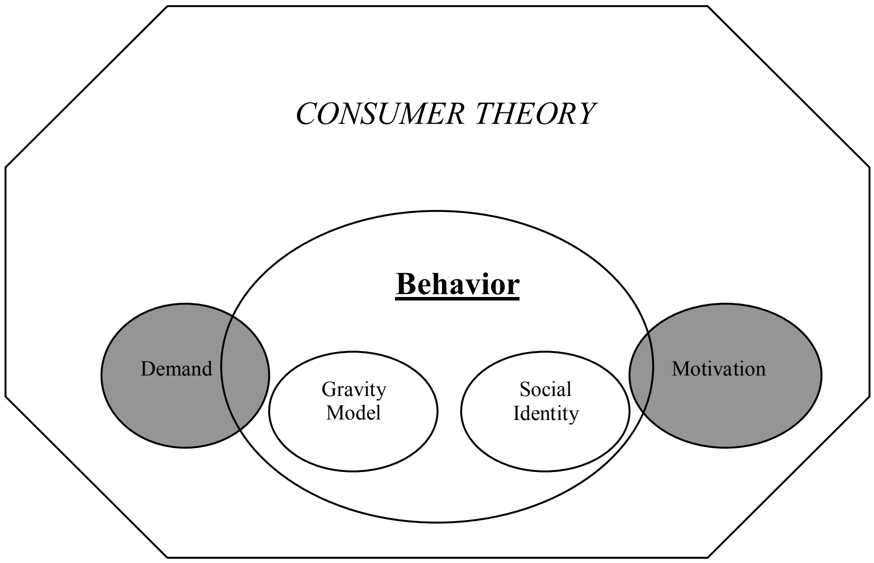

Figure 2.1 Illustration of Relation of Examined Theories

The results of the study indicated that team identification, destination image, and distance are all predictors for fans action to or not to travel to watch their favorite team compete on the road. As indicated in this study there are differences between subgroups. Team identification was a variable that explained the action to travel or not for fans that attend weekend games but not fans that attend games during the week. Team identification was also a variable that explained the action to travel or not for fans that purchase their tickets during the day of the game but did not explain this action for season ticket holders or mini-plan purchasers. Destination image was a variable that explained the action to travel or not for fans that are season ticket holders or purchase their tickets the day of the game but was not a variable that explained this action for fans who purchase mini-plans.

The second theory that was a foundation of this research was gravity theory. Distance decay, a vital component of Newton's gravity theory, explains that the distance between the two objects affects the relationship between two objects. Distance decay as applied predicts that demand will peak at some distance relatively close to a source market and then decline exponentially as distance increases. Distance has a hindering effect on human interaction because there are increasing consequences in time and cost associated with long-distance and more expensive transactions. Distance decay describes the decline of attraction with increasing distance from its point of origin. Similar to a magnetic field, distance-decay can be represented by an object surrounded by rings with decreasing interaction to the center as distance increases, (illustrated by Figure 2.2).

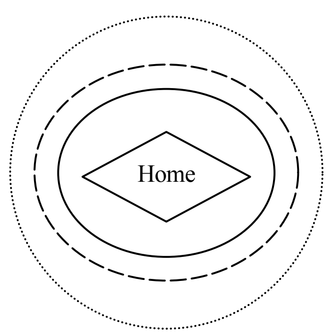

Figure 2.2 Model of Distance Decay between Points of Increasing Distance

The results of the study indicated that distance was a variable that explained fans (as a group) action to travel or not to watch their favorite team compete on the road. The study examined five hypotheses to examine the relationship between distance and travel to road games for fans. However, upon closer inspection of the hypotheses, the investigator reasoned that two of the hypotheses were more appropriate indicators of the relationship. The two hypotheses that were deemed as most appropriate were:

H_3: There is a relationship between the number of home games attending and distance of fans place of residence to the arena in which their favorite team compete.

H_{10}: The greater the number of hours fans are willing to travel to watch their favorite team compete on the road, the greater the number of road games they are willing to attend.

These two hypotheses were chosen, as they are the ones that indicate distance as a variable that explains travel behavior. While the results of the study indicated that distance was a variable that explains travel, the results indicated that there was a difference between subgroups. For subgroups of season ticket holders and mini-plan purchasers that distance may not be a variable that explained travel to road games.

5.3.2 Practical Applications

Sport and tourism are major areas of business. Many times the two areas intersect and have significant impacts on economies. Professionals in the areas of sport and tourism are always looking for new ways to increase their fan base and increase team related spending (i.e. – tickets, merchandise). In order to meet their goals, professionals must understand the behavior and the variables that contribute to the behavior of their consumers. The results of this study can be utilized by both groups of professionals to meet their goals of increased fandom and increased revenue.

Professionals in the area of sport can use this study as a tool to better meet the needs of their consumers. At this point in time, the National Hockey League is not viewed as popular of a sport when compared to the National Basketball Association, National Football League, and Major League Baseball. They are currently competing with NASCAR as the fourth most popular sport behind the aforementioned three sports. Therefore, it is vital that professionals in hockey cultivate and nurture relationships with fans. Specifically, this study suggests that professionals working in professional hockey can identify the breadth of their fan base. By understanding that the majority of fans who attend home games live within 50 miles of the home arena, the professionals can efficiently and effectively allocate their marketing budgets to target individuals within a 50-mile radius. By targeting these individuals, they can increase their fan base and also cultivate their current fan base. Increasing the current fan base of individuals who are more likely to attend home games can ultimately lead to increased revenue from event related sources such as food and concessions, parking, merchandise and apparel. The results of the study indicated that the number of home games attended and number of road games attended are related, therefore, professionals can use the results of the study to nurture and strengthen the relationships they have with their current fans. By offering trip packages to their fans, professional hockey teams would be strengthening their relationship with fans. They can use the results of this study to better identify the length of trips to take, the modes of transportation to use, and how far fans are willing to travel. They can also use the information gathered from the destination image part of this study to identify the characteristics of a destination that are most important to fans. All of this can be used to develop the most attractive trip packages to fans. They can also identify which of their fans are more likely to take these trips based on weekend vs. weekday attendees or type of ticket purchaser. This would create another source of revenue for professional hockey teams and increase team identification among current fans, which can lead to an increase in traditional revenue sources.

Destination management organizations (DMO) are always looking for new ways to increase the number of visitors in their community. DMO's can use the results from this study to create new ways to attract visitors. By working closely with professional hockey teams to develop trip packages, DMO's would be able to generate increased numbers of visitors. Understanding the length of trips and number of hours fans are willing to travel to watch their favorite team compete, will help DMO's better identify which teams are the most appropriate ones to work with.

The investigator also suggests that professionals in both areas use this study to develop partnerships. Based on the results, the study indicates that team identification, destination image, and distance are all influences on travel behavior. Therefore, it may be beneficial for sports teams, destination management organizations, and the travel industry to develop partnerships. For example, individual sports teams currently have partnerships with bus companies, hoteliers, and airlines for travel to road games for their team travel. These partnerships can be strengthened if utilized for fans. A sports team could work closely with a destination management organization and the travel industry to develop trip packages for fans to attend road games. By using this study, the sport team can identify the destinations that fans are most likely to attend. They can then develop a partnerships with motor-coach companies and airlines in which they guarantee a certain number of passengers in terms of fans in exchange for lower rates for their fans. Sports teams can then work with destination management organizations to develop entertainment, dining, and accommodation packages that provide visiting fans with reduced rates. Destination management organizations develop partnerships with their local professional sport team to offer reduced price tickets to visiting fans. Combined partnerships such as these would be beneficial to everyone involved. The fan benefits as all of the work involved with trip planning is already taken care of. The fan also receives the benefits of reduced costs and relief of stress in the travel portion of the trip. The sport team benefits as they will have increased support at their road games. Other benefits that the sport team receives are stronger relationships with current fans and increased fan base for individuals who may be moderate fans of the team but wish to travel to the destination. Strengthening of relationships with fans and increased fan base leads to increased revenue from gate receipts and merchandising. The travel industry can benefit with increased usage of their services by sports teams. Hoteliers can benefit from increased numbers of occupied rooms. Destination management organizations can benefit from revenue produced by selling trip packages and increased numbers of visitors into the community.

5.4 Recommendations for Future Research

While there has been a significant amount of research on the areas of sport and tourism, research on the area of sport tourism is minimal. There also has been a lack of research on spectator sport tourism as opposed to active sport tourism as well as a lack of research on fans of hockey when compared to fans of the other three major professional sports. Research on fan attendance at spectator sporting events has focused on attendance at home games rather than attendance at road games of professional teams. Therefore, the investigator suggests that there is a need to continue research in each of these areas.

There is a need for future research on the relationships between each of the three independent variables and the dependent variable. There is a relationship between each of the three independent variables and the dependent variable. Therefore, to further examine these relationship, the investigator recommends that future research be conducted using the independent and dependent variables used in this study. This study needs to be refined and repeated in order to reaffirm the relationships identified. Furthermore, this research needs to be conducted over an extended period of time in which surveying is completed during more than two games. Specifically, the investigator would conduct the data collection at specific points over a whole season. Data collection in future research would occur at the beginning of the season, in the middle of the season, and then again at the end of the season. Research has shown that attendance figures can be influenced by success on the field of play. By repeating the data collection at different points the investigator would accumulate more reliable data. The investigator would also be able to determine if respondents actually traveled as they indicated at the beginning of the season. In order to generalize the findings to all fans of professional hockey, future research would also examine if the independent variables impacted travel behavior for fans of other teams. The research can be further extended to include fans of other sports such as baseball, basketball, and football. Therefore, the investigator would be able to state whether team identification, destination image, and distance influence travel behavior for only fans of the Carolina Hurricanes, fans of professional hockey, or all fans of professional sport.

There is also a need to reaffirm the application of the team identification index. The Carolina Hurricanes winning the Stanley Cup for the 2005-06 season may have influenced this study. This success may have influenced fans level of team identification. After a successful season, fans may be more likely to indicate a stronger level of team identification. Therefore, the team identification scale may not be an appropriate indicator of travel behavior after a championship season. In order to check the reliability of a team identification scale, more longitudinal studies of individual teams should incorporate the team identification index. Data collection of fans for numerous teams who are at different levels of success during one season would also ensure reliability.

The investigator also suggests that there is a need for a strengthening of the destination image index. The investigator using various dimensions and characteristics of destinations created the destination index that was utilized in this research. The dimensions and characteristics of destinations were identified through previous research. The investigator used only those items that were deemed appropriate to this study. Therefore, scale development of destination image is needed as reliability and validity testing. By interviewing sport and tourism professionals, future researchers can identify the most appropriate measures of destination image to create an index. They can then check the reliability of the index by repeatedly administering it to fans at a sporting event.

There is a need for the creation of indices for distance and team success. The results of this study indicated that distance was a variable that affects travel behavior. In order for fans to travel to watch their favorite team compete on the road, they must weigh the costs associated with attendance. Some of the costs are related to distance. Therefore, there needs to be a distance index that identifies the most suitable measures of distance.

Research in the area of sport has examined the relationship between team success and attendance at home games. This research did not examine the relationship between team success and travel behavior because there were no commonly accepted measures of team success. However, one of the goals of this study was to include questions regarding team success to identify the various ways that fans define team success. These measures can be used for future research to examine the relationship between team success and attendance at road games.

This research focused on the individual relationships between each of the independent variables and the dependent variables. The investigator suggests that there is a need for further research on the interrelationships of all of the variables in this study. By researching the interrelationships between the variables, researchers can develop a better understanding of sports fans travel behavior. Future research would utilize multiple regression analysis considering that the research is predicting travel behavior based on several independent variables. Multiple regression is the preferred method of analysis over multidimensional scaling, factor analysis, or cluster analysis since these do not have a p-value and are not generally used in prediction.

The investigator stated that there is no relationship between gender, level of education and family structure and travel behavior but there is some relationship between household income and travel behavior. Previous research suggests that men are more likely to attend sporting events than women. As discussed earlier, when deciding to travel to watch their favorite team compete, fans must weigh the costs associated with traveling. Family structure, particularly the number of members in the household, can influence the cost of the trip. Therefore, the investigator suggests that there is a need for further research on the relationships between the demographic characteristics and travel behavior.

The study yielded some interesting results. First, the results of the analysis between team identification and travel behavior indicated that day of game ticket purchasers produced a stronger significance level when compared to the results of the groups that were season ticket holders and mini-plan purchasers. Prior to conducting the study, the investigator hypothesized that season ticket holders and mini-plan holders tend to have stronger team identification than day of game purchasers because of their monetary investment to the team. Season ticket holders invest more money in ticket purchasing than mini-plan purchasers while day of game purchasers spend less on tickets that mini-plan purchasers. The different levels of monetary investment tend to lead to stronger team identification. Therefore, the investigator hypothesized that the strength of team identification would lead to an increased number road games attended. Furthermore, when the analysis of reported number of road games and destination image was conducted based on subgroups, the results were significant for season ticket holders and day of game ticket purchasers but not for mini-plan purchasers. The investigator suggests that there is a need for research that further examines the reasons for these results. Future research should seek to answer the following questions: 'does monetary investment relate to team identification?' and 'does the type of ticket that fans purchase relate to their team identification?'

Although research in sport tourism is limited, various scholars have recognized the importance of further research in this area. As sport and tourism continue to have an impact on communities politically, socially, economically, and environmentally, it is inevitable that research in sport tourism will continue to grow. There is a relationship between each of the variables identified in this study and travel behavior. This study, by exploring the relationships between team identification, destination image, distance, and travel behavior, sets the foundation for further examination of these variables.

Research that has been conducted in the area of sport tourism has been mainly proprietary. Many sport teams either hire firms or utilize staffs who do not have research and analytical skills to conduct research on fan behavior. Most of the research that has been conducted focuses on attendance at home games, purchasing of merchandise, or marketing plans. Rarely do teams hire firms or utilize staff to conduct research on travel to road games. By not focusing on fans who travel to road games, teams are neglecting to take full advantage in terms of spending and support from their fan base. Specifically, professional sport teams are not taking advantage of booster clubs. Booster clubs are a market that already supports the team through travel, team related activities and functions, and volunteering at home games. These are groups that have strong team identification and can have a large impact on increasing a team's fan base. Research that has been sponsored by sports teams is rarely shared with other sports teams or academics. Therefore, the research tends to only be useful for the team that pays for it. Researchers who are trained to conduct research and analyze data can make better use of the research, as they generally are more willing to share their results with both the sport and tourism industries rather than one individual team. The investigator hopes that this study stimulates researchers and professionals to think on a larger scale that can benefit the sport and tourism industries rather than focus on research that only benefits their individual organizations.

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APPENDICES

Appendix A

2006-2007 Hockey Fan Survey

I am a graduate student at North Carolina State University conducting a survey of Carolina Hurricanes' fans. This questionnaire is part of a study that examines the factors that influence professional hockey fans. For a chance to win an authentic Carolina Hurricanes' autographed jersey, please complete and return to the **promotions kiosk located at section 109.**

INFORMATION
If you agree to participate in this study, you will be asked to complete a survey about yourself and your travel behavior.

CONFIDENTIALITY
Your individual information in the study will be kept strictly confidential. Data will be stored securely. Only myself (the principal investigator) will have access to the
information provided. No reference will be made in oral or written reports, which could link you to the study.

PARTICIPATION
Your participation in this study is voluntary; you may decline to participate without penalty. If you decide to participate, you may withdraw from the study at any time without penalty and without loss of benefits to which you are otherwise entitled. If you withdraw from the study before data collection is completed your data will be returned to you or destroyed at your request.

Thank you very much for participating in this study.

Instructions: Please mark the appropriate answers for each question.
Now, please answer the following questions based on your feelings.

1. Which NHL team is your favorite team?

____

2. Which of the following best represents your purchasing of Hurricanes' tickets?

A. Season ticket holder
B. Mini-plan purchaser
C. Day of game ticket purchaser

For Questions 3-8 please circle the appropriate response on a scale from 1-8.

3. How important to YOU is it that YOUR team wins?

Not important							Very important
1	2	3	4	5	6	7	8

4. How strongly do your FRIENDS see YOU as a fan of YOUR favorite team?

Not at all a fan							Very much a fan
1	2	3	4	5	6	7	8

5. During the season, how closely do you follow YOUR favorite team via ANY of the following: a) in person or on television, b) on the radio, c) television news or a newspaper, and/or d) the Internet?

Almost everyday							Never
1	2	3	4	5	6	7	8

6. How important to YOU is being a fan of YOUR favorite team?

Not important							Very important
1	2	3	4	5	6	7	8

7. How much do you dislike the greatest rivals of YOUR favorite team?

Do not dislike							Dislike very much
1	2	3	4	5	6	7	8

8. How often do YOU display the team's name or insignia at your place of work, where you live, and/or on your clothing?

Never							Always
1	2	3	4	5	6	7	8

9. Please circle how important EACH of the following is when deciding to travel to a city to watch YOUR favorite team play on the road.
(*1=Not important and 8=Very important*)

	Not Important							Very Important
a. Opponents record	1	2	3	4	5	6	7	8
b. Star players on opposing team	1	2	3	4	5	6	7	8
c. Weather	1	2	3	4	5	6	7	8
d. Cleanliness of the city	1	2	3	4	5	6	7	8
e. Entertainment	1	2	3	4	5	6	7	8
f. Shopping	1	2	3	4	5	6	7	8
g. Cultural appeal	1	2	3	4	5	6	7	8
h. Hospitality / Friendliness	1	2	3	4	5	6	7	8
i. Proximity of accommodations to venue	1	2	3	4	5	6	7	8
j. Cost of accommodations	1	2	3	4	5	6	7	8
k. Safety	1	2	3	4	5	6	7	8
l. Family oriented	1	2	3	4	5	6	7	8
m. Things to see and do in the city	1	2	3	4	5	6	7	8

10. For the 2006-07 season, how many home games of YOUR favorite team do you plan on attending? __________.

11. For the 2006-07 season, how many road games of YOUR favorite team do you plan on attending? __________.

12. Which of the following would be YOUR preferred mode of transportation to watch YOUR favorite team play on the road? (*please circle only one answer*).

A. Airplane
B. Automobile
C. Motorcoach
D. Train

13. What is the furthest distance that you are willing to travel to see YOUR favorite team play on the road (please answer in terms of hours)? _________.

14. When deciding whether to travel to a road game, which of the following do you consider most important in your decision? (*please circle only one answer*).

A. Cost in terms of dollars for travel portion of the trip
B. The amount of travel time the trip takes
C. Distance in miles from your home

15. Which of these types of trips are you more likely to participate in to watch your favorite team play on the road? (*please circle only one answer*).

A. 1 day trip during the week (no overnight stay)
B. 1 day trip during the weekend (no overnight stay)
C. 2-3 day trip during the week
D. 2-3 day trip including the weekend
E. Longer than 3 days during the week
F. Longer than 3 days including the weekend

16. For Your favorite team, how would you define a successful season for the 2006-07 season?

____

17. According to your definition of success, was your favorite team a success during the 2005-06 season?

A. Yes
B. No

The last few questions are about you. Your answers will help us to better understand the demographics of NHL fans. Your answers will be kept confidential.

18. What is your gender?

A. Male
B. Female

19. What is the highest level of education that you have completed (*please circle only one answer*)?

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21+
(grade school) (high school) (college) (grad school)

20. What was your total household income for 2006? $ __________,000

21. Which of the following best represents your household?

A. Single no children
B. Single with children under 18
C. Single with children 18 and over
D. Married with no children
E. Married with children under 18
F. Married with children 18 and over

22. What is your zip code? _____________

There will be a drawing on 2/16/07 to determine the winner of the authentic Carolina Hurricanes' team autographed jersey. In order to be entered into the drawing, please tell us your name and number so that we can contact you if you are the winner.

Print Name: ___________________________________ Phone #:____________

Thank you for taking the time to complete the survey. If you have questions at any time about the study or the procedures, you may contact the researcher, Leon Mohan at ljmohan@ncsu.edu. If you feel you have not been treated according to the descriptions in this form, or your rights as a participant in research have been violated during the course of this project, you may contact Dr. Matthew Zingraff, Chair of the NCSU IRB for the Use of Human Subjects in Research Committee, Box 7514, NCSU Campus (919/513-1834) or Mr. Matthew Ronning, Assistant Vice Chancellor, Research Administration, Box 7514, NCSU Campus (919/513-2148)

Appendix B

Data collection for this study occurred on two separate dates. Two games were chosen for data collection. A total of 1500 surveys were distributed. The first game in which data was collected was on a Saturday night in which the Carolina Hurricanes competed against the New York Rangers. Surveyors distributed 600 surveys at this game in which 357 completed surveys were collected. The second game in which data was collected was on a Thursday night in which the Carolina Hurricanes competed against the Boston Bruins. Surveyors distributed 900 surveys at this game in which 467 completed surveys were collected. A total of 824 completed surveys were examined for this study. Over forty-three percent of the surveys were collected at the game against the New York Rangers while 56.7 percent of the surveys were collected at the game against the Boston Bruins (see table B.1).

