USES AND GRATIFICATIONS OF

INTERNET COLLEGIATE SPORT MESSAGE BOARD USERS

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Submitted to the faculty of the University Graduate School

in partial fulfillment of the requirements

for the degree

Doctor of Philosophy

in the School of Health, Physical Education, and Recreation

Indiana University

March 2008

Accepted by the Graduate Faculty, Indiana University, in partial fulfillment of the requirements for the degree of Doctor of Philosophy

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(Date of Oral Examination — March 6, 2008)

ii

To my father…finishing the journey

that we began.

ACKNOWLEDGEMENTS

ABSTRACT

Galen Clavio

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As the Internet has grown in popularity since the advent of the World Wide Web

in the early 1990's, so too have collegiate sport message boards grown in popularity

(Freeman, 2006; Skretta, 2007). The unique nature of message boards, where the

consumer of content can also be the producer of content, presents sport communication

scholars with a new frontier for scholarly inquiry. While there have been numerous

studies of uses and gratifications of the Internet since the inception of the World Wide

Web, there have been no studies which concentrated specifically on the characteristics,

uses, and gratifications of collegiate sport message board users. This study, through the

examination of a large convenience sample of collegiate sport message board users,

sought to expand the horizons of sport communication research by filling this void in the

literature.

The purpose of this study was to examine the users of Internet-based message

boards which focus on individual collegiate athletic programs. Demographic and other

characteristics were analyzed, and motivations for collegiate sport message board use

were obtained, so that the underlying uses sought and gratifications obtained by these

users could be identified. Specifically, the study examined a convenience sample of collegiate sport message board users drawn from 14 active message boards.

Using a survey methodology, message board users were invited to participate in the study by completing an online questionnaire, made available via web links placed on each of the 14 message boards for an eight-day period in late October, 2007. The survey resulted in 2,339 completed questionnaires. Analysis of the demographic characteristics of the convenience sample revealed that users were predominantly White, male, and at least 30 years old. Most users earned over $60,000 per year in household income, possessed at least an undergraduate degree, and lived in the United States. Over half of the respondents spent at least 16 hours per week on the Internet, fewer than 10 hours per week on collegiate sport message boards, and spent at least some time using collegiate sport message boards at their place of employment. Over half of the respondents had attended five or fewer collegiate athletic events in the previous year. Nearly all users identified football or men's basketball as the collegiate sport in which they were most interested. A total of 34% of respondents identified themselves as subscribers to a collegiate sport message board ($n = 794$). Such subscriptions generally require a fee of approximately $100 per year, and give the subscriber access to private message boards, as well as "premium" reports and other special news content about the athletic program upon which the message boards focus. Of those who identified themselves as subscribers, 35% indicated that they had been a subscriber for at least 48 months, and 24% had subscriptions to multiple collegiate sport message boards. Subscribers reported higher levels of income, education, sport message board usage, financial donation to collegiate athletic programs, and money spent on subscriptions to sport media than non-subscribers.

Respondents were asked to complete a series of 40 questions dealing with motivation and usage statements relating to collegiate sport message board use. Respondents who identified themselves as subscribers were asked to complete an additional series of 20 questions that dealt with motivations and usages of premium message board subscriptions. The responses to these questions were then examined using factor analysis (i.e., principal components analysis), to reduce the motivation and usage statements to their underlying factors.

A total of four factors were revealed for non-subscribers, subscribers, and all collegiate sport message board users, and identified as dimensions of gratification. These four dimensions accounted for 45.9% of the observed variance. The first, an *interactivity* dimension, accounted for 22.8% of the observed variance. This dimension represented the interactive nature of collegiate sport message boards, and included items dealing with giving input and opinions, participating in discussions, communicating with fellow fans, and sharing information. The second dimension, *information gathering*, accounted for 12.1% of the observed variance, and was the most salient use of collegiate sport message boards for all users when the means of each dimension's component items were summed and averaged. This dimension contained items relating to the unique sport and team-related content available on collegiate sport message boards, including content and analysis generated by other users. The third dimension, *diversion*, accounted for 6.1% of the observed variance. The items in this dimension focused on non-sports related elements of message boards, including politics, religion, staying in touch with old classmates, and non-athletic news about the user's alma mater. The final dimension, *argumentation*, accounted for 4.9% of the observed variance. This dimension's items

included engaging in "smack talk" and arguments with other users, and observing the comments of fans of rival teams.

In addition to the dimensions of gratification derived from the 40 motivation and usage statements for subscribers, three additional dimensions of gratification were identified through factor analysis of the 20 premium-only motivation and use statements. The first, a *premium information* dimension, explained 34.36% of the observed variance. The items in this dimension related to the acquisition, quality, and uniqueness of content available only to subscribers on collegiate sport message boards. The second dimension, *community*, accounted for 13.51% of the observed variance, and focused on the quality of other premium users and the communal aspects of interactions with those users. The third dimension, *patronage*, accounted for 7.62% of the observed variance. This dimension's component items included motivations of supporting one's school, or supporting the company which runs the site that hosts the collegiate sport message board to which the user subscribed.

In regards to the dimensions of gratification discovered, the study was for the most part consistent with other uses and gratifications examinations of Internet users in general. Previous studies (Ebersole, 2000; Papacharissi & Rubin, 2000; Stafford & Stafford, 2001) identified dimensions of gratification for Internet use which closely matched this study's findings, in content if not in nomenclature. A unique finding of this study was the discovery of an *argumentation* dimension, which had not been encountered in the existing literature of Internet uses and gratifications. The study's findings also supported the suggestion of Stafford and Stafford (2001) that a *socialization* gratification

be added to Cutler and Danowski's (1980) dichotomous separation of gratifications into content and process gratification.

Overall, the findings of this study indicate that collegiate sport message boards are used primarily by affluent, well-educated White males over the age of 30 who enjoy the exchange of information and interaction with fellow fans. Based on the findings of this study, it was hypothesized that the gathering of information is the most consistent motive for collegiate sport message board use among all users in the sample, with social interaction also standing as a salient motive. Furthermore, based upon the dimensions of gratification for non-subscribers and subscribers, it was hypothesized that the non-subscriber message board environment focuses on the interactive elements of message board usage, while the subscriber-only message board environment focuses on the informational elements. Another key finding of this study was the lack of correlation between *interactivity* and *information gathering*, as well as the lack of correlation between *information gathering* and various usage statistics. These results suggested that the labeling of "active" users on sport message boards should take into account both the amount of content that the user consumes (i.e., reading, viewing) and the amount of content that the user creates (i.e., posting).

TABLE OF CONTENTS

LIST OF TABLES

xvii

LIST OF APPENDICES

CHAPTER I

INTRODUCTION

A head coach was just fired. A star point guard at a basketball camp just committed to a college. An outstanding college linebacker declares he is going pro. A basketball team just won its first-ever postseason tournament game. A school's booster is rumored to have paid cash to recruits.

The college sports fan of today is familiar with some version of all the scenarios listed above. The amount of information regarding college sports teams and programs has increased significantly in recent years, with more and more attention being paid to these teams and programs by a variety of media outlets and other entities.

In many ways, the world of the college sports fan today is not too different from what it has always been. There are players and teams to root for, recruits to get excited about, coaches to praise and criticize in turn, and the occasional scandal to add spice to the proceedings. But the environment that the college sports fan exists in today differs in one major aspect. While yesterday's fans in pursuit of information or conversation regarding their favorite team would have no other choice than to open a newspaper, watch the local news, or head to a local sports bar, college sports fans of today are increasingly more likely to just log on to their teams' Internet message boards instead.

In the nearly 15 years since the advent of the World Wide Web, online sports fan communities have grown from small, isolated pockets of conversation into large, diverse, and influential elements of the sport communication landscape. Derided by sport public relations officials, treated as a mere curiosity by large segments of the traditional sports media, these fan communities have nevertheless continued to grow in popularity and prominence (Freeman, 2006). On a single day in February of 2007, nearly 70 million people logged on to *Rivals.com*, an Internet network of online fan communities, to read

and discuss news relating to college football's national signing day (Skretta, 2007). Some of the most popular fan community sites have upwards of 6,000 subscribers, each of which pay up to $100 a year for the privilege of full access to the site (M. Pegram, Personal Communication, May 15, 2007). The aforementioned *Rivals.com* was purchased in 2007 for an estimated $100 million, bringing the network's 180,000 subscribers under the domain of Internet media giant Yahoo! (Oates, 2007). Even the Entertainment and Sports Programming Network (ESPN), the self-proclaimed "Worldwide Leader in Sports", entered the fan community landscape in 2007 when it announced affiliate deals with four major fan community web sites (ESPN, 2007a, 2007b).

A major component of these online sports fan communities is the message board. A message board is a place where people congregate online to discuss particular topics, in much the same way that people would meet in "real life" social settings. On a message board, people may exchange messages with others in an asynchronous manner, meaning that conversations may be carried on over a period of hours or days. While sites may offer recruiting information, video clips, and interviews with players and coaches, message boards remain the most talked-about part of these fan communities, and in many cases the most active part as well. One message board publisher indicated that the message boards represent a way to get users to come to the site and stay, rather than simply come to read news articles and then leave (W. Stewart, Personal Communication, June 20, 2007).

The phenomenon of the sports message board is not limited to college athletics. Sport message boards have proliferated throughout the Internet landscape, and are present on nearly every major sport web page, including *ESPN.com*, *CBS Sportsline*, and

FoxSports.com. Publicly available blogging software, such as that found on *Blogger.com*, includes a message board-like module where users can discuss and comment on the topics presented by the author. Many newspapers' web sites, from small college newspapers to large publications such as the *Boston Globe*, maintain message boards dedicated to sport. In addition, a number of USENET discussion groups, the software which predates the appearance of the World Wide Web, are still active and dedicated to the discussion of sport and sports topics.

The popularity of the sport message board has also led to large networks of boards, disparate in geographical focus but united by a common sport or athletic theme. The *Rivals.com* and *Scout.com* networks are the largest such networks dedicated to collegiate sports (Freeman, 2006), and arguably the largest web-based networks of any sport type with dedicated sport message board services offered to users. The two networks combine to offer 248 message board sites for a total of 143 National Collegiate Athletic Association (NCAA) colleges and universities, with 1,460 individual discussion forums available to users in those message boards (Clavio, 2007a). The *SportsWar.com* network represents a consortium of boards, each of which is independently owned and maintained, yet share a common pool of national advertisers. While fewer in number of total boards, many *SportsWar.com*-affiliated boards are larger than their counterparts on other networks in numbers of users and subscribers. *ESPN*'s initial foray into the collegiate sport message board world included just four fan communities to start, but those four communities — University of Florida, The Ohio State University, Oklahoma University, and University of Southern California — possess some of the largest fan bases in the collegiate athletics world. Within six months of this initial foray, *ESPN*

announced agreements with fan communities focusing on athletics for the University of Miami and the University of South Carolina.

Many of these message boards have become the place to go for many fans to find out news and information about both their school and rival schools. On April 5, 2007, when ESPN announced that the University of Kentucky would hire Billy Gillispie as their new men's basketball coach, the *Rivals.com*-affiliated site *CatsPause.com*, a Kentucky fan site, recorded 16,011 users logged on to their message boards simultaneously. Additionally, messages which have been posted on some collegiate sports message boards have been the genesis of stories in the traditional media which have led to investigative reports that uncovered wrongdoing by athletic departments, and ultimately led to sanctions and firings (Branston, 2003; Roberts, 2007).

The Development of Online Fan Communities and Message Boards

Sports message boards have rapidly become a key component of the sport communication landscape, through their growing visibility and their popularity among fans. Where did these boards originate? What are the technological antecedents that have allowed sports fans to congregate online despite the geographical distance between them? In order to effectively investigate sports message board users, there is first a need to examine these questions of origin. This section presents a history of the development of online communities and message boards.

Although the Internet offers a wide variety of uses, the community aspects are among the most obvious, according to Joyce and Kraut (2006):

One of the most visible uses of the Internet is to support online groups or communities. These are collections of individuals, typically with a common

interest, whose primary method of communicating is exchanging text messages over the Internet (p. 723).

Porter (2004) defined virtual communities as, "an aggregation of individuals or business partners who interact around a shared interest, where the interaction is at least partially supported and/or mediated by technology and guided by some protocols or norms" (¶11). The eventual connecting of individuals and businesses possessing shared interests would occur rapidly once those protocols and norms were in place, but getting to that point proved to be a time-intensive process. Indeed, the attainment of a common information space proved to be an early challenge in the world of computer-mediated communication. While the challenges faced by the creators of the World Wide Web in the late 1980's and early 1990's were daunting, those challenges at least existed in a timeframe where the technology was available to create effective solutions to such problems. The early history of computer-mediated communication, however, contained challenges to the simple act of connecting two computers together.

In 1972, the first community message board was created in the Berkeley-San Francisco area of California. The system, named "Community Memory", was a series of hard-wired terminals throughout the Berkeley area connected to a main server computer. Community Memory served as an adjunct to the already-existing community bulletin board, and allowed people to read messages from others, as well as add their own (Szpakowski, 2006).

While the chance to exchange messages with fellow community members was a step in the direction of Internet message boards, the hard-wired nature of the terminals was not conducive to consistent personal access. In order for someone to utilize this

common information space, he or she had to physically relocate to where the terminals were placed.

By the mid-1970's, consumers were looking for a way into the computer marketplace. They discovered this portal in 1975, when the magazine *Popular Electronics* ran a cover story about a new microcomputer kit, dubbed the Altair 8800. The manufacturers of the Altair 8800 were expecting to sell a minimal number of units, but were shocked when the system became enormously popular (Weyhrich, 2001). The popularity of this system, despite a very limited initial functionality, indicated the potential marketplace that existed for personal and home computing.

The year 1978 saw the creation of the first bulletin board service (BBS), called the Computerized Bulletin Board Service, or CBBS for short (Garmon, 2005). Created by programmers Randy Suess and Ward Christensen, the CBBS was not strictly a 'message board' in the current sense, but rather was intended as a cross between the network of microcomputers concept advanced by others in the industry, and a traditional bulletin board as one might see in a supermarket (Christensen & Suess, 1989).

Although this original bulletin board service only offered single-user access at any one time, the concept of linking computers proved quite popular with computer owners. Within two years of the creation of the CBBS, one of the founders, Ward Christensen, saw his personally maintained BBS exceed 10,000 members (Garmon, 2005). Given the multi-gigabyte hard drives powering the Internet today, it is somewhat remarkable to note that the software backbone for the first computer bulletin board service ran on a single 173 kilobyte floppy disk (Christensen & Suess, 1989).

Around this same time, the groundwork was being laid for what would become one of the most popular and widely-used forms of community communication on the Internet. In late 1979, researchers at the University of North Carolina and Duke University created a type of protocol exchange which was designed to allow the transfer of information among multiple Internet sites (Salus, 1995). This protocol, ultimately dubbed USENET, allowed for users and sites to subscribe to "newsgroups", which aided in the distribution of articles and content to multiple locations across the Internet. While USENET started slowly, it continued to gain popularity among users, even after the advent of the World Wide Web. According to Salus (1995), there were 158 groups on USENET in 1984; a decade later, there were 10,696 groups, distributing over 1,000,000 articles to nearly 60,000 sites across the Internet.

As technology helped to make access to computerized bulletin boards a reality for consumers willing to invest the time and money into owning a personal computer and the accompanying peripherals, the social aspects of computer-based communication started to become more apparent. With computers more readily able to connect with one another due to the advances in technology, the people using those computers started to connect as well. One of the most celebrated cases of early user-to-user interaction appeared in 1983, when two individuals who had met online decided to get married, in a virtual ceremony conducted via computer terminal. Not only were the bride and groom married via computer, but the guests were in "virtual" attendance, scattered across the United States (Terminal Love, 1983).

Meanwhile, computers gained a foothold on the collective consciousness of Americans, thanks to two high-profile media appearances. The movie *WarGames*,

starring Matthew Broderick, was released in 1983. The film's plot centered on a young computer whiz-kid who, while using his modem and computer to play various games, inadvertently sets off a national security panic when he accesses a top-secret military computer (Textfiles.com, 2007a). Although the characterization of computer hackers in *WarGames* didn't particularly match up with reality, the movie had a significant impact on an emerging generation of computer enthusiasts, who trace their interest in computers and networking technology to the film (Wood & Smith, 2001). In the advertising world, Apple Computers announced the arrival of the Macintosh computer with a television commercial that conjured up images from George Orwell's novel *1984*. The commercial was immensely popular, particularly with the media (Friedman, 1997). As Rafaeli (1986) noted during this period, "The old genre of gangster movies, for example, featuring young men toting guns and knives, is being replaced by movies about even younger boys toting modems" (p. 126).

As computers continued to enter the mainstream, larger bulletin board services started up. In 1984, FidoNet was started by Tom Jennings, in an effort to connect disparate BBS systems which used the Fido BBS software that he authored (Textfiles.com, 2007b). In the first-ever FidoNet newsletter, written by Jennings in late 1984, he estimated that the network has over 10,000 users (Jennings, 1984). Just prior to Christmas of 1984, Jennings announced that the first intercontinental FidoNet message was successfully sent between Indonesia and the United States.

Meanwhile, computer-based communities were appearing in an ever-widening variety of locales. Colleges and universities began adding campus-wide networks, allowing students, faculty, and administrators to communicate among and between each

other. Rafaeli (1986) noted these developments, conducting an early uses and gratifications study of some users on Stanford University's computer network. Also entering the fray were a series of privately owned computer networks, including CompuServe, GEnie, Prodigy, Minitel, and America On-Line, which offered users access to information, email, and discussion forums in exchange for subscription costs or access fees (James, Wotring, & Forrest, 1995). These sites would prove to be a bridge between the solitary Internet sites of the early part of the 1980's and the World Wide Web-powered Internet world of the 1990's. These networks were quite popular, with CompuServe reporting nearly 1,000,000 members in 1992, and GEnie possessing over half-a-million subscribers.

By the end of the 1980's, the number of Internet sites had begun to skyrocket. A good example of this existed in Europe, where the number of sites had gone from 30,000 in 1990, to 100,000 in 1991, to half a million in 1992 (Gillies & Cailliau, 2000). Similar increases occurred in the United States during this period. The stage had been set for a unifying technology to bring these sites together. That technology would become known as the World Wide Web.

While the early days of the Internet allowed for users to interact with one another through the sharing of common interests, it was not until the advent of the World Wide Web in 1993 that a platform existed where such interests could be shared in a broader context. For the first time, individuals and businesses were able to connect with one another across vast distances using a standardized set of data protocols. As the creator of the World Wide Web, Tim Berners-Lee (1998), noted, "The dream behind the Web is of a common information space in which we communicate by sharing information. Its

universality is essential: the fact that a hypertext link can point to anything, be it personal, local or global, be it draft or highly polished." The World Wide Web creator added that, "There was a second part of the dream, too, dependent on the Web being so generally used that it became a realistic mirror (or in fact the primary embodiment) of the ways in which we work and play and socialize" (¶ 3).

As the World Wide Web became the dominant method of accessing and communicating over the Internet, web sites focusing on a vast array of topics began to appear. Among these web sites were the precursors of the current sports message board environment. These sites included public USENET newsgroups, independent sites with discussion boards, and newspaper web sites with discussion boards. One current sports message board publisher indicated that the site he publishes was originally conceived as a sports news and information site in 1996, but that a message board was added within a year (W. Stewart, Personal Communication, June 20, 2007). Other sites, such as the Independent Indiana Basketball Forum (IIBF), were created as an alternative to an existing newspaper site-based message board.

The concept of networking collegiate sports fan communities together has existed for over a decade, but the framework for such networks was built gradually. A current sports message board executive for *Scout.com* noted that in 1995, he had pitched the concept of the networked fan community to ESPN, with an emphasis on recruiting information, yet was told by the network's decision-makers that there was little market for such a service (Solomon, 2006).

By the turn of the century, the first such network, called Rival Networks, had assembled a sizeable group of collegiate sports fan communities. However, a business

model which gave away content and relied on advertising revenue, combined with the dotcom bust of the early 2000's, led to the demise of this network (Solomon, 2006). After the collapse of this enterprise, two new networks arose — the aforementioned *Rivals.com,* and *Scout.com*, with former employees from Rival Networks working for both services (Solomon, 2006). While the two networks' affiliated sites possessed some differences in business approach and site design, both ultimately offered the same function – original content of collegiate sports, including audio, video, and news reporting, as well as message boards for users to discuss issues of collegiate sports. These new networks found that a subscription-based service made far more economic sense, with some of the larger sites able to net revenues well into six figures a year (Solomon, 2006). There exists a good deal of redundancy between the two networks in terms of the schools covered, with *Rivals.com* and *Scout.com* sites existing simultaneously for nearly every Division I Football Bowl Subdivision (FBS) athletic program, as well as for several Division I programs outside the FBS (Clavio, 2007a). The author noted that the *Rivals.com* network consisted of message boards devoted to 105 different Division I programs, while the *Scout.com* network consisted of message boards devoted to 122 different Division I programs.

While many formerly independent sites chose to align themselves with the two networks, other sites with sizeable fan communities chose to remain independent. In 2007, several of these sites joined a loose affiliation named *SportsWar.com*, which allows boards to maintain their individual approaches to site design and subscription rates, yet operate with a pool of national advertisers (D. Max, Personal Communication, July 11, 2007). In recent years other sites have chosen to enter into a new affiliation agreement

with sports media conglomerate ESPN, which promises to share content and subscription costs with these sites (ESPN, 2007a, 2007b).

<p style="text-align:center">Message Boards Defined</p>

In order to understand the cultural and social aspects of sport message boards, it is first necessary to establish terms and definitions of elements unique to message boards. The concept of the Internet or computer-based message board was compared by its inventors to a community cork board or public notice section, as one could find in a grocery store (Christensen & Suess, 1989). Present-day message boards share many of the same characteristics that Christensen and Suess described, but the terminology used to explicate these characteristics is quite unique. A short list of important terms and their definitions from this section is included in the "Definition of Terms" section of Chapter II.

At its most basic level, a message board is a static web page where users can read and post messages to one another, and respond to messages created by other users. A *user* is defined as an individual who utilizes a message board, be it for simply reading messages, or creating original content. Typically, a message board is located on a web site that can be accessed by a person with a connection to the Internet. Message boards are normally created and maintained by a *publisher*, or site owner (Publisher, 2007), as is the case with most web sites and web pages.

In many cases, the sport message board service is offered in conjunction with other services. For instance, nearly every *Rivals.com* and *Scout.com* web site, and the majority of *SportsWar.com*-linked web sites, offers news and information on the team or

conference to what that site is dedicated. This news and information is normally gathered by staff members who work as full-time employees on the site.

Internet message boards have been referred to by a variety of names throughout their history. Besides 'message board', this form of online communication has also been referred to in the past as an electronic bulletin board, BBS, or USENET group, among others. While there are some technical differences between these forms, their basic function of acting as a repository for messages created by and shared between users is the same.

A message board may be a standalone web page, or it may contain a number of smaller message boards, known as *forums*. A forum on a message board is typically a section of the board which is specifically designed to host discussions and content relating to a particular topic (Forum, 2007). The only limit to the number of forums a message board can host is based on the capabilities of the software hosting the message board, and the number of topics that the publisher of the message board is interested in providing and maintaining. A preliminary analysis of collegiate sport message boards (Clavio, 2007a) indicated that these boards tend to contain an average of six separate discussion forums each, with topics including individual sports and teams, politics, ticket and merchandise trading, and non-sports related items. Conversations with a variety of sport message board publishers indicated that forums are generally created due to a perceived demand from the community using the message board, as well as a desire by the message board publisher to effectively segregate the conversations on the message board into different areas, to allow users to concentrate on the topics that they wish to

discuss (D. Max, Personal Communication, July 11, 2007; M. Pegram, Personal Communication, May 15, 2007; W. Stewart, Personal Communication, June 20, 2007).

Message boards and their accompanying forums are policed by *administrators* and/or *moderators*, also known as *system administrators* or *sysadmins* (Sysadmin, 2007). These individuals, which are normally selected by the publisher of the message board, are given special powers not afforded to regular users. These powers include, but are not limited to, the ability to delete messages which are deemed unsuitable or undesirable, to affix certain messages to the top of the message board's display order, modify the content of messages, and ban certain users from accessing the message board.

Sport message boards can encompass a wide variety of topics, and be hosted and/or maintained by a wide variety of sources. For the purposes of this investigation, collegiate sport message boards will be the focus. Collegiate sport message boards were chosen for two primary reasons. First, unlike their professional counterparts, collegiate sport message boards have coalesced into multiple distinct networks, such as the aforementioned *Rivals.com* and *Scout.com* boards. This allows for comparative analysis of different fan populations under the same Internet software; in other words, all *Rivals.com* message boards for different schools use the same Internet interface, all *Scout.com* message boards for different schools use the same Interface interface, and so forth. Second, as noted earlier in the chapter, collegiate sport message boards are a current focus of national sport media entities such as ESPN and Yahoo!, with these companies spending time and money investing in such services (ESPN, 2007a, 2007b; Oates, 2007, Skretta, 2007).

A collegiate sport message board refers to a web site, identifying itself as focused on a particular college athletic program, which devotes at least one web page to a message board where users can interact through discussion. It is important to note that while these message boards identify themselves as focusing on a college's athletic program, this does not mean that other topics are necessarily excluded from conversation.

Equally important to understanding sport message boards is the relationship between the number of discussion forums present, the variety of topics on those boards, and the number of users on the boards. A message board with a larger number of discussion forums tends to have a greater number of divergent topics, as well as a larger base of users. Morris & Ogan (1996) noted that, for a message board to be a viable entity, "its content must have depth and variety. If the audience who also serve as the source of the information for the BBS is too small, the bulletin board cannot survive for lack of content" (p. 45). This is due to the unique nature of message boards, in which the consumers of the information present are also the producers of that information. Message boards which have existed for several years are a testimony to this almost snowball-like process of forum addition. One message board publisher indicated that, while his board started with a discussion forum dedicated to football, the growth of conversation directed at other areas, such as off-topic items, football recruiting, and basketball, caused each area in turn to demand its own, separate discussion forum (W. Stewart, Personal Communication, June 20, 2007).

Messages on a message board fall into two different hierarchies of conversation. The basic hierarchy is the *post* (Post, 2007). Any single message created by a user may be classified as a post, whether it is an unsolicited message or a reply to another user's

message. A post may be as short as a single character or as long as the message board's software will allow, which in some cases can span dozens of pages.