Table B.1 Frequency of survey distribution to professional hockey fans at the RBC Center.

Survey Distribution					
		Frequency	**Percent**	**Valid Percent**	**Cumulative Percent**
Valid	**Versus Boston**	357	43.3	43.3	43.3
	Versus New York	467	56.7	56.7	100.0
	Total	824	100.0	100.0	

The first question of the research asked respondents ‘Who is your favorite team?’ Over 92% of those who responded to the first question indicated that the Carolina Hurricanes were their favorite team (see table B.2).

Table B.2 Frequency of favorite team identified by fans of professional hockey.

Who is your favorite team?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	**Carolina**	737	89.4	92.6	92.6
	Boston	13	1.6	1.6	94.2
	New York (R)	14	1.7	1.8	96.0
	Washington	1	.1	.1	96.1
	Atlanta	1	.1	.1	96.2
	Toronto	6	.7	.8	97.0
	Montreal	1	.1	.1	97.1
	Colorado	4	.5	.5	97.6
	Detroit	5	.6	.6	98.2
	Buffalo	3	.4	.4	98.6
	Pittsburgh	4	.5	.5	99.1
	Minnesota	1	.1	.1	99.2
	Philadelphia	2	.2	.3	99.5
	Anaheim	1	.1	.1	99.6
	New Jersey	3	.4	.4	100.0
	Total	796	96.6	100.0	
Missing	**Missing**	28	3.4		
Total		824	100.0		

The second question of the study asked respondents about the type of ticket they purchase. There were three main types of tickets that the Carolina Hurricanes offer to fans. Over 36% of respondents reported that they were a season ticket holder, while 33.2% of respondents were mini-plan purchaser and 30.3% of respondents were day of game ticket purchaser (see table B.3).

Table B.3 Frequency of type of ticket purchased by fans of professional hockey.

Purchasing of tickets

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	**Season ticket holder**	298	36.2	36.5	36.5
	Mini-plan purchaser	271	32.9	33.2	69.7
	Day of game ticket purchaser	247	30.0	30.3	100.0
	Total	816	99.0	100.0	
Missing	**Missing**	8	1.0		
Total		824	100.0		

Questions 3 through 8 asked respondents to answer questions that were a part of the team identification scale. Question 3 asked respondents to indicate how important to them is it that their favorite team wins. Responses to this question ranged from 1 to 8 with a 1 representing not important and an eight representing very important (see table B.4). The mean score of the responses was a 6.9 with a standard deviation of 1.35 (see figure B.1). Because the responses were not normally distributed, Chebyshev's inequality rule was used. Based on the mean and the standard deviation (2 standard deviations), 75% of the respondents were in the range of 4.2 to 8.

Table B.4 Frequency of the importance of their favorite team winning to fans of professional hockey.

Importance of team winning to you

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	**1**	5	.6	.6	.6
	2	6	.7	.7	1.3
	3	11	1.3	1.3	2.7
	4	19	2.3	2.3	5.0
	5	68	8.3	8.3	13.3
	6	183	22.2	22.3	35.5
	7	156	18.9	19.0	54.5
	8	374	45.4	45.5	100.0
	Total	822	99.8	100.0	
Missing	**Missing**	2	.2		
Total		824	100.0		

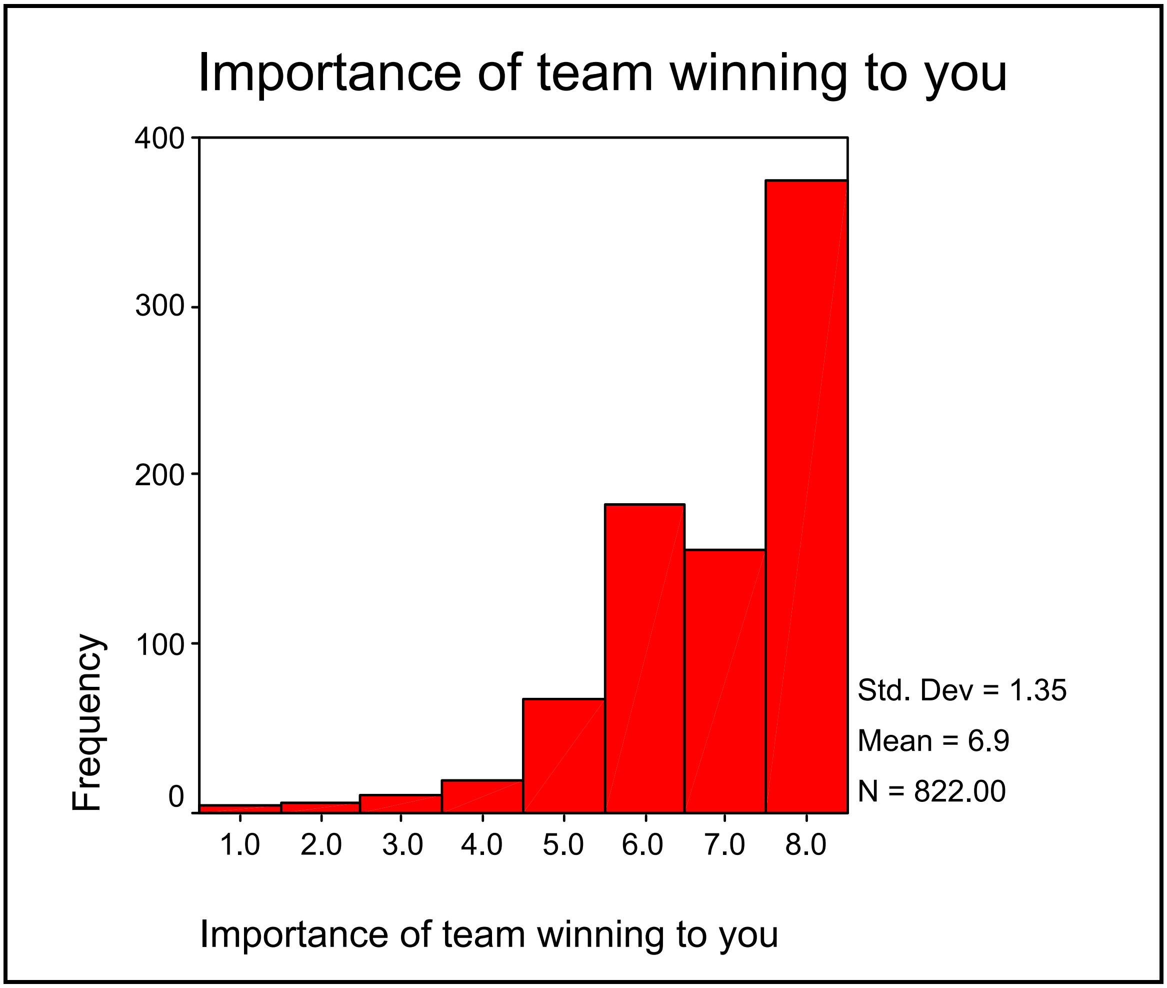

Figure B.1 Frequency of the importance of their favorite team winning to fans of professional hockey.

Question 4 asked respondents to indicate how strongly friends see you as a fan. Responses to this question ranged from 1 to 8 with a 1 representing not at all a fan and an eight representing very much a fan (see table B.5). The mean score of the responses was a 7.1 with a standard deviation of 1.33 (see figure B.2). Based on the mean and the standard deviation (2 standard deviations), 95% of the respondents were in the range of 4.44 to 8.

Table B.5 Frequency of the importance of how strongly friends of professional hockey fans see them as a fan of their favorite team.

How strongly friends see you as a fan

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	**1**	1	.1	.1	.1
	2	10	1.2	1.2	1.3
	3	11	1.3	1.3	2.7
	4	22	2.7	2.7	5.3
	5	60	7.3	7.3	12.6
	6	112	13.6	13.6	26.2
	7	150	18.2	18.2	44.4
	8	458	55.6	55.6	100.0
	Total	824	100.0	100.0	

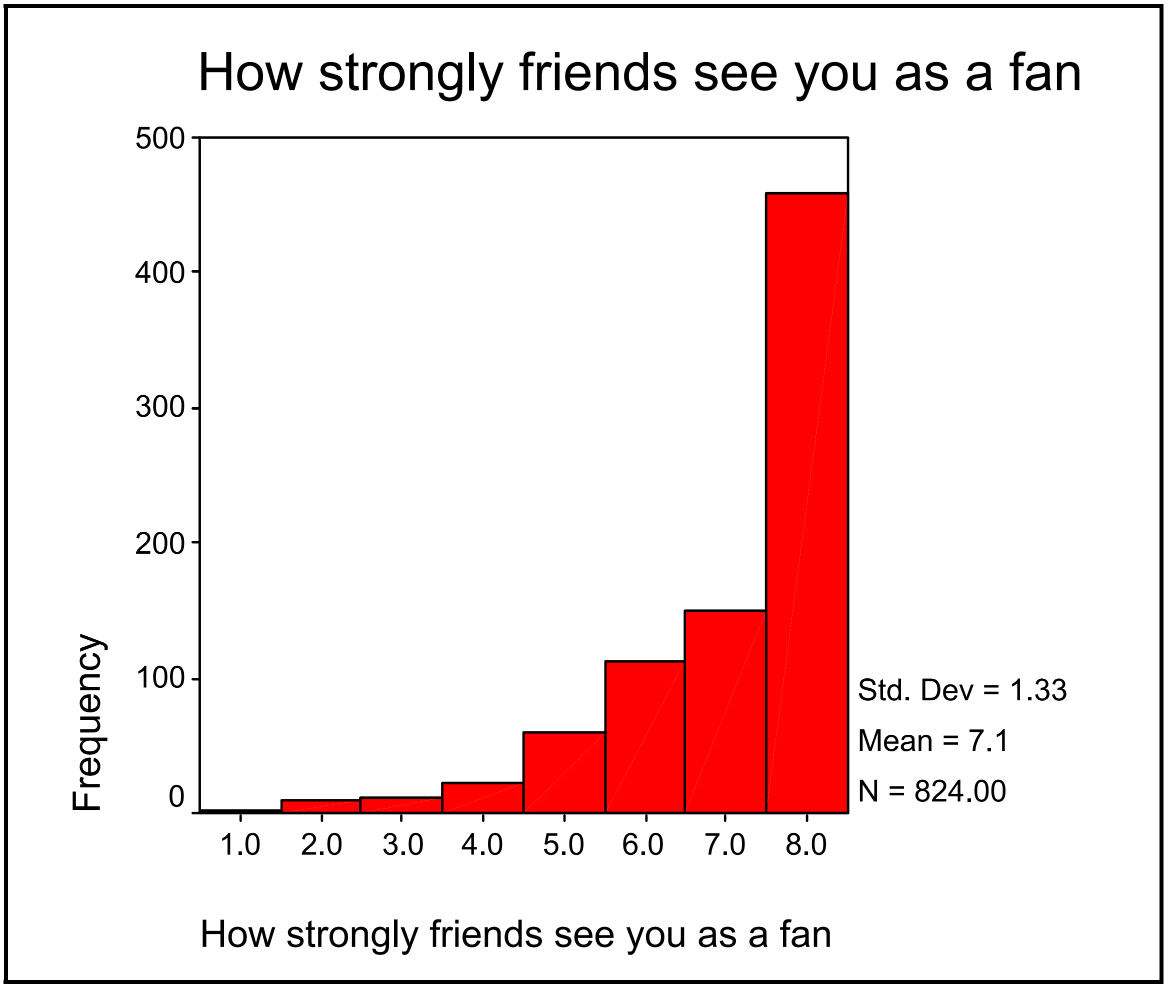

Figure B.2 Frequency of the importance of how strongly friends of professional hockey fans see them as a fan of their favorite team.

Question 5 asked respondents to indicate how closely you follow your favorite team via in person or television, on the radio, television news or a newspaper, and/or the internet. Responses to this question ranged from 1 to 8 with a 1 representing never and an eight representing almost everyday (see table B.6). The mean score of the responses was a 7.2 with a standard deviation of 1.31 (see figure B.3). Based on the mean and the standard deviation (2 standard deviations), 95% of the respondents were in the range of 4.58 to 8.

Table B.6 Frequency of how closely professional follow their favorite team.

How closely do You follow the team

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	**1**	3	.4	.4	.4
	2	6	.7	.7	1.1
	3	14	1.7	1.7	2.8
	4	20	2.4	2.4	5.2
	5	51	6.2	6.2	11.4
	6	85	10.3	10.3	21.7
	7	150	18.2	18.2	39.9
	8	495	60.1	60.1	100.0
	Total	824	100.0	100.0	

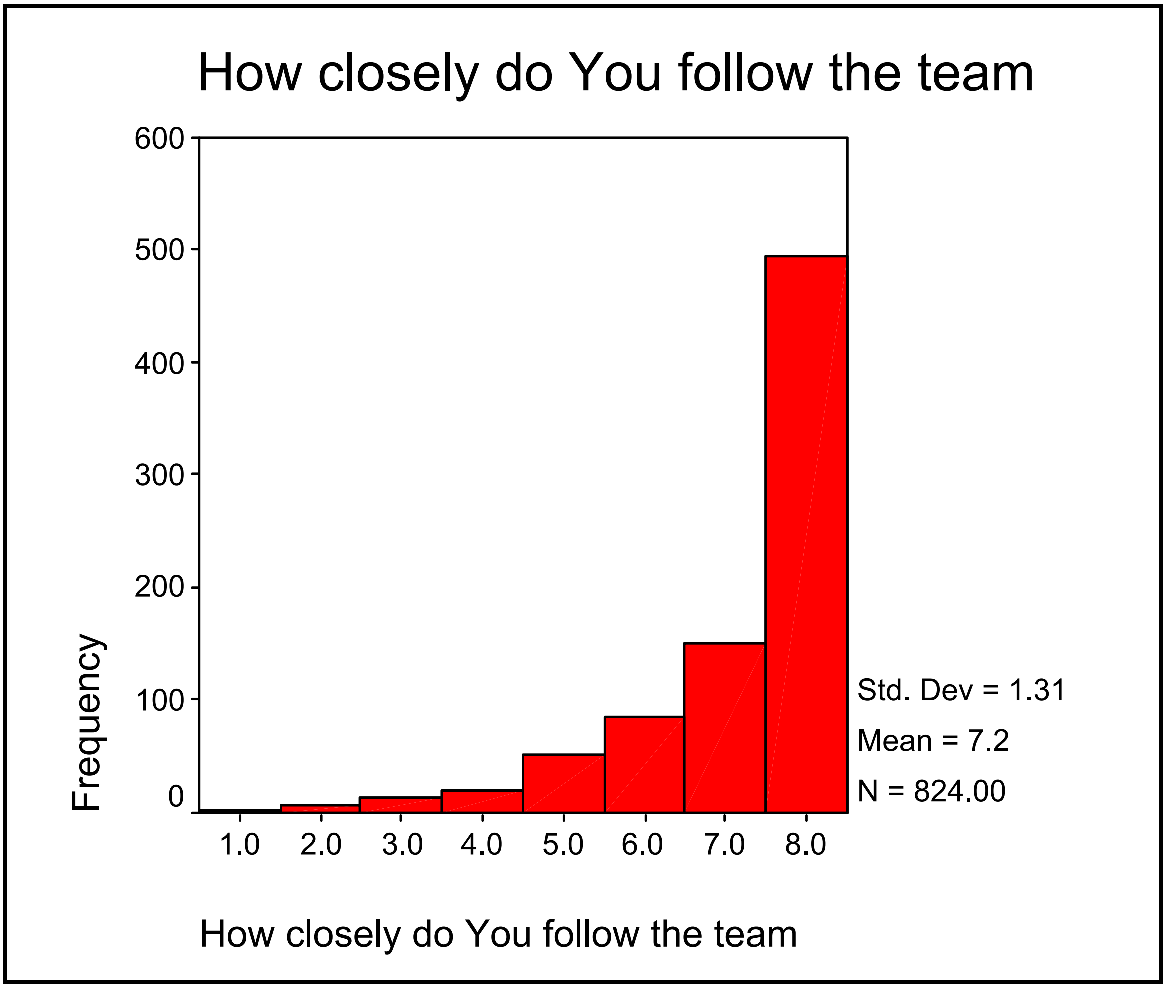

Figure B.3 Frequency of how closely fans of professional hockey follow their favorite team.

Question 6 asked respondents to indicate how important to you is being a fan of your favorite team. Responses to this question ranged from 1 to 8 with a 1 representing not important and an eight representing very important (see table B.7). The mean score of the responses was a 7.1 with a standard deviation of 1.29 (see figure B.4). Based on the mean and the standard deviation (2 standard deviations), 95% of the respondents were in the range of 4.52 to 8.

Table B.7 Frequency of the importance of being a fan to professional hockey fans.

Importance of being a fan

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	**1**	2	.2	.2	.2
	2	5	.6	.6	.8
	3	12	1.5	1.5	2.3
	4	20	2.4	2.4	4.7
	5	56	6.8	6.8	11.5
	6	132	16.0	16.0	27.5
	7	155	18.8	18.8	46.4
	8	442	53.6	53.6	100.0
	Total	824	100.0	100.0	

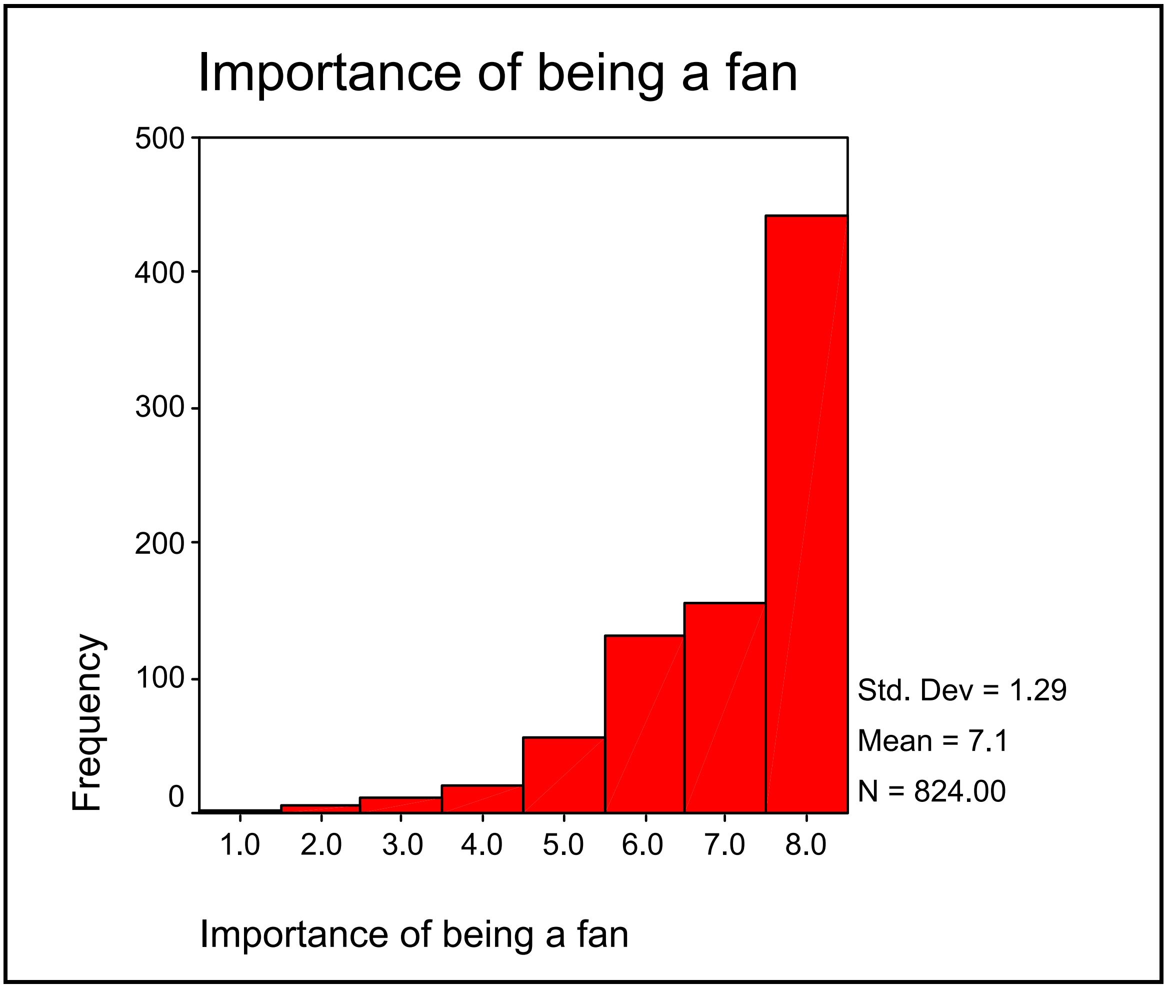

Figure B.4 Frequency of the importance of being a fan to professional hockey fans.