Posts on a message board fall into a larger hierarchy, known as a *thread*. Threads generally keep a particular set of posts bound together, and are generated when a user responds to another user (Thread, 2007). A thread may contain as few as one post, or as many posts as the message board's software will allow, and are generally used to aid in users' reading and response to a particular topic. Oftentimes, these threads are broken into sub-threads, where respondents to the original post are responded to in turn, either by the original poster or other posters. If one were to map out a large thread with several sub-threads, the resulting map would appear somewhat similar to a family tree with a single progenitor.

Generally, message boards require users to register with the web site in order to gain access to posting privileges. Some message boards require users to register in order to read the messages. This registration generally requires the user to provide an email address and to select a user name, which often doubles as the user's *screen name*. The screen name is what accompanies any message that the user posts on the message board (K. Lamb, Personal Communication, November 18, 2007).

While registration is normally compulsory for users who wish to actively participate in message board discussions, the nature of this registration can vary from board to board. Some message boards have decided on a system of registration where all users who wish to read or post messages must pay a subscription fee, with one publisher indicating that the switch-over to this system from a prior system which did not require a

universal fee did not result in any noticeable drop in number of posts or forum activity

(D. Max, Personal Communication, July 11, 2007).

Users of collegiate sport message boards generally can be placed into two groups. *Non-subscribers* are users who do not pay for access to the message board or its accompanying web site. *Premium subscribers* are those users who pay a monthly or yearly access fee to the message board publisher, in exchange for access to premium content. This content may include news stories, information, multimedia, and access to forums which are not available to the non-subscribing public. Not every message board web site contains premium forums or content, although a preliminary analysis of collegiate sport message boards (Clavio, 2007a), revealed that 23% of discussion forums on the *Rivals.com* and *Scout.com* message board networks required a premium subscription for access. The number of premium subscribers often depends on the popularity of the athletic program in question, with message boards focused on the athletic programs of schools such as the University of Alabama and University of Texas possessing over 10,000 subscribers each (M. Pegram, Personal Communication, May 15, 2007).

In addition to the grouping of users into non-subscribers and premium subscribers, a further delineation exists between active users of the board, who post messages on the various forums, and passive users of the board, or *lurkers*. Lurkers, as they are collectively known in Internet circles, choose to not take an active role in conversations on the message board, preferring to simply read the messages created by others (Lurker, 2007). Ridings and Gefen (2004) note that lurking is not normally a negative behavior, and is in fact an expected and accepted element of message board

communities. Based on the results of a preliminary survey analysis of message board users, lurkers exist in both the non-subscriber and premium subscriber populations, and willingly self-identify as lurkers (Clavio, 2007b).

Summary of Message Boards

Collegiate sports message boards are increasingly popular, with hundreds of sites and discussion forums (Clavio, 2007a; 2007b) serving hundreds of thousands of subscribers (Freeman, 2006; Oates, 2007) and millions of visitors (O'Connor, 2007; Skretta, 2007), many of whom spend large amounts of time using these boards (Solomon, 2006). Despite this growing popularity, there has yet to be a concerted effort by scholars to examine the phenomenon as it relates to the field of sport communication. There are some legitimate reasons for this absence of scholarly inquiry. The popularity and mass appeal of collegiate sport message boards have only recently revealed themselves, although the presence of online fan communities predates the emergence of the World Wide Web. The legitimacy of these message boards as actual communities has been questioned by the traditional media, who have at times framed message boards as a haven for lunatics and rumor-mongering. Additionally, there is still no clear consensus about the true nature of why people use the Internet, let alone why people use collegiate sports message boards.

However, despite these unknowns — or perhaps because of them — it is imperative that the sport communication field examine the world of sports message boards through the eyes of the people who use them. The population of collegiate sports message board users is unique among sports fan populations in that it is, by and large, directly observable. Sports message board users represent the reality of the "new media"

sports fan, where the user of media is also the creator of media. This phenomenon should be studied from a scholarly perspective, due to the challenges that it presents to traditional media uses and effects models. For example, a theory such as agenda setting relies on examining a small group of content generators (i.e., newspaper sports pages or television sports) to disseminate news and information, and using that examination to study the types of content and messages generated. This process becomes problematic when dealing with message boards, due to the large number of users who possess the ability to both create and consume content in the same media space.

Messages posted on the majority of message board forums are publicly viewable, and therefore prime candidates for future sport communication analysis and inquiry. Furthermore, the people who use sports message boards represent a highly visible and desirable segment of sport fans, particularly in the eyes of sport marketers. As noted earlier, these message boards consist of large clusters of fans, all of whom have chosen to participate in one form or another. Even those message boards which concentrate on schools outside of the Division I FBS enjoy large numbers of users. For example, *Spiderfans.com*, a web site focusing on University of Richmond athletics, has seen more than 100,000 visitors on some days (O'Connor, 2007). Given the popularity of these sites, and the numbers of people willing to spend not only time, but also money, to use them, it seems clear that these sites and their users are prime candidates for scholarly investigation.

Due to the vast landscape of Internet-based fan communities and message boards, it is necessary to narrow the focus of this study to a particular segment of that landscape. For the purposes of this investigation, the community type chosen for examination

focuses on intercollegiate athletics. This community type was chosen for three primary reasons. First, college sports fan communities have coalesced into four major networks, which allows for a definable population of boards, as well as relative uniformity of software protocols on the message boards themselves. While communities focusing on professional sports are numerous, there exists no unifying network structure, such as a *Rivals.com* or *Sportswar.com*, in which large numbers of individually owned and operated boards and their user populations may be compared. Second, the examination of college sports fan communities allows the study to examine self-identified fans of multiple sports within a particular school's athletic program, and therefore the similarities and differences of fans of various sports within and between sports message board populations. Hypothetically, this will allow a more complete understanding of the nature of uses and gratifications among sports message board users, because the results will not be constrained to fans of a particular sport. Finally, the collegiate sports message board environment boasts the highest user retention rate among all sports web sites. According to Solomon (2007), *Rivals.com* sites are the "stickiest" sports web sites on the Internet, which means that users who visit the sites stay there longer than on any other, spending an average of one hour and 10 minutes on the site.

This study's primary purpose is three-fold: to determine the characteristics of collegiate sports message board users, and to ascertain the reasons that these individuals use collegiate sports message boards, and to understand what benefits they derive from that use. While there are several theoretical approaches that such a study could take, the most appropriate communications paradigm for this area of inquiry is the theory of uses and gratifications, due to the theory's emphasis on the users of media, rather than the

senders of media. Therefore, this study will utilize a traditional uses and gratifications approach in examining collegiate sports message boards.

Conceptual Framework

The Internet and its online communities have been the subjects of a number of studies in the recent past, with many scholars choosing to investigate these communities by applying the theory of uses and gratifications. Throughout its lifespan, this theory has endured a series of changes, and has often conflicted with other theories of the communication process, due to its emphasis on the users of media, rather than the senders of media.

While there have been studies of the uses of media since the beginning of communication research, the present-day theoretical framework of uses and gratifications was laid out in Blumler and Katz's (1974) edited volume, entitled *Uses of Mass Communications*. Within this volume, Katz, Blumler, and Gurevitch (1974) described uses and gratifications theory as "an attempt to explain something of the way in which individuals use communications, among other resources in the environment, to satisfy their needs and to achieve their goals, and to do so by simply asking them" (p. 21).

While there have been several suggested changes in uses and gratifications theory over the past few decades, the basic definition of the contemporary study of the theory has remained the same. Katz et al. (1974) helped to clarify uses and gratifications theory, and the goals of researchers who utilize the approach, with the following:

> They are concerned with (1) the social and psychological origins of (2) needs, which generate (3) expectations of (4) the mass media or other sources, which lead to (5) differential patterns of media exposure (or engagement in other

activities), resulting in (6) need gratifications and (7) other consequences, perhaps mostly unintended ones (p. 20).

Uses and gratifications theory also assumes that individuals are active in their usage of the media, and that functional alternatives, both media-based and non media-based, are available to the users (Ruggiero, 2000). Therefore, the underlying concept of uses and gratifications theory is that individuals, each with distinct social and psychological influences, will form opinions about the use of differing types of media and the potential benefits therein. Based upon these influences and opinions, these individuals will then choose to utilize a particular medium, which will result in need gratification and other occurrences.

Charney and Greenberg (2002) noted that certain gratifications were unique to the Internet among all forms of media, due to the Internet's particular capabilities. These scholars also noted that some of the more common Internet uses, such as e-mail, online discussions, and shopping, did not naturally fit into the dimensions of gratifications that have been uncovered in other mediums. This was in part due to the interactivity that these uses offered, a feature which is not integral in other communication mediums such as television and print media.

Uses and gratifications theory, which assumes that media usage is goal-driven and serves the purpose of fulfilling the needs and wants of the user (Katz et al., 1974), has been used by a number of scholars to examine the Internet milieu, with studies concentrating on a wide variety of Internet uses (Chen & Wells, 1999; Ebersole, 2000; Ferguson & Perse, 2000; Flaherty, Pearce, & Rubin, 1998; Garramone, Harris, & Anderson, 1986; Ko, Cho, & Roberts, 2005; Korgaonkar & Wolin, 1999; LaRose &

Eastin, 2004; LaRose, Mastro, & Eastin, 2001; Papacharissi & Rubin, 2000; Rafaeli, 1986; Ridings & Gefen, 2004; Ruggiero, 2000; Sohn & Lee, 2005; Stafford & Stafford, 2001; Stafford, Stafford, & Schkade, 2004). The emergence of the Internet, and other communication technologies, has led to a rise in the theory's usage due to this concentration on the user of media, rather than the sender. The aforementioned uses and gratifications studies of the Internet have concentrated on several different aspects of Internet use. However, despite the ever-increasing popularity of Internet message boards devoted to sport, there has yet to be a focused effort in the academic world of sport communication to examine online fan communities through the uses and gratifications lens.

What sets uses and gratifications theory apart from other mass communication theories? The distinction was best described by Windahl (1981), who noted that while uses and gratifications theory approached the communication process from the standpoint of the user, effects-based mass media theories approached the process from the standpoint of the communicator. Some scholars, including Katz (1959), McCombs and Weaver (1985), Windahl (1981), and others, have suggested merging uses and gratifications theory with other research approaches, such as cultural studies, agenda-setting, and general effects-based media studies. However, it is important to point out that although the term "uses and gratifications theory" is widely accepted in communication literature, it is worth noting that there is no single overarching theory which governs uses and gratifications (Blumler, 1979). While this has led some scholars to deride uses and gratifications as exceedingly atheoretical (Elliott, 1974), one may also look at the lack of a single overarching theory as a benefit to research objectives, allowing for researchers to

utilize uses and gratifications to examine media usage and needs satisfaction through a variety of different methods and constructs. A recent example of this is the research performed by LaRose and Eastin (2001) and LaRose, Mastro, and Eastin (2004), who applied the tenets of social-cognitive theory to a uses and gratifications examination of Internet users. Due to the lack of scholarly inquiry into sport message boards, it is important to utilize uses and gratifications to first grasp the nature of the medium, and then use that greater understanding of the medium to help guide subsequent research endeavors.

Due to the aforementioned emphasis on examining communication from the user's perspective, uses and gratifications is ideally suited to the study of collegiate sports message boards. By asking users questions regarding their reasons for using collegiate sports message boards, and combining those responses with demographic information collected from those same users, a series of motivational, usage, and gratifications profiles may be created.

Another advantage of uses and gratifications in relation to this study is that the theory relies on the concept of an active audience. Internet users are, by definition, active, with the nature of the medium allowing for little passivity (Charney & Greenberg, 2002). Whether sports message board users are actively posting messages or are simply reading what others have written, there is still a level of activity required in both functions that goes beyond other media uses. Recent studies by the Pew Internet & American Life Project have indicated that 53 million Americans, comprising 44% of Internet users in the United States, have contributed content to the Internet in some way, be it through text, files, pictures, or other means (Lenhart, Fallows, & Horrigan, 2004). Even those who

simply read others' messages must consciously decide which messages to select for reading. Sports message boards are not like television; a new message will not automatically appear on the screen once the user is finished reading the old message.

One of the few studies which examined sport message boards suggested uses and gratifications as a future area of study. End (2001) utilized the theories of self-presentation and social identity theory in examining Internet-based messages written by fans of professional football teams in the United States. The researcher's suggestions for future research indicated that an effort should be made to study the users of sports message boards themselves, including demographic information and self-reporting of motivations for message board usage.

Summary of Conceptual Framework

Uses and gratifications assumes an active audience, influenced by social and psychological needs, and presented with media choices, will select media that can potentially satisfy those needs, and through that selection, gratifications will be obtained (Katz et al., 1974). Furthermore, the users of media are sufficiently aware of their own uses of the media, and the gratifications they derive from that use, that researchers can expect them to effectively report those uses and gratifications when asked (Katz et al., 1974). Uses and gratifications has been applied to several aspects of Internet usage (Chen & Wells, 1999; Ebersole, 2000; Ferguson & Perse, 2000; Flaherty et al., 1998; Garramone et al., 1986; Ko et al., 2005; Korgaonkar & Wolin, 1999; Larose & Eastin, 2004; LaRose et al., 2001; Papacharissi & Rubin, 2000; Rafaeli, 1986; Ridings & Gefen, 2004; Ruggiero, 2000; Sohn & Lee, 2005; Stafford & Stafford, 2001; Stafford et al., 2004), but has yet to be applied to sport message boards and their users.

CHAPTER II

REVIEW OF LITERATURE AND RESEARCH QUESTIONS

An examination of the literature related to the application of uses and

gratifications theory reveals a broad and multi-faceted developmental line. While the

basic concept of uses and gratifications, outlined above in this study's conceptual

framework, has remained as a touchstone for functional, or use-based, interaction with

media, the scholarly application of the theory has varied greatly, both in the mediums

examined by the theory and the manner in which it has been applied to subjects of

research. While the depth of literature relating to uses and gratifications allows for a

number of different approaches, the review of literature for this study will concentrate on

three main areas. The first area of research will concentrate on tracing the development of

uses and gratifications, from its beginnings as a proposed alternative to effects-based

media research to its current theoretical status. The second area of research will trace the

application of uses and gratifications to the Internet, with particular attention paid to the

theory's application in examining the users of message boards and other online

communities. The third and final area of research will concentrate on other theoretical

approaches which have investigated Internet users and other topics related to Internet use.

While these studies have not applied uses and gratifications to the subject matter, their

inclusion is beneficial to this examination, in order to provide a more complete

understanding of the virtual world in which sports message board users operate.

<center>Uses and Gratifications – Theoretical Development</center>

The foundation of uses and gratifications stretches back several decades, far

before the advent of the Internet or its computer-based precursors. Media effects research

as early as the 1930's and 1940's laid the groundwork for what would become uses and

gratifications, by examining mass media audiences for motives and patterns of media

<center>28</center>

selection. For example, Berelson (1949) examined consumption of newspaper articles from the reader's perspective, while Cantril and Allport (1935), Herzog (1940; 1944), and Warner and Henry (1948) studied the users of the still-nascent technology of radio. As noted by Katz et al. (1973), these studies laid the groundwork for the present-day uses and gratifications approach, in that they elicited statements regarding media function from respondents in an open-ended manner, and shared a qualitative approach in grouping those statements into categories. Where these early research efforts fell short was in their inability to link gratifications with the origin of their accompanying needs, and their failure to search for a latent media gratifications structure (Katz et al, 1973). However, despite these initial failings, the early research efforts laid the foundation for a second wave of research in the 1950's, which concentrated on the operationalization of variables in relation to media use in peer and family settings (Palmgreen, Wenner, & Rosengren, 1985).

Despite this second wave, the state of uses and gratifications was in flux, with researchers grappling over the implementation of a functionalist paradigm within the concept, and the prevalence of effects-based research in the communication field. However, Katz (1959), in response to a colleague bemoaning the potential death of field of communication research, claimed that the field of communication research had within it a promising research approach. Katz (1959) stated: "The direction I have in mind has been variously called the functional approach to the media, or the 'uses and gratifications' approach. It is the program that asks the question, not 'What do the media do to people?' but, 'What do people do with the media?'" (p. 2). While Katz had effectively named this research approach, uses and gratifications still had several years to

go before it would gain widespread recognition in the field of mass communication research.

Klapper (1963), in reviewing uses and gratifications and offering suggestions for its scholarly enhancement, noted that uses and gratifications studies were promising in that they would allow mass communication research to escape the pattern of asking dichotomous questions which both oversimplified problems and provided no real explanation of the reasons behind media effects or media use. The scholar went on to say that uses and gratifications researchers required greater scientific rigor, and suggested the use of Merton's (as cited in Klapper, 1963) functional analysis paradigm as a guide. Klapper postulated that researchers must be specific about the element of media which is used, or which provides a particular gratification, and that researchers must not only consider the use or gratification observed, but also the consequences of that use or gratification for the individual, the group, and society at large. Klapper also stated that uses and gratifications studies should include functional alternatives for the user, in order to fully consider both the reasons for utilizing a particular medium, and the source of the gratifications sought.

Throughout the next decade, scholarly work would continue on the codification and typology of the theory. The manner in which mass communication media satisfy social and psychological needs was explored by Katz, Gurevitch, and Haas (1973), who noted that these needs tended to take the form of the strengthening or weakening of a connection with a referent entity. This connection could take the form of a cognitive or knowledge-based element, an affective element, or an integrative element. The referent entity could be something as personal as one's self, or as broad as a social institution. In

clarifying the theoretical developments related to uses and gratifications further, Katz et al., (1973) stated:

It argues that people bend the media to their needs more readily than the media overpower them; that the media are at least as much agents of diversion and entertainment as agents of information and influence. It argues, moreover, that the selection of media and content, and the uses to which they are put, are considerably influenced by social role and psychological predisposition (p. 32).

However, the most significant publication in the development of uses and gratifications as a theory occurred with Blumler and Katz's (1974) seminal volume on the topic, *The Uses of Mass Communications*. According to Palmgreen, Rosengren, and Wenner (1985), this collection of perspectives from various scholars interested in the various aspects of uses and gratifications played a key role in setting the research agenda for the theory, while simultaneously contributing heavily to a subsequent surge in uses and gratifications research over the next decade.

Katz et al. (1974) noted that uses and gratifications relied on a particular group of assumptions, which Lundberg and Hultén (as cited in Katz et al., 1974) referred to in sum as a model of uses and gratifications. Katz et al. isolated five particular elements from this model as particularly worthy of comment. The first of these elements conceived the audience as being an active one, with the assumption that the usage of mass media by individuals is goal directed. The second element argued that media choice and need gratification was user-initiated, placing the theory in opposition to strong effects-based mass media theories. The third element noted that other sources of need satisfaction competed with the media. The fourth element stated that individual media users

31

possessed the wherewithal to identify their own motives and interests, and that these users could effectively report these motives and interests when asked. The fifth element noted that uses and gratifications reported by audience members should be dealt with on their own terms during data collection, rather than interpreted through a particular cultural lens.

As a result of these clarifications of the nature and direction of uses and gratifications, a considerable amount of debate was generated regarding the theory. In surveying the landscape of uses and gratifications at the end of the decade, Blumler (1979) indicated that much of the criticism regarding the application of uses and gratifications to the mass media focused on the lack of an underlying theory. In response, Blumler asserted that while there was no singular theory of uses and gratifications, there were a variety of theories about various uses and gratifications, most of which sprung from a common defining groundwork. The scholar also noted that media effects researchers had created a multitude of offshoot theories which were not bound by the same theoretical underpinnings, nor influenced by a singular scholarly perspective.

Furthermore, Blumler (1979) stated that while many academics who utilize uses and gratifications do so with a particular theoretical approach in mind, there is no requirement for a unifying, over-arching theory in uses and gratifications research. As Blumler stated:

> After all, it is the distinctive mission of uses and gratifications research to get to grips with the nature of audience experience itself, which is ever in danger of being ignored or misread by (a) elitists who cannot partake of it and (b) grand

theoreticians who believe they understand the significance of such experience

better than do the poor benighted receivers themselves (p. 12).

Blumler (1979) pointed out that a struggle existed in attempting to tie media

gratifications to social circumstances, and that research tended to assume that media use

was compensatory for elements lacking in a user's life. However in a study of British

television viewers, data analysis indicated that media users who fell into one of four

dimensions (*surveillance*, *curiosity*, *diversion*, and *personal identity*) tended to also be

classified by certain variables, and that those variables did not always fit the profile of

compensatory media use. For example, those media users falling into the *curiosity*

dimension tended to be males, have higher levels of education, have experience in travel

abroad, and have an ability to get out in the evening frequently.

The sub-classification of gratification types was another element of uses and

gratifications research that scholars were exploring at this time. Cutler and Danowski

(1980) noted that, while uses and gratifications studies were more attentive to what the

user of media brought to the communication process, the role of the user's age was rarely

accounted for, due to the cross-sectional nature of most studies' data collection. To

compensate for this, Cutler and Danowski proposed a dichotomous separation of

gratifications into two categories: *content gratification* (i.e., the act of enjoying the

content of the messages from a particular medium), and *process gratification* (i.e.,

enjoying the usage of the medium itself, as opposed to the content). Stafford and Stafford

(2001) later suggested the addition of a third gratification type specific to the Internet,

called the *socialization gratification*. This proposed gratification dealt with the enjoyment

of the interactive elements that the Internet provides, and is discussed in greater detail in the following section of this literature review.

An important development in uses and gratifications research was the merging of a gratifications focus with an effects-based focus. Windahl (1981) suggested such a merger of the two models. Windahl noted that the traditional media effects approach differed from uses and gratifications primarily because the traditional approach tended to examine the communication process from the perspective of the communicator, while uses and gratifications tended to examine the communication process from the perspective of the audience member. In proposing a model which combined the two approaches, the researcher conceived of a new type of outcome in the communication process. In addition to the effects of media use and the consequences of media use processes, the new outcome, which Windahl dubbed *conseffects*, "are partly results of content mediated by use and partly results of media use in itself" (p. 180). The researcher suggested that the synthesis of the two approaches strengthened traditional uses and gratifications, by placing more emphasis on both the sender of communication content and the actual content itself.

One of the strengths of uses and gratifications theory is its ability to adapt to changing technologies in the communications spectrum. Williams, Phillips, and Lum (1985) in examining the potential application of uses and gratifications to the already-changing media landscape of the mid-1980's, highlighted some of the features and characteristics of new mediums such as cable television, video cassettes, and electronic mail. In laying the foundation for the study of new media, Williams et al. suggested that topics such as expanded choice, interactivity, specific and personalized gratifications, and

the basic concept of *audience* would need to be revisited as technology changed the characteristics of these elements. Several studies throughout the 1980's and early 1990's examined users, needs, and gratifications as they related to these new mediums and technologies (Albarran & Dimmick, 1993; Donohew, Palmgreen, & Rayburn, 1987; LaRose & Atkin, 1991; Lin, 1993; Walker & Bellamy, 1991), demonstrating the adaptability of uses and gratifications.

The application of uses and gratifications theory to communication was further advanced by Rubin and Rubin (1985), who argued that the theory's scope should be broadened, making it a communications paradigm, as opposed to simply a tool of mass communication research. The authors indicated that the interpersonal dynamics in uses and gratifications models should include interpersonal communication channels as functional alternatives to media use.

As part of this new paradigm, Rubin and Rubin (1985) suggested five underlying assumptions of uses and gratifications. First, the assumption that media use is goal-directed is also present in the usage of interpersonal communication channels. Second, media is utilized to satisfy personal needs, and those needs can vary in both type and scope from user to user. Third, the user is able to self-identify his/her needs, and makes choices about communication utilization based on those needs. Fourth, a user is capable of providing an accounting of his/her own personal motives and gratifications for communication usage. Finally, every user is affected by a variety of influences, both internal and external, which can have an impact on communication selection and usage.

As uses and gratifications entered the 1990's, questions remained regarding the true nature of the audience being studied by mass media researchers. Was the audience

active, as uses and gratifications researchers believed, or was it passive in nature, as other mass media theories suggested? Rubin (1993) believed that the appropriate view existed somewhere in the middle of these two extremes. In portraying the (at the time) contemporary uses and gratifications perspective, Rubin indicated that uses and gratifications researchers still largely assumed that communication behavior was goal directed, that communication sources were selected and used to satisfy needs or desires, that social factors mediated communication behavior, and that media were in competition with other forms of communication for selection and use. Rubin also noted the addition of a fifth assumption, which stated that, "People are usually more influential than media in media-person relationships" (p. 98).

Uses and gratifications theory has traditionally tried to explain not only the uses of communication, but also their sociological and psychological origins (Blumler, 1985). In a study of this area of uses and gratifications theory, Finn (1997) investigated traditional mass media use as it correlated to the five-factor model of personality, which measures personality through the traits of agreeableness, conscientiousness, extroversion, neuroticism, and openness. Utilizing a mixed methodology, the study scored participants on a self-reported personality scale, and also measured communication activity through a series of participant communication diaries. Analysis of the data revealed several relationships between personality traits and communication usage, including the finding that those individuals with high scores in agreeableness and extroversion tended to prefer non-mediated communication activities. However, Finn expressed disappointment at the absence of more robust results, given the model used and the amount of communication usage information included. Regardless, Finn revealed that the results indicated the need

to account for alternative sources of interpersonal gratifications when attempting to link patterns of mass media use to personality traits.

In examining the state of uses and gratifications research at the close of the 20th Century, Lin (1999) outlined the component parts of present-day uses and gratifications processes. Lin indicated that the two basic psychological needs were deficiency needs (i.e., seeking external reinforcement, primarily from other people, to compensate for a lack of internal satisfaction) and self actualization needs (i.e., independent sources providing self-development). Five self-actualization needs were deemed relevant to media uses and gratifications, including cognitive needs, affective needs, integrative needs, contact needs, and escape needs. Furthermore, Lin identified ten motive dimensions for media use, consisting of *entertainment*, *surveillance*, *information*, *diversion*, *escape*, *social interaction*, *parasocial interaction*, *identity*, *pass time*, and *companionship*. These motive dimensions are affected by an individual's social and demographic background. Two dimensions of motivations were also highlighted: a *cognitive* dimension, dealing with the thought process that individuals utilize when choosing media to satisfy needs, and an *affective* dimension, dealing with the emotional expectation or conceptualization of choosing media to satisfy needs.

Uses and Gratifications — Internet Applications

Determining who the users of the Internet are, and what those users do with the Internet, is the crux of the application of uses and gratifications to the Internet. As Klapper (1963) stated, the underlying concept of uses and gratifications theory is what people do with the mass media. The articles in this section deal directly with uses and gratifications as it has been applied to Internet users by scholars.