Question 7 asked respondents to indicate how much do you dislike the greatest rivals of your favorite team. Responses to this question ranged from 1 to 8 with a 1 representing do not dislike and an eight representing dislike very much (see table B.8). The mean score of the responses was a 5.7 with a standard deviation of 2.03 (see figure B.5). Based on the mean and the standard deviation (2 standard deviations), 95% of the respondents were in the range of 1.64 to 8.

Table B.8 Frequency of the strength of dislike of rivals for professional hockey fans.

Dislike of rivals					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	39	4.7	4.8	4.8
	2	33	4.0	4.0	8.8
	3	51	6.2	6.2	15.0
	4	81	9.8	9.9	24.8
	5	133	16.1	16.2	41.0
	6	153	18.6	18.6	59.7
	7	106	12.9	12.9	72.6
	8	225	27.3	27.4	100.0
	Total	821	99.6	100.0	
Missing	Missing	3	.4		
Total		824	100.0		

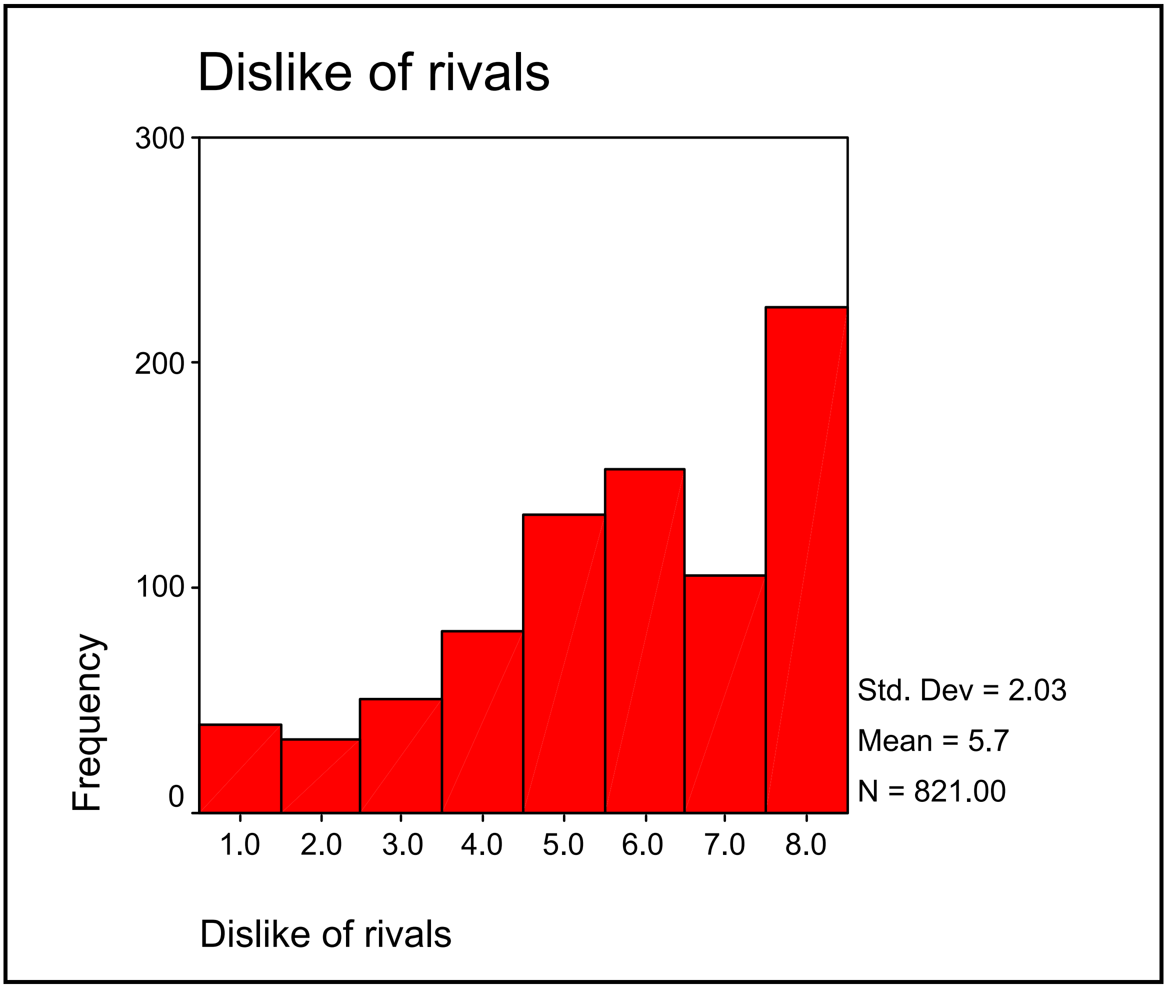

Figure B.5 Frequency of the strength of dislike of rivals for professional hockey fans.

Question 8 asked respondents to indicate how often do you display the team's name or insignia at your place of work, where you live, and/or on your clothing. Responses to this question ranged from 1 to 8 with a 1 representing never and an eight representing always (see table B.9). The mean score of the responses was a 6.4 with a standard deviation of 1.88 (see figure B.6). Based on the mean and the standard deviation (2 standard deviations), 95% of the respondents were in the range of 2.64 to 8.

Table B.9 Frequency of how often professional hockey fans display their favorite team's name or insignia.

How often do you display team name or insignia

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	**1**	21	2.5	2.6	2.6
	2	26	3.2	3.2	5.7
	3	29	3.5	3.5	9.2
	4	47	5.7	5.7	15.0
	5	86	10.4	10.5	25.4
	6	144	17.5	17.5	42.9
	7	102	12.4	12.4	55.4
	8	367	44.5	44.6	100.0
	Total	822	99.8	100.0	
Missing	**Missing**	2	.2		
Total		824	100.0		

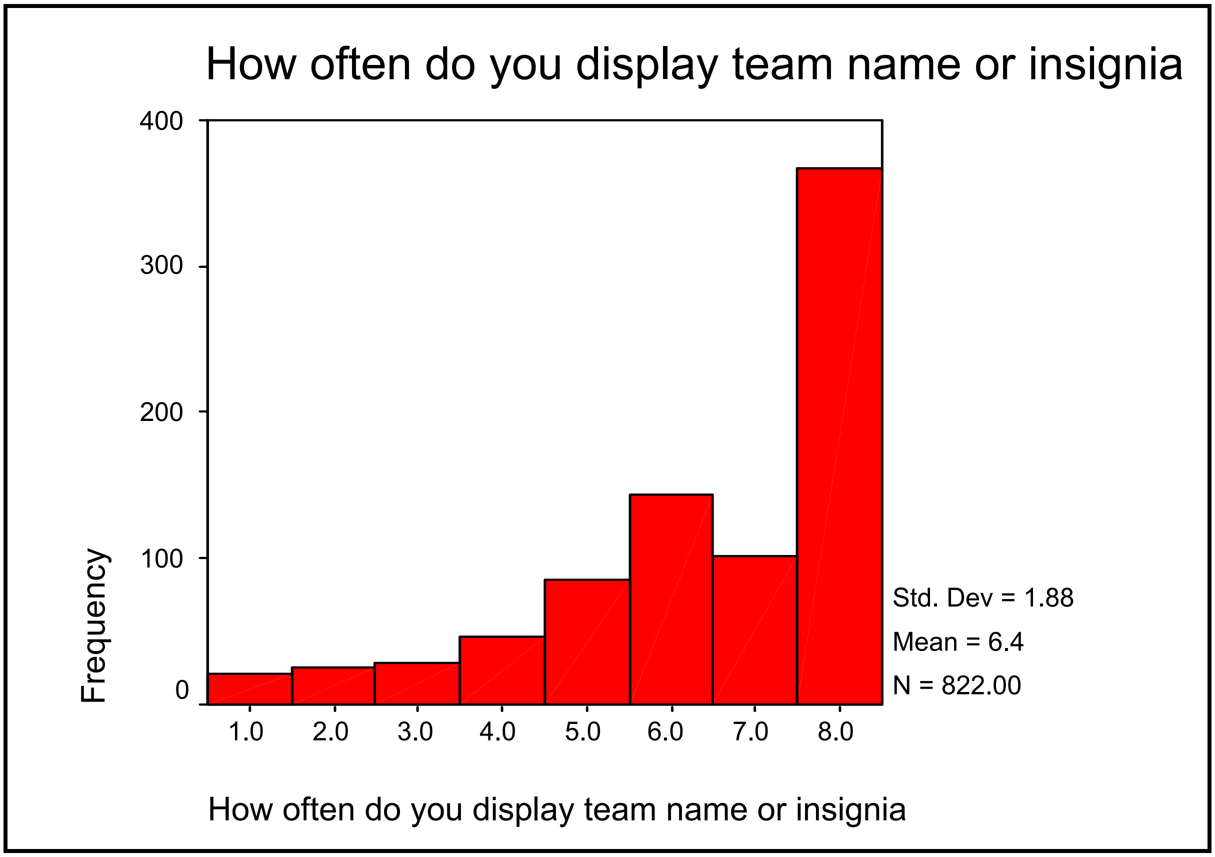

Figure B.6 Frequency of how often professional hockey fans display their favorite team's name or insignia.

Questions 9 asked respondents to answer 13 Likert style items. Each of the 13 items is an indicator of the importance that the respondent places on each item when deciding to travel to a city to watch their favorite team play on the road. Respondents answered the items based on a scale of 1 to 8 with a 1 representing not important and an 8 representing very important. These items were a part of the destination image scale.

Item 9A asked respondents about the importance they place on opponent's record when deciding to travel to a city to watch your favorite team play on the road. Responses to item 9A ranged from 1 to 8 (see table B.10). The mean score of the responses was a 3.4 with a standard deviation of 2.41 (see figure B.7). Based on the mean and the standard deviation (1 standard deviation), 68% of the respondents were in the range of 1 to 5.82.

Table B.10 Frequency of the importance of opponent's record for professional hockey fans when deciding to travel to see their favorite team compete.

Importance of opponent's record

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	300	36.4	38.5	38.5
	2	57	6.9	7.3	45.8
	3	53	6.4	6.8	52.6
	4	91	11.0	11.7	64.2
	5	80	9.7	10.3	74.5
	6	98	11.9	12.6	87.1
	7	46	5.6	5.9	92.9
	8	55	6.7	7.1	100.0
	Total	780	94.7	100.0	
Missing	Missing	44	5.3		
Total		824	100.0		

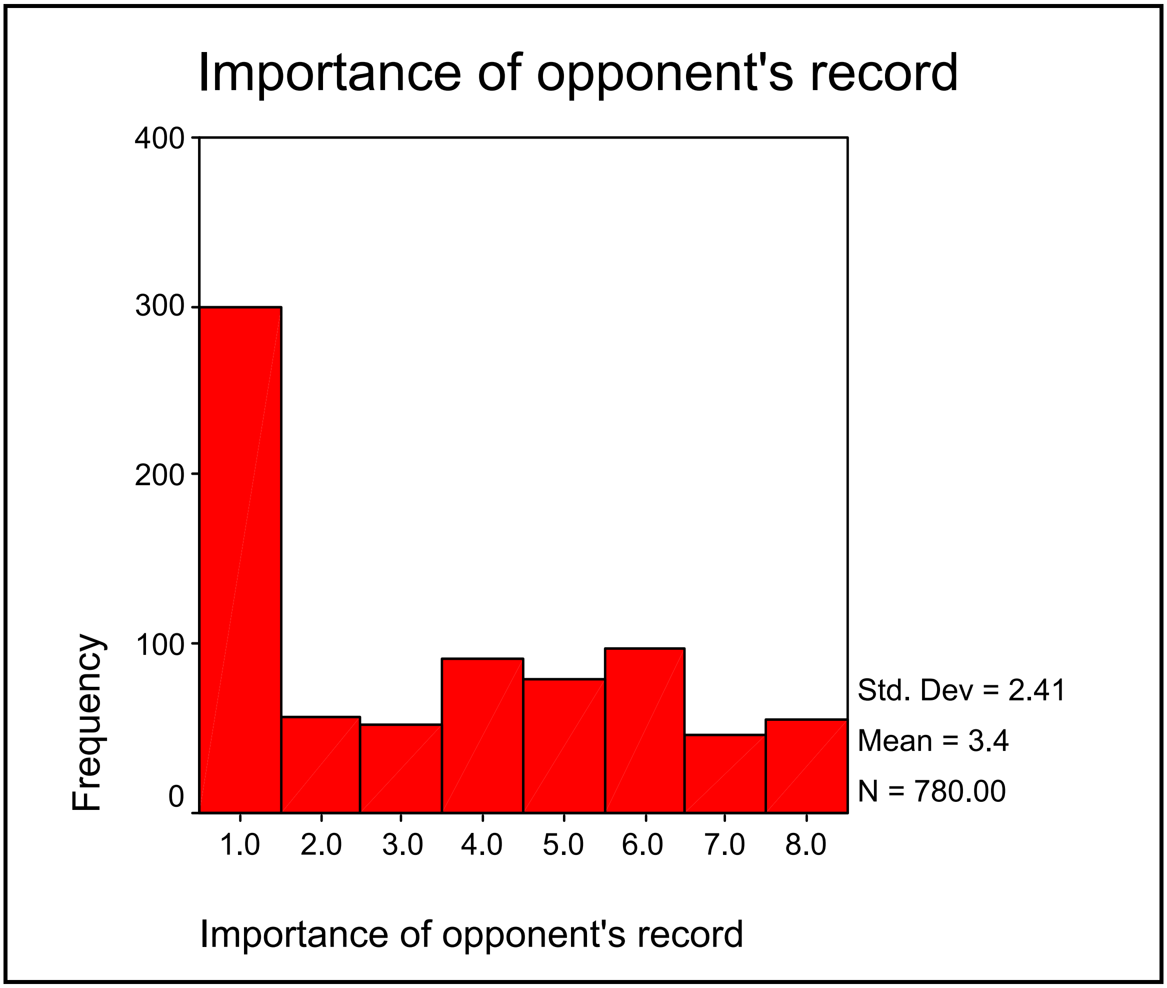

Figure B.7 Frequency of the importance of opponent's record for professional hockey fans when deciding to travel to see their favorite team compete.

Item 9B asked respondents about the importance they place on opponents having star players when deciding to travel to a city to watch your favorite team play on the road. Responses to item 9B ranged from 1 to 8 (see table B.11). The mean score of the responses was a 4.0 with a standard deviation of 2.35 (see figure B.8). Based on the mean and the standard deviation (1 standard deviation), 68% of the respondents were in the range of 1.65 to 6.35.

Table B.11 Frequency of the importance of star players on the opposing team for professional hockey fans when deciding to travel to see their favorite team compete.

Importance of star players

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	**1**	201	24.4	25.7	25.7
	2	62	7.5	7.9	33.6
	3	66	8.0	8.4	42.1
	4	87	10.6	11.1	53.2
	5	117	14.2	15.0	68.2
	6	119	14.4	15.2	83.4
	7	70	8.5	9.0	92.3
	8	60	7.3	7.7	100.0
	Total	782	94.9	100.0	
Missing	**Missing**	42	5.1		
Total		824	100.0		

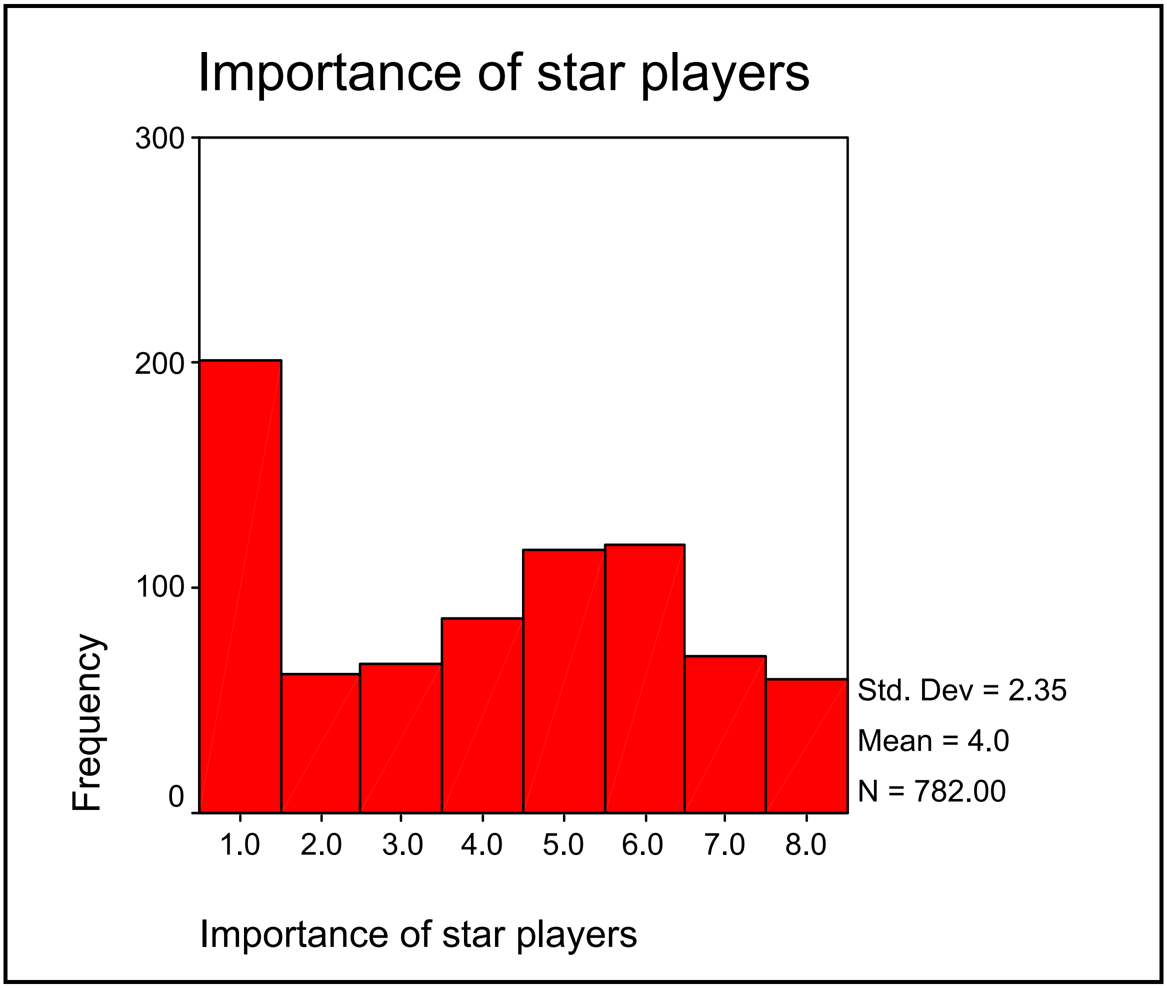

Figure B.8 Frequency of the importance of star players on the opposing team for professional hockey fans when deciding to travel to see their favorite team compete.

Item 9C asked respondents about the importance they place on the weather of the destination city when deciding to travel to a city to watch your favorite team play on the road. Responses to item 9C ranged from 1 to 8 (see table B.12). The mean score of the responses was a 4.0 with a standard deviation of 2.44 (see figure B.9). Based on the mean and the standard deviation (1 standard deviation), 68% of the respondents were in the range of 1.56 to 6.44.

Table B.12 Frequency of the importance of the weather of the visiting destination for professional hockey fans when deciding to travel to see their favorite team compete.