Is uses and gratifications an appropriate lens through which to view the Internet? In the principal findings of their study from over three decades ago, far before the advent of message boards or the World Wide Web, Katz et al. (1973) noted an element of audience needs that illustrates the differences between the traditional mass media forms and Internet-based mass media. Their subjects indicated that non-media sources, particularly friends, were both more gratifying in general than the mass media, and more important than the mass media in terms of self-gratification needs. What makes the Internet, and more specifically sports message boards, unique is the combination of media function and interpersonal interaction within the same sphere, hypothetically allowing users to interact with "friends" or non-media sources while still garnering the gratification function of media usage.

A paper by Morris and Ogan (1996), which positioned the Internet as a mass medium and strongly encouraged mass communication researchers to examine the Internet in order to evaluate existing questions of communications research, noted that uses and gratifications theory, "may help provide a useful framework from which to begin the work on Internet communication" (p. 46). They note that previous scholars supported the application of the theory to previous computer-mediated forms of communication, and that the presupposition of audience activity in uses and gratifications theory should be included in Internet communication studies.

Are message boards a mass communication medium? The question bears asking, particularly when one considers the dual nature of the Internet itself. The medium is both broadly available to all users with the means to access it, and narrowly oriented to each individual user's focus of attention. Rafaeli (1986), in a study which pre-dated the

creation of the World Wide Web, stated that electronic bulletin boards are, "a new kind of mass medium" (p. 124). Furthermore, the scholar observed that message boards offered a challenging environment for those engaged in the study of both human communication and the social context of computers. Even at this early stage of message boards, Rafaeli noted several paradoxes inherent in their makeup, including their capacity to allow users to experience both highly intimate and highly anonymous interactions, the conflict between restricted access and open rules on the message boards, and the duality of message boards being both electronic and non-linear.

Newhagen and Rafaeli (1996), in their dialogue on why the Internet should be studied by the communications discipline, noted that communication researchers were slow to join the scholarly examination of the Internet. Within the dialogue, both scholars pointed to uses and gratifications as a logical paradigm to utilize in the study of both the providing of information and the participation of users on the Internet. In fact, within the dialogue, it was predicted that the Internet and its various uses would likely rejuvenate the scholarly application of uses and gratifications in scholarly research. The trends in communication research which followed support Newhagen and Rafaeli's claims. Kim and Weaver (2002), in a meta-analysis of the abstracts of communication studies relating to the Internet, found that studies involving the way that people use and perceive the Internet comprised 18.9% of the total, second only to studies examining law and policy issues.

Those studies relating to the Internet have demonstrated a wide range of uses and gratifications factors. Lin (1996) noted that the emergence of the personal computer, and the manner in which the personal computer has been utilized by individuals, has been

linked to a wide variety of need fulfillments commonly cited in uses and gratifications research. Lin's stated examples of these gratifications included, "social identity, interpersonal communication, parasocial interaction, companionship, escape, entertainment, and surveillance" (p. 559).

Ruggiero (2000), in a review of the development and future direction of uses and gratifications theory, agreed that the Internet and related technologies were a logical genre for the paradigm to explore, and that the emergence of these new technologies may have revived uses and gratifications theory from dormancy. The researcher suggested that uses and gratifications theory was particularly well-suited to explore three data attributes not found in traditional media: *interactivity*, which refers to the level of control that participants in the communication process possess; *demassification*, or the degree to which users have control over the medium itself; and *asynchroneity*, or the concept of messages being both sendable and retrievable at different times. Furthermore, Ruggiero noted that the traditional uses and gratifications concepts of *active* and *audience*, among others, would have to be revisited when considered in relation to the Internet, due to the reasons for using the Internet varying, sometimes greatly, from individual to individual.

In an early investigation of online message board users, Rafaeli (1986) utilized uses and gratifications theory, noting that the unique participatory and interactive nature of public message boards prescribed such an approach. The author noted that the most important element of interactive media such as bulletin boards was the active role that its members are given, putting the medium in direct conflict with mass communication research theories that presuppose a passive audience. The study examined users, messages, and patterns of use on a university-based bulletin board system, and sent

questionnaires to a random sample of these users, both electronically and by mail. The results generated by the questionnaires revealed both demographic and uses and gratifications-related data. In terms of demographics, respondents to the survey were primarily native English-speaking males in their early 20's who were relatively experienced in computer use. In regards to motivations for using the bulletin board system, the most commonly-identified motivation was that of recreation/entertainment, which 75% of respondents indicated was a reason for using the bulletin board system. Sixty-three percent of respondents identified diversion as a reason for using the system, while 51% said that learning what others think was a reason for their usage. Other motivations identified included the reading of controversial content (48% agreement), people who mattered to the respondent having access to the board (41% agreement), the board being a link to the community (38% agreement), and learning about other students' interests (35% agreement). Rafaeli also noted that an informal content analysis of messages on the bulletin board system during the survey period indicated that the vast majority of messages on the system were non-utilitarian in nature, instead focusing on items such as humor, philosophical commentary, politics, or other topics. Despite its age, the results of both the demographic and uses and gratifications data from this survey offer a basis for determining the proper questions to ask in a uses and gratifications examination of message boards.

In another examination of pre-World Wide Web bulletin board users, Garramone et al. (1986) utilized a phone survey to determine the motivations and gratifications of participants on a political bulletin board service. Analysis of the data indicated nine categories of motivation for bulletin board use: surveillance, learning opinions of others,

expressing one's own opinion, interaction with other users, accessing a sponsor (in this case, a legislator who created the bulletin board), entertainment, curiosity, individual utility, and utilization of technology. Of these categories of motivation, surveillance and curiosity were the most frequently identified elements. Through factor analysis, the survey identified three major obtained gratifications dimensions. The first such dimension was a *personal identity dimension*, which accounted for 31.7% of the total variance encountered, and included such items as comparing one's ideas to others, acquiring interesting things to talk about, learning what others are thinking about the user, and acquiring support for ideas. The second dimension dealt with *surveillance*, accounting for 22% of the total variance encountered, and included keeping up with current events, as well as gaining an understanding of state government issues. The third dimension was classified as *diversion*, explaining 12.6% of the total variance encountered, and included the process of being entertained, as well as passing time.

Nearly a decade later, James et al. (1995) utilized an online survey instrument to investigate the, "uses, perceived benefits, and nature of the bulletin board communicator" (p. 36). The study administered the survey to a sample of users from CompuServe and Prodigy, two popular subscription-based networks which pre-dated the World Wide Web. The results of the survey revealed that 64% of users had completed college, with an additional 25% having completed a Master's degree or higher. Seventy-three percent of respondents indicated a household income of more than $40,000, and 87% of respondents held jobs in a professional or managerial capacity. In terms of gender, 74% of the respondents were male. For the data relating to uses and benefits, James et al. analyzed open-ended responses and condensed them into five major groupings of usage categories.

The most prevalent use of bulletin boards was informational in nature, with 38.2% of respondents listing the transfer of information or education as a primary reason for using bulletin boards. The next most prevalent use of bulletin boards was for socialization, with 23.9% of respondents' answers falling into that category. The remaining categories included the appeal of the medium itself (17.4%), business-related items (11.7%), and entertainment or special interest (8.8%). It should be noted that these results were aggregated from the responses on both services; however, the scholars found that a comparison of the responses from each system showed only one category (business) with a statistically significant difference, and that this difference was expected due to the prohibition on the Prodigy boards of product or service solicitation.

Due to the uniquely interactive nature of the Internet, uses and gratifications must be utilized in a slightly different manner than with other mediums. December (1996), in a study which sought to create a typography of analytical units for Internet-based communication, noted that the structure of the Internet varied enough from traditional media that elements such as *media class*, *media object*, and *media instance* should be defined separately, particularly when utilizing uses and gratifications. Examples of media class include a complete group of Internet-based media, such as online magazines on a particular topic, or the complete population of message boards on a particular topic. Media object refers to a singular instance of the medium in question; a sole message board from the population would be a good example in this case. Media instance refers to the media object as observed during a specific time period. December argued that these and other areas of the Internet required extensive definition, due to the lack of familiarity with the medium, particularly when compared with more well-known media such as

radio and television. While the Internet of today has been around for over a decade longer than was the case when December's research was published, it is still necessary to clearly define not just the concept of online communication being discussed, but also the internal separation of the sample being examined and the media class, object, and instance involved.

As noted in the conceptual framework of this study, Charney and Greenberg (2002) identified several uses of the Internet which did not fit into the dimensions of gratifications previously derived from other media. Charney and Greenberg's survey of college students regarding their uses of the Internet revealed that none of the traditional dimensions of gratification, including peer pressure status, aesthetic uses, entertainment, and surveillance, was particularly strong among the participants. However, when the individual responses were subjected to a factor analysis with Varimax rotation, eight factors revealed themselves as independent predictors of variance. The first factor, a *keep informed* factor, included items such as getting information, learning, finding new things, developing new interests, acquiring information to pass on to others, and belief that Internet use would be even more important in the future. This first factor explained 38.6% of the variance observed. The second factor was classified as a *diversion-entertainment* factor, and explained 7.3% of the variance observed. This factor included pass time, play, entertainment, having fun, relaxing, and finding excitement. The third factor, *peer identity,* explained 6% of the variance observed, and included such items as, "because everyone else does" (p. 393), gaining status, living out a fantasy, being accepted for one's ideas, meeting new people, and satisfying a habit. The fourth factor, *good feelings*, accounted for 3.7% of the variance observed, and included feeling important,

feeling good, finding companionship, and escaping one's own identity. None of the remaining factors accounted for more than 3.3% of the total variance. These three remaining factors included a *communication* factor, a *sights and sounds* factor, and a *coolness* factor, which dealt with the students' perceptions of Internet use as a popular or exclusive activity.

Charney and Greenberg (2002) also performed multiple regression analyses on a wide variety of independent variables relating to Internet uses and gratifications, in an attempt to determine whether predictors of these two items existed. It was determined that the gratifications dimensions relating to *keeping informed*, *diversion/entertainment*, *communications*, *sights and sounds*, and *careers* all could be predicted from other variables, while the functions of *peer identity*, *coolness*, and *good feelings* could not. However, it is important to note three things regarding Charney and Greenberg's study. First, the amount of time that respondents said they used the Internet was quite low, with 75% indicating that they spent four hours or fewer online each week. Second, none of the gratifications statements had a mean score above 2.8 on a 5-point scale, indicating that the factors identified were not uniform throughout the sample. Third, the study was performed in 1996, which was several years before widespread penetration of the Internet as a cultural phenomenon, and several years before the widespread penetration of high-speed Internet access.

A key element in any analysis of Internet users is attempting to understand why users choose to use certain web sites. Stafford and Stafford (2001) explored this question in relation to users' motivations for visiting and using commercial web sites. Through application of uses and gratifications theory, the authors first placed an open-ended

questionnaire on a major commercial web site. This questionnaire, designed to create a list of motivational statements for web use, generated 179 unique descriptive adjectives from respondents. From this, a list of 45 items was placed into a survey, where users were asked to assign a level of importance to each item in relation to their motivations for using the Internet. The results from the survey, which was administered to users of America Online, were then analyzed suing principal components analysis. The analysis retained five factors of Internet use motivation, which accounted for a combined 45% of the total variance of the sample. These included a *search* factor, where users were motivated by Internet searches, technology, resources, etc.; a *cognitive* factor, where users were motivated by pursuit of education, information, learning, and research; a *new and unique* factor, where users were motivated by relaxing, ideas, progressive elements, and other items; a *social* factor, where users were motivated by chatting, friends, interaction, and newsgroups; and an *entertainment* factor, where users were motivated by entertainment, fun, and games. The study also utilized multiple regression analyses to compare Internet usage motivations with certain pre-existing scales relating to computer affinity, web usage frequency, and computer use frequency. Among other findings, the study noted social motivations possessed a positive significant relationship with computer affinity, while entertainment motivations possessed positive and significant relationships with computer affinity and web use frequency.

The previous section of this study noted that two general dimensions of uses and gratifications had been accepted in previous uses and gratifications research: *content gratifications* and *process gratifications*. As a result of their findings, Stafford and Stafford (2001) suggested that *socialization* might exist as a third, Internet-specific media

gratification dimension. Stafford et al. (2004) followed up on this assertion by utilizing

uses and gratifications to examine Internet usage variables through the lens of these three

dimensions. Through the utilization of a survey questionnaire and subsequent factor

analysis with Varimax rotation, the authors discovered that each of the three dimensions

acted as factors. The *process gratifications* factor saw loading at .5 or above from

variables such as searching, search engines, technology, and web sites; the *content

gratifications* factor saw loading at .5 or above from variables such as learning,

knowledge, and information; and the *social gratifications* factor saw loading at .5 or

above from variables such as people, chatting, interaction, and friends. Stafford et al.

noted that while the literature of the time suggested that Internet users would have social

reasons for engaging in online activities, there had not been an attempt to measure or

describe the social dimension of Internet uses and gratifications.

The role of an individual's personal values in his/her usage of the Internet is an

important element to consider when examining those who utilize sports message board

communities. Schiffman, Sherman, and Long (2003) examined the interplay of personal

values and Internet usage with a two-part questionnaire administered to college students,

which measured elements of Internet experience and personal values as well as

demographic information about the respondents. While a significant part of the study

concentrated on business and e-business uses, it also measured personal values for those

Internet users focused on information gathering and entertainment-related uses of the

Internet. The study found that 79% of respondents who used the Internet for learning or

gathering information scored highly on "a sense of accomplishment" being an important

element of their daily life, and 78% of those users scored highly on "self-fulfillment"

being an important element of their daily life. Also, over 60% of those users scored highly on the personal values of "warm relationships with others" and "self-respect." For those respondents who used the Internet for entertainment-related pursuits, the personal values of "fun and enjoyment in life" and "excitement" were rated the highest. Furthermore, those users who engaged in message board or chat room use scored highest on the personal value of "being well-respected", "excitement", and "warm relationships with others." For the purposes of this investigation into sports message board users, it is interesting to note that of all the combinations of personal values and Internet use, the only usage category with which "being well-respected" had a statistically significant relationship was the message board and chat room category. In discussing this particular category of Internet usage, Schiffman et al. noted that, "the same Internet activity might have a different meaning to individuals depending on their personal value orientation" (p. 184).

The application of uses and gratifications has not been limited to college-age students and/or adults. Ebersole (2000) examined uses and gratifications of the World Wide Web in middle-school and high-school students at 10 public schools, with a focus on how attitudes and opinions affected the students' use of the medium. Using a mixed methodological approach, the author took several steps during the data collection process, including two separate surveys of students who used the World Wide Web, a passive data collection of sites that students visited on school computers, and a panel of educators who examined the sites recorded by the passive data collection. The surveys, which are of particular interest to this study, included a set of questions gauging the students' affinity for the World Wide Web, their beliefs about the World Wide Web, their skill at using the

World Wide Web, and the locations that they access the World Wide Web. In addition, the surveys included a list of 40 questions designed to address reasons why students choose to use the World Wide Web. Following the collection of data, the study utilized exploratory factor analysis to arrive at a list of eight broad usage statements. These usage statements included *research and learning*, *easy access to entertainment*, *communication and social interaction*, *something to do when bored*, *access to material otherwise unavailable*, *product info and tech support*, *games and sexually explicit sites*, and *consumer transactions*. The study noted that students appeared to prefer seeking out sites which offered pleasure or entertainment by an almost two-to-one margin over seeking out sites which offered information to learn.

Papacharissi and Rubin (2000) applied uses and gratifications theory to Internet usage in order to locate primary motives for using the Internet. Utilizing a survey questionnaire and applying principal components analysis to the data, the study revealed five primary motives for Internet usage. *Interpersonal utility*, which featured community-centered actions such as helping others, participating in discussions, and meeting new people, was the most salient motive. Other motives identified were *pass time*, *information seeking*, *convenience*, and *entertainment*. The *convenience* motivation stood as the only significant negative predictor of Internet use duration, while the *interpersonal utility* motivation was the only positive predictor of Internet exposure. Furthermore, the *convenience* motivation was a significant negative predictor of listserv and bulletin board use, while the *information seeking* and *entertainment* motives were significant predictors of email use. Significantly, Papacharissi and Rubin summarized their findings by noting that, "It appears that those who were more mobile, economically secure, satisfied with

49

life, comfortable with approaching others in an interpersonal context, and who felt valued in their interpersonal encounters preferred the more instrumental Internet uses, such as information seeking." They added that, "Those who were less satisfied and who felt less valued in their face-to-face communication used the Internet as a functional alternative to interpersonal communication, or to fill time" (p. 192).

Some scholars have chosen to apply variables from other social theories in studies that utilize uses and gratifications theory, in an attempt to extend its theoretical boundaries. LaRose et al. (2001) identified variables from social-cognitive theory (Bandura, 1986; 1989) and approached uses and gratifications theory through this lens. The study utilized Pearson product-moment correlations to test a variety of hypotheses related to these variables. The study found that elements such as positive outcome expectations, Internet self-efficacy, and perceived Internet addiction were all positively correlated and related to Internet usage, while elements such as negative outcome expectations, self-disparagement, and self-slighting were negatively related to Internet use. While the study found no negative relationship between negative outcome expectations and usage, the findings pointed towards a potential curvilinear relationship between usage and negative expectations, meaning that such expectations might result in either high levels or low levels of usage. The study was able to explain approximately 60% of the total variance encountered through analysis of the variables included.

In a subsequent study, LaRose and Eastin (2004) further extended the application of social cognitive theory elements to uses and gratifications theory. The study found that expected activity outcomes and social outcomes were both related to Internet usage. The researchers also indicated that the *pass time* factor, which had been present in several

previous examinations of uses and gratifications for many mediums, emerged as an independent predictor of media exposure, which pointed towards habit as being separate from gratifications and expected outcomes. The researchers noted that the results of the study portrayed the Internet as being a medium which allowed for user attainment of social interaction, enjoyment, self-reactive, monetary, informational, and status incentives, and that social status may be a more important factor than social support in determining level of Internet usage.

While the connection of external theories is a traditional progression of research focus in uses and gratifications studies, attempts to do so with sports message board users at this time could prove counterproductive. As Klopfenstein (2002) noted, "the first research on users tends to focus on who the users are" (p. 359). While there has been considerable research into users of message boards relating to a vast array of subjects (i.e., advertising, business, commerce, politics), there have been limited investigations into the "who" question regarding sports message board users.

Several studies of Internet uses and gratifications have focused on the interaction that takes place between users, and the social elements which contribute to this interaction being valued by those users. Best and Krueger (2006) examined the concept of social capital, the residual elements which emerge from the engagement of other people and lead to future social exchanges, as it relates to online interactions. The scholars noted that no one questions the assertion that many individuals interact socially with people that they meet on the Internet. Using a random-digit-dialed telephone sample of United States residents, the study surveyed Internet users in an attempt to operationalize the concept of social capital as it related to online interaction. The results

of the survey indicated that 56% of respondents who used message boards reported that half or more of their interactions on those boards occurred with people whom they had met online. This stood in stark contrast to e-mail and instant messaging use, where 50% and 75% of users, respectively, indicated that none of their interactions on those services occurred with people whom they had met online. This finding would seem to indicate that message board use encourages interaction between individuals despite a lack of prior offline interaction, unlike e-mail and instant messaging, which appear to be used as reinforcements of existing social ties between individuals.

Korgaonkar and Wolin (1999) utilized a uses and gratifications approach to study Internet usage through three contexts. These usage contexts included the number of hours spent on the Internet, the percentage of time spent on the Internet for personal purposes and business purposes, and a commercial context related to purchasing activity on the Internet. A survey questionnaire was administered to consumers with prior Internet experience, and through principal component analysis the study discovered seven motivational factors that accounted for 58.9% of the total variance encountered. These seven motivational factors included a *social escapism* motivation, a *transaction-based security and privacy concerns* motivation, an *information* motivation, an *interactive control* motivation, a *socialization* motivation, a n*on-transactional privacy concern* motivation, and an *economic* motivation. The scholars indicated that the study suggested consumers use the Internet for far more reasons than simply retrieving information, and that both practitioners and researchers should pay closer attention to the needs of users, as well as users' perceptions of the Internet as a medium.

The impact of Internet uses and gratifications on the academic and business disciplines of commerce has been the genesis for scholarly inquiry into the motivations of users (Stafford & Stafford, 2001; Stafford et al., 2004). The related field of advertising has also demonstrated scholarly interest in Internet uses and gratifications. Chen and Wells (1999) attempted to determine the main dimensions of user requests in Internet surfing, particularly as they related to Internet advertising and web sites. Utilizing a three judge panel examining a variety of web sites, the researchers asked the judges to rate a variety of adjectives in relation to the web sites examined. Through factor analysis and a variety of other statistical procedures, Chen and Wells identified three dimensions relating to consumer attitude about web sites. The first factor, *entertainment*, explained 36% of the variance across web sites, and contained such adjectival attributions as fun, exciting, cool, imaginative, entertaining, and flashy. The second factor, *informativeness*, explained 13% of the variance across web sites, and included elements such as informative, intelligent, knowledgeable, and resourceful. The third and final factor, *organization*, accounted for 5% of the variance across web sites. This factor saw negative scores given to elements such as messy, cumbersome, confusing, and irritating.

While user attitudes towards various interactivity dimensions on sites are important to consider, those dimensions mean little unless the user actually believes that the site is interactive. Sohn and Lee (2005) stated that, "Whether people actually perceive a medium/vehicle as interactive is the only valid criterion for judging its interactivity" (¶ 1). A study by Sohn and Lee explored this concept of user-delineated interactivity through the usage of an online cross-sectional survey. The data indicated three main dimensions of perceived interactivity which explained 69.7% of the total variance:

control, *responsiveness*, and *interaction efficacy*, or the effect that the site had on the user's ability to interact with others. The *control* dimension, which explained 29.3% of the total variance, included such items as perceived content control, perceived navigational control, and perceived comfort in using the World Wide Web. The *responsiveness* dimension, which explained 22.7% of the total variance, included items such as perceived sensitivity of the World Wide Web, responsiveness of the World Wide Web, and expected positive outcomes of use. The *interaction efficacy* dimension, which explained 17.8% of the variance, included the user feeling comfortable expressing their opinions, and the ability to have real-time communication with others. Further data analysis revealed several predictors for these three dimensions in variables derived from the survey. The lone variable which was statistically significant in predicting all three dimensions was *need for cognition*. This variable was also the only predictor for perceived control, indicating that perceived control is tied more to psychological variables than social variables. *Interaction efficacy*, which is the most closely related of these dimensions to message board use, was predicted by both need for cognition and web usage time. The researchers noted that these predictors indicated that people with more experience in using the World Wide Web, as well as a higher need for cognition, tended to regard online interaction with others as more viable and comfortable than those without that experience or need.

Ko et al. (2005) applied uses and gratifications theory to their study of interactive advertising, using a structural equation model. Utilizing a computer-based questionnaire, the study surveyed college students with Internet experience in both the United States and Korea, to determine their reactions to latent variables related to the purchase of an item

and the usage of the Internet for this purpose. The study found that users with high motivational levels of convenience, information, and/or social interaction tended to spend more time at a web site to satisfy their particular motivations; high levels of informational motivation corresponded to higher rates of human-message interaction (i.e., clicking on several hyperlinks to get to information); high levels of convenience and social interaction motivation corresponded to higher rates of human-human interaction; and that users with higher usage levels of both human-message and human-human interaction had a more favorable attitude towards the web site being used. Ko et al. also noted that the results of the study supported uses and gratifications as an approach to examining the Internet and its users.

Some studies have chosen to compare and contrast the Internet to other mediums, as would be expected when a new mode of communication such as the Internet gains mass popularity. Ferguson and Perse (2000) utilized uses and gratifications theory to examine the similarities between television and the World Wide Web. Through surveys and media use diaries given to college students, the authors examined the relation between motives for watching television and World Wide Web usage, as well as how World Wide Web users interact with the vast array of content at their disposal. Survey results were analyzed using principal components analysis, and four factors were extracted: *entertainment*, *pass time*, *relaxation-escape*, and *social information*. The *entertainment* factor, which accounted for the largest percentage of common variance (42.1%), included such uses and gratifications statements as, "I surf the WWW because it's enjoyable", "It entertains me", and "I just like to do it"; the *pass-time* factor, which accounted for 8.6% of common variance, included such statements as, "It gives me

something to occupy my time" and, "When I have nothing better to do"; the *relaxation-escape* factor (6.6% of common variance) included such statements as, "So I can forget about school, work, or other things" and, "It allows me to unwind"; the *social information* factor (5.3% of common variance) included such statements as, "So I can talk with others about what I find" and, "So I can learn how to do things that I haven't done before." Furthermore, certain television-related World Wide Web surfing motives, such as *play*, *acquisition-related activities*, *entertainment*, *relaxation*, and *social interaction*, were significantly related to the four factors identified above. The researchers' findings indicated that, similar to television, the World Wide Web is seen as a source of entertainment and diversion, as well as a way to pass time. However, the researchers also noted that relaxation was not an important motive for using the World Wide Web, whereas relaxation is noted as being among the most important motives for watching television.

A study by Flanagin and Metzger (2001) sought to examine the way people used certain Internet functions in comparison with their usage of other types of communication media. Although not strictly a uses and gratifications study, the scholars investigated the uses of nine different communications technologies and the resulting level of need satisfaction for 21 different variables, using a survey administered to Internet-savvy users, the majority of which were undergraduate students. Using cluster analysis, the study identified three clusters of technologies, including unmediated interpersonal, mediated interpersonal, and mass communication technologies. The results of the study indicated that new communication technologies, such as the Internet and e-mail, had attained functional equivalency with traditional media. For instance, the mean rating for

acquiring information was higher for Internet-based information retrieval (4.63 out of 5) than all other mediums, including newspapers (4.49 out of 5), face-to-face communication (4.49 out of 5), and books and magazines (4.48 out of 5). Furthermore, the researchers indicated that, "the Internet is a multidimensional communication technology used to fulfill well-understood needs in novel ways" (p. 175).

Flaherty et al. (1998) examined the uses of the Internet as a computer-mediated communication channel, and whether those uses were intended as a substitute for face-to-face communication between and among individuals. Employing uses and gratifications, the authors utilized self-administered questionnaires to survey a group of users on technology computer newsgroups, as well as a group of college students, to measure variables relating to the elements mentioned above. The results of the survey indicated that several positive correlations were found between face-to-face and Internet communication motives; however, Flaherty et al. concluded that, "computer-mediated communication channels are not functional alternatives for face-to-face channels for most interpersonal needs" (p. 264). The scholars also intimated that people use face-to-face communication to satisfy informational needs, while using Internet communication to satisfy entertainment needs. It should be noted, however, that the study was performed within the first five years of the appearance of the World Wide Web, when modern instant messaging and message board software was still in its infancy. Furthermore, as Flanagin and Metzger (2001) noted, the evolution of computers from primarily work-related machines to primarily entertainment or leisure-oriented machines may cause a blurring of, and eventual convergence of, individuals' perceptions of information-seeking and entertainment needs as achieved through computers.

Other Studies of Internet Users

While the review of literature for this study has to this point focused exclusively on uses and gratifications theory and the examination of the Internet through that lens, there exists a sizeable body literature which has examined the Internet through other theoretical methods. Because of the relative lack of literature related to sports message boards, it seems logical to include as much as has been written about the topic, regardless of the theoretical underpinnings.

How does one classify the groups of users which congregate on collegiate sports message boards? Based on Porter's (2004) conceptualization of virtual communities as an aggregation of people who interact in a technology-mediated environment about a common or shared interest, sports message boards should be classified as virtual communities. The typology of virtual communities proposed by Porter went on to detail several characteristics of these communities. The typology drew a distinction between member-initiated communities, where the community was founded by and is currently managed by members, and organization-sponsored communities, where the community is sponsored by a commercial or non-commercial organization. While many collegiate sports message boards would, on the surface, be easily classified as organizational communities, the history of each message board is different. For instance, the *Rivals.com* message board for Indiana University is maintained by a commercial entity, but was a member-initiated community for several years prior to joining the *Rivals.com* network, and is still maintained by the founding member, among others (M. Pegram, Personal Communication, May 15, 2007). Other message boards have been conceived and created from the start as commercial sites. The typology did note that certain communities which

58

appear difficult to categorize, such as fantasy communities, would be classified based upon how the community was established. If one were to follow Porter's typological recommendations, then this conclusion would indicate that there is no standardized virtual community sub-classification for collegiate sports message boards, and that each message board must be analyzed on its own history and current status.

Porter (2004) also drew distinctions between the relationship orientations of the community, which alludes to the overall tone of the relationships fostered within the community. The typology identified two orientations, social and professional, in relation to member-initiated communities, while identifying three orientations, commercial, nonprofit, and government, in relation to organization-sponsored communities. Porter went on to note that member-initiated communities foster relationships between members, while organization-sponsored communities foster relationships both among members, and between members and the organization.

Preece and Maloney-Krichmar (2005) reported that the uncertain definition of the term *community* has caused a great deal of angst in those who apply it to the Internet. They went on to note that the advance of telecommunications technologies had allowed people to communicate with one another regardless of the distance involved, thereby reducing the importance of following a strict definition of community as offered by sociologists and anthropologists. Furthermore, the scholars allowed for a lack of absolute definition with regards to online or virtual communities, indicating that conflicts over what constitutes an online community may detract from more important issues involving these communities, such as how they are created and how they evolve.

It is also important to note that not all scholars have agreed with the utilization of the term *community* to describe virtual social interaction. Fernback (2007), in a qualitative examination of online group users, found that these users' concept of what a *community* is did not match previously established definitions of community. The study also concluded that many scholars equate online communities with little more than corporate constructs designed to generate profit. Fernback advised that using the term *community* in such broad strokes was damaging to the investigation and research processes that the Internet offers to scholars, and that more attention should instead be paid to the concept of *commitment* in online social groups, both at the individual user level and within the larger dynamic of a group, or series of groups.

The question of why people join online communities is central to understanding these communities and their users. A study by Ridings and Gefen (2004) utilized an open-ended question approach to examine the reasons for joining an online community for users across a wide topical range of message boards. The study discovered that while users were still joining and utilizing message boards for information exchange, they were also joining for social support and friendship-seeking, with those two elements accounting for over one-third of the stated reasons. The study also found that the reasons for joining a particular community were dependent upon the type of community. For example, friendship-seeking was second only to information exchange among users of communities dealing with personal interests and leisure, while social support occupied the second position in communities devoted to health and wellness.

Wise, Hamman, and Thorson (2006) examined user intent to participate in online communities as affected by internal elements, such as whether a site appeared to be

moderated, the level of interactivity of the site, and how quickly and interactively

messages were responded to. Using an experimental design, the study noted that

moderated sites generated a greater level of participation intent than unmoderated sites,

indicating that users favor a moderated and controlled online environment. Furthermore,

the researchers indicated that users in the experiment demonstrated a greater intent to

participate when viewing a community that possessed interactive messages as opposed to

non-interactive messages; however, interactive message communities with fast responses

to messages caused the intent to participate to be lower than those sites with more time

between messages. Wise et al. proposed that users might feel they have to, "hurry up and

get through the discussion so that they can post a comment before it loses relevance" (¶

42).

Can individuals construct and maintain meaningful interpersonal relationships in

a computer-mediated communication environment? Parks and Floyd (1996), in an

examination of the origin, creation, frequency, possession, and maintenance of personal

relationships between newsgroup participants, postulated that computer-mediated

communication is unique from other forms of interpersonal communication in that it is

not devoid of social cues which convey personal or relational information, but rather that

these cues and informational elements take a longer amount of time to send and receive

between users. Their study, which utilized a survey questionnaire sent to participants on

24 randomly selected newsgroups, found that personal relationships were common, with

60.7% of respondents indicating that they had formed a personal relationship with

someone who they had met for the first time on an Internet newsgroup. Furthermore, the

study found that the likelihood of individuals forming personal relationships was

relatively equal across all newsgroups examined. These relationships tended to involve members of the opposite sex, although less than 8% of these relationships were romantic in nature. The study indicated that the best predictors of whether an individual had formed a personal relationship were the length of time that the individual had been a part of the newsgroup, and how active they were in that newsgroup. The study also noted that many people involved in computer-mediated personal relationships had supplemented their interactions with offline forms of contact, including telephone calls, personal mail, or face-to-face communication.

The behavior of fans in a computer-mediated space, particularly in relation to fans' public association with teams during times of team success or failure, was examined by End (2001). The study, which utilized a content analysis methodology to examine fan-maintained personal web pages as well as message boards devoted to National Football League (NFL) teams located on the web site of *The Sporting News*, found that fans were more likely to post messages on boards devoted to successful teams than on boards devoted to unsuccessful teams, with 80.1% of all messages posted on winning teams' boards. However, data indicated that of all messages posted, a slight majority (50.9%) of all messages indicated identification with an unsuccessful team. Furthermore, the study found that fans may utilize message boards to post messages that engage in *information sharing*, *blasting* (attacking fans of an opposing team), and *BIRGing* (Basking in reflective glory). Of the three types of messages, the study found that the most common function of message board posts was *information sharing*, which comprised over 60% of the coded messages. *Blasting* messages accounted for just over 30% of all messages, and *BIRGing* accounted for less than 10% of all messages. The researcher hypothesized that

fans may use *blasting* messages to either enhance or protect their identities as sport fans at the expense of fans supporting other teams, and that the prevalence of this message function may be related to the anonymity that Internet message boards and computer-mediated communication in general provide them.

Another area of sport message boards that has received scholarly attention is the analysis of fans and their online reactions to the results of games being won or lost by their favorite team. End et al. (2003) utilized a content analysis methodology to examine attributional statements from NFL fans following wins and losses by their teams. The study found that fans were generally more likely to attribute victories to external, stable, and uncontrollable factors, and losses to internal, unstable, and controllable factors. In lay terms, fans were more likely to explain victory through attributions to luck, fan support, or weather (external), and more likely to explain loss through attributions to team or individual play (internal). The differences between stable/unstable and controllable/uncontrollable were similar. These findings contrasted earlier research done on sport fans' outcome-based attributions, but the researchers noted that one of the possible explanations for this difference was that the subjects and attributions under examination came from message boards. The researchers hypothesized that the anonymity provided by using a pseudonym or "handle" on a message board might cause individuals to be less concerned about issues of self-presentation, and cause them to be more forthright in expressing their real attitudes, positive or negative, towards their teams.

Online consumption of sport is an area that has received recent scholarly attention. Hur, Ko, and Valacich (2007) used structural equation modeling to craft a

model for online sport consumption, using data gathered from a convenience sample of college students. The resulting model contained five factors of motivation in online sport consumption (*convenience, information, diversion, socialization,* and *economic*) and four factors of concern in online sport consumption (*security and privacy, delivery, product quality,* and *customer service*).

Seo and Green (2008) attempted to quantify the various motivations for using professional sport teams' web sites into a motivation scale for sport online consumption. The researchers utilized a two-step process to first identify potential motives for professional sport web site usage, and then reduce those potential motivations into factors of usage. The resulting scale contained 10 different dimensions of motivation, namely *fanship, interpersonal communication, technical knowledge, fan expression, entertainment, pass time, information, escape,* and *support*. Analysis of the individual dimensions revealed that *interpersonal communication* was the most salient motive for consumption of sport online, followed by *fan expression* and *technical knowledge*. *Team support*, *escape*, and *information* were the least salient motives for online sport consumption.

As mentioned in End (2001) and End et al. (2003), the effects of anonymous posting, combined with a lack of face-to-face cues, are key elements to examine when trying to understand message board users and their motivations. In a related study, Heisler and Crabill (2006) utilized a self-report survey to analyze whether e-mail users utilized mediated clues in an unknown email sender's email address to construct perceptions of the unknown email sender. The study utilized six fictional email addresses, constructed using contrasting amounts of divulged information (i.e.,

"ZH7624@any.com", "packerfan4@any.com") to send messages to the study's subjects, who then were asked a series of questions relating to their perceptions of the fictional sender's personality and work or task productivity. The results of the study indicated that respondents were willing to assign a specific biological sex, despite the presence of a "don't know" option, to "creative" names such as "packerfan4." Furthermore, participants were willing to describe the race, age, hobbies, and work performance of the fictional owners of these "creative" email names, purely based on the information gleaned from the email name itself. The study suggested that email usernames provide an opportunity to gather information about the individual sending the email. This information-gathering function is of particular interest to the study of sports message boards, due to the nearly-uniform usage of handles and pseudonyms by message board users.

Gender differences can play a role in Internet usage, particularly in regards to usage type. A study by Mitra et al. (2005) examined the criteria of evaluation used by men and women to make evaluative decisions regarding web pages. The study first utilized a focus group of college students to identify various dimensions of Internet usage and web site evaluation, with the results of the focus group used to construct a survey that was administered to a group of students asked to perform a web search and evaluation task. The results of the study indicated that men generally selected sites that contained video and sound more often than women did. Furthermore, men were more likely to visit sites related to humor, gaming, sport, pornography, and special interests than women, while women were more likely to visit academic sites than men. The researchers suggested that women are more likely to utilize Internet technology in a way that adapts

to their everyday practices, while men are more likely to utilize Internet technology for the sake of utilizing the technology itself. Given the high entertainment and "bells and whistles" content of sports message board sites, with increasing amounts of audio and video content added to the sports message board environment in recent years, the findings of this study indicated that men might be more drawn to the sports message boards than women.

Joyce and Kraut (2006) examined online participation in newsgroups, a type of online community which shares many of the technical and structural characteristics of message boards. Much like message boards, the newsgroup allows users to hold conversations in reply structures, which are shown visually as threads on the discussion group. The study explored how the presence or absence of a response to a new user's first message, combined with the content and tone of that response, affected whether that new user would continue to participate in the newsgroup. The study examined six different newsgroups, including one newsgroup devoted to fans of the National Hockey League's (NHL) New York Rangers. The results supported the scholars' hypothesis that a new user receiving a response to their first message was more likely to post another message, but the results did not support the other hypotheses of the study, including those hypotheses dealing with post content or tone.

Another type of online community which shares many of the characteristics of message boards is the chat room. Like message boards, chat rooms are computer-mediated meeting spaces for users. Chat rooms "form around shared interests" (Shoham, 2004, p. 856), just as message boards and forums form around shared interests. Shoham took an ethnographic approach to qualitatively examine a number of chat rooms, utilizing

online interviews and observations, as well as document analysis. The researcher noted that the interactions of users within the chat rooms examined appeared to mirror a *flow experience,* where users were motivated by the experience of chatting, rather than any potential external rewards such as participation, pleasure, or power. Such an observation is of considerable value to a uses and gratifications examination of message board users, because it adds a level of gratifications sought that could be unique to the process of online community interaction. The researcher also hypothesized that image management and enhancement may play a role in the interaction between users, with long-time users seeking to maintain a particular image, and newcomers seeking to enhance their standing in the hierarchy of the chat.

Another function of the Internet which has received scholarly attention has been its decentralizing effect on the flow of information. With both Internet sites and Internet users representing potential sources of information, the role of traditional media gatekeepers has in many ways been reduced. Poor (2006) examined these challenges to traditional media gatekeepers in the realm of sport communication, by examining the media actions of Curt Schilling, a famous American baseball player. Poor's research, utilizing a case study methodology, examined Schilling's use of a fan community message board to communicate directly with fans, and also examined the reactions to his usage of this medium from both fans and traditional media gatekeepers such as radio talk show hosts. The study found that fans were impressed by Schilling's willingness to communicate with them directly through two different message boards. As the researcher stated, "It was almost as if he'd walked into a Boston sports bar, except it wasn't face to face" (p. 47). The study also found that the media reacted poorly to Schilling's usage of

the Internet as a direct communication medium with the fans, feeling that this choice threatened their role in the sport communication continuum.

Investigations of sports message boards have not been limited to the United States. A recent study by Ruddock (2005) involved an examination of a message board used by fans of the West Ham United football club, a team in the English Premier League. The study, a qualitative audience research piece which focused on larger issues of politics, racism, sport, and culture, examined 39 messages posted on the fan site over a five-day period in response to the controversial signing of an allegedly racist player by the team. Among other things, the study noted that within the culture of the message board itself, there was a great deal of resistance to externally-imposed political agendas — in this case, externally imposed from traditional media, such as the British newspaper *The Guardian*.

While many studies have concentrated on the perspective of the Internet user, Ha and James (1998) explored the issue of Internet use from the perspective of site design and dimensions of interactivity. The study codified the concept of interactivity through five dimensions of communication need fulfillment: *playfulness*, *choice*, *connectedness*, *information collection*, and *reciprocal communication*. Using a content analysis methodology, the study examined 110 different business web sites, and coded the features on each site which fell into the dimensional categories listed above. The results indicated that the most common interactivity dimension on the web sites surveyed was *reciprocal communication* (61.8% of sites), such as a feedback form or email address. This was followed by the presence of *interactivity in choice* (52.7% of sites), which referred to the ability of the user to alter items such as color scheme, language, or other

elements on the web page. Curiously, elements of *connectedness*, *playfulness*, and *information collection* did not appear on the majority of web sites. While the Internet of today bears little resemblance to the Internet from the time period that the study was performed, it is still interesting to note that, with the exception of choice, these dimensions of site interactivity are still valid, particularly in relation to sports message boards and fan sites.

One area of Internet research that has started to gain scholarly attention deals with the World Wide Web's credibility as a source of information. This category of research examines the user's perceived credibility of web sites, and can be linked back to pre-World Wide Web media studies dealing with the perceived credibility of other information sources and mediums. Flanagin and Metzger (2007) noted that site, or source, credibility could likely be examined through two dimensions: *trustworthiness*, often embodied in the presence of site policy statements or the absence of commercial content, and *expertise*, which could manifest itself in the level of informativeness that the site offers, or the credentials of the site itself. In their experimental study of credibility perceptions in users, Flanagin and Metzger found that perceived credibility of both sources and messages differed across genres of web sites, and that news organization sites were rated highest in perceived message, sponsor, and overall credibility, ahead of special-interest sites, e-commerce sites, and personal web pages. The study also suggested that those users familiar with a particular site genre as a source of information might have their perceptions of that site affected by that familiarity. As Flanagin and Metzger stated, "the findings on verification paint a picture of a set of internet users who

are skeptical of web-based information, know they should verify the information they get online, and yet fail to do so" (p. 334).

Summary of Existing Literature

This review of existing literature examined studies related to uses and gratifications theory, its application to the Internet, and other studies related to Internet usage. The assembled articles revealed the development of uses and gratifications theory into a communication paradigm, the adaptation of the theory to the study of Internet users and their motivations, and other efforts to analyze Internet usage.

Uses and gratifications theory was revealed to have developed from an audience-focused functional approach to a multidimensional theory of the uses of mass communication, including the uses of the Internet, and the gratifications derived from that usage. The foundations of the current application of uses and gratifications theory were presented in the early 1970's, as an approach which considered the social and psychological antecedents of individuals who form opinions about the uses of communications and the gratifications derived from that use, the communication choices made by those individuals, and the expected gratifications from those chosen forms of communication (Blumler & Katz, 1974; Katz et al., 1973; Katz et al., 1974). Uses and gratifications theory was questioned by other communication researchers, particularly those with a background in media effects-based research (Blumler, 1979; Elliot, 1974). As the theory progressed, changes in approach were suggested, both by scholars from other media research disciplines and by scholars from within the discipline of uses and gratifications research (Blumler, 1979; Cutler & Danowski, 1980; McCombs & Weaver, 1985; Rubin, 1993; Rubin & Rubin, 1985; Williams et al., 1985; Windahl, 1981).

70

The application of uses and gratifications to the Internet and other computer-mediated forms of communication existed as early as the 1980's (Garramone et al., 1986; Rafaeli, 1986), and sought to demonstrate the reasons for people wanting to use the Internet, and what they derived from that use. These studies have included inquires into early bulletin boards (Rafaeli, 1986), political bulletin boards (Garramone et al., 1986), subscription-based message boards (James et al., 1995), advertising (Chen & Wells, 1999), e-commerce (Korgaonkar & Wolin, 1999), commercial web sites (Stafford & Stafford, 2001; Stafford et al., 2004), young children and adolescents as users (Ebersole, 2000), Internet use as compared to other mediums (Ferguson & Perse, 2000; Flanagin & Metzger, 2001), and the potential use of the Internet as a substitute for face-to-face communication (Flaherty et al., 1998). While uses and gratifications for Internet use varied widely within these studies, a partial compilation of the discovered dimensions of uses and gratifications includes *business*, *cognition*, *communication*, *convenience*, *developing new interests*, *diversion*, *entertainment*, *good feelings*, *information-gathering*, *interpersonal utility*, *medium appeal*, *pass time*, *peer identity*, *personal identity*, *relaxation-escape*, *research*, *searching*, *socialization*, and *surveillance*.

Other studies of Internet use have utilized a wide variety of research design methods, and have included examinations of virtual communities (Fernback, 2007; Porter, 2004; Preece & Maloney-Krichmar, 2006; Ridings & Gefen, 2004; Wise et al., 2006), the role of anonymity in Internet user perceptions (Heisler & Crabill, 2006), the role of gender in Internet use (Mitra et al., 2005), comparable technologies to message boards such as newsgroups and chat rooms (Joyce & Kraut, 2006; Shoham, 2004) dimensions of interactivity and its impact on perceptions of a web site (Ha & James,

1998), and sports fan communities (End, 2001; End et al., 2003; Poor, 2006; Ruddock, 2005). Taken together, these studies reveal various aspects of the Internet user as measured over the past two decades.

Statement of the Problem

As the literature review above has revealed, the number of uses and gratifications studies of Internet users is relatively limited, and the number of studies focusing on Internet message board users is smaller still. Furthermore, very few studies have examined sport message board users, and none of these have examined these users through the lens of uses and gratifications. Therefore, the purpose of this study was to determine the characteristics of collegiate sport message board users, both in terms of demographics and in terms of uses and gratifications that message board users identify. This study examined whether there are significant differences within and between groups of sport message board users. This study explored these areas through the use of an Internet-based survey questionnaire administered to collegiate sport message board users, and the analysis of the data produced by the responses to that instrument.

Research Questions

Due to the exploratory nature of this investigation, a series of research questions was developed, based upon the results of previous research into uses and gratifications as they relate to Internet and Internet message board usage:

1. What are the demographic characteristics and distributions of non-subscribing users of collegiate sport message boards?

2. What are the demographic characteristics and distributions of subscribers to collegiate sport message boards?

3. Is there a significant difference in the demographic characteristics and distributions of non-subscribing and subscribing users of collegiate sport message boards?

4. Are there significant differences in the demographic characteristics and distributions of non-subscribing and subscribing users of collegiate sport message boards based on the school of focus?

5. Are there significant differences in the demographic characteristics and distributions of non-subscribing and subscribing users of collegiate sport message boards based on the region and/or conference affiliation of the school of focus?

6. What are the dimensions of gratifications for non-subscribing users of collegiate sport message boards?

7. What are the dimensions of gratifications for subscribers to collegiate sport message boards?

8. Based on dimensions of gratifications, are there any clear motivational categories for collegiate sport message board users?

9. How do the dimensions of gratifications for collegiate sport message board users vary based upon demographics, school of focus, and geographic region?

Definition of Terms

The following terms and definitions were used for interpretation of data and discussion of results in this study:

Administrator. An individual who acts as a manager of message board content, which includes the policing of messages and execution of technical changes to the message boards and forums.

Collegiate Sports Message Board. A message board dedicated to the discussion of a particular NCAA school's athletic program(s).

Flame. An inflammatory message, often written in a pejorative style. The act of writing such a message is known as *flaming*.

Forum. An independent part of a message board, often used to coordinate or foster discussion on a particular topic. A message board may have multiple forums.

Lurker. A user of message boards who does not engage in the posting of messages, preferring instead to read what others have written.

Message Board. A web page dedicated to asynchronous communication between users through the use of software protocols.

Moderator. An individual who acts as a referee of message board content, which includes the policing of messages and responding to user complaints. A message board may have multiple moderators.

Non-Premium User. A sports message board user who does not pay for access to a message board or its forums.

Post. A single message written on a message board forum.

Poster. A user who actively engages in the posting of messages.

Premium User. A sports message board users who pays for access to a message board or its forums.

Publisher. The owner and/or operator of a sports message board and its accompanying web site.

Thread. A grouping of messages on a message board. A thread may contain as little as one message, or as many as the software protocols on the board allow.

Units of Analysis. The unit of analysis in this study is the individual user.

User. An individual who uses sports message boards. Users can include both posters and lurkers, as well as both premium and non-premium users.

Assumptions of the Study

This study was conducted under the following assumptions:

1. All participants in the survey read and understood the survey information sheet located at the beginning of the survey instrument.

2. The Internet survey mechanism, hosted by *SurveyMonkey.com*, provided accurate representations of each participant's answers, and accurately compiled the data from these answers.

Limitations of the Study

There were limitations applied to the results and conclusions of this investigation into collegiate sport message board users. These limitations included the following:

1. The results of the study were specific only to the forums and message boards to which the survey was offered, and may not represent the characteristics and/or attitudes of message boards not included in the study.

2. The results of the study were specific only to those message board users who responded to the survey, and may not be applicable to those users who did not respond to the survey.

3. The results derived from the survey questionnaire were generated from a particular period of time (October 24, 2007 to October 31, 2007). This time period was chosen due to the likelihood of the maximum potential number of users being present on the message boards during that portion of the calendar year; however, certain groups of

users devoted to sports not in season during that time period may not be accurately represented.

4. The study attempted to place the survey on the most active forums on each participating message board; however, logistics and accommodation of the desires of message board publishers precluded this study from being able to place the survey on every forum of every message board. Therefore, it is possible that some users who only frequent less-active forums may not have been aware of the presence of the survey.

Significance of the Study

While face-to-face interaction has been the traditional method of sport-related discussion for fans, the formation of online fan communities has altered the face of sport and sport communication. As Pedersen, Miloch, and Laucella (2007) stated in their analysis of online sport communication, the interactivity of the Internet is what allows people to form online social networks. This interactivity has become a major element in the day-to-day life of hundreds of thousands of sports fans across the United States, and millions around the world. As Foster (2006) noted about fans of a Division I school in California, "The Internet fan is active all season and off-season, grappling information from online articles, the UC-Davis athletic site and word of mouth, then sharing and discussing these findings on message boards" (¶ 2).

Sports message boards provide us with an opportunity to examine, on a macro level, why sports fans come together to discuss their teams, and what they get out of that interaction. The popularity of online communities has increased considerably in recent years (Ridings & Gefen, 2004), and sport fan communities are no exception. In February of 2005, the *Rivals.com* network of fan communities recorded 38 million page views on

college football's national signing day (Freeman, 2006). Two years later, the number had increased to 70 million page views on that date (Skretta, 2007). Furthermore, an examination of sport message boards also allows a window into a form of interpersonal communication which has been difficult to study or measure in the past. As Dicken-Garcia (1998) noted, the interpersonal communication found on the Internet is closer to word of mouth than traditional media has offered.

The redefining of media roles, with message boards operating as both sources of information and conduits for direct communication from players and teams to fans, holds obvious implications for collegiate sports message boards and their users. Collegiate sport message boards have been used in the past as platforms for players and coaches to communicate directly with fans. Two particular instances of this process occurred amidst the investigation and subsequent firing of basketball coach Bob Knight by Indiana University in the year 2000. Just prior to a "zero-tolerance policy" being announced by then Indiana University president Myles Brand in May of 2000, Knight communicated directly with fans through the *Peegs.com* message board, the most popular fan web site for the school, through a personal statement that was placed on the main page of the site. Following Knight's firing, one of the seniors on the team, a former walk-on named Tom Geyer, left the team under mysterious circumstances. When questions began to mount regarding the reason for Geyer's departure, Geyer decided to communicate directly with the fans by posting a message on the main forum at *Peegs.com*.

Sports message boards have also demonstrated their potential as a locus for user-generated news and investigation. In a well-publicized incident, a message board user on *TexAgs.com*, a fan site devoted to Texas A&M University athletics, posted a message

77

indicating potential improprieties involving two student-athletes on the football team at Oklahoma University, a rival of Texas A&M University (Roberts, 2007). This message preceded any coverage from traditional media sources by several days, and ultimately led to the NCAA's levying sanctions against Oklahoma University, including a requirement that they vacate all eight wins from the 2005 season. Other examples of sport message board-generated news and investigation include the circulation of photographs of former Iowa State University men's basketball coach Larry Eustachy drinking with college students, revelations of the participation in a gambling pool by former University of Washington football coach Rick Neuheisel, and potential illegal contact between current University of Alabama football coach Nick Saban and recruiting prospects (Roberts, 2007).

While the users of collegiate sport message boards are primarily fans, the reality is that nearly all major stakeholders in sport are watching the message boards, be they athletes (Foster, 2006), athletic directors (O'Connor, 2007), journalists, members of academia (Campos, 2006), or even prospective recruits (Freeman, 2006). With every fan using the boards now possessing the potential to act as a creator of media in a public environment, the implications are numerous for athletic department public relations, sports journalism, and athletics recruiting. Whatever one thinks of collegiate sport message boards and their users, the reality is that they have become a major part of the sport communication landscape.