Importance of weather

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	206	25.0	26.4	26.4
	2	70	8.5	9.0	35.3
	3	64	7.8	8.2	43.5
	4	107	13.0	13.7	57.2
	5	81	9.8	10.4	67.6
	6	103	12.5	13.2	80.8
	7	64	7.8	8.2	89.0
	8	86	10.4	11.0	100.0
	Total	781	94.8	100.0	
Missing	Missing	43	5.2		
Total		824	100.0		

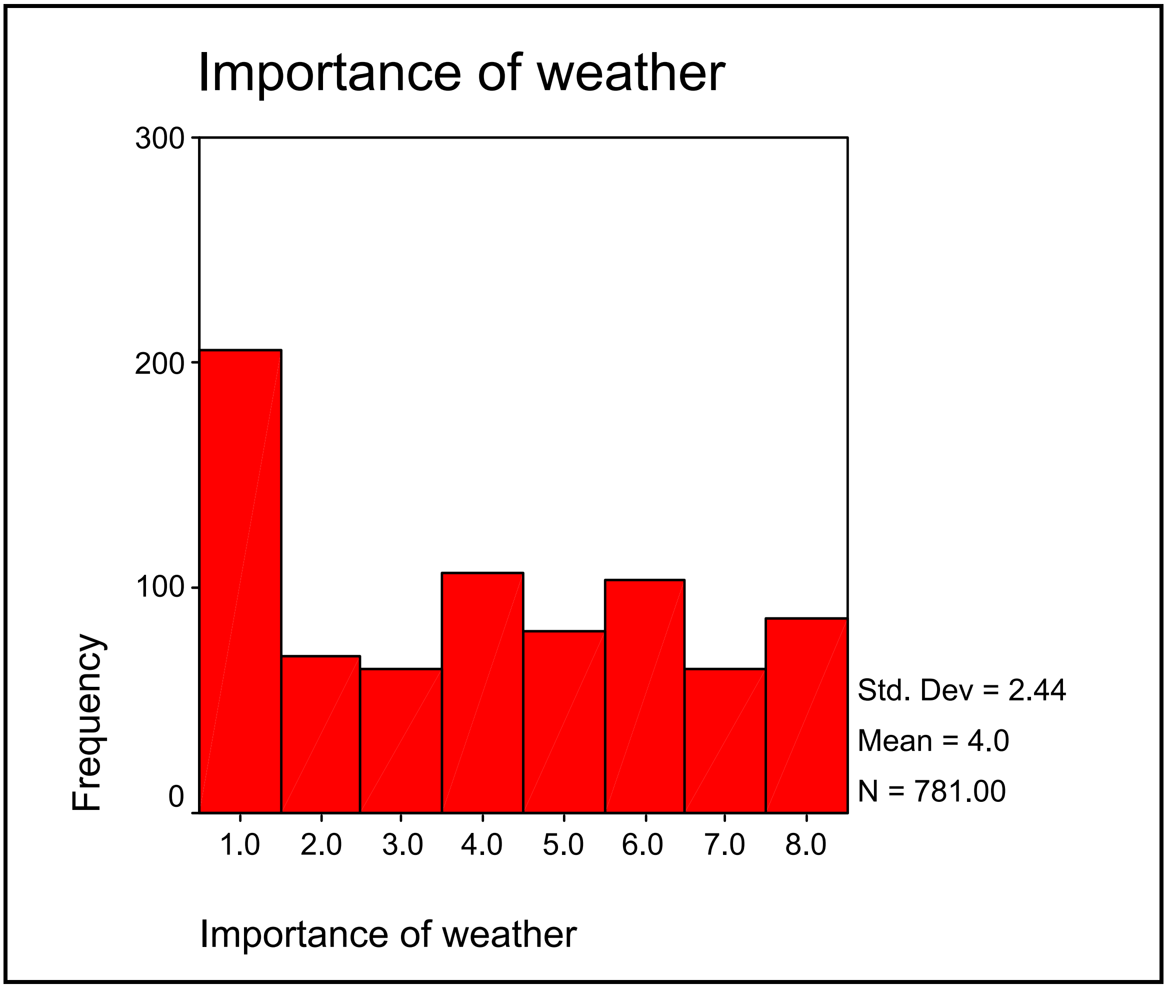

Figure B.9 Frequency of the importance of the weather of the visiting destination for professional hockey fans when deciding to travel to see their favorite team compete.

Item 9D asked respondents about the importance they place on the cleanliness of the destination city when deciding to travel to a city to watch your favorite team play on the road. Responses to item 9D ranged from 1 to 8 (see table B.13). The mean score of the responses was a 4.1 with a standard deviation of 2.38 (see figure B.10). Based on the mean and the standard deviation (1 standard deviation), 68% of the respondents were in the range of 1.72 to 6.48.

Table B.13 Frequency of the importance of cleanliness of the visiting destination for professional hockey fans when deciding to travel to see their favorite team compete.

Importance of cleanliness of city

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	191	23.2	24.6	24.6
	2	53	6.4	6.8	31.4
	3	72	8.7	9.3	40.7
	4	97	11.8	12.5	53.2
	5	108	13.1	13.9	67.1
	6	104	12.6	13.4	80.4
	7	78	9.5	10.0	90.5
	8	74	9.0	9.5	100.0
	Total	777	94.3	100.0	
Missing	Missing	47	5.7		
Total		824	100.0		

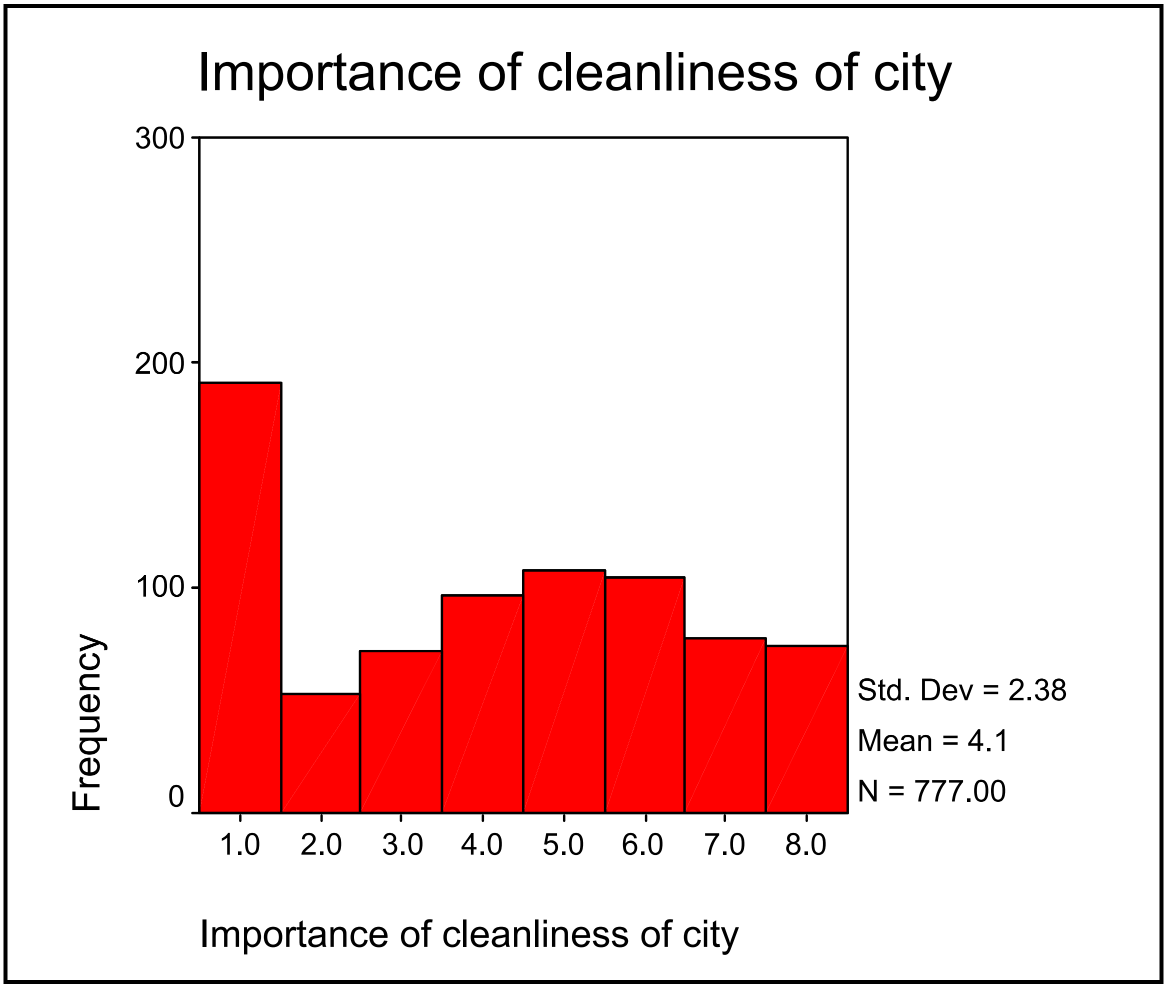

Figure B.10 Frequency of the importance of cleanliness of the visiting destination for professional hockey fans when deciding to travel to see their favorite team compete.

Item 9E asked respondents about the importance they place on entertainment of the destination city when deciding to travel to a city to watch your favorite team play on the road. Responses to item 9E ranged from 1 to 8 (see table B.14). The mean score of the responses was a 4.3 with a standard deviation of 2.31 (see figure B.11).

Based on the mean and the standard deviation (1 standard deviation), 68% of the respondents were in the range of 1.99 to 6.61.

Table B.14 Frequency of the importance of entertainment of the visiting destination for professional hockey fans when deciding to travel to see their favorite team compete.

Importance of entertainment					
		Frequency	**Percent**	**Valid Percent**	**Cumulative Percent**
Valid	**1**	162	19.7	20.8	20.8
	2	52	6.3	6.7	27.5
	3	54	6.6	6.9	34.5
	4	102	12.4	13.1	47.6
	5	129	15.7	16.6	64.2
	6	123	14.9	15.8	80.1
	7	82	10.0	10.6	90.6
	8	73	8.9	9.4	100.0
	Total	777	94.3	100.0	
Missing	**Missing**	47	5.7		
Total		824	100.0		

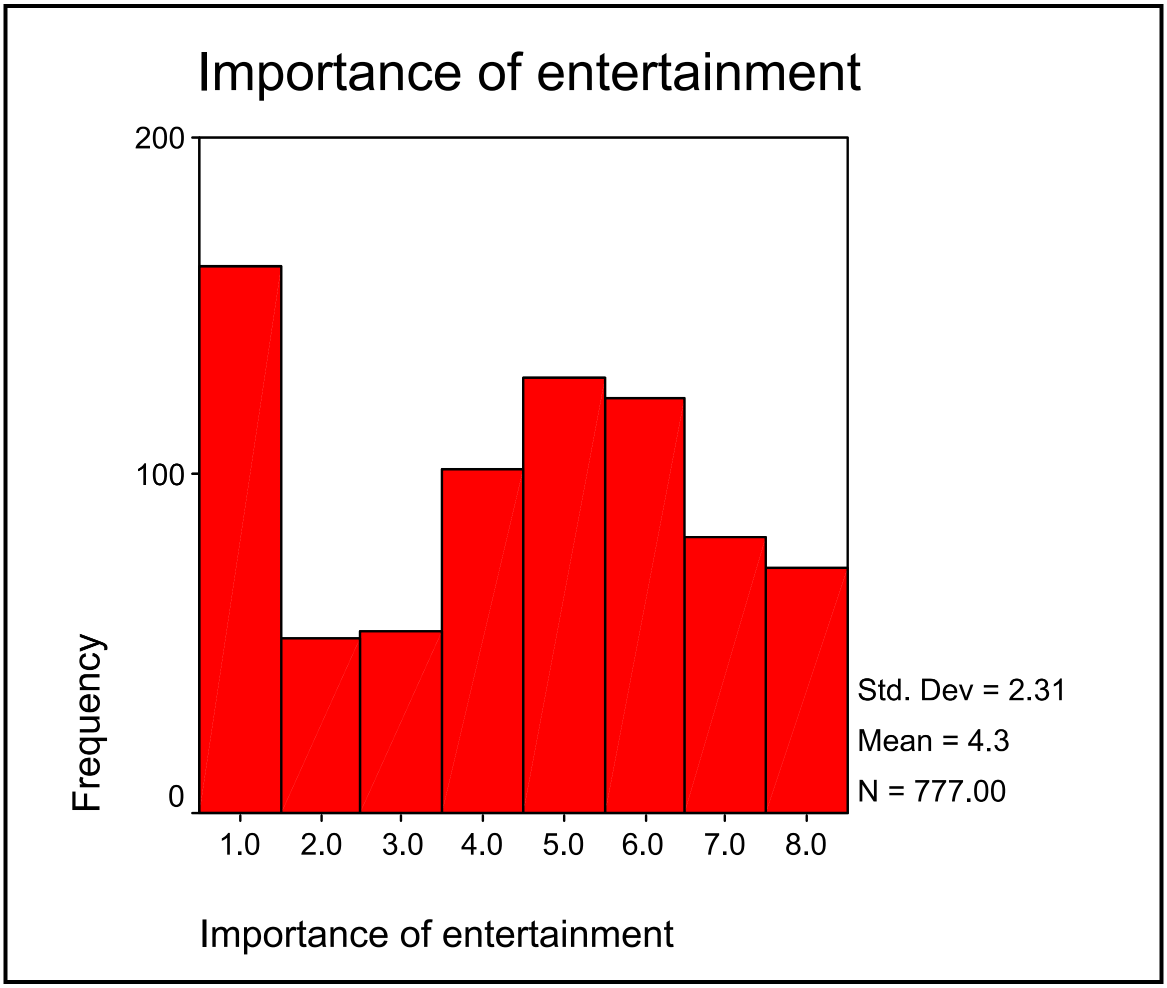

Figure B.11 Frequency of the importance of entertainment of the visiting destination for professional hockey fans when deciding to travel to see their favorite team compete.

Item 9F asked respondents about the importance they place on shopping of the destination city when deciding to travel to a city to watch your favorite team play on the road. Responses to item 9F ranged from 1 to 8 (see table B.15). The mean score of the responses was a 3.5 with a standard deviation of 2.66 (see figure B.12). Based on the mean and the standard deviation (1 standard deviation), 68% of the respondents were in the range of 1 to 6.16.

Table B.15 Frequency of the importance of shopping in the visiting destination for professional hockey fans when deciding to travel to see their favorite team compete.

Importance of shopping

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	**1**	240	29.1	30.8	30.8
	2	80	9.7	10.3	41.1
	3	85	10.3	10.9	52.1
	4	100	12.1	12.9	64.9
	5	104	12.6	13.4	78.3
	6	60	7.3	7.7	86.0
	7	70	8.5	9.0	95.0
	8	39	4.7	5.0	100.0
	Total	778	94.4	100.0	
Missing	**Missing**	46	5.6		
Total		824	100.0		

Figure B.12 Frequency of the importance of shopping in the visiting destination for professional hockey fans when deciding to travel to see their favorite team compete.

Item 9G asked respondents about the importance they place on the cultural appeal of the destination city when deciding to travel to a city to watch your favorite team play on the road. Responses to item 9G ranged from 1 to 8 (see table B.16). The mean score of the responses was a 3.9 with a standard deviation of 2.30 (see figure

B.13). Based on the mean and the standard deviation (1 standard deviation), 68% of the respondents were in the range of 1.6 to 6.2.

Table B.16 Frequency of the importance of the cultural appeal of the visiting destination for professional hockey fans when deciding to travel to see their favorite team compete.

Importance of cultural appeal					
		Frequency	**Percent**	**Valid Percent**	**Cumulative Percent**
Valid	**1**	196	23.8	25.3	25.3
	2	66	8.0	8.5	33.9
	3	60	7.3	7.8	41.6
	4	115	14.0	14.9	56.5
	5	114	13.8	14.7	71.2
	6	90	10.9	11.6	82.8
	7	85	10.3	11.0	93.8
	8	48	5.8	6.2	100.0
	Total	774	93.9	100.0	
Missing	**Missing**	50	6.1		
Total		824	100.0		

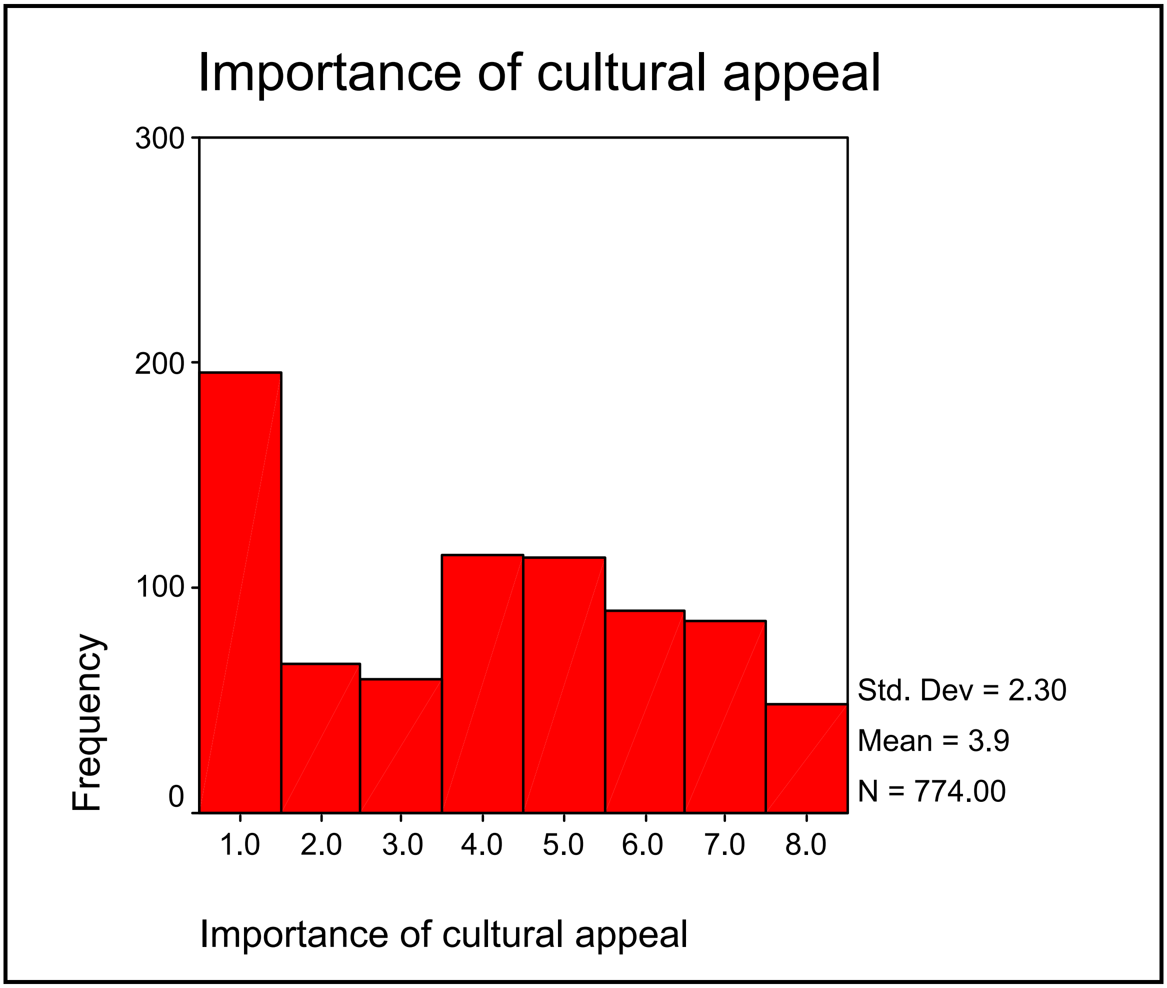

Figure B.13 Frequency of the importance of the cultural appeal of the visiting destination for professional hockey fans when deciding to travel to see their favorite team compete.

Item 9H asked respondents about the importance they place on the hospitality of the destination city when deciding to travel to a city to watch your favorite team play on the road. Responses to item 9H ranged from 1 to 8 (see table B.17). The mean score of the responses was a 5.2 with a standard deviation of 2.33 (see figure B.14). Based on the mean and the standard deviation (1 standard deviation), 68% of the respondents were in the range of 2.87 to 7.53.

Table B.17 Frequency of the importance of the hospitality of the visiting destination for professional hockey fans when deciding to travel to see their favorite team compete.