A weakness of prior uses and gratifications studies is their attempt to paint Internet users with a broad brush. Several uses and gratifications studies cited in the literature review of this paper have investigated such heterogeneous groups as college

students and randomly-selected adults, with the only common thread throughout being a requirement that the group members have experience or expertise in using the Internet. Not surprisingly, uses and gratifications for these groups have varied widely from study to study. Such an approach, while understandable given the early stage in which Internet uses and gratifications research currently resides, seems to deny the reality of the Internet experience for the user. Internet users are far from homogenous; each of them brings a particular set of social and psychological antecedent factors to his/her usage of the medium, as Katz et al.'s (1974) original mapping of uses and gratifications theory anticipates. The choice to use a particular type of web site, or join a particular sport fan community, is affected by those antecedents. Once the decision is made to participate in a particular sports fan community, users are likely to find themselves among other users with similar social and psychological antecedents. Approaching Internet uses and gratifications research from the standpoint of December's (1996) concept of media class, or an entire group of media such as sport message boards, allows for a cross-section of similar communities to be examined closely, and should allow for greater specificity into the nature of the users of that type of media, and what they gain from that media's use.

By concentrating on uses and gratifications of collegiate sport message boards and their users, this study hopes to provide an insight into these users that a broader sample, such as an investigation of college students, could not provide. The ability to directly observe a rapidly growing population of large groups of highly identified sport fans who operate as both senders and receivers of public communication, coupled with the potential impact that sports fan communities may have on athletic teams, marketing, public relations, psychologies of fan bases, and sports journalism, combine to make the

study of users of collegiate sports message boards an important topic of research in the

sport communication field.

CHAPTER III

METHODOLOGY

The purpose of this study was to examine the characteristics, uses, and gratifications of collegiate sport message board users. This chapter describes the methodology that was utilized to examine these areas, and presents the research design, survey instrument, data collection method, and method of analysis of the data gathered.

Research Design

The methodology used for this study was a survey of collegiate sport message board users over a two-week period. The survey method is accepted and widely-used by researchers examining uses and gratifications in a media context (Wimmer & Dominick, 2003). Furthermore, this method has been used in numerous studies relating to the investigation of uses and gratifications as it relates to Internet usage (Best & Krueger, 2006; Charney & Greenberg, 2002; Ebersole, 2000; Ferguson & Perse, 2000; Flaherty et al., 1998; Flanagin & Metzger, 2001; Garramone et al., 1986; James et al., 1995; Ko et al., 2005; Korgaonkar & Wolin, 1999; LaRose & Eastin, 2004; LaRose et al., 2001; Papacharissi & Rubin, 2000; Rafaeli, 1986; Schiffman et al., 2003; Sohn & Lee, 2005; Stafford & Stafford, 2001; Stafford et al., 2004).

According to Hansen, Cottle, Negrine, and Newbold (1998), survey research is used, "to provide empirical data collected from a population of respondents on a whole number of topics or issues" (p. 225). The nature of that empirical data, the population examined, and the topics and/or issues explored depend on the design process of the survey instrument. Kim and Weaver (2002), in their meta-analysis of Internet-focused communication studies, noted that survey methodology was the most-used method of quantitative data collection. Preece and Maloney-Krichmar (2005) noted that online surveys were, "fundamental tools for online community research" (¶ 6).

In the tradition of uses and gratifications research, this study assumes that users are capable of effectively providing answers to questions regarding both their uses of sports message boards and the gratifications sought therein. While questions have been raised by some scholars regarding the ability for individuals to understand their own actions in regards to media usage, particularly in self-report mechanisms such as surveys (Ruggiero, 2000), this study follows the lead of previous researchers (Blumler, 1979; Katz et al., 1974, Newhagen & Rafaeli, 1996, Rubin & Rubin, 1985) in assuming that the users of media are best equipped to highlight those uses and gratifications which are considered a significant part of their online experience. Furthermore, given the paucity of specific research regarding sports message boards and their users, any attempt at assigning different motivations from the ones that users identify would first require a gathering of those user-identified motivations, which is what this study did.

Survey methodology includes a variety of data collection methods, including questionnaires, which are a type of survey that is not administered by an individual, but rather is administered through a written format (Berger, 2000). While there is a technical distinction between the terms "survey" and "questionnaire", the terms themselves tend to be used loosely (Berger, 2000). For the purposes of this study, the term "survey" was utilized to refer to the overall process of collecting responses from users, including the development of a sample from which to draw those users, while the term "questionnaire" was used in relation to the actual instrument that respondents utilized to answer questions and provide data.

Effective survey methodology involves three operational steps (Baxter & Babbie, 2004). First, a questionnaire must be developed. Second, a sample of participants must be

identified. Third, the questionnaire must be administered to that selected sample. The following sections detail this study's attention to these three operational steps.

<center>Questionnaire Development</center>

As noted by Nardi (2006), an effectively-written and administered questionnaire is essential to achieving reliable and valid survey results. Using the operational steps described in Baxter and Babbie (2004), a questionnaire was developed, tested for reliability and validity via a pilot study and a panel of experts, and then administered to a selected sample population. The first of these steps, the development of the questionnaire, commenced with a basic conceptualization of the problems to be studied, which included a thorough review of literature on Internet users and message boards as a whole.

Following this, a series of demographic questions was created, in order to establish differentiation between respondents based on such areas as age, economic standing, gender, occupation, race, and other factors. Questions relating to demographic factors are standard in nearly all questionnaires (Hansen et al., 1998), and are important to the research process in that they allow the samples of respondents included in studies across multiple disciplines to be compared. Demographic questions from other studies were considered, as were questions specific to the sports message board environment.

Following this, two series of motivational statements regarding message board use were devised. The first series, which consisted of general motivational statements for all message board users, was to be answered by all participants in the study. The second series of statements, which consisted of motivational statements aimed at premium message board users, was to be answered only by those respondents identifying themselves as subscribers to collegiate sport message boards.

<center>84</center>

The questions in these sections were derived from a combination of elements. First, interviews were conducted with several sport message board moderators and publishers, where these individuals were invited to comment on their observations of message board users (K. Lamb, Personal Communication, May 18, 2007; D. Max, Personal Communication, July 11, 2007; M. Pegram, Personal Communication, May 15, 2007; W. Stewart, Personal Communication, June 20, 2007; R. Thomason, Personal Communication, May 18, 2007). Included in these questions were requests by the researcher to have moderators describe the differences between premium and non-premium users. These answers were then compiled into two separate series of conceptual statements, intended for general responses and subscriber-only responses.

Next, informal questions were asked of users on a private message board regarding the users' reasons for participating in message board activity. These users were selected primarily due to their use of message boards over a long period of time, which in some cases went back 12 years from the time of the questions being asked. Responses to these questions were then compiled into conceptual statements, and combined with the statements created from the interview of message board moderators.

Finally, the researcher examined the responses, removed any duplicates, and added a small number of additional conceptual statements which were applicable to the study. The researcher felt confident in taking this step, based upon the long history of message board use that the researcher possesses.

After the last of the conceptual statements was added, the statements were changed into motivational statements, and placed in a five-point Likert-type scale, as is customary with such statements in uses and gratifications investigations (Wimmer &

Dominick, 2003). According to Thomas (2004), Likert-type scales have the important characteristic of allowing responses for several different questions to be summed, which allows for either total scores or subscores of each objective. The resulting pilot survey instrument contained a total of 69 questions (three identification questions, 19 demographic questions, 38 general message board use questions, and nine premium message board questions).

In order to ensure reliability and validity of the survey instrument utilized, two separate tests were utilized. First, a pilot study was conducted, with a link to an online questionnaire posted on three selected message board communities, utilizing the questions and statements noted above. A pilot study is accepted as the best method for assessing whether the questionnaire flows properly, the instructions for the questionnaire are adequately explained, the format and wording are clear to the user, and the survey takes a reasonable amount of time to complete (Nardi, 2006).

Respondents to the pilot study had the opportunity to answer the questionnaire in the same online environment that respondents in the official survey utilized. Online questionnaires have grown in popularity among researchers, and these types of questionnaires provide certain advantages over traditional paper-based surveys, such as increased response rates, reduced mailing costs, and the ability to have computer-based survey software code the data, therefore reducing or eliminating a common source of error that results from researchers inputting data by hand (Nardi, 2006). While Nardi (2006) pointed out that computer-based surveys possess a major limitation in that those without computers or Internet access cannot participate in the survey, this limitation does not affect this study, because the goal of the research is to investigate current users of

collegiate sport message boards. The lack of a computer or Internet access would logically preclude those individuals from being current users of such message boards.

Following the conclusion of the pilot study, descriptive statistics were run on the demographic questions, while factor analysis and descriptive statistics were run on the motivational statements, to determine whether certain questions or statements were reliable measures of dimensions of gratification. Preliminary findings from the pilot study indicated five major potential dimensions of gratification, including a *community interaction* dimension, a *flaming/troublemaking* dimension, a *social utility* dimension, a *pass time* dimension, and a *commercial activity* dimension (Clavio, 2007b). The gratifications components of these dimensions, including their mean values, were examined for clarity, reliability, and repetition, and several components were filtered out of the questionnaire. At this point, several new questions relating to gratifications were added, based on open-ended responses provided by survey participants.

Simultaneously, the survey instrument was examined by an expert panel of scholars familiar with both uses and gratifications theory and online surveys. These scholars were asked to examine the survey instrument for the purposes of establishing validity within the survey mechanism. This step has been used by other researchers utilizing a survey methodology (Cianfrone & Zhang, 2006) to improve elements such as clarity, content relevance, and representativeness of questions.

Following these alterations to the questionnaire, the survey was deemed suitable for use in this examination of collegiate sports message board users. The survey was then delivered to the Institutional Review Board (IRB) of Indiana University, for examination, and was given approval as an exempt study. The IRB-assigned number of the survey was

#07-12264. A Portable Document Format (PDF) version of the survey is included in Appendix A of this paper.

Based on the results of the pilot study and the evaluation of the survey instrument by the panel of experts, the following questions were included in the official questionnaire for this study. First, participants were asked to report their age, prior to any other questions being asked. Those participants who stated their age as under 18 were not allowed to continue with the survey, due to Human Subjects regulations regarding the administration of surveys to minors. Respondents who were 18 and older were then asked to report their gender, their race or ethnicity, their approximate household income, their current education level, any colleges or universities which they attended, their marital or relationship status, the number of children for whom they are currently the primary or shared caregiver, the country or region where their primary residence is located, and their current level of employment.

Participants were also asked about various aspects of their usage of computers, the Internet, general media, and collegiate athletics. In regards to computer, Internet and message board usage, participants were asked to report how many computers in their primary residence have Internet access, how many hours a week they spend on the Internet, how many hours a week they spend on collegiate sport message boards, how many (if any) posts they make per week on collegiate sport message boards. Regarding collegiate athletics usage, respondents were asked to report the average amount of money they spend per year on tickets to athletic events, how many collegiate athletic events they attended in person the previous year, the average amount of money they spend per year in donations to collegiate athletic programs, and the collegiate sport that they follow most

closely or for which they are the biggest fan. Respondents were also asked how often they read print media, how much television they watch in an average week, and the average amount of money they spend per year on subscriptions to sport media.

All respondents were asked to respond to a series of 40 general motivation and usage statements on a five-point Likert-type scale. The order of these statements was randomized so as to avoid response bias, but each respondent was asked to respond to all 40 statements. Included in these statements were such items as, "I use collegiate sport message boards to meet new and interesting people", "I use collegiate sport message boards to find out news faster than I would using other types of sports media", and "I use collegiate sport message boards to complain about things going wrong with my favorite team(s)." A full list of these motivational and usage statements is located in Appendix A.

Respondents were asked to identify the collegiate sport message board on which they spend the most time, as well as any other collegiate sport message boards which they use frequently. Respondents were also asked to report whether they are currently a premium subscriber to a collegiate sport message board. Those participants who indicated that they were premium subscribers were asked to report the length of time that they have been subscribers, as well as whether they are subscribers to more than one collegiate sport message board.

Those respondents who identified themselves as premium subscribers to collegiate sport message boards were then asked to respond to a series of 20 additional motivational and usage statements, designed to measure specific uses and gratifications of premium subscribers. Included in these statements were such items as, "I am a premium subscriber to a collegiate sport message board because I feel as though I am

supporting my school", "I am a premium subscriber to a collegiate sport message board to learn things about my favorite team(s) that the media doesn't know", and "I am a premium subscriber to a collegiate sport message board because I prefer to participate in discussions on the premium message board(s) instead of the free board(s)." A full list of subscriber-only motivational and usage statements is located in Appendix A.

Sample Selection

This study utilized a convenience sample to select message boards for participation, due to the lack of a global list of all sports message board communities making random sampling of all sports message boards unfeasible. Convenience samples have been utilized by a number of scholars investigating this general topic (e.g., Parks & Floyd, 1996; Ridings & Gefen, 2004), and seem particularly appropriate given the focus of this study on examining a particular media class, as opposed to a group of people derived from outside the specific usage of sports message boards. Although a convenience sample does not allow for extrapolation to a larger population due to the lack of random probability sampling, the convenience sample utilized attempted to represent a cross-section of message boards and user populations from throughout the collegiate sports milieu.

The media class identified for this survey was all collegiate sports message boards belonging to a fan community network or affiliate group. Included in this media class were all college athletics-focused web sites located on four networks: *ESPN, Rivals.com, Scout.com*, and *SportsWar.com*. An invitation email, which included information about the nature of the study and the operational procedures therein, was sent out to all message board publishers with publicly available contact information, and to all message boards

with a feedback form. While the convenience sample included in the survey is by no means comprehensive due to the limitations discussed in the first paragraph of this section, the message boards within the sample represent a wide variety of athletic conferences (Atlantic Coast Conference, Big East Conference, Big 12 Conference, Big 10 Conference, Conference USA, Mountain West Conference, Pac 10 Conference, Southeastern Conference) and geographic locations. A full list of the message boards included in the convenience sample for this study can be found in Table 1.

Table 1

List of Collegiate Sport Message Boards in Sample

School of Focus	Board URL	Board Affiliation
University of Alabama	http://tidefans.com	SportsWar
Colorado State University	http://www.ramnation.com	SportsWar
University of Connecticut	http://uconn.rivals.com	Rivals.com
Duke University	http://www.dukebasketballreport.com	SportsWar
Florida State University	http://floridastate.rivals.com	Rivals.com
University of Nebraska	http://www.huskerpedia.com	SportsWar
University of North Carolina	http://northcarolina.rivals.com	Rivals.com
Northwestern University	http://northwestern.rivals.com	Rivals.com
The Ohio State University	http://www.bucknuts.com	ESPN
Purdue University	http://purdue.rivals.com	Rivals.com
Rutgers University	http://rutgers.rivals.com	Rivals.com
University of Southern California	http://usc.rivals.com	Rivals.com
Southern Methodist University	http://www.ponyfans.com	SportsWar
University of Texas	http://www.hornfans.com	SportsWar

It should be noted that, although there are no *Scout.com*-affiliated boards in the convenience sample, numerous attempts were made to include such boards in the sample. Emails and form feedback was sent to publishers and administrators on several of these

boards, to no effect. Additionally, several attempts were made to contact the *Scout.com* corporate offices, with no success. A possible reason for the lack of response is circumstantial evidence that *Scout.com* is in the middle of an organizational upheaval, including the recent defection of several of its most popular message boards to other networks (ESPN, 2007a). Despite a rumored corporate reshuffling during the fall of 2007, there was still no communication from *Scout.com*, and no *Scout.com*-related message board web site agreed to participate in this study.

<center>Administration of Questionnaire</center>

Following IRB approval, the revised questionnaire was designed and implemented utilizing an Internet-based survey distribution method. This method of questionnaire distribution has proven successful in previous studies. In particular, Ridings and Gefen (2004) utilized a web-based investigation where respondents were invited to participate by clicking on a hyperlink posted on a message board forum.

The Internet site which served as the design and distribution point for this questionnaire was *SurveyMonkey.com*. This service, which allows researchers to design and fully customize their own surveys, has been utilized by a wide variety of individuals interested in survey research, including government employees, human resource managers, marketers, scholars, and others.

Once the design of the survey on *SurveyMonkey.com* was completed, a series of web addresses, or Uniform Resource Locators (URLs), were generated. Each of these URLs was designated to collect survey responses from one collegiate sport message board, resulting in a total of 14 survey URLs. This linkage separation allowed for each board to be analyzed separately. Because the questionnaire was the same for each of

<center>93</center>

these URLs, the results were merged for macro-level analysis after the survey was complete.

The survey was administered over a one-week period from October 24, 2007 to October 31, 2007. These dates, and this span of time, were chosen based upon user information gleaned from the preliminary collegiate sport message board analysis that preceded this project (Clavio, 2007b), as well as the content analysis of collegiate sport message boards (Clavio, 2007a). The content analysis indicated that the vast majority of message board forums relating to college sports were dedicated to the sports of football and men's basketball. The time period selected represented the first full week of the 2007-08 athletic season where audiences for both football and men's basketball would likely be participating in message board discussions simultaneously. The window of time where both football and men's basketball fans were likely to be online was relatively narrow, extending from approximately a week before the start of the basketball season (November 5) to the final week of the regular season in college football (December 1). It was decided to perform the survey at the earliest possible date, in case of unforeseen technical problems with the online survey mechanism. The week-long survey period was derived from the preliminary analysis of collegiate sport message board users (Clavio, 2007b), which noted that response rates fell off dramatically after the first seven days of the survey link's availability to users.

A day prior to the start date, survey URLs were emailed to the contact for each message board, with instructions to place the link on the top four message board forums in terms of usage and web traffic. Responses were monitored to ensure that survey URLs and links were operating properly. At the end of the survey period, an email was sent to

each message board's contact, thanking them for their participation in the study and reminding them to remove the URLs from their site. Furthermore, the survey collectors were turned off on the survey web site itself, preventing additional responses from being collected past the cut-off date.

Data Analysis

Following the collection of data, a variety of statistical methods were utilized to analyze its contents and generate results. Utilizing the Statistical Package for the Social Sciences Version 15.0 (SPSS), descriptive statistics were used to examine the frequencies and distributions of demographic and usage data, including the variables of age, gender, race, education level, income level, and others. Means, standard deviations, and histograms were examined for all variables. These statistical methods were applied to the entire data set, individually to both the populations of non-subscribers and subscribers, as well as to the other salient combinations which the data allowed, such as by geographic region.

Crosstabulations were performed on applicable demographic and usage variables, such as those with interval or scale-level data. Chi Square analyses were performed, to determine whether statistical distributions occurred by chance. Based on the type of data being analyzed, other statistical methods were used to analyze the results, including nominal-level statistics such as Phi or Cramer's V (Foster, 2002). Additionally, independent samples *t*-tests and analysis of variance (ANOVA) were utilized to compare the means of demographic and usage variables, and to test for statistically significant differences between groups, such as non-subscribers and subscribers, or between geographic regions of the sample.

For those research questions dealing with dimensions of gratification among collegiate sport message board users, factor analysis with Varimax rotation was utilized As Foster (2002) noted, factor analysis is utilized to analyze correlations between data sets, so that these data sets may be simplified. The type of factor analysis utilized in this study was principal components analysis, which is the accepted method of factor analysis for exploratory research (Foster, 2002). Scholars who have used this methodology include Charney and Greenberg (2002), Larose and Eastin (2004), Papacharissi and Rubin (2000), Stafford and Stafford (2001), and Stafford et al. (2004).

The process of factor analysis involved utilizing SPSS to group together a series of variables, resulting in a correlation matrix. This matrix is then reduced to a series of factors which aim to explain these correlations. Factors were retained for analysis if they contained at least three loadings over .40 (Hunter, 1980; Tabachnick & Fidell, 1983). The motivational statements that made up each factor were summed and averaged for further analysis, as has been done in other studies of Internet uses and gratifications (e.g., Ferguson & Perse, 2000; Papacharissi & Rubin, 2000).

For the purposes of this study, a factor analysis was performed on the 40 questions relating specifically to collegiate sport message board uses and gratifications. This analysis was carried out on the entire sample. Factor analyses were also performed separately on the sample of non-subscribers, the population of subscribers, and on the four geographical regions into which the sample was partitioned. Also, a factor analysis was performed solely on subscriber responses to the 20 questions relating specifically to collegiate sport message board subscriber uses and gratifications.

Following each factor analysis, the resulting dimensions were examined as a group using scale reliability analysis in SPSS. A factor was considered reliable if the resulting alpha coefficient from the reliability analysis was at .70 or better, which Nunnally (1978) identified as an acceptable level. The results of these reliability analyses resulted in a series of identifiable dimensions for each factor analysis, which allowed them to be discussed in light of their component items, as well as compared to the factors revealed by analysis of other groups within this study's convenience sample.

Finally, as has been done in other studies of Internet uses and gratifications (e.g., Papacharissi & Rubin, 2000; Stafford & Stafford, 2001), the scores of the items which made up each identified factor were summed and averaged. These summed scores were then utilized to perform Pearson product correlations, to examine how the factors correlated amongst each other, and with selected variables such as message board usage.

CHAPTER IV

RESULTS

This study used a survey instrument to investigate individuals who participate in online discussion forums relating to college sports. The purpose of this study was to examine the demographic characteristics, uses sought, and gratifications obtained of Internet collegiate sport message board users. This chapter presents the results of the study in detail. Statistical analysis, including general frequencies, regression analyses, and factor (principal components) analyses were utilized to examine the data.

General Results

Through a convenience sample of 14 collegiate sport message boards, the online survey web site *SurveyMonkey.com* was used to collect 2,339 completed survey instruments over an eight-day period from October 24, 2007 to October 31, 2007. These completed surveys comprised the total sample size ($N = 2,339$) of this study. Users were able to access the survey through a web link, which was placed on each message board's four highest-traffic forums. Each message board's web link was unique, allowing for completed surveys to be compartmentalized into individual collectors. Table 2 indicates the number of completed surveys collected from each message board's web link. The number of completed surveys ranged from 21 (University of Connecticut) to 487 (University of Alabama). Three message board collectors had fewer than 50 responses (University of Connecticut [21], Southern Methodist University [34], and Northwestern University [38]), while three had more than 300 responses (University of Texas [320], Duke University [436], and University of Alabama [487]). The average number of completed surveys per message board was 167.

The web sites affiliated with the message board network *SportsWar* had 1,611 completed surveys, which represented the highest number of responses among the three

included networks. *SportsWar* boards (i.e., University of Alabama, Colorado State University, Duke University, University of Nebraska, Southern Methodist University, University of Texas) averaged 268.5 responses per board. *Rivals.com*-affiliated message boards (i.e., University of Connecticut, Florida State University, University of North Carolina, Northwestern University, Purdue University, Rutgers University, University of Southern California) accounted for 637 completed surveys, an average of 91 responses per board. Only one board (The Ohio State University) affiliated with *ESPN* took part in the survey. That board accounted for 91 completed surveys.

Table 2

Completed Surveys per Message Board

School of focus	Board affiliation	Number of surveys completed
University of Alabama	SportsWar	487
Duke University	SportsWar	436
University of Texas	SportsWar	320
University of Nebraska	SportsWar	277
Florida State University	Rivals.com	217
Purdue University	Rivals.com	132
The Ohio State University	ESPN	91
University of Southern California	Rivals.com	83
University of North Carolina	Rivals.com	78
Rutgers University	Rivals.com	68
Colorado State University	SportsWar	57
Northwestern University	Rivals.com	38
Southern Methodist University	SportsWar	34
University of Connecticut	Rivals.com	21
Total		2339

The survey instrument required users to identify themselves as subscribers or non-subscribers to a collegiate sport message board. Those users who identified themselves as subscribers were given additional questions dealing specifically with subscription-based

aspects of the collegiate message board experience. Of the 2,339 completed surveys, a total of 794 indicated that the user was a subscriber to a collegiate sport message board, while 1,519 identified the user as a non-subscriber. It is worth noting that the combined number of subscribers and non-subscribers only adds up to 2,313. The remaining 26 surveys represent one of two classes of respondents: those who chose not to participate in the survey by selecting "No" as their answer to the first question, and those who agreed to participate but who identified themselves as under the age of 18.

As shown in Table 3, the number of non-subscribers who completed the survey ranged from 10 (University of Connecticut) to 408 (University of Alabama). Two boards had fewer than 20 non-subscribers complete a survey (University of Connecticut [10] and Purdue University [19]), while two boards had more than 300 completed surveys from non-subscribers (University of Alabama [408] and Duke University [377]). The number of subscribers who completed the survey ranged from one (Southern Methodist University) to 172 (Florida State University). Two message boards had more than 100 completed surveys from subscribers (Florida State University [172] and Purdue University [105]), while four boards had fewer than 20 completed surveys from subscribers (Southern Methodist University [1], Colorado State University [7], University of Connecticut [11], and Northwestern University [17]). The board with the lowest percentage of completed surveys from non-subscribers was Purdue University, with the 24 surveys representing 18.2% of its overall total. The Southern Methodist University message board had the highest percentage of completed surveys from non-subscribers, with 32 surveys representing 94.1% of the board total.

Of the 1,611 completed surveys from message boards affiliated with *SportsWar*, 1,339 (83.1%) were from non-subscribers, while 272 (16.8%) were from subscribers. Of the 637 completed surveys from *Rivals.com*-affiliated message boards, 169 (26.5%) were from non-subscribers, while 468 (73.5%) were from subscribers. The lone *ESPN*-affiliated site (The Ohio State University) had 26 (28.6%) of its responses from non-subscribers and 64 (70.3%) of its responses from subscribers.