Importance of hospitality

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	**1**	116	14.1	15.0	15.0
	2	26	3.2	3.4	18.4
	3	35	4.2	4.5	22.9
	4	78	9.5	10.1	33.0
	5	96	11.7	12.4	45.5
	6	151	18.3	19.6	65.0
	7	139	16.9	18.0	83.0
	8	131	15.9	17.0	100.0
	Total	772	93.7	100.0	
Missing	**Missing**	52	6.3		
Total		824	100.0		

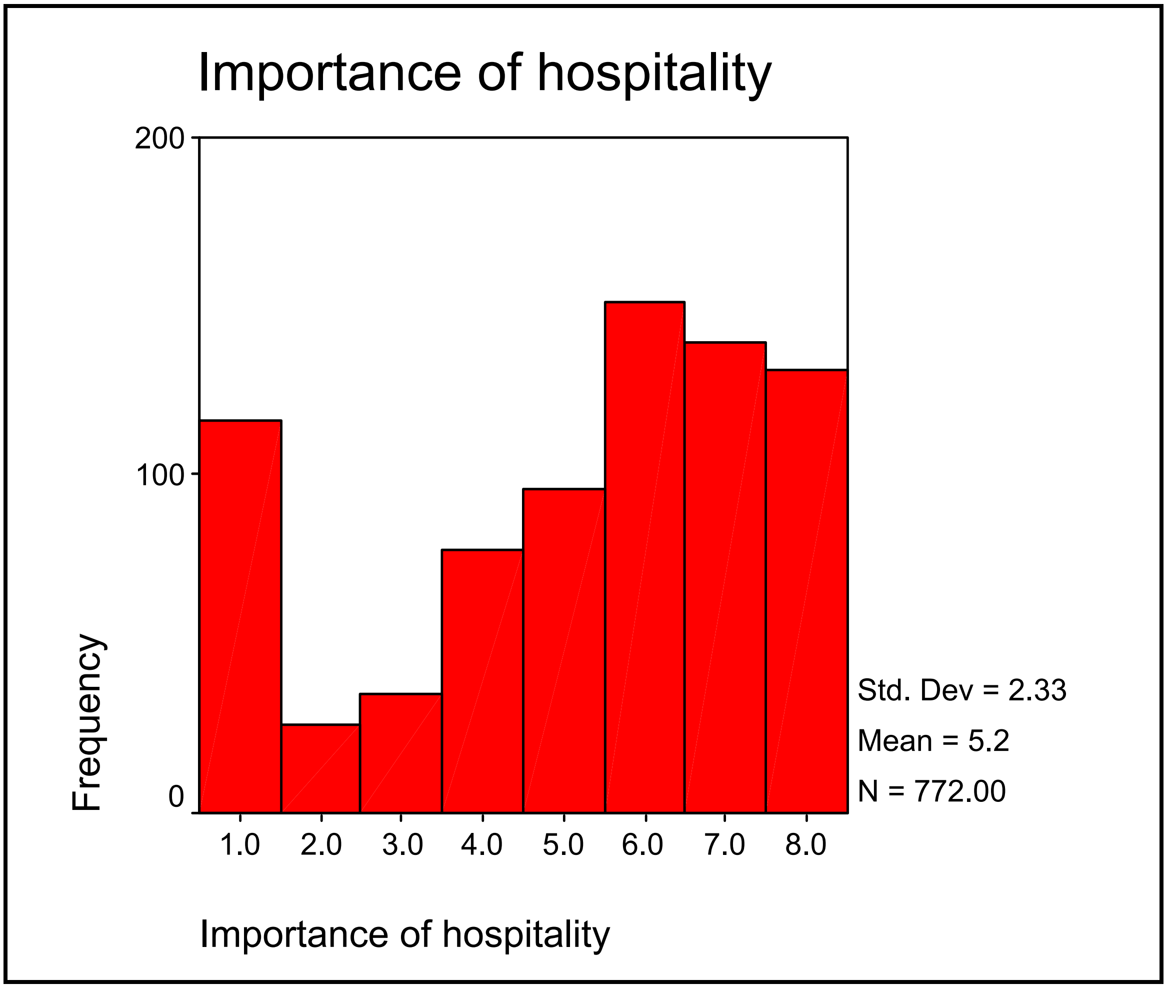

Figure B.14 Frequency of the importance of the hospitality of the visiting destination for professional hockey fans when deciding to travel to see their favorite team compete.

Item 9I asked respondents about the importance they place on the proximity of accommodations to the venue when deciding to travel to a city to watch your favorite team play on the road. Responses to item 9I ranged from 1 to 8 (see table B.18). The mean score of the responses was a 5.3 with a standard deviation of 2.34 (see figure B.15). Based on the mean and the standard deviation (1 standard deviation), 68% of the respondents were in the range of 2.96 to 7.64.

Table B.18 Frequency of the importance of the proximity of the venue to accommodations for professional hockey fans when deciding to travel to see their favorite team compete.

Importance of proximity to venue

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	**1**	113	13.7	14.6	14.6
	2	25	3.0	3.2	17.8
	3	30	3.6	3.9	21.7
	4	73	8.9	9.4	31.1
	5	93	11.3	12.0	43.2
	6	132	16.0	17.1	60.2
	7	169	20.5	21.8	82.0
	8	139	16.9	18.0	100.0
	Total	774	93.9	100.0	
Missing	**Missing**	50	6.1		
Total		824	100.0		

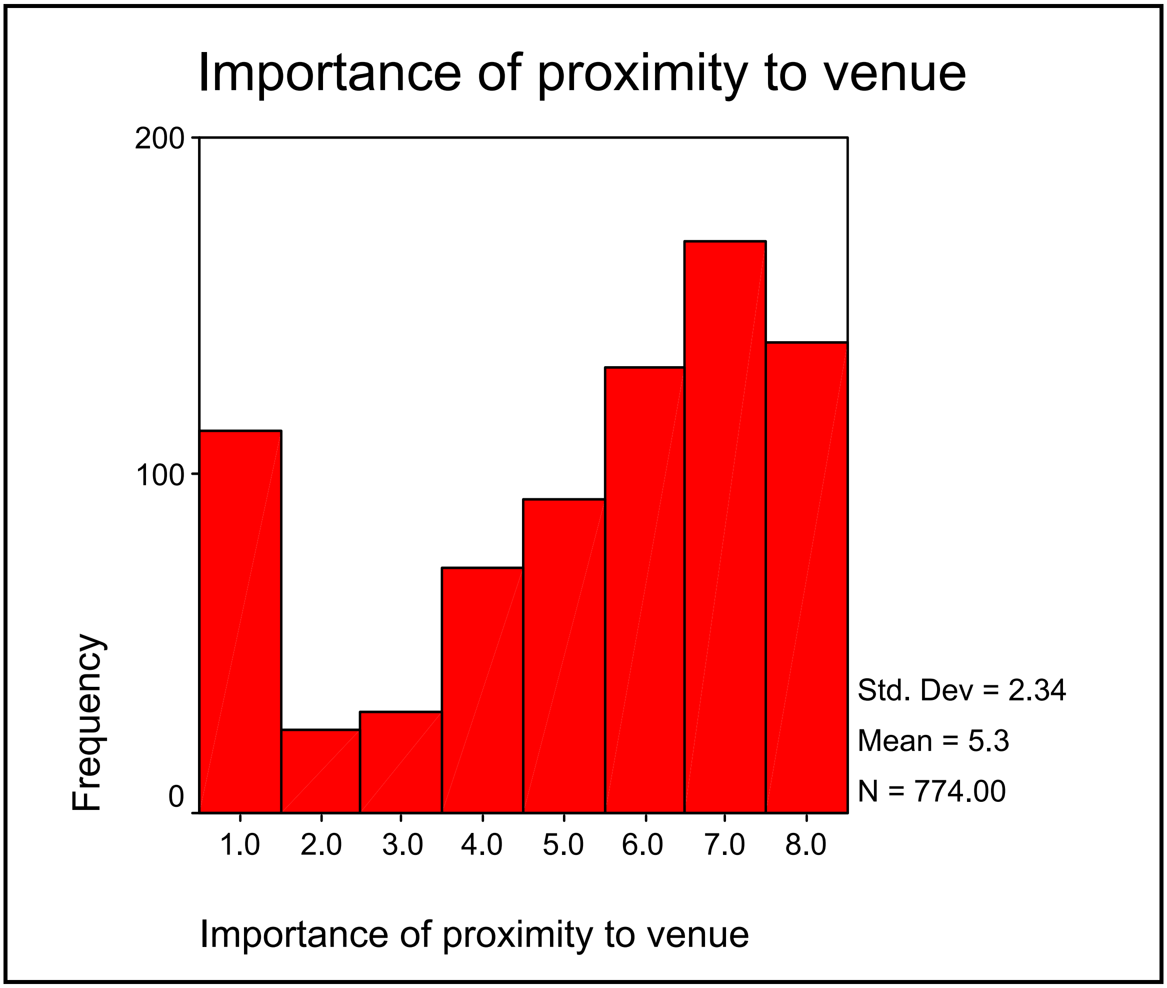

Figure B.15 Frequency of the importance of the proximity of the venue to accommodations for professional hockey fans when deciding to travel to see their favorite team compete.

Item 9J asked respondents about the importance they place on the cost of accommodations when deciding to travel to a city to watch your favorite team play on the road. Responses to item 9J ranged from 1 to 8 (see table B.19). The mean score of the responses was a 5.4 with a standard deviation of 2.27 (see figure B.16). Based on the mean and the standard deviation (1 standard deviation), 68% of the respondents were in the range of 3.13 to 7.67.

Table B.19 Frequency of the importance of the cost of accommodations in the destination city for professional hockey fans when deciding to travel to see their favorite team compete.

Importance of cost of accommodations

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	100	12.1	12.8	12.8
	2	20	2.4	2.6	15.4
	3	32	3.9	4.1	19.5
	4	72	8.7	9.2	28.7
	5	100	12.1	12.8	41.5
	6	136	16.5	17.4	58.9
	7	166	20.1	21.3	80.2
	8	155	18.8	19.8	100.0
	Total	781	94.8	100.0	
Missing	Missing	43	5.2		
Total		824	100.0		

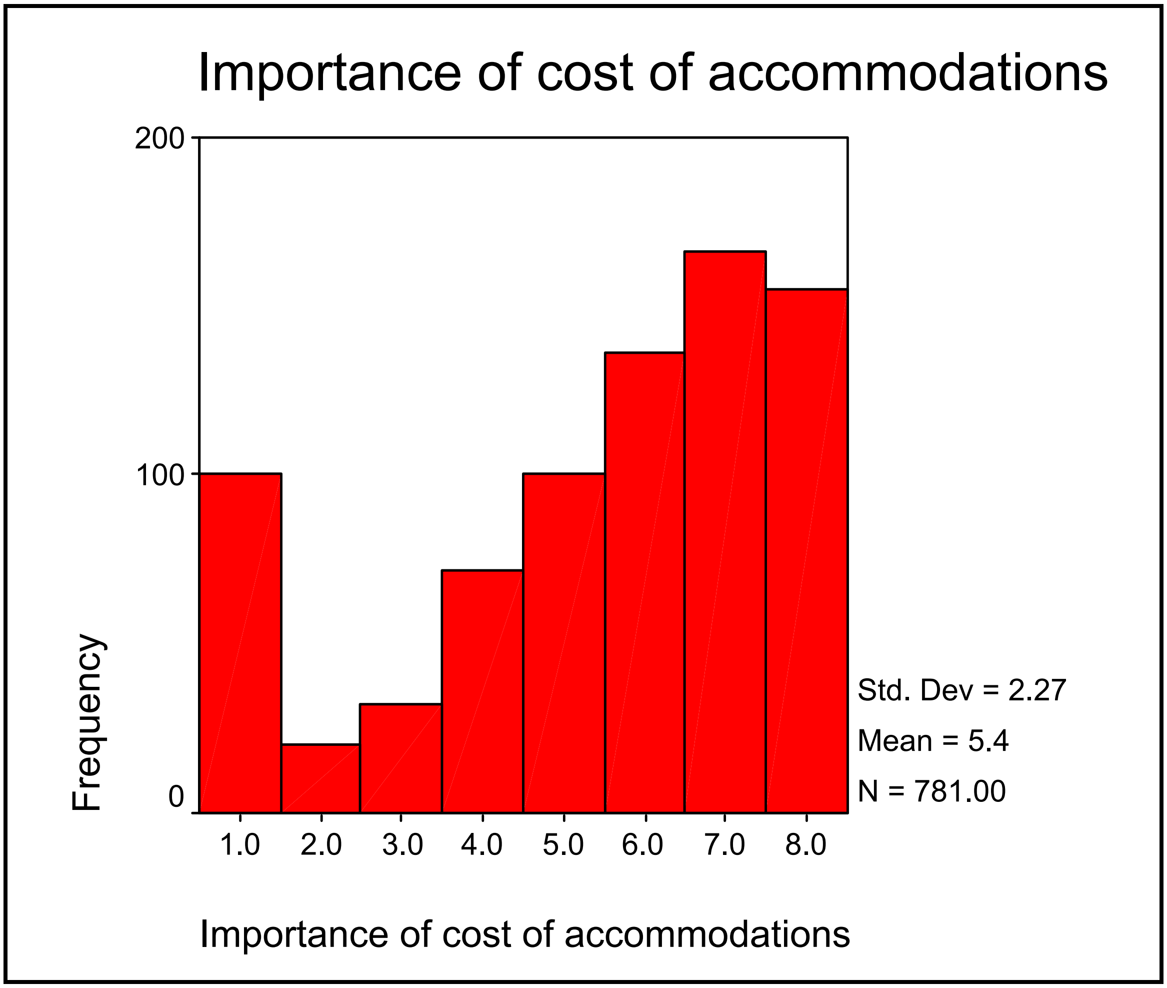

Figure B.16 Frequency of the importance of the cost of accommodations in the destination city for professional hockey fans when deciding to travel to see their favorite team compete.

Item 9K asked respondents about the importance they place on the safety of the destination city when deciding to travel to a city to watch your favorite team play on the road. Responses to item 9K ranged from 1 to 8 (see table B.20). The mean score of the responses was a 5.9 with a standard deviation of 2.31 (see figure B.17). Based on the mean and the standard deviation (1 standard deviation), 68% of the respondents were in the range of 3.59 to 8.

Table B.20 Frequency of the importance of the safety of the destination city for professional hockey fans when deciding to travel to see their favorite team compete.

Importance of safety

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	90	10.9	11.6	11.6
	2	14	1.7	1.8	13.4
	3	23	2.8	3.0	16.3
	4	51	6.2	6.6	22.9
	5	74	9.0	9.5	32.4
	6	111	13.5	14.3	46.7
	7	158	19.2	20.3	67.1
	8	256	31.1	32.9	100.0
	Total	777	94.3	100.0	
Missing	Missing	47	5.7		
Total		824	100.0		

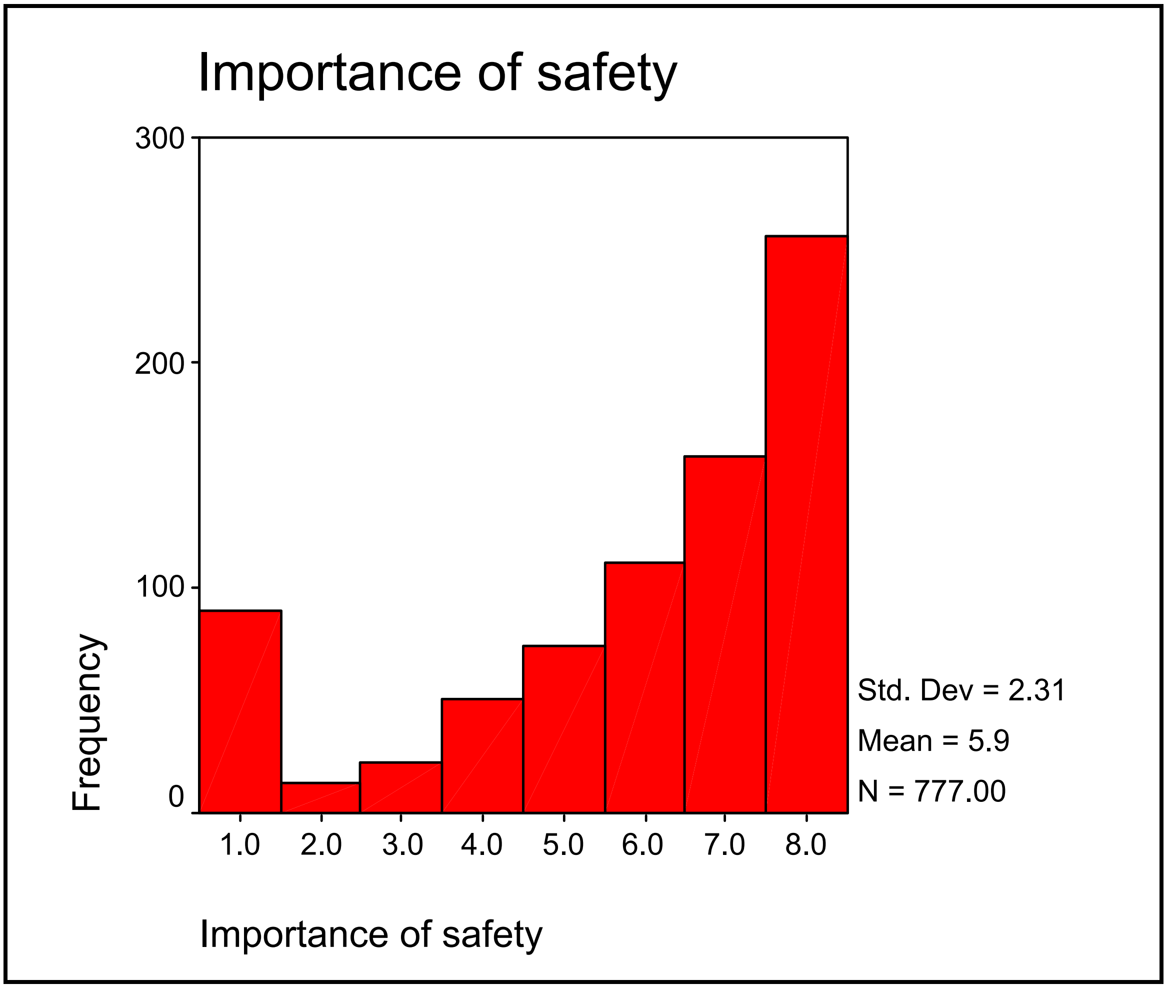

Figure B.17 Frequency of the importance of the safety of the destination city for professional hockey fans when deciding to travel to see their favorite team compete.

Item 9L asked respondents about the importance they place on family friendliness of the destination city when deciding to travel to a city to watch your favorite team play on the road. Responses to item 9L ranged from 1 to 8 (see table B.21). The mean score of the responses was a 4.8 with a standard deviation of 2.50 (see figure B.18). Based on the mean and the standard deviation (1 standard deviation), 68% of the respondents were in the range of 2.3 to 7.3.

Table B.21 Frequency of the importance of the destination city being family oriented for professional hockey fans when deciding to travel to see their favorite team compete.

Importance of family oriented

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	**1**	143	17.4	18.4	18.4
	2	45	5.5	5.8	24.1
	3	50	6.1	6.4	30.6
	4	88	10.7	11.3	41.8
	5	91	11.0	11.7	53.5
	6	97	11.8	12.5	66.0
	7	116	14.1	14.9	80.9
	8	149	18.1	19.1	100.0
	Total	779	94.5	100.0	
Missing	**Missing**	45	5.5		
Total		824	100.0		

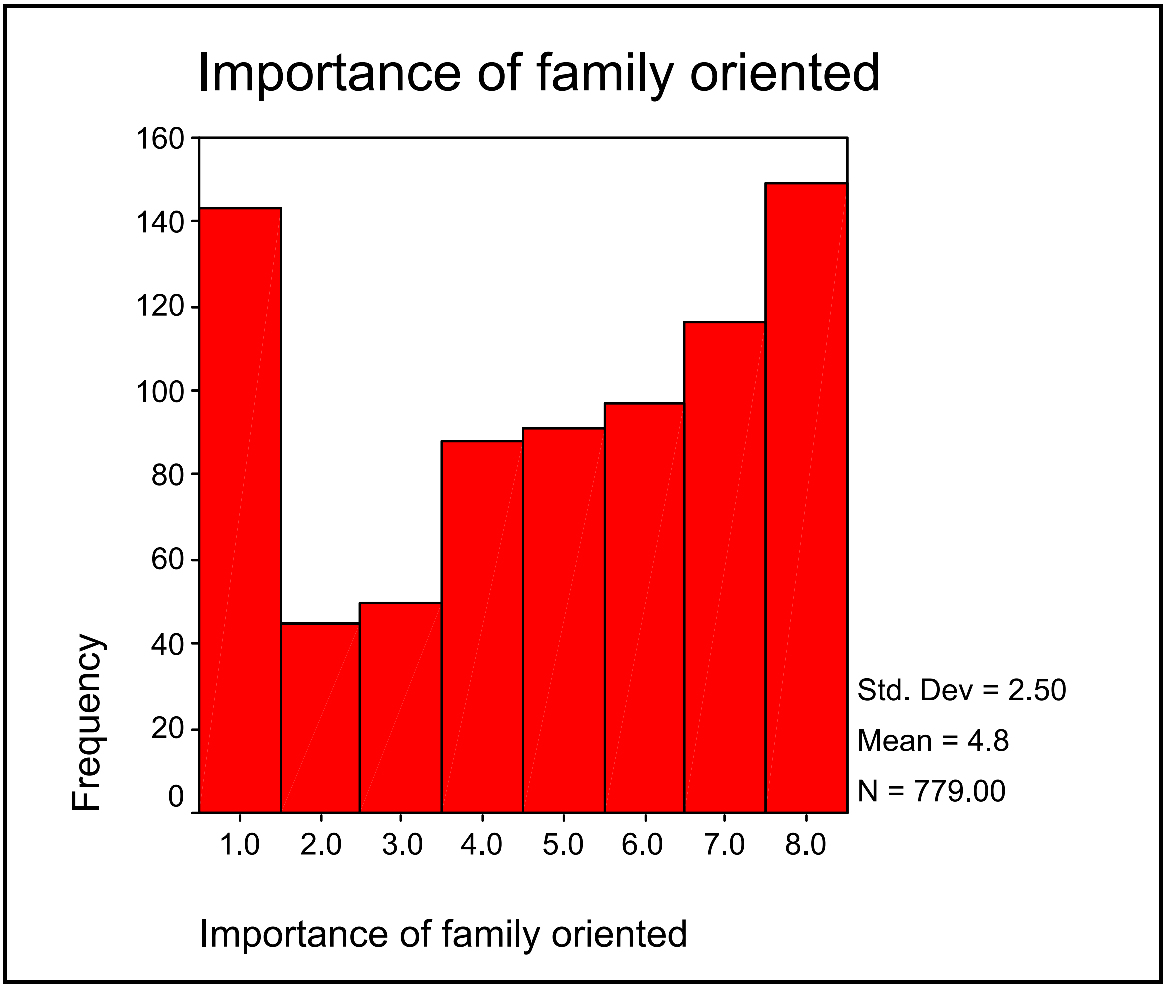

Figure B.18 Frequency of the importance of the destination city being family oriented for professional hockey fans when deciding to travel to see their favorite team compete.

Item 9M asked respondents about the importance they place on the things to see and do in the destination city when deciding to travel to a city to watch your favorite team play on the road. Responses to item 9M ranged from 1 to 8 (see table B.22). The mean score of the responses was a 5.0 with a standard deviation of 2.32 (see figure B.19). Based on the mean and the standard deviation (1 standard deviation), 68% of the respondents were in the range of 2.68 to 7.32.

Table B.22 Frequency of the importance of things to see and do in the destination city for professional hockey fans when deciding to travel to see their favorite team compete.

Importance of things to see and do

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	**1**	124	15.0	15.9	15.9
	2	25	3.0	3.2	19.1
	3	44	5.3	5.6	24.7
	4	74	9.0	9.5	34.2
	5	111	13.5	14.2	48.5
	6	152	18.4	19.5	67.9
	7	136	16.5	17.4	85.4
	8	114	13.8	14.6	100.0
	Total	780	94.7	100.0	
Missing	**Missing**	44	5.3		
Total		824	100.0		

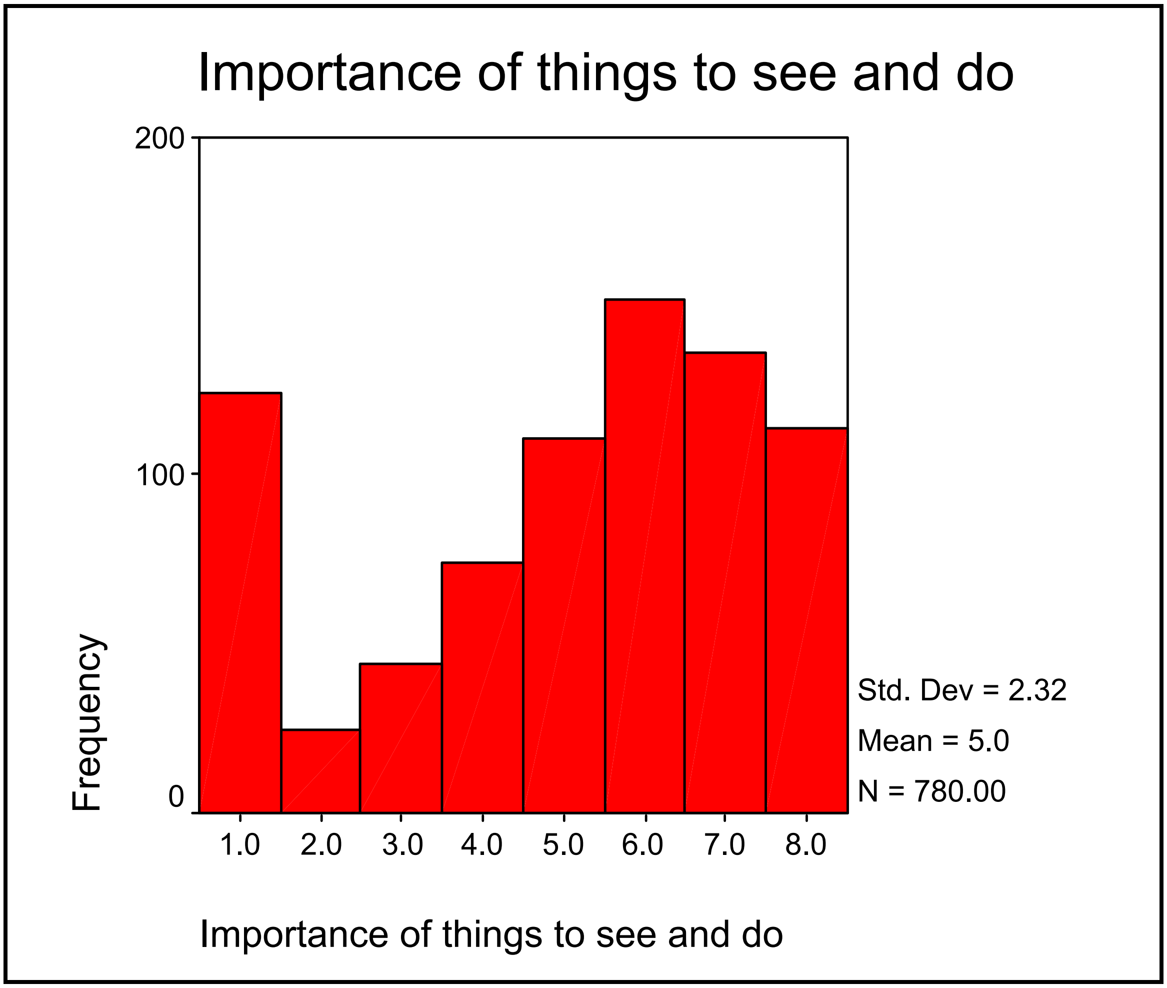

Figure B.19 Frequency of the importance of things to see and do in the destination city for professional hockey fans when deciding to travel to see their favorite team compete.

As previously stated, based on the 13-question index in which a minimum response was 1 and maximum response was 8, the range for the destination image index was 13 to 104. The unweighted destination image index produced a range of 3 to 104 based on the responses given (see table B.23). After recalculating the responses using a weighted destination image index the new range was 3 to 120 (see table B.24).

Table B.23 Frequency of responses by professional hockey fans to the total items in the destination image index.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	3	1	.1	.1	.1
	13	63	7.6	8.0	8.2
	14	1	.1	.1	8.3
	15	3	.4	.4	8.7
	16	2	.2	.3	8.9
	18	4	.5	.5	9.4
	19	2	.2	.3	9.7
	20	4	.5	.5	10.2
	21	2	.2	.3	10.4
	22	2	.2	.3	10.7
	23	1	.1	.1	10.8
	24	3	.4	.4	11.2
	25	4	.5	.5	11.7
	26	4	.5	.5	12.2
	27	3	.4	.4	12.6
	28	2	.2	.3	12.9
	29	5	.6	.6	13.5
	30	2	.2	.3	13.8
	31	3	.4	.4	14.1
	32	3	.4	.4	14.5
	33	4	.5	.5	15.0
	34	12	1.5	1.5	16.6
	35	6	.7	.8	17.3
	36	1	.1	.1	17.5
	37	1	.1	.1	17.6
	38	9	1.1	1.1	18.7
	39	8	1.0	1.0	19.7
	40	8	1.0	1.0	20.8
	41	5	.6	.6	21.4
	42	5	.6	.6	22.0
	43	7	.8	.9	22.9
	44	12	1.5	1.5	24.5
	45	7	.8	.9	25.4
	46	8	1.0	1.0	26.4
	47	8	1.0	1.0	27.4
	48	7	.8	.9	28.3
	49	8	1.0	1.0	29.3
	50	8	1.0	1.0	30.3
	51	7	.8	.9	31.2

Table B.23 Continued

	Frequency	Percent	Valid Percent	Cumulative Percent
52	15	1.8	1.9	33.1
53	12	1.5	1.5	34.6
54	13	1.6	1.7	36.3
55	16	1.9	2.0	38.3
56	14	1.7	1.8	40.1
57	15	1.8	1.9	42.0
58	12	1.5	1.5	43.6
59	12	1.5	1.5	45.1
60	15	1.8	1.9	47.0
61	15	1.8	1.9	48.9
62	19	2.3	2.4	51.3
63	9	1.1	1.1	52.5
64	15	1.8	1.9	54.4
65	29	3.5	3.7	58.1
66	14	1.7	1.8	59.9
67	11	1.3	1.4	61.3
68	15	1.8	1.9	63.2
69	18	2.2	2.3	65.5
70	17	2.1	2.2	67.6
71	12	1.5	1.5	69.2
72	10	1.2	1.3	70.4
73	22	2.7	2.8	73.2
74	11	1.3	1.4	74.6
75	12	1.5	1.5	76.2
76	18	2.2	2.3	78.5
77	14	1.7	1.8	80.3
78	10	1.2	1.3	81.5
79	17	2.1	2.2	83.7
80	13	1.6	1.7	85.4
81	8	1.0	1.0	86.4
82	12	1.5	1.5	87.9
83	9	1.1	1.1	89.0
84	5	.6	.6	89.7
85	6	.7	.8	90.4
86	4	.5	.5	91.0
87	7	.8	.9	91.8
88	4	.5	.5	92.4
89	9	1.1	1.1	93.5
90	7	.8	.9	94.4
91	8	1.0	1.0	95.4
92	6	.7	.8	96.2
93	5	.6	.6	96.8

Table B.23 Continued

		Frequency	Percent	Valid Percent	Cumulative Percent
	94	3	.4	.4	97.2
	95	2	.2	.3	97.5
	96	2	.2	.3	97.7
	97	5	.6	.6	98.3
	98	1	.1	.1	98.5
	102	1	.1	.1	98.6
	104	11	1.3	1.4	100.0
	Total	785	95.3	100.0	
Missing	missing	39	4.7		
Total		824	100.0		

Table B.24 Frequency of responses by professional hockey fans to the total items in the destination image index (weighted).

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	3	1	.1	.1	.1
	14	1	.1	.1	.3
	15	63	7.6	8.0	8.3
	17	2	.2	.3	8.5
	18	2	.2	.3	8.8
	19	1	.1	.1	8.9
	20	2	.2	.3	9.2
	21	2	.2	.3	9.4
	22	3	.4	.4	9.8
	23	1	.1	.1	9.9
	24	1	.1	.1	10.1
	25	2	.2	.3	10.3
	26	2	.2	.3	10.6
	27	1	.1	.1	10.7
	29	1	.1	.1	10.8
	30	4	.5	.5	11.3
	31	1	.1	.1	11.5
	32	2	.2	.3	11.7
	33	1	.1	.1	11.8
	34	7	.8	.9	12.7
	35	3	.4	.4	13.1
	36	3	.4	.4	13.5
	37	2	.2	.3	13.8
	38	2	.2	.3	14.0
	39	2	.2	.3	14.3

Table B.24 Continued

	Frequency	Percent	Valid Percent	Cumulative Percent
40	1	.1	.1	14.4
41	4	.5	.5	14.9
42	5	.6	.6	15.5
43	8	1.0	1.0	16.6
44	6	.7	.8	17.3
45	4	.5	.5	17.8
46	7	.8	.9	18.7
47	2	.2	.3	19.0
49	4	.5	.5	19.5
50	11	1.3	1.4	20.9
51	6	.7	.8	21.7
52	9	1.1	1.1	22.8
53	7	.8	.9	23.7
54	8	1.0	1.0	24.7
55	6	.7	.8	25.5
56	3	.4	.4	25.9
57	5	.6	.6	26.5
58	10	1.2	1.3	27.8
59	9	1.1	1.1	28.9
60	9	1.1	1.1	30.1
61	11	1.3	1.4	31.5
62	8	1.0	1.0	32.5
63	8	1.0	1.0	33.5
64	15	1.8	1.9	35.4
65	8	1.0	1.0	36.4
66	6	.7	.8	37.2
67	11	1.3	1.4	38.6
68	15	1.8	1.9	40.5
69	11	1.3	1.4	41.9
70	16	1.9	2.0	43.9
71	6	.7	.8	44.7
72	12	1.5	1.5	46.2
73	14	1.7	1.8	48.0
74	9	1.1	1.1	49.2
75	22	2.7	2.8	52.0
76	17	2.1	2.2	54.1
77	13	1.6	1.7	55.8
78	19	2.3	2.4	58.2
79	12	1.5	1.5	59.7
80	14	1.7	1.8	61.5
81	14	1.7	1.8	63.3
82	8	1.0	1.0	64.3

Table B.24 Continued

		Frequency	Percent	Valid Percent	Cumulative Percent
	83	16	1.9	2.0	66.4
	84	16	1.9	2.0	68.4
	85	11	1.3	1.4	69.8
	86	5	.6	.6	70.4
	87	20	2.4	2.5	73.0
	88	15	1.8	1.9	74.9
	89	18	2.2	2.3	77.2
	90	14	1.7	1.8	79.0
	91	10	1.2	1.3	80.3
	92	12	1.5	1.5	81.8
	93	10	1.2	1.3	83.1
	94	8	1.0	1.0	84.1
	95	15	1.8	1.9	86.0
	96	13	1.6	1.7	87.6
	97	6	.7	.8	88.4
	98	7	.8	.9	89.3
	99	7	.8	.9	90.2
	100	1	.1	.1	90.3
	101	6	.7	.8	91.1
	102	4	.5	.5	91.6
	103	7	.8	.9	92.5
	104	5	.6	.6	93.1
	105	12	1.5	1.5	94.6
	106	6	.7	.8	95.4
	107	4	.5	.5	95.9
	108	3	.4	.4	96.3
	109	4	.5	.5	96.8
	110	3	.4	.4	97.2
	111	2	.2	.3	97.5
	112	2	.2	.3	97.7
	113	6	.7	.8	98.5
	118	1	.1	.1	98.6
	120	11	1.3	1.4	100.0
	Total	785	95.3	100.0	
Missing	missing	39	4.7		
Total		824	100.0		

Question 10 asked respondents to indicate the number of home games of their favorite team they plan on attending for the 2006-07 season. Data collected from this question will be used twofold. First, it was used as an independent variable in order to show its relationship to question 11, which asked respondents to indicate the number of road games of their favorite team they plan on attending for the 2006-07 season. Second, it was used as a dependent variable in order to show its relationship to question 22, which asked respondents to indicate their home zip code. Responses to question 10 ranged from 0 to 41 (see table B.25). The mean score of the responses was a 21.9 with a standard deviation of 13.87 (see figure B.20). Based on the mean and the standard deviation (1 standard deviation), 68% of the respondents were in the range of 8.03 to 35.77.

Table B.25 Frequency of responses by professional hockey fans to the number of home games attending for the 2006-07 season.

Number of home games attending					
		Frequency	**Percent**	**Valid Percent**	**Cumulative Percent**
Valid	**0**	19	2.3	2.4	2.4
	1	17	2.1	2.1	4.5
	2	25	3.0	3.1	7.6
	3	18	2.2	2.3	9.9
	4	29	3.5	3.6	13.5
	5	20	2.4	2.5	16.0
	6	24	2.9	3.0	19.0
	7	10	1.2	1.3	20.3
	8	12	1.5	1.5	21.8
	9	2	.2	.3	22.1

Table B. 25 Continued

	Frequency	Percent	Valid Percent	Cumulative Percent
10	67	8.1	8.4	30.5
11	5	.6	.6	31.1
12	35	4.2	4.4	35.5
13	3	.4	.4	35.8
14	3	.4	.4	36.2
15	37	4.5	4.6	40.9
16	6	.7	.8	41.6
17	3	.4	.4	42.0
18	4	.5	.5	42.5
19	1	.1	.1	42.6
20	42	5.1	5.3	47.9
21	7	.8	.9	48.7
22	2	.2	.3	49.0
23	1	.1	.1	49.1
24	79	9.6	9.9	59.0
25	22	2.7	2.8	61.8
26	9	1.1	1.1	62.9
27	3	.4	.4	63.3
28	10	1.2	1.3	64.5
29	2	.2	.3	64.8
30	56	6.8	7.0	71.8
32	7	.8	.9	72.7
34	4	.5	.5	73.2

Table B. 25 Continued

		Frequency	Percent	Valid Percent	Cumulative Percent
	35	19	2.3	2.4	75.6
	36	1	.1	.1	75.7
	37	3	.4	.4	76.1
	38	8	1.0	1.0	77.1
	39	1	.1	.1	77.2
	40	25	3.0	3.1	80.3
	41	157	19.1	19.7	100.0
	Total	798	96.8	100.0	
Missing	**Missing**	26	3.2		
Total		824	100.0		

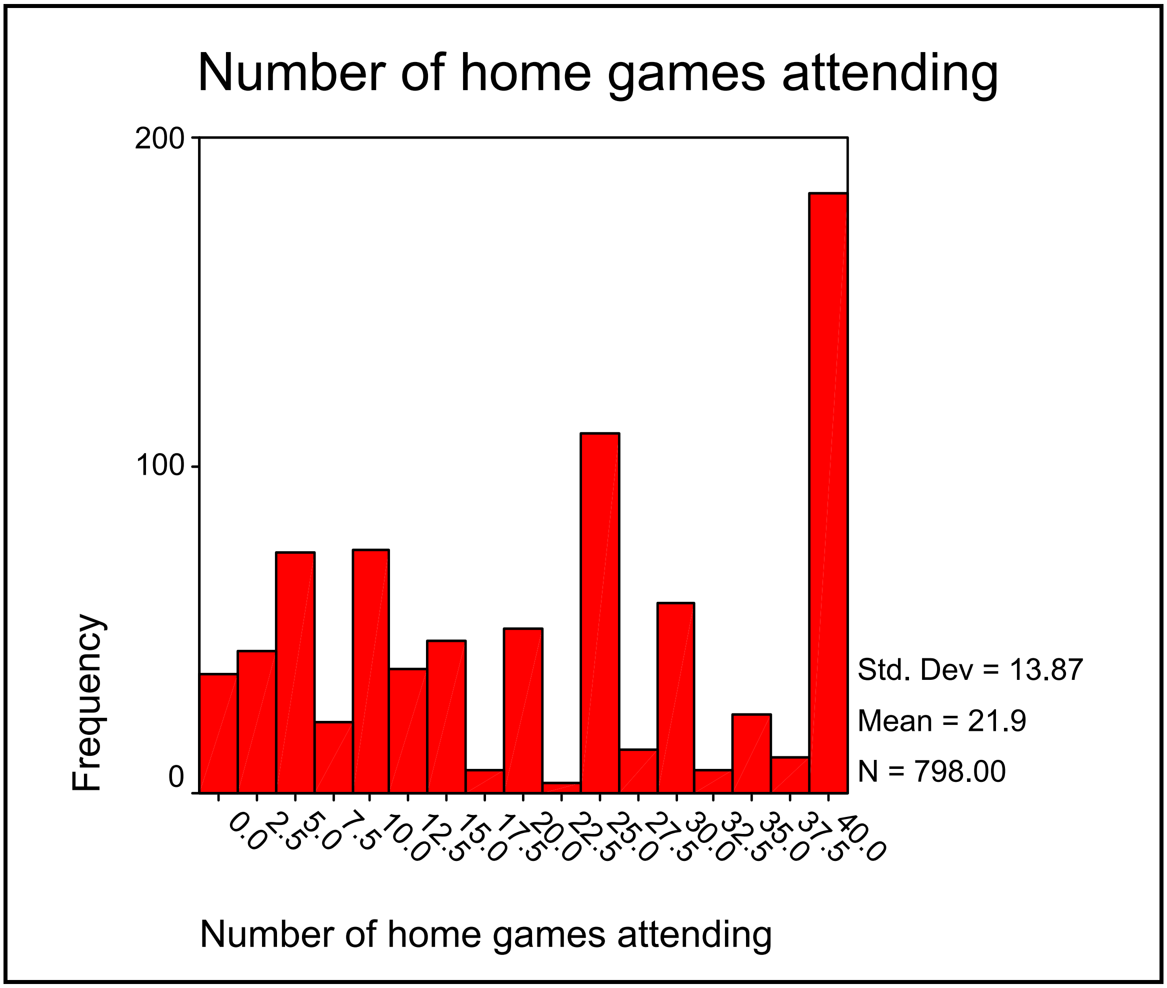

Figure B.20 Frequency of responses by professional hockey fans to the number of home games attending for the 2006-07 season.