Table 3

Number of Users per Message Board by Subscription Status

School of Focus	Board affiliation	Non-subscribers (%)	Subscribers (%)	Total
University of Alabama	SportsWar	408 (83.8)	77 (15.8)	487
Duke University	SportsWar	377 (86.5)	53 (12.2)	436
University of Texas	SportsWar	260 (81.3)	57 (17.8)	320
University of Nebraska	SportsWar	198 (71.5)	77 (27.8)	277
Florida State University	Rivals.com	41 (18.9)	172 (79.3)	217
Purdue University	Rivals.com	24 (18.2)	105 (79.5)	132
The Ohio State University	ESPN	26 (28.6)	64 (70.3)	91
University of Southern California	Rivals.com	19 (22.9)	64 (77.1)	83
University of North Carolina	Rivals.com	19 (24.4)	58 (74.4)	78
Rutgers University	Rivals.com	36 (52.9)	31 (45.6)	68
Colorado State University	SportsWar	49 (86.0)	7 (12.3)	57
Northwestern University	Rivals.com	20 (52.6)	17 (44.7)	38
Southern Methodist University	SportsWar	32 (94.1)	1 (2.9)	34
University of Connecticut	Rivals.com	10 (47.6)	11 (52.4)	21
Total		1,519	794	2,339

In addition to analyzing all message boards in the sample, this study aimed to examine survey respondents in smaller groups. The first attempt involved combining message boards based upon the school's conference affiliation; however, only four conferences had more than one school's message board in the survey (Atlantic Coast Conference [Duke University, Florida State University, and University of North Carolina], Big East Conference [University of Connecticut and Rutgers University], Big Ten Conference [The Ohio State University, Northwestern University, and Purdue University], and Big 12 Conference [University of Nebraska and University of Texas]). The remaining schools comprised over 28% of the total sample, which represented too large of a percentage of users to exclude from analysis. Furthermore, the Big East Conference schools' message boards comprised only 3.8% of the total sample, too small a percentage to use in order to make valid inferences about users from that conference.

Due to the unsuitability of a conference-by-conference breakdown of message boards involved in the study, the decision was made to divide message board respondents by region, utilizing the NCAA's separation of Division I athletic conferences into four regions (NCAA, 2007). The 14 message boards in this study were divided into the East (University of Connecticut, Duke University, Florida State University, University of North Carolina, and Rutgers University), South (University of Alabama, University of Nebraska, and University of Texas), Midwest (The Ohio State University, Northwestern University, Purdue University, and Southern Methodist University), and West (Colorado State University and University of Southern California) regions. The distributions for subscribers and non-subscribers based upon these regions are represented in Table 4. The South region contained the most completed surveys (n = 1084), followed by the East (n =

819), the Midwest (*n* = 295), and the West (*n* = 140). The South region contained the

highest percentage of non-subscribers (79.9%), while the Midwest region contained the

highest percentage of subscribers (63.4%). Each of the four regions contained affiliate

message boards from at least two of the message board networks included in this study;

the Midwest region contained all three (*ESPN, Rivals.com,* and *SportsWar*).

Table 4

Distributions of Non-subscribers and Subscribers by Region

Region	Non-subscribers (%)	Subscribers (%)	Total
East	483 (60.0)	324 (40.0)	819
South	866 (79.9)	211 (20.1)	1084
Midwest	102 (34.6)	187 (63.4)	295
West	68 (48.6)	71 (51.4)	140
Total	793	1519	2339

Summary of General Results

The general results for this study revealed a total sample size of 2,339 respondents

across 14 different message boards. The message board with the largest number of

responses was the University of Alabama (*n* = 487), while the smallest number of

responses came from the message board for the University of Connecticut (*n* = 21).

Message boards affiliated with the *SportsWar* network generated the most responses (*n* =

1,611). Responses were also divided into four regions (East, South, Midwest, and West),

and data analysis revealed that the South region contained the largest number of respondents ($n = 1,084$).

<div align="center">Research Questions</div>

<div align="center">*Research Questions 1 and 2*</div>

The first research question of this study sought to examine the demographic characteristics and distributions of non-subscribing users of collegiate sport message boards who completed survey instruments. The second research question of this study sought to examine the demographic characteristics and distributions of subscribing users of collegiate sport message boards who completed survey instruments. Both sets of users were given the same demographic questions. Due to this fact, the results from both sets of users will be discussed simultaneously, in order to facilitate comparisons between the two groups.

The first demographic question asked of survey participants dealt with age. Due to Institutional Review Board rules pertaining to human subjects under the age of 18, all respondents who indicated that they were not yet 18 years old were not permitted to complete the remainder of the survey instrument. These surveys were included in the total count of attempted surveys, but were not considered in the tabulation of completed surveys, because the user was not permitted to complete the survey. The total number of respondents who identified themselves as below 18 was 19, or 0.8% of the attempted surveys.

Table 5 contains the distribution of responses from completed surveys for age. The age group of 30-39 was the most frequently reported for both non-subscribers (30.5%) and subscribers (28.0%). Non-subscribers were slightly younger than their

<div align="center">107</div>

subscriber counterparts, with 54% of non-subscriber respondents indicating that their age was below 40, compared to 49.4% of subscribers. In comparing the means of subscribers ($M = 4.64$) and non-subscribers ($M = 4.50$), it can be determined that the average age of a subscriber was 36.4 years old, while the average age of a non-subscriber was 35 years old.

Table 5

Age of Respondents

Age	Non-subscribers (%)	Subscribers (%)	Total (%)
18-22	91 (6.0)	39 (4.9)	130 (5.6)
23-29	266 (17.5)	131 (16.5)	397 (17.0)
30-39	464 (30.5)	222 (28.0)	686 (29.3)
40-49	328 (21.6)	176 (22.2)	504 (21.5)
50-59	236 (15.5)	140 (17.6)	376 (16.1)
60 and over	134 (8.8)	86 (10.8)	220 (9.4)
Total	1519	794	2339

Users were also asked to report their gender. As Table 6 indicates, both non-subscribers (87.0%) and subscribers (92.2%) were predominantly male, with non-subscribers reporting themselves as female at a slightly higher rate (12.4%) than subscribers (7.4%).

Table 6

Gender of Respondents

Gender	Non-subscribers (%)	Subscribers (%)	Total (%)
Female	188 (12.4)	59 (7.4)	247 (10.6)
Male	1322 (87.0)	732 (92.2)	2054 (87.8)
No Response	10 (0.6)	3 (0.4)	38 (1.6)
Total	1519	794	2339

In terms of racial or ethnic background, the vast majority of both groups indicated that they were White, with that racial background comprising 92.5% of non-subscribers and 90.4% of subscribers. Table 7 contains the racial and ethnic backgrounds reported by respondents.

Table 7

Race of Respondents

Race	Non-subscribers (%)	Subscribers (%)	Total (%)
American Indian / Native American	13 (0.9)	5 (0.6)	18 (0.8)
Asian or Asian-American	28 (1.8)	10 (1.3)	38 (1.6)
Black or African-American	11 (0.7)	15 (1.9)	26 (1.1)
Hispanic, Latino, or Spanish	35 (2.3)	28 (3.5)	63 (2.7)
White	1405 (92.5)	718 (90.4)	2123 (90.8)
Other	21 (1.4)	15 (1.9)	36 (1.5)
No Response	6 (0.4)	2 (0.3)	34 (1.5)
Total	1519	794	2339

Survey participants were asked to specify their household income. The income category with the highest percentage of respondents for both non-subscribers (29.2%) and subscribers (35.9%) was $100,000-to-$199,999. As Table 8 indicates, users who identified themselves as subscribers reported a higher level of household income, with 49.3% of respondents indicating an amount at or above $100,000 per year, compared to 39.3% of non-subscribers. Conversely, 25.2% of non-subscribers reported a household income of under $60,000, compared to 19.2% of subscribers.

Table 8

Household Income of Respondents

Household income	Non-subscribers (%)	Subscribers (%)	Total (%)
$19,999 or less	57 (3.8)	19 (2.4)	76 (3.2)
$20,000 - $39,999	113 (7.4)	48 (6.0)	161 (6.9)
$40,000 - $59,999	212 (14.0)	86 (10.8)	298 (12.7)
$60,000 - $79,999	257 (16.9)	121 (15.2)	378 (16.2)
$80,000 - $99,999	255 (16.8)	115 (14.5)	370 (15.8)
$100,000 - $199,999	444 (29.2)	285 (35.9)	729 (31.2)
$200,000 or more	157 (10.1)	104 (13.4)	258 (11.0)
No Response	27 (1.8)	16 (2.0)	69 (2.9)
Total	1519	794	2339

Respondents were asked to specify the highest level of education that they had completed at the time of filling out the survey instrument. The largest number of respondents for both non-subscribers (32.1%) and subscribers (39.2%) indicated that they held an undergraduate degree from an institution of higher learning. As Table 9 indicates, 75.9% of non-subscribers and 79.3% of subscribers reported having completed at least an undergraduate degree. The results also indicate that 32.3% of non-subscribers attained a degree at the graduate level or higher, compared to 30.6% of subscribers.

Respondents were also asked to identify whether the message board they spent the most time on was focused on their alma mater. For non-subscribers, 58.2% indicated that they were alumni of the message board's school, compared to 60.6% of subscribers.

Overall, 59% of respondents indicated that they were an alumnus of the message board's school.

Table 9

Education Level of Respondents

Education Level	Non-subscribers (%)	Subscribers (%)	Total (%)
Some high school	5 (0.3)	2 (0.3)	7 (0.3)
High School diploma	76 (5.0)	24 (3.0)	100 (4.3)
Some undergraduate work	285 (18.8)	138 (17.4)	423 (18.1)
Undergraduate degree	488 (32.1)	311 (39.2)	799 (34.2)
Some graduate work	170 (11.2)	74 (9.3)	244 (10.4)
Master's Degree	261 (17.2)	158 (19.9)	419 (17.9)
Doctorate / Law Degree	230 (15.1)	85 (10.7)	315 (13.5)
No Response	4 (0.3)	2 (0.3)	32 (1.4)
Total	1519	794	2339

Survey participants were asked about their current relationship status, as well as the number of children for whom they are currently the primary or shared caregiver. The majority of both non-subscribers (62.9%) and subscribers (63.0%) indicated that they were currently married, as noted in Table 10. All categories regarding relationship status were answered at a similar rate by both subscribers and non-subscribers, with the largest difference between groups being 2.2%, for respondents reporting that the best answer for their current status was "Never Married".

Table 10

Relationship Status of Respondents

Relationship Status	Non-subscribers (%)	Subscribers (%)	Total (%)
Married	953 (62.9)	500 (63.0)	1453 (62.1)
Never Married	360 (23.7)	171 (21.5)	531 (22.7)
Engaged or Living with a partner	94 (6.2)	57 (7.2)	151 (6.5)
Divorced	86 (5.7)	55 (6.9)	141 (6.0)
Widowed	13 (0.9)	6 (0.8)	19 (0.8)
Separated	9 (0.6)	3 (0.4)	12 (0.5)
No Response	4 (0.3)	2 (0.3)	32 (1.4)
Total	1519	794	2339

As for the number of children for whom respondents are the primary or shared caregiver, the majority of both groups (52.5% for non-subscribers, 55.3% for subscribers) reported that they currently are not the caregiver for any children. Only 3.2% of non-subscribers and 3.3% of subscribers indicated that they are currently the primary or shared caregiver for four or more children. Table 11 illustrates the breakdown for each group.

Table 11

Number of Children for whom Respondents are Primary or Shared Caregiver

Children	Non-subscribers (%)	Subscribers (%)	Total (%)
0	797 (52.5)	439 (55.3)	1236 (52.8)
1	206 (13.6)	111 (14.0)	317 (13.6)
2	321 (21.1)	143 (18.0)	464 (19.8)
3	137 (9.0)	70 (8.8)	207 (8.8)
4 or more	48 (3.2)	26 (3.3)	74 (3.2)
No Response	10 (0.7)	5 (0.6)	41 (1.8)
Total	1519	794	2339

Respondents were asked to identify their current country or region of residence. As noted in Table 12, nearly all respondents reported that they live in the United States, with 98.7% of non-subscribers and 98.1% of subscribers indicating that they maintain a domestic residence. Within the population of respondents who indicated that they lived in the United States, the states of Texas (312, 13.2%), Alabama (238, 10.1%), Florida (196, 8.3%), North Carolina (190, 8.1%), and California (116, 4.9%) were the most frequently identified places of residence. Respondents who indicated they lived outside the United States identified a variety of locations, including China, Denmark, Egypt, Germany, India, Japan, Saudi Arabia, South Korea, Taiwan, and the United Kingdom.

Table 12

Country or Region of Primary Residence of Respondents

Country/Region of Primary Residence	Non-subscribers (%)	Subscribers (%)	Total (%)
United States	1499 (98.7)	779 (98.1)	2278 (97.4)
Canada	5 (0.3)	2 (0.3)	7 (0.3)
Europe	4 (0.3)	2 (0.3)	6 (0.3)
Mexico/Caribbean	1 (0.1)	3 (0.4)	4 (0.2)
Other/Unspecified	9 (0.6)	6 (0.8)	15 (0.6)
No Response	1 (0.1)	2 (0.3)	29 (1.2)
Total	1519	794	2339

Respondents were asked to indicate their current employment level, the results of which are demonstrated in Table 13. The majority of respondents indicated some level of current employment, with 81.2% of non-subscribers and 83.6% of subscribers currently either employed full-time, or self-employed. Students made up a slightly larger percentage of non-subscribers (7.2%) than subscribers (5.8%), while retirees made up a slightly larger percentage of subscribers (7.3%) than non-subscribers (5.9%).

Table 13

Current Employment Level of Respondents

Employment Level	Non-Subscribers (%)	Subscribers (%)	Total (%)
Full-time Employment	1096 (72.2)	559 (70.4)	1655 (70.8)
Self-employed / Business owner	136 (9.0)	105 (13.2)	241 (10.3)
Student	110 (7.2)	46 (5.8)	156 (6.7)
Retired	90 (5.9)	58 (7.3)	148 (6.3)
Part-time Employment	57 (3.8)	15 (1.9)	72 (3.1)
Unemployed	26 (1.7)	11 (1.4)	37 (1.6)
No Response	4 (0.3)	0 (0.0)	30 (1.3)
Total	1519	794	2339

In addition to demographic information, respondents were asked to indicate their levels of usage of the Internet in general, and of collegiate sport message boards in particular. In terms of general usage, subscribers reported spending slightly more time on the Internet than non-subscribers, as noted in Table 14. The time category of 6-to-10 hours per week spent on the Internet was the most common response for non-subscribers (22.4%), while the category of 16-to-20 hours per week was most commonly identified by subscribers (22.7). Nearly half (47.6%) of non-subscribers reported spending 16 or more hours per week on the Internet, while 54.7% of subscribers reported usage at 16 or more hours per week.

Table 14

Hours Spent on Internet per Week by Respondents

Hours Spent on Internet Per Week	Non-subscribers (%)	Subscribers (%)	Total (%)
0 hours	0 (0.0)	0 (0.0)	0 (0.0)
1-5 hours	131 (8.6)	49 (6.2)	180 (7.7)
6-10 hours	340 (22.4)	165 (20.8)	505 (21.6)
11-15 hours	321 (21.1)	145 (18.3)	466 (19.9)
16-20 hours	283 (18.6)	180 (22.7)	463 (19.8)
21-25 hours	152 (10.0)	82 (10.3)	234 (10.0)
26 or more hours	289 (19.0)	172 (21.7)	461 (19.7)
No Response	3 (0.2)	1 (0.1)	30 (1.3)
Total	1519	794	2339

In terms of time spent on collegiate sport message boards, the time category of 1-to-5 hours per week was the most common response among both non-subscribers (58.3%) and subscribers (38.8%). On the whole, collegiate sport message board usage among non-subscribers tended to be less than that of subscribers. The majority of non-subscribers reported usage not exceeding five hours per week, resulting in an approximate average weekly usage rate of 3.3 hours ($M = 2.66$). Subscribers, on the other hand, spent nearly twice that amount of time on message boards, with an approximate average weekly usage rate of 6.1 hours ($M = 3.10$). However, as Table 15 indicates, 72%

of subscribers reported their collegiate sport message board use as being no more than 10 hours per week.

Table 15

Hours Spent on Collegiate Sport Message Boards per Week by Respondents

Hours Spent on Collegiate Sport Message Boards Per Week	Non-Subscribers (%)	Subscribers (%)	Total (%)
0 hours	6 (0.4)	0 (0.0)	6 (0.3)
1-5 hours	886 (58.3)	308 (38.8)	1194 (51.0)
6-10 hours	400 (26.3)	264 (33.2)	664 (28.4)
11-15 hours	124 (8.2)	120 (15.1)	244 (10.4)
16-20 hours	57 (3.8)	56 (7.1)	113 (4.8)
21-25 hours	22 (1.4)	19 (2.4)	41 (1.8)
26 or more hours	21 (1.4)	24 (3.0)	45 (1.9)
No Response	3 (0.2)	3 (0.4)	32 (1.4)
Total	1519	794	2339

Respondents were also asked to detail the average number of posts that they made per week on collegiate sport message boards. Included in this question was the option for participants to identify themselves as "lurkers", or message board users who read others' messages but do not themselves post. As Table 16 indicates, a total of 1-to-20 posts per week was the most commonly identified number by both non-subscribers (54.3%) and subscribers (65.0%). Lurkers comprised 34.2% of the non-subscribers who completed the

survey, versus 17.7% of subscribers. On the whole, 88.5% of non-subscribers identified

themselves as either not posting at all or posting 20 times or less per week, while 82.7%

of subscribers fell into these two categories.

Table 16

Average Number of Collegiate Sport Message Board Posts per Week by Respondents

Posts per week on Collegiate Sport Message Boards	Non-subscribers (%)	Subscribers (%)	Total (%)
0 (lurker only)	519 (34.2)	140 (17.7)	659 (28.2)
1-20	825 (54.3)	516 (65.0)	1341 (57.3)
21-40	105 (6.9)	78 (9.8)	183 (7.8)
41-60	38 (2.5)	33 (4.2)	71 (3.0)
More than 60	30 (2.0)	26 (3.3)	56 (2.4)
No Response	2 (0.1)	1 (0.1)	29 (1.2)
Total	1519	794	2339

Table 17 details the distribution of responses for average usage of collegiate sport

message boards at the participant's place of employment. The time period of 1-to-30

minutes per day spent on message boards at work was the most common response for

both non-subscribers (39.0%) and subscribers (30.6%). A majority of both groups

reported at least some usage of collegiate sport message boards at work, with 66.1% of

non-subscribers and 69.8% of subscribers indicating that some time was spent per week

on such sites. A total of 9.7% of subscribers reported using these boards constantly

throughout the day at work, versus 5.6% of non-subscribers.

Table 17

Average Usage of Collegiate Sport Message Boards at Place of Employment per Day by Respondents

Usage of Message Boards at Place of Employment	Non-subscribers (%)	Subscribers (%)	Total (%)
None	515 (33.9)	240 (30.2)	755 (32.3)
1-30 minutes	592 (39.0)	243 (30.6)	835 (35.7)
31-60 minutes	227 (14.9)	149 (18.8)	376 (16.1)
61-120 minutes	66 (4.3)	52 (6.5)	118 (5.0)
More than 120 minutes	13 (0.9)	15 (1.9)	28 (1.2)
Constantly throughout the day	85 (5.6)	77 (9.7)	162 (6.9)
No Response	21 (1.4)	18 (2.3)	65 (2.8)
Total	1519	794	2339

Survey respondents were asked to detail their involvement with collegiate athletics, both in terms of athletic events attended and money donated to collegiate athletic programs. Table 18 contains the distributions for athletic events attended in the past year by both groups. The most common response for both groups was 1-to-5 collegiate athletic events attended per year, with 47.3% of non-subscribers and 44.1% of subscribers indicating this level of attendance. The majority of both non-subscribers (60.7%) and subscribers (51.8%) replied that they attended five or fewer collegiate athletic events in the past year, while 24.2% of subscribers and 20.0% of non-subscribers attended 11 or more collegiate athletic events in the same time period.

Table 18

Number of Collegiate Athletic Events Attended in the Past Year by Respondents

Athletic Events attended in past year	Non-subscribers (%)	Subscribers (%)	Total (%)
0	203 (13.4)	61 (7.7)	264 (11.3)
1-5	718 (47.3)	350 (44.1)	1068 (45.7)
6-10	293 (19.3)	187 (23.6)	480 (20.5)
11-15	118 (7.8)	78 (9.8)	196 (8.4)
16-20	53 (3.5)	38 (4.8)	91 (3.9)
More than 20	132 (8.7)	76 (9.6)	208 (8.9)
No Response	2 (0.1)	4 (0.5)	32 (1.4)
Total	1519	794	2339

In terms of money donated to collegiate athletic programs, a majority of non-subscribers (58.1%) indicated that they did not donate any money to athletic programs in an average year, and 41.7% of subscribers indicated the same. This was the most common response among subscribers; however, 57.7% of subscribers donated at least some money to collegiate athletic programs, with 16.8% of subscribers donating $1000 or more in an average year. Table 19 details the distributions for this category.

Table 19

Average Amount Donated to Collegiate Athletic Programs per Year by Respondents

Amount donated per year to collegiate athletic programs	Non-Subscribers (%)	Subscribers (%)	Total (%)
$0	882 (58.1)	331 (41.7)	1213 (51.9)
$1 - $99	146 (9.6)	64 (8.1)	210 (9.0)
$100 - $299	197 (13.0)	125 (15.7)	322 (13.8)
$300 - $499	79 (5.2)	60 (7.6)	139 (5.9)
$500 - $999	84 (5.5)	76 (9.6)	160 (6.8)
$1000 or more	123 (8.1)	133 (16.8)	256 (10.9)
No Response	8 (0.5)	5 (0.6)	39 (1.7)
Total	1519	794	2339

Respondents were also asked to report the average amount of money they spent on subscriptions to sport media, in both the print and electronic realms. The most common response for non-subscribers was zero, with 46.6% reporting no money spent on such subscriptions, compared to only 18.5% of subscribers. Subscribers (30.6%) most commonly reported $1-to-$99 spent on sport media. The results in Table 20 also note that 12.1% of subscribers reported spending $300 or more on sport media subscriptions, while just 4.2% of non-subscribers spent at this level.

Table 20

Average Amount Spent on Subscriptions to Sport Media per Year by Respondents

Amount Spent per year on subscriptions to sport media	Non-Subscribers (%)	Subscribers (%)	Total (%)
$0	708 (46.6)	147 (18.5)	855 (36.6)
$1 - $99	452 (29.8)	243 (30.6)	695 (29.7)
$100 - $199	210 (13.8)	197 (24.8)	407 (17.4)
$200 - $299	81 (5.3)	111 (14.0)	192 (8.2)
$300 - $399	31 (2.0)	47 (5.9)	78 (3.3)
$400 - $499	13 (0.9)	14 (1.8)	27 (1.2)
$500 or more	19 (1.3)	35 (4.4)	54 (2.3)
No Response	5 (0.3)	0 (0.0)	31 (1.3)
Total	1519	794	2339

The survey also asked respondents to identify the collegiate sport which they follow most closely. As noted in Table 21, both subscribers (83.2%) and non-subscribers (72.9%) identified football as the sport which commanded their attention the most. The only other sport which garnered significant attention was men's basketball, with 23.8% of non-subscribers and 14.5% of subscribers identifying it as their sport of choice.

Table 21

Collegiate Sport Followed Most Closely by Respondents

Sport followed most closely	Non-Subscribers (%)	Subscribers (%)	Total (%)
Football	1108 (72.9)	787 (83.2)	1769 (75.6)
Men's Basketball	362 (23.8)	115 (14.5)	477 (20.4)
Women's Basketball	18 (1.2)	7 (0.9)	25 (1.1)
Baseball	17 (1.1)	4 (0.5)	21 (0.9)
Hockey	2 (0.1)	0 (0.0)	2 (0.1)
No Response	12 (0.8)	7 (0.9)	45 (1.9)
Total	1519	794	2339

Respondents who identified themselves as subscribers were asked a pair of additional questions, dealing with the length of time that they have spent as a subscriber to a collegiate sport message board, and whether they subscribed to multiple collegiate sport message boards. Table 22 indicates the length of time that subscribers have held a collegiate sport message board subscription. The largest reported category for length of subscription was for a period of time longer than 48 months, with 34.6% of respondents falling into that category. However, 64% of respondents indicated they had been a subscriber for 48 months or fewer, and 36.8% indicated they had been a subscriber for 24 months or fewer.

Table 22

Amount of Time Spent as Subscriber (in Months) by Respondents Identifying Themselves as Subscribers

Time Subscribed	Frequency	Percent
1-12 Months	146	18.4%
13-24 Months	146	18.4%
25-36 Months	131	16.5%
37-48 Months	85	10.7%
More than 48 Months	276	34.6%
No Response	11	1.4%
Total	794	

Table 23 denotes the responses to the question of whether respondents are subscribers to multiple collegiate sport message boards. The majority of subscribers (75.2%) indicated that they were subscribed to only one message board.

Table 23

Number of Subscribing Users Who are Subscribed to Multiple Boards

Subscribed to multiple boards	Frequency	Percent
Yes	187	23.6%
No	597	75.2%
No Response	10	1.3%
Total	794	

In addition to the demographic, computer, athletic, and media usage questions referenced above, participants were asked to respond to a series of motivational and usage statements. The responses to these usage statements were given on a five-point Likert-type scale, with "1" representing "Strongly Disagree", "2" representing "Somewhat Disagree", "3" representing "Neither Agree nor Disagree", "4" representing "Somewhat Agree", and "5" representing "Strongly Agree."

Overall, five statements received a mean response of over 4.00 from non-subscribers, including "To get information about my favorite team(s) that I can't get elsewhere" ($M = 4.41$, $SD = 0.93$), "Because it offers more in-depth coverage of my favorite team(s) than traditional media" ($M = 4.28$, $SD = 1.03$), "To find out news faster than I would using other types of sports media" ($M = 4.2$, $SD = 1.03$), "To read good analysis of my favorite team(s) from fellow fans" ($M = 4.17$, $SD = 1.0$), and "Because I enjoy reading what other users write" ($M = 4.06$, $SD = 0.91$). Six statements received a mean response of over 4.00 from subscribers, including "To get information about my

favorite team(s) that I can't get elsewhere" ($M = 4.62$, $SD = 0.81$), "Because it offers more in-depth coverage of my favorite team(s) than traditional media" ($M = 4.55$, $SD = 0.89$), "To find out news faster than I would using other types of sports media" ($M = 4.45$, $SD = 0.92$), "To read good analysis of my favorite team(s) from fellow fans" ($M = 4.23$, $SD = 0.93$), "To talk about my team's recruiting efforts" ($M = 4.05$, $SD = 1.13$), and "To participate in discussions about my favorite team" ($M = 4.04$, $SD = 1.18$). The statement "Because I enjoy reading what other users write" received a mean response of over 4.00 from non-subscribers, but not from subscribers. Conversely, the statements "To talk about my team's recruiting efforts" and "To participate in discussions about my favorite team" received a mean response of over 4.00 from subscribers, but not from non-subscribers.

The statement which received the most positive average response among both groups was "To get information about my favorite team(s) that I can't get elsewhere", with non-subscribers providing a mean response of 4.41 ($SD = 0.93$), and subscribers providing a mean response of 4.62 ($SD = 0.81$). The statement which received the most negative average response was "Because I enjoy putting other users in their place", with non-subscribers providing a mean response of 1.63 ($SD = 1.03$), and subscribers providing a mean response of 1.66 ($SD = 1.04$).

As noted in Table 24, Table 25, Table 26, Table 27, and Table 28, there were differences in the mean responses between non-subscribers and subscribers in all but two of the 40 statements. The largest overall difference between the two groups, and the largest positive difference for subscriber responses, was 0.47, in relation to the statement "To talk about my team's recruiting efforts". For this statement, the mean response for

subscribers was 4.05 ($SD = 1.13$), while the mean response for non-subscribers was 3.58

($SD = 1.26$), indicating that subscribers rated this statement more highly than non-

subscribers in terms of why they use collegiate sport message boards. The largest positive

difference for non-subscriber responses was 0.34, in relation to the statement "To read

what others have to say, even though I don't participate in discussions myself." For this

statement, the mean response for non-subscribers was 3.63 ($SD = 1.26$), versus a mean

response of 3.29 ($SD = 1.34$) for subscribers. This difference indicated that, on average,

non-subscribers rated non-interactive observation higher than subscribers in terms of why

collegiate sport message boards were used. Two statements demonstrated no differences

in the mean responses for subscribers and non-subscribers. The statement "To meet new

and interesting people" demonstrated a mean response of 2.37 for both non-subscribers

($SD = 1.21$) and subscribers ($SD = 1.20$), and the statement "To keep up with non-athletic

news about my alma mater" demonstrated a mean response of 2.27 for both non-

subscribers ($SD = 1.24$) and subscribers ($SD = 1.20$).

Table 24

Mean Responses to Motivation and Usage Statements with Differences of .25 or Higher

Between Groups

I use collegiate sport message boards:	Non-subscribers M (SD)	Subscribers M (SD)	Difference
To talk about my team's recruiting efforts	3.58 (1.26)	4.05 (1.13)	0.47
To see video clips of top players and/or recruits	3.16 (1.30)	3.62 (1.18)	0.46
To give my input and opinions	3.21 (1.31)	3.51 (1.17)	0.3
Because it offers more in-depth coverage of my favorite team(s) than traditional sports media	4.28 (1.03)	4.55 (0.89)	0.27
To find out news faster than I would using other types of sports media	4.2 (1.03)	4.45 (0.92)	0.25
To communicate with fellow fans of my school and/or team(s)	3.51 (1.31)	3.76 (1.23)	0.25

Table 25

Mean Responses to Motivation and Usage Statements with Differences of .15 to .24

between Groups

I use collegiate sport message boards:	Non-subscribers M (SD)	Subscribers M (SD)	Difference
To participate in discussions about my favorite team	3.82 (1.30)	4.04 (1.18)	0.22
To share information I have learned with the community	2.99 (1.28)	3.21 (1.17)	0.22
To discuss games in progress	2.73 (1.40)	2.95 (1.37)	0.22
To get information about my favorite team(s) that I can't get elsewhere	4.41 (0.93)	4.62 (0.81)	0.21
To discuss X's and O's and general strategy	3.26 (1.24)	3.47 (1.13)	0.21
To hear about other users' personal encounters with coaches and players	3.2 (1.21)	3.39 (1.13)	0.19
To hear fair and balanced views on things	2.95 (1.20)	3.12 (1.17)	0.17
Because I enjoy interacting with other users	3.18 (1.22)	3.34 (1.18)	0.16
To express myself freely	2.97 (1.29)	3.13 (1.22)	0.16
To see what people on rival boards are saying about my team(s)	2.93 (1.36)	3.08 (1.31)	0.15

Table 26

Mean Responses to Motivation and Usage Statements with Differences of .05 to .14

between Groups

I use collegiate sport message boards:	Non-subscribers M (SD)	Subscribers M (SD)	Difference
To find out the latest gossip about players, coaches, and administrators for my favorite team(s)	3.79 (1.15)	3.93 (1.12)	0.14
To complain about things going wrong with my favorite team(s)	2.6 (1.31)	2.71 (1.27)	0.11
To belong to a community of like-minded fans	3.62 (1.20)	3.72 (1.15)	0.1
To see how fans of other teams are reacting to news about their program	3.18 (1.30)	3.27 (1.26)	0.09
Because I find out things about my favorite team(s) that my friends don't know	3.66 (1.20)	3.73 (1.20)	0.07
Because I feel like I'm a part of the message board community	2.97 (1.29)	3.04 (1.24)	0.07
To read good analysis of my favorite team(s) from fellow fans	4.17 (1.00)	4.23 (0.93)	0.06
To "smack talk" to fans of other schools	1.75 (1.13)	1.81 (1.14)	0.06
To stay in touch with old friends and classmates	1.74 (1.03)	1.8 (1.05)	0.06

Table 27

Mean Responses to Motivation and Usage Statements with Differences of .00 to .04

between Groups

I use collegiate sport message boards:	Non-subscribers M (SD)	Subscribers M (SD)	Difference
To feel like I'm part of the fan community even though I live far away	3.17 (1.40)	3.21 (1.42)	0.04
To find people to whom I can sell tickets or memorabilia	1.67 (1.05)	1.71 (1.08)	0.04
To find people who can sell me tickets or memorabilia	1.96 (1.16)	1.99 (1.17)	0.03
Because I enjoy putting other users in their place	1.63 (1.03)	1.66 (1.04)	0.03
To argue with other users online	1.88 (1.13)	1.9 (1.12)	0.02
To talk about sports other than football and basketball	2.36 (1.31)	2.37 (1.31)	0.01
To meet new and interesting people	2.37 (1.21)	2.37 (1.20)	0
To keep up with non-athletic news about my alma mater	2.27 (1.24)	2.27 (1.20)	0

Table 28

Responses to Motivation and Usage Statements with Higher Non-subscriber Means

I use collegiate sport message boards:	Non-subscribers M (SD)	Subscribers M (SD)	Difference
To be able to share my views and experiences anonymously	2.75 (1.26)	2.74 (1.20)	-0.01
Because it gives me something to do at work	2.44 (1.38)	2.41 (1.39)	-0.03
Because I enjoy reading what other users write	4.06 (0.91)	3.98 (0.94)	-0.08
Because I like to use the non-sports forums to discuss all areas of life	2.19 (1.39)	2.06 (1.33)	-0.13
To pass time when I'm bored	3.56 (1.19)	3.42 (1.25)	-0.14
To talk about things other than sports, such as politics and religion	2.14 (1.36)	1.99 (1.31)	-0.15
To read what others have to say, even though I don't participate in discussions myself	3.63 (1.26)	3.29 (1.34)	-0.34

While the differences between the individual motivational statements are worth noting, the purpose of the motivational statements in the questionnaire was to utilize them in a factor analysis, to ascertain whether the statements combined into dimensions of gratification. As such, the statistical significance of the differences for individual

statements will not be examined in the results of this dissertation. Instead, following

factor analysis, all motivational statements which comprise a particular dimension of

gratification were summed and averaged, and the resulting scales were utilized to

examine correlations between the factors and variables pertaining to collegiate sport

message board usage.

In addition to the aforementioned motivation and usage statements given to all

respondents, a separate set of 20 motivation and usage statements was given to

respondents who identified themselves as subscribers. Tables 29 and 30 illustrate the

mean responses from subscribers to these statements. The statement "To gain access to

premium content on the message board, such as videos, updates, and recruiting news"

received the highest average response ($M = 4.36$, $SD = 1.05$), followed by "Because I get

access to insider information on the premium message board(s)" ($M = 4.30$, $SD = 1.07$).

The statement which received the lowest average response ($M = 2.61$, $SD = 1.27$) was

"Because it makes me feel like more of a fan."

Table 29

Mean Responses of 3.50 or Higher to Premium Motivation and Usage Statements

I am a premium subscriber to a collegiate sport message board:	Response (*M*)	*SD*
To gain access to premium content on the message board, such as videos, updates, and recruiting news	4.36	1.05
Because I get access to insider information on the premium message board(s)	4.30	1.07
To find out news about my team faster than other people	4.15	1.13
Because the quality of premium content is excellent	4.15	1.03
To learn things about my favorite team(s) that the media doesn't know	4.10	1.13
To get access to premium content on the front page of the website	3.99	1.24
Because the users are generally more knowledgeable	3.74	1.20
To learn things about my favorite team(s) that my friends don't know	3.70	1.24
Because the quality of users on the premium side is much better	3.58	1.28
Because I enjoy the community of users on the premium message board	3.50	1.22

Table 30

Mean Responses Lower Than 3.50 to Premium Motivation and Usage Statements

I am a premium subscriber to a collegiate sport message board:	Response (*M*)	*SD*
Because there is less smack talk on the premium board	3.47	1.38
Because I prefer to participate in discussions on the premium message board(s) instead of the free board(s)	3.28	1.38
Because there are too many fans from other schools on the free boards	3.14	1.33
Because it allows me to better network with the fan community of my favorite team(s)	3.04	1.29
Because there is more of a family feeling on the premium board	2.97	1.27
To support the web site or company that runs the message board community	2.93	1.39
Because people on non-premium boards are more negative about my team(s)	2.86	1.26
Because I feel as though I am supporting my school	2.68	1.32
To give out "insider" information to my fellow fans	2.63	1.32
Because it makes me feel like more of a fan	2.61	1.27

Research Questions 1 and 2 examined the demographic characteristics and distributions of non-subscribing and subscribing users of collegiate sport message boards. Numerous demographic categories were examined for both groups, including age, gender, race or ethnicity, household income, education level, relationship status, number

of children, country or region of residence, and current employment level. Included in these findings was evidence that non-subscribers are slightly younger than subscribers, that subscribers have a higher average household income than non-subscribers, and that both groups are predominantly male, White, married residents of the United States who are employed full-time. Usage data indicated that subscribers used both the Internet and collegiate sport message boards more often than non-subscribers, and that subscribers spent more per month on subscriptions to sport media than non-subscribers. The majority of respondents in both groups indicated that football was the sport they followed most closely. A plurality of subscribers was found to have held a subscription to a collegiate sport message board for over 48 months. Analysis of mean responses to motivation and usage statements uncovered differences between the two groups on all but two. The largest of these differences was 0.47, for the statement "To talk about my team's recruiting efforts", with subscribers indicating that statement held a higher salience for message board use than non-subscribers. Five statements received a mean response of over 4.00 for non-subscribers, while six statements received a mean response of over 4.00 for subscribers. Finally, six mean responses by subscribers to premium motivation and usage statements received a mean response of over 4.00.

Research Question 3

The third research question of this study asked whether there was a significant difference in the demographic characteristics and distributions of non-subscribing and subscribing collegiate sport message board users. Crosstabulations were performed in SPSS to examine the distributions of each variable as it related to subscriber status, and to ascertain whether a statistically significant relationship existed between variables.

Following the crosstabulations, independent samples *t*-tests were performed, to further explore the possibility of statistically significant differences in means between variables.

Utilizing the Chi Square statistic, calculated by SPSS, no significant differences were discovered for the variables of age, race, alumni status, country or region of primary residence, the number of computers in the respondent's primary residence, the amount of television watched per week, and the amount of time spent reading print news media. Therefore, crosstabulations of these variables were not included; however, these variables were checked for significant difference between non-subscribers and subscribers by use of independent samples *t*-tests later in this chapter.

A crosstabulation was performed in SPSS to examine the relationship between gender and subscriber status. Using a 2 X 2 contingency table, the Chi Square statistic indicated that the frequencies in the subgroups were significantly different, as noted in Table 31. Females appeared in the non-subscriber category more often than expected, and in the subscriber category less often than expected. However, a calculation of Cramer's V, a nominal-by-nominal statistic, found practically no relationship between gender and subscriber status ($V = .077$), meaning that the groups were significantly different, but no directional relationship existed between the variables.

Table 31

Subscriber Status by Gender

Gender	Non-subscriber (expected)	Subscriber (expected)
Female	188 (162.1)	59 (84.9)
Male	1322 (1347.9)	732 (706.1)
Total	1510	791

χ^2=13.496, *df*=1, p =.000; *V* = .077

Crosstabulation was also performed in SPSS on the variables of reported household income and subscriber status. The Chi Square statistic found that the frequencies of the groups were significantly different, but the nominal-by-nominal statistic found practically no relationship between the two variables (Cramer's *V* = .099). As the 2 X 7 contingency table in Table 32 illustrates, non-subscribers appeared in the sub-$100,000 income categories slightly more than expected, while subscribers appeared in the over-$100,000 income categories more than expected.

Table 32

Subscriber Status by Household Income

Household income	Non-subscriber (expected)	Subscriber (expected)
$19,999 or less	57 (50)	19 (26.0)
$20,000 - $39,999	113 (105.8)	48 (55.2)
$40,000 - $59,999	212 (195.9)	86 (102.1)
$60,000 – $79,999	257 (248.4)	121 (129.6)
$80,000 - $99,999	255 (243.2)	115 (126.8)
$100,000 - $199,999	444 (479.1)	285 (249.9)
$200,000 or more	154 (169.6)	104 (88.4)
Total	1492	778

χ^2=22.430, *df*=6, p =.001; *V* = .099

A crosstabulation was performed in SPSS on the variables of reported education level and subscriber status. Two of the cells of the 2 X 7 contingency table contained expected counts of less than five, with both of those cells describing users who self-reported an education level of "Some High School" (i.e., those without a high school diploma). The Chi Square statistic found that the subgroups were significantly different, while Cramer's V indicated a minimal positive relationship between education level and subscriber status (*V* = .103). Subscribers appeared more often than expected in the categories of undergraduate degree and master's degree, while non-subscribers appeared more often than expected in the categories of high school diploma, some undergraduate, some graduate, and doctoral/law school. The distribution of responses by category is represented by Table 33.

Table 33

Subscriber Status by Education Level

Education level	Non-subscriber (expected)	Subscriber (expected)
Some High School	5(4.6)	2 (2.4)
HS Diploma	76 (65.7)	24 (34.3)
Some Undergraduate	285 (277.8)	138 (145.2)
Undergraduate Degree	488 (524.7)	311 (274.3)
Some Graduate	170 (160.2)	74 (83.8)
Master's Degree	261 (275.2)	158 (143.8)
Doctorate/Law School	230 (206.9)	85 (108.1)
Total	1515	792

χ^2=24.256, *df*=6, p =.000; *V* = .103

A crosstabulation was also used to examine the variables of subscriber status and hours spent per week on the Internet. Table 34 indicates the distribution of responses. The Chi Square statistic, computed in SPSS, notes that the responses in the 2 X 6 contingency table are significantly different. Non-subscribers appeared more often than expected in the categories of 1-to-5 hours per week, 6-to-10 hours per week, and 11-to-15 hours per week, while subscribers appeared more often than expected in the categories of 16-to-20 hours per week, 21-to-25 hours per week, and 26 or more hours per week. A nominal-by-nominal examination of the variables found practically no relationship between subscriber status and hours spent per week on the Internet (Cramer's *V* = .075).

Table 34

Subscriber Status by Hours Spent per Week on Internet

Hours per week spent on Internet	Non-subscriber (expected)	Subscriber (expected)
1-5 hours	131 (118.2)	49 (61.8)
6-10 hours	340 (331.6)	165 (173.4)
11-15 hours	321(306.0)	145 (160.0)
16-20 hours	283 (304.0)	180 (159.0)
21-25 hours	152 (153.6)	82 (80.4)
26 or more hours	289 (302.7)	172 (158.3)
Total	1516	793

χ^2=12.896, *df*=5, p =.024; *V* = .075

Table 35 illustrates the crosstabulation performed on the variables of subscriber status and hours per week spent on collegiate sport message boards. Two of the cells of the 2 X 7 contingency table contained expected counts of fewer than five, both of which indicated users who had reported using collegiate sport message boards for zero hours per week. A Chi Square statistic, computed in SPSS, indicated that the groups were significantly different. Non-subscribers appeared more often than expected in the categories of zero hours and 1-to-5 hours per week, while subscribers appeared more often than expected in all categories above 1-to-5 hours per week. The Cramer's V statistic, also computed in SPSS, indicated a slight positive relationship between subscriber status and amount of time spent per week on collegiate sport message boards (*V* = .204).

Table 35

Subscriber Status by Hours Spent per Week on Collegiate Sport Message Boards

Hours spent per week on collegiate sport message boards	Non-subscribers (expected)	Subscribers (expected)
0 hours	6 (3.9)	0 (2.1)
1-5 hours	886 (784.6)	308 (409.4)
6-10 hours	400 (436.3)	264 (227.7)
11-15 hours	124 (160.3)	120 (83.7)
16-20 hours	57 (74.3)	56 (38.7)
21-25 hours	22 (26.9)	19 (14.1)
26 or more hours	21 (29.6)	24 (15.4)
Total	1516	791

χ^2=95.771, *df*=6, p =.000; *V* = .204

A crosstabulation was also performed on the variables of subscriber status and posts per week on collegiate sport message boards. The Chi Square statistic for the 2 X 5 contingency table indicated a significant difference between subgroups. The nominal-by-nominal statistic Cramer's V indicated a slight positive relationship between subscriber status and number of posts made per week on collegiate sport message boards ($V = .179$). Non-subscribers appeared more often than expected in the category of zero posts, while subscribers appeared more often than expected in all other categories. The distributions of the crosstabulation are included in Table 36.

Table 36

Subscriber Status by Posts per Week on Collegiate Sport Message Boards

Posts per week	Non-subscriber (expected)	Subscriber (expected)
0 (lurker only)	519 (432.8)	140 (226.2)
1-20 posts	825 (880.6)	516 (460.4)
21-40 posts	105 (120.2)	78 (62.8)
41-60 posts	38 (46.6)	33 (24.4)
More than 60 posts	30 (36.8)	26 (19.2)
Total	1517	793

χ^2=74.160, *df*=4, p =.000; *V* = .179

The variables of subscriber status and amount of time spent using collegiate sport message boards at work were compared using crosstabulation. The Chi Square statistic indicated a significant difference in the distributions between non-subscribers and subscribers, as seen in the representation of the 2 X 6 contingency table located in Table 37. Cramer's V indicated a minimal positive relationship between subscriber status and the amount of time collegiate sport message boards were used at work (*V* = .131). Non-subscribers appeared more often than expected in the "none" category and the "1-to-30 minutes" category, while subscribers appeared more often than expected in the "31-to-60 minutes", "61-to-120 minutes", "more than 120 minutes", and "constantly throughout the day" categories.

Table 37

Subscriber Status by Amount of Time Collegiate Sport Message Boards are Used at Work

Amount of time used at work	Non-subscriber (expected)	Subscriber (expected)
None	515 (497.4)	240 (257.6)
1-30 minutes	592 (550.1)	243 (289.4)
31-60 minutes	227 (247.7)	149 (128.3)
61-120 minutes	66 (77.7)	52 (40.3)
More than 120 minutes	13 (18.4)	15 (9.6)
Constantly throughout the day	85 (106.7)	77 (55.3)
Total	1498	776

χ^2=39.122, *df*=5, p =.000; *V* = .131

In addition to the variables describing usage of the Internet and of collegiate sport message boards, crosstabulations were also performed on variables relating to athletics and media usage. The 2 X 7 contingency table for this calculation is represented in Table 38. For the variables of subscriber status and average amount spent on tickets to athletic events per year, the Chi Square statistic indicated a significant difference in the subgroups. Non-subscribers appeared more often than expected in all categories inclusive from $0-to-$299 spent per year, while subscribers appeared more often than expected in all categories inclusive from $300-to-$500 or more per year. The nominal-by-nominal calculation of the variables indicated a slight positive relationship (Cramer's *V* = .157).

Table 38

Subscriber Status by Average Amount Spent on Tickets to Athletic Events per Year

Average spent on tickets to athletic events per year	Non-subscriber (expected)	Subscriber (expected)
$0	167 (142.1)	49 (73.9)
$1 - $99	260 (232.2)	93 (120.8)
$100 - $199	278 (255.2)	110 (132.8)
$200 - $299	224 (221.6)	113 (115.4)
$300 - $399	131 (140.7)	83 (73.3)
$400 - $499	60 (65.8)	40 (34.2)
$500 or more	394 (456.4)	300 (237.6)
Total	1514	788

χ^2=56.972, *df*=6, p =.000; *V* = .157

A crosstabulation was performed on the variables of subscriber status and collegiate athletic events attended in person during the previous year. Again, while the Chi Square statistic for the 2 X 6 contingency table indicated a significant difference in subgroups, the Cramer's V statistic found only a minimal positive relationship between the two variables (*V* = .106). Non-subscribers appeared more often than expected in the zero and 1-to-5 categories, while subscribers appeared more often than expected in all categories from 6-to-10 and beyond. Table 39 illustrates the observed and expected counts for each variable.

Table 39

Subscriber Status by Collegiate Athletic Events Attended in Person Last Year

Collegiate Athletic Events Attended in Person Last Year	Non-subscriber (expected)	Subscriber (expected)
0	203 (173.2)	61 (90.4)
1-5	718 (702.3)	350 (365.7)
6-10	293 (315.6)	187 (164.4)
11-15	118 (128.9)	78 (67.1)
16-20	53 (59.8)	38 (31.2)
More than 20	132 (136.8)	76 (71.2)
Total	1517	790

χ^2=25.762, *df*=5, p =.000; *V* = .106

Also examined by crosstabulation was the relationship between the variables of subscriber status and average amount donated to collegiate athletic programs on an annual basis. The Chi Square statistic for the 2 X 6 contingency table tested the relationship between the variables, and found a statistically significant difference between the two subgroups. Non-subscribers appeared more often than expected in the zero and $1-to-$99 categories, while subscribers appeared more often than expected in all other categories. The nominal-by-nominal statistic Cramer's V indicated a slight positive relationship (*V* = .190). Table 40 contains the distributions for each variable.

Table 40

Subscriber Status by Average Amount Donated to Collegiate Athletic Programs Annually

Average amount donated per year	Non-subscriber (expected)	Subscriber (expected)
$0	882 (796.9)	331 (416.1)
$1 - $99	146 (138.0)	64 (72.0)
$100 - $299	197 (211.5)	125 (110.5)
$300 - $499	79 (91.3)	60 (47.7)
$500 - $999	84 (105.1)	76 (54.9)
$1000 or more	123 (168.2)	133 (87.8)
Total	1511	789

χ^2=83.365, *df*=5, p =.000; *V* = .190

Finally, a crosstabulation was performed for the variables of subscriber status and average amount spent per year on subscriptions to sport media, as illustrated in Table 41. The Chi Square statistic for the 2 X 7 contingency table again found a significant difference between the two variables. The nominal-by-nominal statistic Cramer's V revealed a positive relationship between the two variables (*V* = .325). The Cramer's V value for this crosstabulation was the strongest relationship discovered between subscriber status and any of the variables examined. Non-subscribers appeared more often than expected in the zero category, while subscribers appeared more often than expected in all other categories.

Table 41

Subscriber Status by Average Amount Spent per Year on Subscriptions to Sport Media

Average spent per year on sport media	Non-subscriber (expected)	Subscriber (expected)
$0	708 (560.9)	147 (294.1)
$1 - $99	452 (455.9)	243 (239.1)
$100 - $199	210 (267.0)	197 (140.0)
$200 - $299	81 (125.9)	111 (66.1)
$300 - $399	31 (51.2)	47 (26.8)
$400 - $499	13 (17.7)	14 (9.3)
$500 or more	19 (35.4)	35 (18.6)
Total	1514	794

χ^2=243.162, *df*=6, p =.000; *V* = .325

In addition to crosstabulations, independent samples *t*-tests were performed, in order to further explore the possibility of statistically significant differences in means between non-subscribers and subscribers. Nominal variables were excluded from these *t*-tests.

An independent samples *t*-test was conducted on mean differences for the variable of user age between non-subscribers and subscribers. The 1,519 non-subscribers (*M* = 4.50, *SD* = 1.34) and 794 subscribers (*M* = 4.64, *SD* = 1.36) demonstrated a significant difference in age, *t*(2311) = -2.363, *p* = .018. Non-subscribers were younger than subscribers, according to the difference in means.

The differences in means for the variable of gender between non-subscribers and subscribers were examined via independent samples t-test. The 1,510 non-subscribers (M = 1.88, SD = 0.33) and 791 subscribers (M = 1.93, SD = 0.26) demonstrated a significant difference in gender, $t(2299)$ = -3.683, p = .000. There was a higher proportion of males among non-subscribers than subscribers, based on the differences in means.

An independent samples t-test was conducted on mean differences in race between non-subscribers and subscribers. The 1,513 non-subscribers (M = 5.83, SD = 0.81) and 792 subscribers (M = 5.81, SD = 0.81) did not demonstrate a significant difference in race, $t(2303)$ = .584, p = .559. Therefore, according to the statistical analysis, there was no difference between the two groups for the variable of race.

Mean differences for the variable of income were also exampled via independent samples t-test for non-subscribers and subscribers. The 1,492 non-subscribers (M = 4.67, SD = 1.62) and 778 subscribers (M = 4.97, SD = 1.56) demonstrated a significant difference in income level, $t(2268)$ = -4.326, p = .000. According to the difference in means, non-subscribers reported a lower average household income than subscribers.

The differences in means for education level between non-subscribers and subscribers were examined utilizing independent samples t-tests. The 1,515 non-subscribers (M = 4.61, SD = 1.49) and 792 subscribers (M = 4.57, SD = 1.36) did not demonstrate a significant difference in education level, $t(2305)$ = .661, p = .508. Therefore, this analysis revealed that there were no notable differences in the average level of education between the two groups.

Also examined were the mean differences for alumni status of the message board utilized for the survey by non-subscribers and subscribers. The 1,335 non-subscribers (M

= 1.42, *SD* = 0.49) and 713 subscribers (*M* = 1.39, *SD* = 0.49) did not demonstrate a significant difference in alumni status, *t*(2046) = 1.046, *p* = .296. Therefore, the statistical analysis indicated a lack of notable difference in alumni status between the two groups.

The differences in means for relationship status between non-subscribers and subscribers were examined. The 1,515 non-subscribers (*M* = 2.51, *SD* = 2.17) and 792 subscribers (*M* = 2.46, *SD* = 2.13) analyzed did not demonstrate a significant difference in marital status, *t*(2305) = .127, *p* = 551. Therefore, the statistical analysis revealed no notable differences in relationship status between the two groups.