Question 11 asked respondents to indicate the number of road games of their favorite team they plan on attending for the 2006-07 season. Question 11 was the main independent variable for this study. Responses to question 11 ranged from 0 to 41 (see table B.26). The mean score of the responses was a 1.5 with a standard deviation of 3.8 (see figure B.21). Based on the mean and the standard deviation (1 standard deviation), 68% of the respondents were in the range of 0 to 5.3.

Table B.26 Frequency of responses by professional hockey fans to the number of road games attending for the 2006-07 season.

Number of road games attending

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	441	53.5	56.1	56.1
	1	105	12.7	13.4	69.5
	2	127	15.4	16.2	85.6
	3	35	4.2	4.5	90.1
	4	22	2.7	2.8	92.9
	5	14	1.7	1.8	94.7
	6	10	1.2	1.3	95.9
	7	3	.4	.4	96.3
	8	8	1.0	1.0	97.3
	10	10	1.2	1.3	98.6
	12	2	.2	.3	98.9
	15	2	.2	.3	99.1
	24	2	.2	.3	99.4
	30	1	.1	.1	99.5
	40	1	.1	.1	99.6
	41	3	.4	.4	100.0
	Total	786	95.4	100.0	
Missing	Missing	38	4.6		
Total		824	100.0		

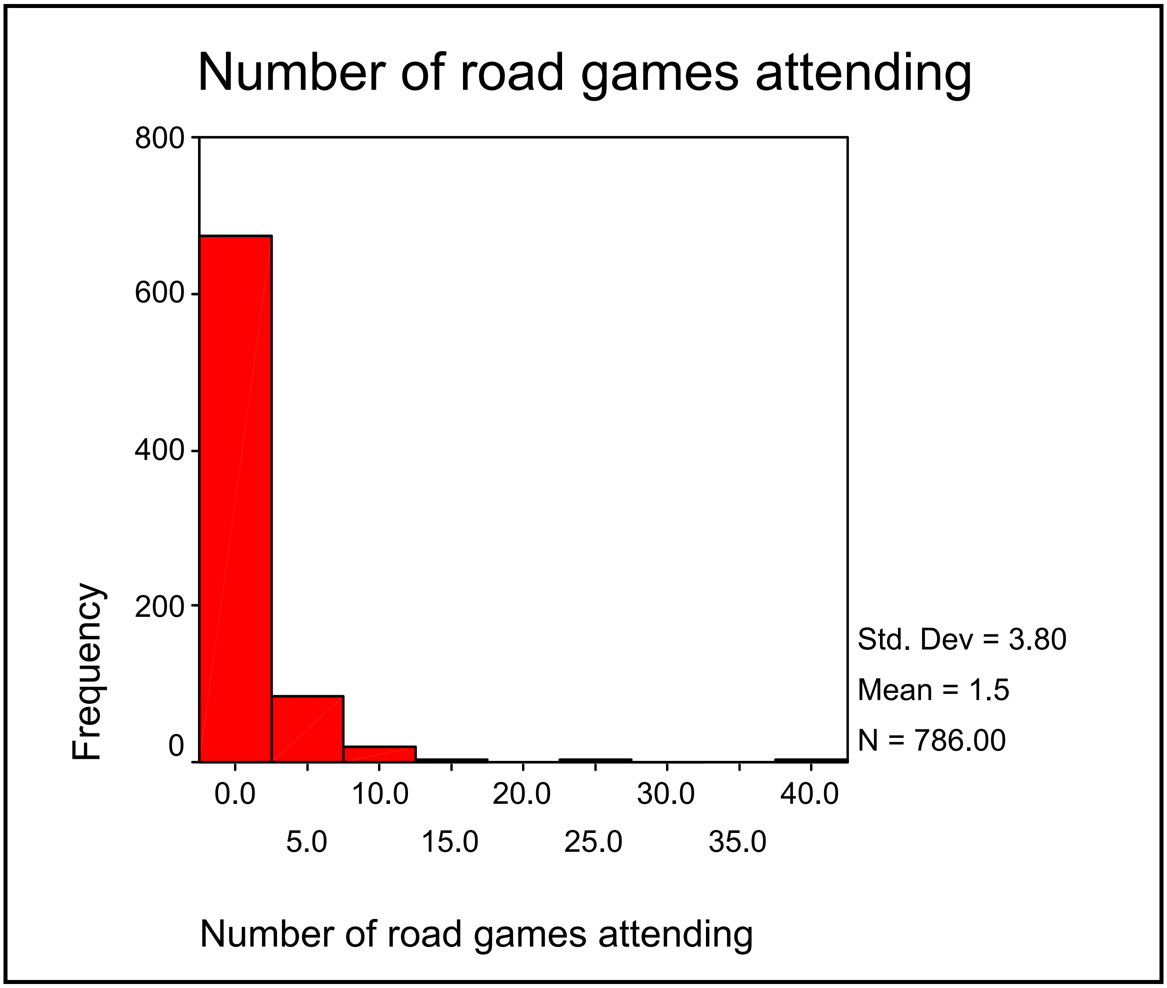

Figure B.21 Frequency of responses by professional hockey fans to the number of road games attending for the 2006-07 season.

Question 12 asked respondents about their preferred mode of transportation when traveling to see their favorite team play on the road. The choices that respondents had for this question were airplane, automobile, motor coach, and train. A majority of respondents to this question indicated that their preferred mode of transportation was either airplane (41.9%) or automobile (50.3%) (see table B. 27).

Table B.27 Frequency of responses by professional hockey fans to the preferred mode of transportation when traveling to road games to watch their favorite team compete.

Mode of transportation					
		Frequency	**Percent**	**Valid Percent**	**Cumulative Percent**
Valid	**Airplane**	333	40.4	41.9	41.9
	Automobile	400	48.5	50.3	92.2
	Motor coach	31	3.8	3.9	96.1
	Train	31	3.8	3.9	100.0
	Total	795	96.5	100.0	
Missing	**Missing**	29	3.5		
Total		824	100.0		

Question 13 asked respondents to indicate the furthest distance in terms of hours that they are willing to travel to see their favorite team play a road game. Responses ranged from 0 to 72 hours (see table B.28). The mean score of the responses was a 6.4 with a standard deviation of 5.27 (see figure B.22). Based on the mean and the standard deviation (1 standard deviation), 68% of the respondents were in the range of 1.13 to 11.67 hours.

Table B.28 Frequency of responses by professional hockey fans to the number of hours they are willing to travel to road games to watch their favorite team compete.

Number of travel hours					
		Frequency	**Percent**	**Valid Percent**	**Cumulative Percent**
Valid	**.00**	22	2.7	2.8	2.8
	1.00	30	3.6	3.9	6.7
	2.00	73	8.9	9.4	16.1
	3.00	68	8.3	8.7	24.8
	4.00	104	12.6	13.4	38.2
	5.00	91	11.0	11.7	49.9
	6.00	122	14.8	15.7	65.6
	7.00	21	2.5	2.7	68.3
	8.00	101	12.3	13.0	81.2
	9.00	10	1.2	1.3	82.5
	10.00	47	5.7	6.0	88.6
	11.00	1	.1	.1	88.7
	12.00	34	4.1	4.4	93.1
	13.00	1	.1	.1	93.2
	14.00	8	1.0	1.0	94.2
	15.00	15	1.8	1.9	96.1
	16.00	7	.8	.9	97.0
	18.00	2	.2	.3	97.3
	20.00	5	.6	.6	97.9
	21.00	1	.1	.1	98.1

Table B.28 Continued

		Frequency	Percent	Valid Percent	Cumulative Percent
	22.00	1	.1	.1	98.2
	24.00	9	1.1	1.2	99.4
	25.00	1	.1	.1	99.5
	30.00	1	.1	.1	99.6
	40.00	1	.1	.1	99.7
	48.00	1	.1	.1	99.9
	72.00	1	.1	.1	100.0
	Total	778	94.4	100.0	
Missing	**Missing**	46	5.6		
Total		824	100.0		

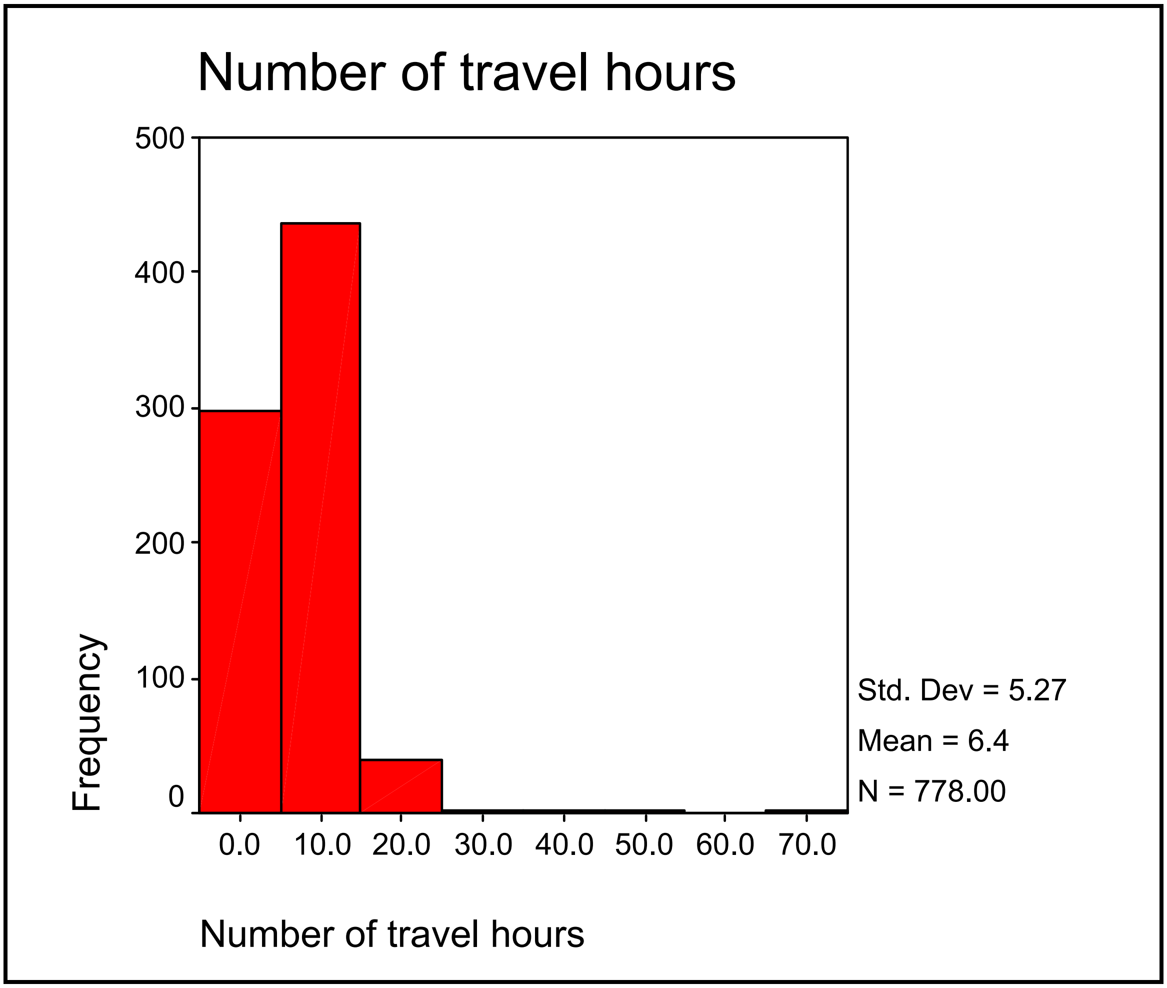

Figure B.22 Frequency of responses by professional hockey fans to the number of hours they are willing to travel to road games to watch their favorite team compete.

Question 14 asked respondents to indicate the most important factor in terms of cost they consider when deciding to travel to see their favorite team play a road game. A majority of respondents indicated that the most important factor was the cost of the trip in terms of dollars for the travel portion of the trip (see table B.29).

Table B.29 Frequency of responses by professional hockey fans to the way they measure cost when deciding to travel to road games to watch their favorite team compete.

Consideration of travel					
		Frequency	**Percent**	**Valid Percent**	**Cumulative Percent**
Valid	**Cost in terms of dollars for travel portion of the trip**	447	54.2	56.7	56.7
	Amount of travel time the trip takes	225	27.3	28.6	85.3
	Distance in miles from your home	116	14.1	14.7	100.0
	Total	788	95.6	100.0	
Missing	**Missing**	36	4.4		
Total		824	100.0		

Question 15 asked respondents to indicate the type of trip they are most likely to take when traveling to see their favorite team play a road game. The most common response given by respondents was 2-3 day trips which includes the weekend (46.4%) followed by a 1-day trip during the weekend with no overnight stay (24.5%) (see table B.30).

Table B.30 Frequency of responses by professional hockey fans to the type of trip they prefer to take when deciding to travel to road games to watch their favorite team compete.

Type of trip					
		Frequency	**Percent**	**Valid Percent**	**Cumulative Percent**
Valid	**1 day trip during the week (no overnight)**	94	11.4	11.8	11.8
	1 day trip during the weekend (no overnight)	195	23.7	24.5	36.3
	2-3 day trip during the week	89	10.8	11.2	47.5
	2-3 day trip including the weekend	369	44.8	46.4	93.8
	Longer than 3 days during the week	9	1.1	1.1	95.0
	Longer than 3 days including the weekend	40	4.9	5.0	100.0
	Total	796	96.6	100.0	
Missing	**Missing**	28	3.4		
Total		824	100.0		

Question 16 asked respondents to indicate the how they would define a successful season for their favorite team. A majority of the respondents defined success as making the playoffs (55.5%) followed by winning the cup (27.4%) (see table B.31). This information will be used for later research to determine team success.

However, the data may be skewed based on the fact that the Carolina Hurricanes won the Stanley Cup in the prior season.

Table B.31 Frequency of responses by professional hockey fans to the way they measure a successful season of their favorite team.

Definition of success

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Winning the cup	196	23.8	27.4	27.4
	Making the finals	42	5.1	5.9	33.3
	Making the playoffs	397	48.2	55.5	88.8
	Winning Record	66	8.0	9.2	98.0
	Win the division	14	1.7	2.0	100.0
	Total	715	86.8	100.0	
Missing	Missing	109	13.2		
Total		824	100.0		

Question 17 asked respondents to indicate whether they feel that last season was a success for their favorite team based on their definition of success. A majority of the respondents felt that the previous season was a success (94.9%) (see table B.32). This information will be used for later research to determine team success.

However, the data may be skewed based on the fact that the Carolina Hurricanes won the Stanley Cup in the prior season.

Table B.32 Frequency of responses by professional hockey fans to whether or not their favorite team was successful in the 2005-06 season.

Was your team successful

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	**No**	42	5.1	5.1	5.1
	Yes	779	94.5	94.9	100.0
	Total	821	99.6	100.0	
Missing	**Missing**	3	.4		
Total		824	100.0		

The final section of the questionnaire asked respondents to answer five demographic questions. Question 18 asked respondents their gender. Over half (59.5%) of the respondents to the survey were male (see table B.33)

Table B.33 Frequency of gender of professional hockey fans.

What is your gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	490	59.5	59.5	59.5
	Female	333	40.4	40.5	100.0
	Total	823	99.9	100.0	
Missing	Missing	1	.1		
Total		824	100.0		

Question 19 asked respondents about their level of education. Respondents were asked to indicate the highest level of education that they had completed. Most of the respondents (92.2%) had completed high school. Furthermore, 85.7% of respondents had some post high school education and based on the data collected, the investigator infers that 57.9% of respondents have at least a bachelor degree (see table B.34). Based on the mean of 15.6 and the standard deviation of 2.57, 68% of the respondents were in the range of 13.03 to 18.17 (see figure B.23).

Table B.34 Frequency of highest level of education of professional hockey fans.

Highest level of education

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	9	1	.1	.1	.1
	10	2	.2	.3	.4
	11	3	.4	.4	.8

Table B.34 Continued

		Frequency	Percent	Valid Percent	Cumulative Percent
	12	103	12.5	13.4	14.2
	13	67	8.1	8.7	22.9
	14	101	12.3	13.2	36.1
	15	46	5.6	6.0	42.1
	16	254	30.8	33.1	75.1
	17	28	3.4	3.6	78.8
	18	58	7.0	7.6	86.3
	19	29	3.5	3.8	90.1
	20	17	2.1	2.2	92.3
	21	59	7.2	7.7	100.0
	Total	768	93.2	100.0	
Missing	**Missing**	56	6.8		
Total		824	100.0		

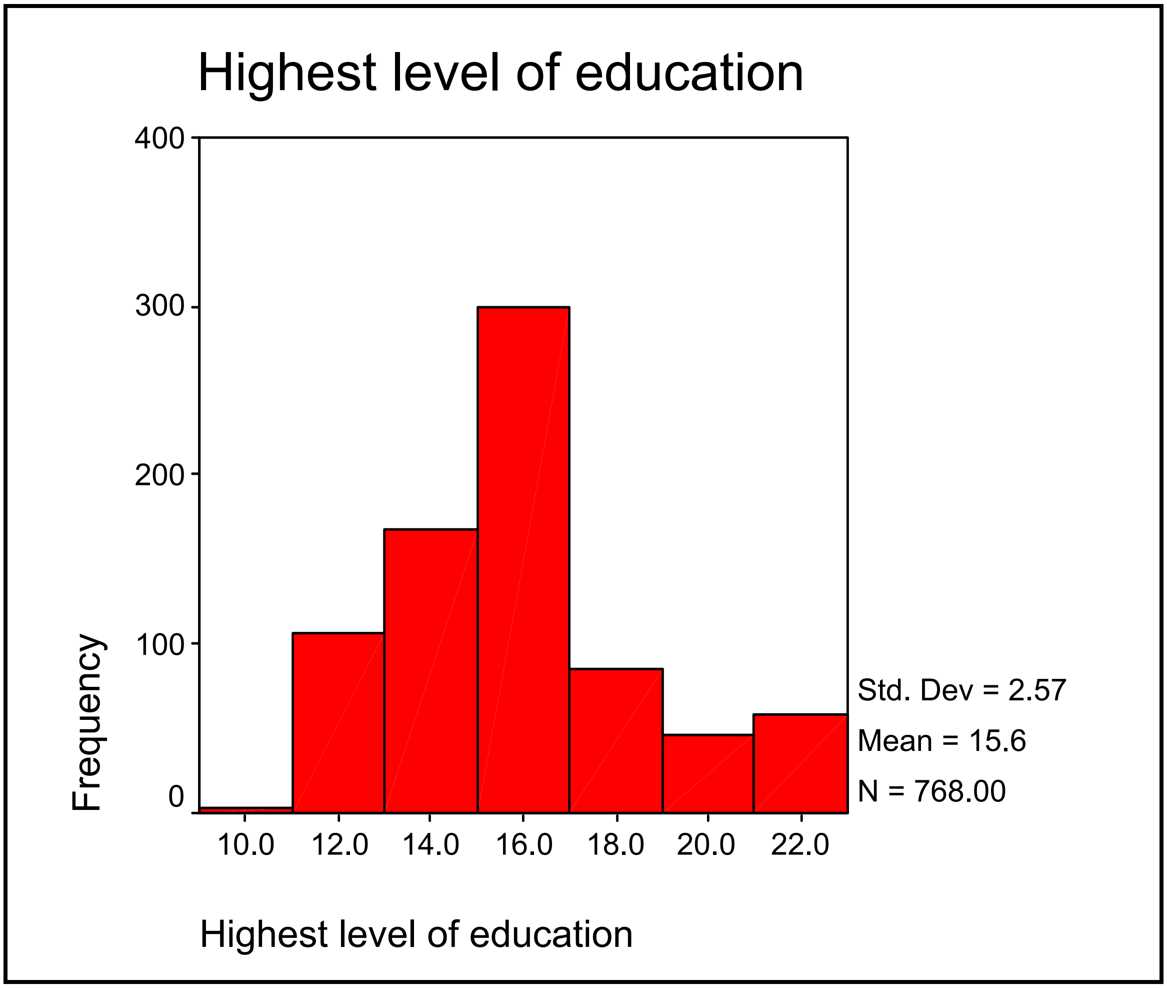

Figure B.23 Frequency of highest level of education of professional hockey fans.

Question 20 asked respondents about their household income. Of the 824 completed surveys, 609 of those respondents answered the question regarding their household income. Responses to this question ranged from a yearly household income level of $8,000 to $1,300,000 with a standard deviation of $93,600. However, based on the mean of $106, 200 and the standard deviation (1 standard deviation), 68%, of the respondents were in the range of $12,600 to $199,800 (see figure B.24).

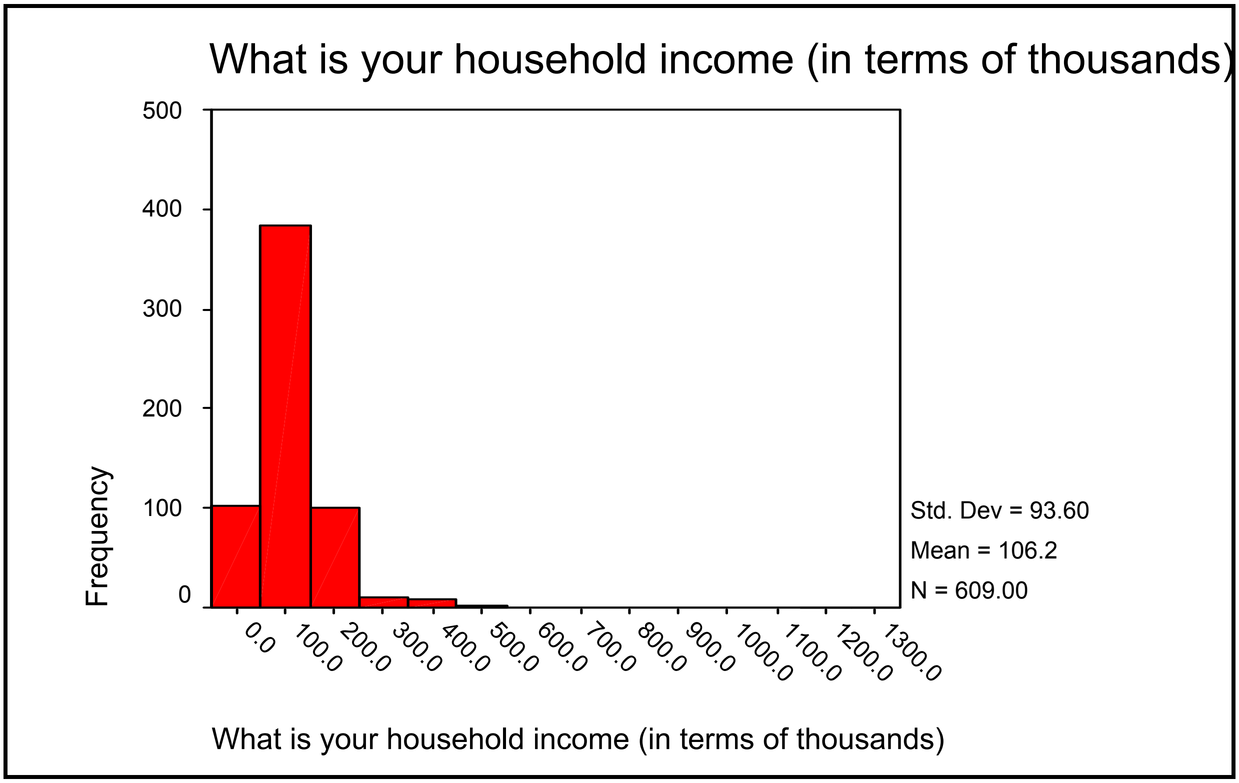

Figure B.24 Frequency of household income (in terms of thousands) of professional hockey fans.

Question 21 asked respondents about their household representation. The two groups that were underrepresented in the study were: 'single parents with children under 18' (3.0%) and single parents with children 18 and over' (2.5%). The other four groups were closely represented: 'Single no children' (21.1%), 'Married with no children' (18.0%), 'Married with children under 18' (28.7%), and 'Married with children 18 and over' (26.8%) (see table B.35).

Table B. 35 Frequency of household representation of professional hockey fans.

Household representation

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Single no children	170	20.6	21.1	21.1
	Single with children under 18	24	2.9	3.0	24.0
	Single with children 18 and over	20	2.4	2.5	26.5
	Married with no children	145	17.6	18.0	44.5
	Married with children under 18	232	28.2	28.7	73.2
	Married with children 18 and over	216	26.2	26.8	100.0
	Total	807	97.9	100.0	
Missing	Missing	17	2.1		
Total		824	100.0		

Question 22 asked respondents to indicate their zip code. Responses to this question were transformed into miles. The investigator calculated the distance between the reported zip code and the zip code for the RBC center (the arena in which the Carolina Hurricanes compete). Responses to the question in terms of mileage ranged from 0 to 862 miles (see table B.36). Based on the mean of 40 and the standard deviation, 95% of the respondents were in the range of 0 to 192.14

miles (see figure B.25). However, it is important to note that the median for this data was 14 miles.

Table B.36 Frequency of distance in mileage from home to the RBC Center of professional hockey fans who attended a Carolina Hurricanes home game.

	Frequency	Percent	Valid Percent	Cumulative Percent
0	12	1.5	1.5	1.5
3	11	1.3	1.4	2.9
4	16	1.9	2.0	4.8
5	23	2.8	2.9	7.7
6	27	3.3	3.4	11.1
7	25	3.0	3.1	14.2
8	33	4.0	4.1	18.3
9	102	12.4	12.7	30.9
10	35	4.2	4.3	35.3
12	24	2.9	3.0	38.3
13	12	1.5	1.5	39.8
14	96	11.7	11.9	51.7
15	14	1.7	1.7	53.4
16	6	.7	.7	54.2
17	14	1.7	1.7	55.9
19	7	.8	.9	56.8
21	42	5.1	5.2	62.0
22	25	3.0	3.1	65.1
23	10	1.2	1.2	66.3
24	10	1.2	1.2	67.6
25	5	.6	.6	68.2
27	26	3.2	3.2	71.4
28	11	1.3	1.4	72.8
30	11	1.3	1.4	74.2

Table B. 36 Continued

	Frequency	Percent	Valid Percent	Cumulative Percent
32	6	.7	.7	74.9
33	2	.2	.2	75.2
35	4	.5	.5	75.7
36	2	.2	.2	75.9
37	4	.5	.5	76.4
38	8	1.0	1.0	77.4
39	2	.2	.2	77.6
40	5	.6	.6	78.3
41	1	.1	.1	78.4
47	3	.4	.4	78.8
48	3	.4	.4	79.1
49	2	.2	.2	79.4
50	2	.2	.2	79.6
51	1	.1	.1	79.8
52	1	.1	.1	79.9
55	3	.4	.4	80.2
56	4	.5	.5	80.7
58	4	.5	.5	81.2
59	1	.1	.1	81.4
60	8	1.0	1.0	82.4
61	1	.1	.1	82.5
63	3	.4	.4	82.9
64	1	.1	.1	83.0
67	1	.1	.1	83.1
69	3	.4	.4	83.5
70	1	.1	.1	83.6
72	1	.1	.1	83.7
73	5	.6	.6	84.3
74	1	.1	.1	84.5
76	6	.7	.7	85.2
77	1	.1	.1	85.3
78	2	.2	.2	85.6
79	4	.5	.5	86.1
80	2	.2	.2	86.3
84	2	.2	.2	86.6
86	2	.2	.2	86.8
87	4	.5	.5	87.3
88	2	.2	.2	87.6
89	6	.7	.7	88.3
90	4	.5	.5	88.8
91	8	1.0	1.0	89.8

Table B. 36 Continued

	Frequency	Percent	Valid Percent	Cumulative Percent
92	2	.2	.2	90.1
94	1	.1	.1	90.2
96	4	.5	.5	90.7
98	1	.1	.1	90.8
103	1	.1	.1	90.9
107	1	.1	.1	91.1
112	3	.4	.4	91.4
124	1	.1	.1	91.6
125	1	.1	.1	91.7
128	1	.1	.1	91.8
130	2	.2	.2	92.0
131	2	.2	.2	92.3
133	1	.1	.1	92.4
135	4	.5	.5	92.9
137	5	.6	.6	93.5
139	1	.1	.1	93.7
142	4	.5	.5	94.2
143	2	.2	.2	94.4
144	1	.1	.1	94.5
145	2	.2	.2	94.8
147	1	.1	.1	94.9
148	2	.2	.2	95.2
155	1	.1	.1	95.3
156	4	.5	.5	95.8
168	1	.1	.1	95.9
173	1	.1	.1	96.0
174	2	.2	.2	96.3
178	2	.2	.2	96.5
179	1	.1	.1	96.6
185	1	.1	.1	96.8
187	2	.2	.2	97.0
194	1	.1	.1	97.1
206	1	.1	.1	97.3
213	3	.4	.4	97.6
216	1	.1	.1	97.8
227	1	.1	.1	97.9
237	1	.1	.1	98.0
245	5	.6	.6	98.6
249	2	.2	.2	98.9
291	1	.1	.1	99.0
292	1	.1	.1	99.1

Table B. 36 Continued

	Frequency	Percent	Valid Percent	Cumulative Percent
308	1	.1	.1	99.3
358	1	.1	.1	99.4
531	1	.1	.1	99.5
729	1	.1	.1	99.6
813	1	.1	.1	99.8
852	1	.1	.1	99.9
862	1	.1	.1	100.0
Total	805	97.7	100.0	
missing	18	2.2		
System	1	.1		
Total	19	2.3		
	824	100.0		

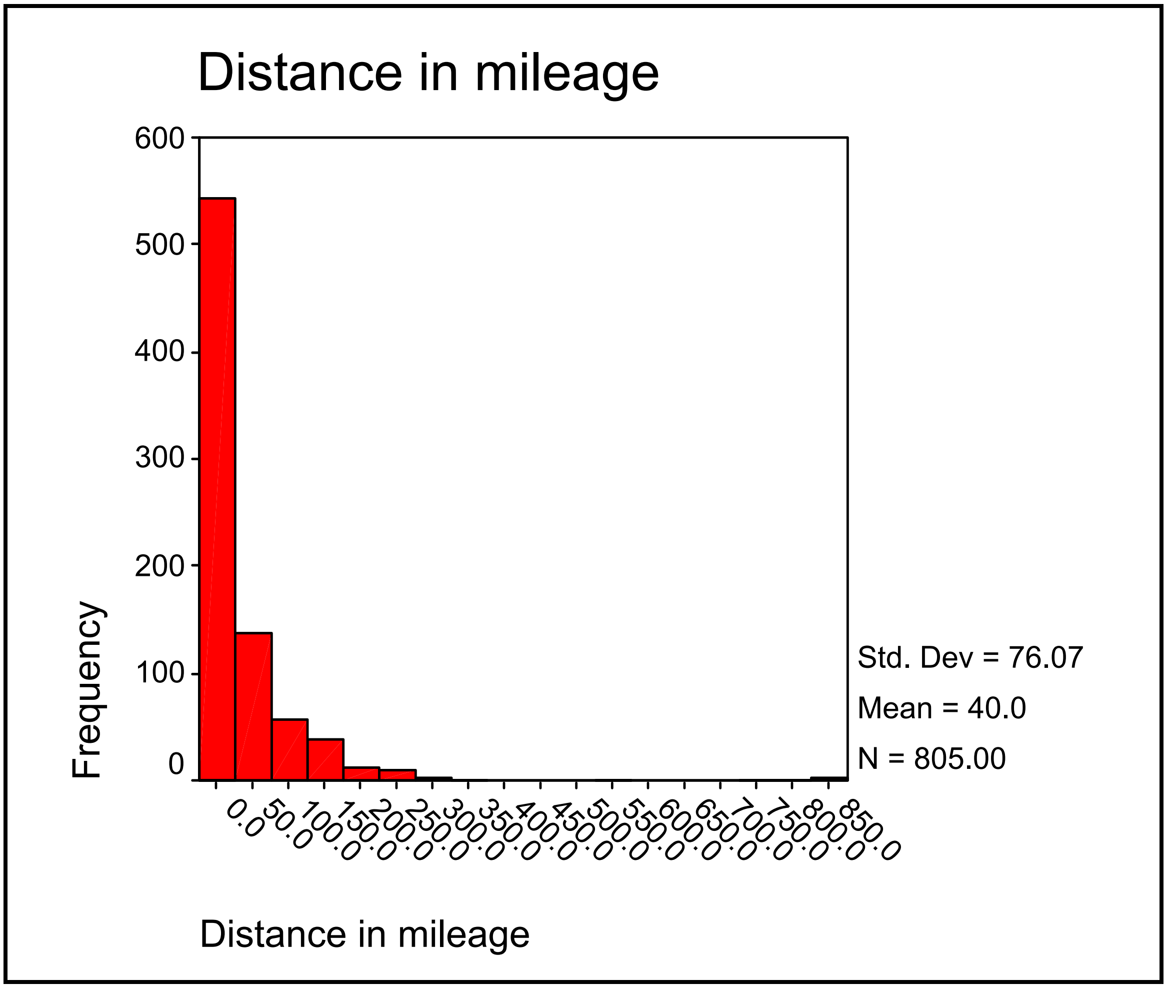

Figure B.25 Frequency of distance in mileage from home to the RBC Center of professional hockey fans who attended a Carolina Hurricanes home game.

Appendix C

Table C.1 NHL Expansion / Retraction

Season	Teams Added	Teams Dropped	Total Teams
1917-18	4	1	3
1919-20	1	0	4
1924-25	2	0	6
1925-26	1	0	7
1926-27	3	0	10
1931-32	0	2	8
1932-33	1	0	9
1935-36	0	1	8
1937-38	0	1	7
1942-43	0	1	6
1967-68	6	0	12
1970-71	2	0	14
1972-73	2	0	16
1974-75	2	0	18
1978-79	0	1	17
1979-80	4	0	21
1991-92	1	0	22
1992-93	2	0	24
1993-94	2	0	26
1998-99	1	0	27
1999-2000	1	0	28
2000-01	2	0	30
2005-06	0	0	30

Source: www.nhl.com

Table C.2. NHL/Southeast Division Attendance

Season	NHL	Atlanta	Carolina	Florida	Tampa Bay	Washington
1992-93	14,045	N/A[1]	N/A[2]	N/A[4]	10,014	15,540
1993-94	14,748	N/A[1]	N/A[2]	14,144	19,549	14,673
1994-95	14,797[5]	N/A[1]	N/A[2]	14,198[5]	19,934[5]	14,159[5]
1995-96	15,986	N/A[1]	N/A[2]	13,278	18,892	15,155
1996-97	16,548	N/A[1]	N/A[2]	14,703	17,419	15,672
1997-98	16,195	N/A[1]	9,086[3]	14,696	13,868	15,275
1998-99	16,311	N/A[1]	8,188[3]	18,500	11,511	17,281
1999-2000	16,359	17,206	12,401	15,982	13,600	14,480
2000-01	16,549	15,263	13,346	14,679	14,907	15,534
2001-02	16,486	13,368	15,052	16,084	15,366	16,493
2002-03	16,591	13,476	15,682	15,428	16,545	15,787
2003-04	16,534	15,121	12,086	15,936	17,820	14,720
2004-05	*SEASON CANCELLED DUE TO LABOR DISPUTE*					
2005-06	16,954	15,550	15,596	16,014	20,509	13,905

1. Atlanta Thrashers joined the NHL during the 1999-2000 season.
2. Carolina Hurricanes relocated to North Carolina during the 1997-98 season.
3. Carolina Hurricanes played in Greensboro, NC.
4. Florida Panthers joined the NHL during the 1993-94 season.
5. Strike shortened season.

SOURCE: www.hockeyresearch.com

Table C.3 NHL/Southeast Division Win-Loss Record

Season	Atlanta	Carolina	Florida	Tampa Bay	Washington
1992-93	N/A[1]	N/A[2]	N/A[4]	23-54-7 (53)	43-34-8 (93)
1993-94	N/A[1]	N/A[2]	33-34-17 (83)	30-43-11 (71)	39-35-10 (88)
1994-95	N/A[1]	N/A[2]	20-22-6 (46)[5]	17-28-3 (37)[5]	22-18-8 (52)[5]
1995-96	N/A[1]	N/A[2]	41-31-10 (92)	38-32-12 (88)	39-32-11 (89)
1996-97	N/A[1]	N/A[2]	35-28-19 (89)	32-40-10 (74)	33-40-9 (75)
1997-98	N/A[1]	33-41-8 (74)[3]	24-43-15 (63)	17-55-10 (44)	40-30-12 (92)
1998-99	N/A[1]	34-30-18 (86)[3]	30-34-18 (78)	19-54-9 (47)	31-45-6 (68)
1999-2000[6]	14-61-7-4 (39)[6]	37-35-10-0 (84)[6]	43-33-6-6 (98)[6]	19-54-9-7 (54)[6]	44-26-12-2 (102)[6]
2000-01	23-45-12-2 (60)	38-32-9-3 (88)	22-38-13-9 (66)	24-47-6-5 (59)	41-27-10-4 (96)
2001-02	19-47-11-5 (54)	35-26-16-5 (91)	22-44-10-6 (60)	27-40-11-4 (69)	36-33-11-2 (85)
2002-03	31-39-7-5 (74)	22-43-11-6 (61)	24-36-13-9 (70)	37-24-16-5 (95)	39-29-8-6 (92)
2003-04	33-37-8-4 (78)	28-34-14-6 (76)	28-35-15-4 (75)	46-22-8-6 (106)	23-46-10-3 (59)
2004-05	*SEASON CANCELLED DUE TO LABOR DISPUTE*				
2005-06					

1. Atlanta Thrashers joined the NHL during the 1999-2000 season.
2. Carolina Hurricanes relocated to North Carolina during the 1997-98 season.
3. Carolina Hurricanes played in Greensboro, NC.
4. Florida Panthers joined the NHL during the 1993-94 season.
5. Strike shortened season.
6. Beginning with the 1999-2000 season, teams earned an extra point for winning an overtime game.

SOURCE: www.nhl.com

Appendix D

Each of the booster clubs is also part of the National Hockey League Booster Clubs (NHLBC), which consists of over twenty booster/fan clubs representing about 10,000 members from all over the world. Any officially recognized fan club of an NHL team is eligible to join the organization. The NHLBC also has clubs representing teams that are no longer in the NHL, but whose members continue the tradition of supporting hockey in their area. All of the booster clubs associated with the NHLBC have the following in common: board of directors, bylaws, membership application, and newsletters. NHLBC member clubs cooperate and assist each other whenever possible. Each club sends all the other clubs their monthly newsletters (keeping each other informed as to their current activities and providing the NHLBC with ideas on how to make the club better). When club members travel to other NHL cities, they are often greeted and toured around by local fans. Each August the NHLBC holds its annual weeklong convention at one of the NHL's host cities. Members from all of the booster clubs attend the convention, which includes numerous trips and excursions to local tourist sites, restaurants, bars, and other local entertainment. An example of the trips and excursions associated with a typical NHLBC convention are the activities that were scheduled for the convention held in 2004 in Toronto, Canada. Members who attended this convention had the opportunity to visit the following places: Casa Loma and the Science Center, a Broadway show, Niagara

Falls, Pub Crawl, Caribbean Dinner Cruise Party, CN Tower, the Hockey Hall of Fame, and a tour of the city of Toronto.

Although each of these clubs convene each year and take part in the festivities associated with the convention and important reason for their attendance is to keep abreast of each other's activities and how to further enhance their support of their team and the sport. They all have basically the same mission of supporting the sport of hockey and in many cases supporting their home team. These clubs perform an important function for their parent team including: volunteering at games and team affiliated functions, coordinating and organizing team related community and charitable functions, and marketing for the team. While it seems logical that each one of the five teams in the Southeast Division would have a booster club, the investigator determined that only four of the five teams actually have team affiliated booster clubs. The only team to not have a booster club is the Atlanta Thrashers.

Carolina Hurricanes Booster Club

The Carolina Hurricanes booster club was formed in 1997, which is when the team moved to North Carolina from Hartford, CT. The membership for this club has continually increased over the years with 150 members during the team's Stanley Cup run in 2002 to a current total of 290 members, the year after winning the Stanley Cup. The goal of this club is to support the Carolina Hurricanes Hockey organization, and promote hockey throughout the Carolinas. The goals are reached by volunteering and assisting the organization, as needed. Some of the activities include: raising funds for non-profit charities, helping local youth hockey programs with sponsorship, and promoting the sport of hockey throughout the community. The booster club has continued to promote the team in the community through a variety of events such as the following:

1. Meals on Wheels
2. Food drives
3. Build a Bear project for the NC Children's Hospital
4. UNC telethon
5. Carolina Hurricanes Kids 'N' Community Foundation that supports community development and charitable giving with an emphasis on children and educational programs.
6. Volunteering at North Carolina State University games
7. Hockey Day in Carolina
8. Ben and Jerry's Benefit

The booster club also volunteers at Hurricanes' home games as they provide support in handing out giveaways and other promotional items. In the past the club has taken trips to various destinations to support the team. These destinations include Buffalo, Montreal, Atlanta, Washington, DC, and New York. For the 2006-07 season, the club is scheduled to travel to Washington, DC, Atlanta, and Columbia, SC to support not only the Carolina Hurricanes but also one of its minor league affiliates. The booster club also sends some of its members to the annual NHLBC convention each year. Based on their strength of team identification, booster club members would be considered as highly identified fans (Wann, 1997).