An independent samples *t*-test was performed on mean differences for the variable of number of children that the user is the primary caregiver for, by non-subscribers and subscribers. The 1,509 non-subscribers (*M* = 1.96, *SD* = 1.18) and 789 subscribers (*M* = 1.90, *SD* = 1.18) analyzed did not demonstrate a significant difference for this variable, *t*(2296) = .625, *p* = .243. Therefore, the statistical analysis revealed no notable differences between the two groups for this variable.

The differences in means for number of computers in the user's residence with Internet access for non-subscribers and subscribers were also examined. The 1,515 non-subscribers (*M* = 2.91, *SD* = 0.81) and 792 subscribers (*M* = 2.95, *SD* = 0.81) did not demonstrate a significant difference in number of computers with Internet access, *t*(2305) = -1.074, *p* = .283. Therefore, this statistical analysis indicated no notable differences between the two groups for the variable of computers with Internet access.

An independent samples *t*-test was conducted on mean differences for the variable of hours spent per week on the Internet by non-subscribers and subscribers. The 1,516 non-subscribers (*M* = 4.56, *SD* = 1.60) and 793 subscribers (*M* = 4.75, *SD* = 1.58)

demonstrated a significant difference in amount of time spent per week on the Internet, $t(2202) = -2.736$, $p = .006$. The difference in means indicated that non-subscribers spent less time on the Internet per week than subscribers.

The differences in means for the variable of hours per week spent on collegiate sport message boards by non-subscribers and subscribers were examined via independent samples t-test. The 1,516 non-subscribers ($M = 2.66$, $SD = 1.04$) and 791 subscribers ($M = 3.10$, $SD = 1.23$) demonstrated a significant difference in the number of hours spent per week on collegiate sport message boards, $t(2305) = -8.934$, $p = .000$. According to the difference in means, non-subscribers spent less time per week on collegiate sport message boards than subscribers.

Also tested using this methodology was the variable for number of collegiate sport message board posts made per week, by non-subscribers and subscribers. The 1,517 non-subscribers ($M = 1.84$, $SD = 0.81$) and 793 subscribers ($M = 2.10$, $SD = 0.85$) demonstrated a significant difference within this variable, $t(2308) = -7.359$, $p = .000$. The difference in means indicated that non-subscribers made fewer posts per week than subscribers.

The difference in means for the usage of collegiate sport message boards at the user's place of employment by non-subscribers and subscribers was examined by independent samples t-test. The 1,498 non-subscribers ($M = 2.15$, $SD = 1.28$) and 776 subscribers ($M = 2.47$, $SD = 1.52$) demonstrated a significant difference in the amount of time spent on collegiate sport message boards at work, $t(2272) = -5.342$, $p = 0.00$. Non-subscribers spent less time on collegiate sport message boards at work than subscribers did, according to the difference in means.

An independent samples *t*-test was also conducted for the variable of average amount spent per year on tickets to athletic events by non-subscribers and subscribers. The 1,514 non-subscribers ($M = 4.09$, $SD = 2.11$) and 788 subscribers ($M = 4.79$, $SD = 2.07$) demonstrated a significant difference in the average amount spent on tickets, $t(2300) = -7.584$, $p = .000$. Based on the difference in means, non-subscribers spent less on average than subscribers on tickets to athletic events.

Also tested using this methodology was the difference in means for how many collegiate athletic events non-subscribers and subscribers attended in person last year. The 1,517 non-subscribers ($M = 2.67$, $SD = 1.38$) and 790 subscribers ($M = 2.89$, $SD = 1.38$) demonstrated a significant difference in the number of collegiate athletic events attended, $t(2305) = -3.610$, $p = .000$. The difference in means indicated that non-subscribers attended fewer collegiate athletic events than subscribers.

The difference in means for the average amount donated to collegiate athletic programs by non-subscribers and subscribers was also examined via independent-samples *t*-test. The 1,511 non-subscribers ($M = 2.14$, $SD = 1.65$) and 789 subscribers ($M = 2.85$, $SD = 1.93$) demonstrated a significant difference in the amount donated on average, $t(2306) = -9.257$, $p = .000$. This difference indicated that non-subscribers did not donate as much money on average to collegiate athletic programs as subscribers did.

The difference in means for the amount of print media read by non-subscribers and subscribers was examined using this statistical method. The 1,515 non-subscribers ($M = 3.33$, $SD = 0.91$) and 790 subscribers ($M = 3.36$, $SD = 0.92$) did not demonstrate a significant difference for this variable, $t(2303) = -.853$, $p = .394$. Therefore, the statistical

analysis indicated no notable differences in print media consumption between the two groups.

An independent samples *t*-test was conducted for the variable of average amount of television watched in an average week by non-subscribers and subscribers. The 1,514 non-subscribers (*M* = 4.07, *SD* = 1.41) and 794 subscribers (*M* = 4.28, *SD* = 1.50) demonstrated a significant difference, $t(2306) = -3.398$, $p = .001$. This difference in means indicated that non-subscribers watched less television on average than subscribers.

The difference in means for the average amount of money spent on subscriptions to sport media, such as *ESPN Full Court* or *Sports Illustrated*, was also examined via this statistical methodology. The 1,514 non-subscribers (*M* = 1.94, *SD* = 1.21) and 794 subscribers (*M* = 2.81, *SD* = 1.50) demonstrated a significant difference, $t(2306) = -15.181$, $p = .000$. Based on the difference in means, non-subscribers spent less per year on subscriptions to sport media than subscribers did.

Research Question 3 asked whether there were significant differences in the demographic characteristics and distributions of non-subscribing and subscribing users of collegiate sport message boards. Crosstabulations and independent samples *t*-tests were utilized to examine the available demographic and usage variables for statistically significant differences. The crosstabulations revealed statistically significant differences at the .05 confidence level for the variables of gender, income level, education level, hours spent per week on the Internet, hours spent per week on message boards, posts made per week on message boards, time spent on message boards at work, money spent on tickets to athletic events, athletic events attended in person, amount donated to college athletic departments, and average amount spent on sport media. The strongest directional

relationship uncovered indicated a weak positive correlation between subscriber status and amount spent on sport media. Independent samples *t*-tests indicated statistically significant differences between the means for the two groups on several variables, including age, gender, household income, hours spent per week on the Internet, hours spent per week on collegiate sport message boards, posts made per week on message boards, time spent on message boards at work, college athletic events attended in person, amount of money donated to college athletic departments, amount of television watched, and amount of money spent on sport media subscriptions.

Research Question 4

The fourth research question of this study asked whether significant differences were found in the demographic characteristics and distributions of non-subscribing and subscribing collegiate sport message board users based on the school of focus. Due to inadequate response rates for certain message boards included in the survey, insufficient data existed to perform a statistically valid and reliable comparison between all message boards. For a breakdown of message boards by school and response frequency, please refer to Tables 2 and 3.

Research Question 5

The fifth research question of this study asked whether significant differences were found in the demographic characteristics and distributions of collegiate sport message board users based on the region and/or conference affiliation of the school of focus. As explained earlier in this section, inadequate cases existed to conduct valid and reliable statistical comparisons of survey respondents based upon schools' conference affiliations. Therefore, the conference affiliation element of Research Question 5 cannot

be effectively examined. For a breakdown of the conferences, please refer to the General Results section of this chapter.

In terms of region, the data set was divided into four separate groups, as discussed earlier in this chapter. These four regions (East, Midwest, South, and West) were then examined in terms of demographic and usage data. One-way analysis of variance (ANOVA) was utilized in SPSS to determine the presence of any significant differences in group means for several variables. An alpha level of .05 was used for all significance tests, and cases were excluded pairwise, in order to ensure that the ANOVAs were calculated on the same sets of cases. In addition, post-hoc Bonferroni tests were conducted for multiple comparisons between group means.

An ANOVA was calculated on responses to the question of gender from respondents in each of the four regions. The analysis was significant, $F(3,1937) = 9.92$, $p = .000$. In the Gender variable, "Female" was coded as 1 and "Male" was coded as "2". Respondents from message boards in the East region group ($M = 1.84$, $SD = .363$) were more likely to be female than respondents from message boards in the South group ($M = 1.92$, $SD = 0.28$), Midwest group ($M = 1.94$, $SD = 0.24$), or West group ($M = 1.93$, $SD = 0.26$). According to the post-hoc test, the differences between the East group and the other three groups were statistically significant, while there were no statistically significant differences between the means of the other three groups.

An ANOVA was also calculated on responses to the question of household income from respondents in each of the four regions. This analysis was significant, $F(3,1937) = 17.22$, $p = .000$. The means indicated that respondents from the South region ($M = 4.65$, $SD = 1.60$) had a lower average reported income than respondents from the

Midwest (*M* = 4.91, *SD* = 1.68), East (*M* = 4.95, *SD* = 1.62), and West (*M* = 5.15, *SD*

1.53). The Bonferroni post-hoc test indicated that significant differences existed in the

means of the South group as they related to the East and West. No other significant

differences were found between the groups.

Responses to the question of education level from each of the four regions were

tested with ANOVA. This analysis was significant, *F*(3,1937) = 32.614, *p* = .000.

Respondents from the South (*M* = 4.53, *SD* = 1.35) reported a lower level of education

completed than those from the Midwest (*M* = 4.80, *SD* = 1.26), West (*M* = 4.86, *SD* =

1.27), and East (*M* = 5.03, *SD* = 1.35). It is important to note that, based upon the interval

scale on which the education variable was constructed, each of the regions' means

indicate that respondents had completed at least a bachelor's degree, and the East

region's mean score indicated that respondents had, on average, completed at least some

graduate school. The post-hoc test indicated that significant differences between means

and existed when the South group was compared to the East and Midwest groups; in

other words, there was a statistically significant difference between the means for

education level between the South and East regions and the South and Midwest regions,

but not between the South and West regions. No other significant differences were found

between the groups.

An ANOVA was performed on responses to the number of children for whom the

user was the primary or shared caregiver, for each of the four regions. The analysis was

significant, *F*(3,1937) = 7.916, *p* = .001. Respondents from the East group (*M* = 1.78, *SD*

= 1.11) reported having fewer children under their primary or shared care than those in

the Midwest (*M* = 1.88, *SD* = 1.17), West (*M* = 2.01, *SD* = 1.16), or South (*M* = 2.02, *SD*

= 1.20). Post-hoc tests indicated only one significant difference between groups, involving the East and South groups. No other significant differences were found between groups.

An ANOVA was also performed on responses to the question of how many hours a week the user estimates that s/he spend on collegiate sport message boards, for each of the four regions. The analysis was significant, $F(3,1937) = 7.854$, $p = .000$. Respondents from the East region ($M = 2.63$, $SD = 1.01$) reported spending the least amount of time on collegiate sport message boards per week, followed by respondents from the Midwest ($M = 2.80$, $SD = 1.05$), South ($M = 2.86$, $SD = 1.09$), and West ($M = 3.01$, $SD = 1.31$). It is important to note that the means for this category do not represent the actual number of hours spent on collegiate sport message boards, but rather represent the interval scale for the variable. A score of "2" on that scale represents 1-to-5 hours, while a score of "3" represents 6-to-10 hours. The Bonferroni post-hoc test indicated that significant differences existed between the means of the East group and those of the South and West. No other significant differences were found between groups.

An ANOVA was conducted on responses to how many posts a user estimated that s/he made per week on collegiate sport message boards, for each of the four regions. The analysis was significant, $F(3,1937) = 14.851$, $p = .000$. Respondents from the East region ($M = 1.79$, $SD = 0.79$) indicated making fewer posts on collegiate sport message boards per week than respondents from the Midwest ($M = 1.87$, $SD = 0.73$), South ($M = 2.02$, $SD = 0.81$), and West ($M = 2.17$, $SD = 1.04$). The post-hoc test indicated a significant difference between means for the West group and means for the East and Midwest groups. The post-hoc test also indicated a significant difference between South group

responses and East group responses. No other significant differences were found between groups.

Responses to the question of whether users utilized collegiate sport message boards at work were examined via ANOVA, for each of the four regions. The analysis was significant, $F(3,1937) = 4.680$, $p = .003$. Respondents from the East region ($M = 2.17$, $SD = 1.28$) used collegiate sports message boards at work less than respondents from the South ($M = 2.31$, $SD = 1.40$), Midwest ($M = 2.41$, $SD = 1.41$), and West ($M = 2.61$, $SD = 1.56$). The Bonferroni post-hoc test indicated only one statistically significant difference, which existed between the East and West groups. No other significant differences were found between groups.

An ANOVA was conducted on the amount spent per year on tickets to athletic events, for each of the four regions. The analysis was significant, $F(3,1937) = 8.649$, $p = .000$. Respondents from the South region ($M = 4.20$, $SD = 2.09$) spent less on tickets to athletic events in the past year than those from the East ($M = 4.36$, $SD = 2.10$), Midwest ($M = 4.65$, $SD = 2.13$), and West ($M = 5.13$, $SD = 2.10$). The post-hoc test discovered significant differences between the West group responses and those from the South and East. The post-hoc test also discovered a significant difference between the responses from the Midwest group and the South group. No other significant differences were found between groups.

An ANOVA was conducted on responses to the question of the number of collegiate athletic events attended in person by the user, for each of the four regions. The analysis was significant, $F(3,1937) = 18.467$, $p = .000$. Respondents from the South region ($M = 2.54$, $SD = 1.25$) attended fewer collegiate athletic events in the past year

than respondents from the East ($M = 2.90$, $SD = 1.45$), West ($M = 3.05$, $SD = 1.30$), and Midwest ($M = 3.15$, $SD = 1.54$). The Bonferroni post-hoc test indicated significant differences between the mean responses for the South group and the mean responses for the East, Midwest, and West groups. No other significant differences were found between groups.

Responses to the question of how much the user donates to college athletic programs were examined with ANOVA, for each of the four regions. The analysis was significant, $F(3,1937) = 52.140$, $p = .000$. Respondents from the South region ($M = 2.11$, $SD = 1.62$) reported donating less money to college athletic programs than those from the Midwest ($M = 2.54$, $SD = 1.79$), East ($M = 2.90$, $SD = 1.45$), and West ($M = 3.05$, $SD = 1.95$). The post-hoc test indicated a significant difference between the South group means and the means of the East, Midwest, and West groups. No other significant difference was found between groups.

An ANOVA was conducted on responses to the question of the amount spent per year on subscriptions to sport media, for each of the four regions. The analysis was significant, $F(3,1937) = 17.662$, $p = .000$. Users from the South region ($M = 2.02$, $SD = 1.24$) reported spending less per year on subscriptions to sport media than users from the East ($M = 2.28$, $SD = 1.34$), West ($M = 2.58$, $SD = 1.53$), and Midwest ($M = 2.62$, $SD = 1.52$). The Bonferroni post-hoc test indicated significant differences between the means for the South group and the means for the other three regions. Also detected was a significant difference between the Midwest group means and the East group means. No other significant differences were found between groups.

Several other ANOVAs were performed, but did not yield statistically significant analysis of variance. The analyses for age ($F[3,1937] = 1.749$, $p = .155$), race ($F[3,1937] = 2.470$, $p = .160$), marital status ($F[3,1937] = 1.975$, $p = .116$), number of computers in primary residence with internet access ($F[3,1937] = .665$, $p = .573$), hours spent per week on the Internet ($F[3,1937] = 2.346$, $p = .071$), and level of employment ($F[3,1937] = 2.096$, $p = .099$) did not yield any significant findings.

Research Question 5 asked whether significant differences were found in demographic and usage variables among the four regions utilized to separate the sample. Using ANOVA, several significant differences were discovered between regions on a number of variables. One example involved the variable of gender, which found statistically significant differences between the East region and the other three regions on the variable of gender, indicating that East region respondents were more likely to be female. Another example involved the variable dealing with the number of collegiate athletic events attended, with the analysis indicating a statistically significant difference between respondents from the South region and respondents from the other three regions. These differences indicated that respondents from the South region attended fewer collegiate athletic events in the past year than other respondents. Several variables yielded no statistically significant findings when examined via ANOVA.

Research Questions 6, 7, 8, and 9

The next three research questions of this study focused on dimensions of gratifications for different groups of users, and whether any clear motivational categories could be inferred from these dimensions. Research Question 6 focused on the dimensions of gratifications for non-subscribing users of collegiate sport message boards. Research

161

Question 7 focused on the dimensions of gratifications for subscribers to collegiate sport message boards. Research Question 8 asked whether any clear motivational categories were apparent from these dimensions of gratification. Finally, Research Question 9 focused on dimensions of gratification for the four NCAA-defined geographic regions.

Research Question 6

The principal components analysis for Research Question 6 yielded four interpretable factors of gratification for non-subscribers of collegiate sport message boards: *interactivity*, *information-gathering*, *diversion*, and *argumentation*. These factors collectively accounted for 46.23% of the variance after Varimax rotation. Three additional potential factors were identified: a *commerce* factor, a *surveillance* factor, and a *pass time* factor. However, the presence of only two items in each of these factors precluded them from reliability testing, rendering them invalid for the purposes of this study. Tables 42, 43, 44, and 45 summarize the factor analysis and internet motives.

The first factor, *interactivity*, accounted for 23.4% of the variance. It contained eight items from the original 40 statements included in the questionnaire (Cronbach's α = .91). The elements of this factor generally dealt with providing input, taking part in discussions, and interacting with the message board community. The factor loadings for the *interactivity* dimension are portrayed in Table 42.

162

Table 42

Factor Scores of Interactivity Dimension for Non-subscribers

Internet Motive Item Factors	1	2	3	4
"I use collegiate sport message boards…"				
Factor 1: Interactivity				
To give my input and opinions	**.84**	.06	.05	.19
To participate in discussions about my favorite team	**.83**	.25	.03	-.01
Because I enjoy interacting with other users	**.79**	.07	.20	.11
To communicate with fellow fans of my school and/or team(s)	**.76**	.16	.09	-.03
To express myself freely	**.76**	-.01	.01	.25
To share information I have learned with the community	**.68**	.13	.17	.15
To discuss X's and O's and general strategy	**.55**	.34	.18	.12
To be able to share my views and experiences anonymously	**.54**	.01	.09	.25

Note. Factor 1 (Interactivity) had an eigenvalue of 9.37

The second factor, *information gathering*, contained six items from the questionnaire (Cronbach's α = .81), and accounted for 11.9% of the variance. This factor contained several statements regarding news and information of the user's team, including usefulness of message boards as a source of unique content. Table 43 contains the factor loadings for the *information gathering* dimension.

Table 43

Factor Scores of Information Gathering Dimension for Non-subscribers

Internet Motive Item Factors	1	2	3	4
"I use collegiate sport message boards…"				
Factor 2: Information Gathering				
Because it offers more in-depth coverage of my favorite team(s) than traditional media	.07	**.80**	.04	-.13
To get information about my favorite team(s) that I can't get elsewhere	.08	**.79**	-.08	-.20
To find out news faster than I would using other types of sport media	.10	**.75**	.03	-.09
To read good analysis about my favorite team from fellow fans	.19	**.66**	.01	-.19
Because I find out things about my favorite team(s) that my friends don't know	.10	**.55**	-.08	.13
To find out the latest gossip about players, coaches, and administrators for my favorite team(s)	-.04	**.53**	-.22	.21
Because it offers more in-depth coverage of my favorite team(s) than traditional media	.07	**.80**	.04	-.13

Note: Factor 2 (Information Gathering) had an eigenvalue of 4.76

Diversion, the third factor, accounted for 6.0% of the variance, and contained four items from the questionnaire (Cronbach's α = .77). Three of this factor's items express interest in discussing non-sports items, while the fourth item expresses an interest in

164

discussing sports other than the two most widely discussed on collegiate sport message boards, namely football and basketball. Table 44 contains the factor loadings for *diversion*.

Table 44

Factor Scores of Diversion Dimension for Non-subscribers

Internet Motive Item Factors	1	2	3	4
"I use collegiate sport message boards…"				
Factor 3: Diversion				
Because I like to use the non-sports forums to discuss all areas of life	.24	-.06	**.79**	.08
To talk about things other than sports, such as politics and religion	.23	-.07	**.78**	.13
To keep up with non-athletic news about my alma mater	-.02	.06	**.66**	.08
To talk about sports other than football and basketball	.22	-.00	**.59**	.10

Note: Factor 3 (Diversion) had an eigenvalue of 2.39

The fourth factor, *argumentation*, accounted for 4.93% of the variance (Cronbach's α = .80), and the loadings for this factor are included in Table 45. The three items included in this factor all represent combative online interaction with other users.

Table 45

Factor Scores of Argumentation Dimension for Non-subscribers

Internet Motive Item Factors	1	2	3	4
"I use collegiate sport message boards…"				
Factor 4: Argumentation				
Because I enjoy putting other users in their place	.16	-.16	.15	**.78**
To argue with other users online	.25	-.12	.16	**.76**
To "smack talk" to fans of other schools	.16	-.13	.18	**.69**

Note: Factor 4 (Argumentation) had an eigenvalue of 1.97

Following the factor analysis, each dimension was summed and averaged. The mean scores for each dimension were: *interactivity* (M = 3.23, SD = 0.98), *information gathering* (M = 4.09, SD = 0.76), *diversion* (M = 2.26, SD = 1.03), and *argumentation* (M = 1.76, SD = 0.93).

Pearson correlations were calculated for the four non-subscriber collegiate sport message board usage factors as they related to Internet and collegiate sport message board usage. The variables chosen for the correlation were amount of time spent on message boards, number of posts made per week, and how often collegiate sport message boards are used at work.

As Table 46 indicates, the first non-subscriber factor, *interactivity*, had highly significant positive correlations with *information gathering* (r[1367] = .27, p = .000), *diversion* (r[1367] = .39, p = .000), and *argumentation* (r[1367] = .37, p = .000). The second factor, *information gathering*, did not have a significant correlation with *diversion* (r[1367] = -.03, p = .228), and had a highly significant but weak positive correlation with

166

argumentation (*r*[1367] = .17, *p* = .000). The third factor, *diversion*, had a highly significant positive correlation with *argumentation* (*r*[1367] = .35, *p* = .000).

Table 46

Correlations for Non-subscriber Factors between Combined Factor Scale Means, Age, and Usage

Measure	1	2	3	4	5	6	7
1. Interactivity	-	.27**	.39**	.37**	.26**	.53**	.18**
2. Information Gathering		-	-.03	.17**	.06*	.05	.05
3. Diversion			-	.35**	.22**	.29**	.19**
4. Argumentation				-	.18**	.29**	.16**
5. Hours on Message Boards					-	.40**.	.36**
6. Posts per week						-	.26**
7. Use at Work							-

Note: * p < .05, ** p < .01

Three of the non-subscriber factors had highly significant positive correlations with the number of hours spent on message boards per week (*M* = 2.67, *SD* = 1.04): *interactivity* (*r*[1367] = .26, *p* = .000), *diversion* (*r*[1367] = .22, *p* = .000), and *argumentation* (*r*[1367] = .18, *p* = .000). *Information gathering* had a significant relationship with hours spent on collegiate sport message boards, albeit a very weak one (*r*[1367] = .06, *p* = .028).

The variable for number of posts per week ($M = 1.85$, $SD = 0.82$) also had highly significant positive correlations with three of the variables, including *interactivity* ($r[1367] = .53$, $p = .000$), *diversion* ($r[1367] = .29$, $p = .000$), and *argumentation* ($r[1367] = .29$, $p = .000$). *Information gathering* did not have a significant relationship with this variable, $r(1367) = .05$, $p = .091$.

Three of the non-subscriber factors had highly significant but weak positive correlations with the amount of time spent using collegiate sport message boards at work ($M = 2.15$, $SD = 1.28$). The *diversion* factor shared the strongest positive correlation with this variable ($r[1367] = .19$, $p = .000$), followed by *interactivity* ($r[1367] = .18$, $p = .000$) and *argumentation* ($r[1367] = .16$, $p = .000$). *Information gathering* did not have a statistically significant relationship with amount of time spent on message boards at work ($r[1367] = .05$, $p = .09$).

Research Question 6 sought to uncover the dimensions of gratification for non-subscribing users of collegiate sport message boards. A factor analysis of the motivation and usage statements included in the questionnaire indicated four distinct factors, namely *interactivity*, *information gathering*, *diversion*, and *argumentation*. Pearson product correlations were performed on these dimensions, both as they related to each other and as they related to variables dealing with message board usage. The *interactivity* dimension had a statistically significant positive correlation with the other three dimensions, as well as a moderate positive correlation with the number of posts made on message boards per week. The *information gathering* dimension did not have a statistically significant correlation with the *diversion* dimension, nor did it have a statistically significant correlation with posts made per week or time spent on message

168

boards while at work. The *diversion* dimension possessed a significant positive correlation with the *argumentation* dimension.

Research Question 7

For Research Question 7, two separate principal components analyses were performed. The first factor analysis performed data reduction on the responses by message board subscribers to the same set of motivation statements that non-subscribers answered. The second factor analysis focused on the set of statements that were available only to those users who identified themselves as subscribers.

The first principal components analysis performed in SPSS for Research Question 7 yielded four interpretable factors: *interactivity*, *information-gathering*, *diversion*, and *argumentation*. These factors collectively accounted for 45.64% of the variance after Varimax rotation. The results of the factor analysis are represented in Table 47, Table 48, Table 49, and Table 50. Four additional potential factors were identified, namely *commerce*, *surveillance*, *community involvement*, and *pass time*. However, three of these potential factors (*commerce*, *surveillance*, and *pass time*) contained only two items and were therefore precluded from reliability testing. Despite the fourth factor (*community involvement*) containing three factors, it was excluded from the study due to having too low a reliability score (Cronbach's $\alpha = .22$).

The first factor for subscribers, *interactivity,* accounted for 21.55% of the variance, and contained eight items from the original 40 statements included in the questionnaire (Cronbach's $\alpha = .90$). This factor shared six items with the same factor for non-subscribers, and contained two differences. The subscriber *interactivity* factor contained two more statements expressing a community mindset than the non-subscriber

169

factor, which instead contained a statement involving the discussion of game strategy and a statement expressing a desire to share views anonymously. Table 47 contains the factor loadings for *interactivity*.

Table 47

Factor Scores of Interactivity Dimension for Subscribers

Internet Motive Item Factors	1	2	3	4
"I use collegiate sport message boards…"				
Factor 1: Interactivity				
To give my input and opinions	**.80**	.16	.04	.25
Because I enjoy interacting with other users	**.79**	.10	.21	.10
To participate in discussions about my favorite team	**.74**	.37	.01	.06
To communicate with fellow fans of my favorite school	**.74**	.23	.16	.01
To express myself freely	**.71**	.03	.06	.28
To share information I have learned with the community	**.65**	.13	.09	.09
To belong to a community of like-minded fans	**.63**	.13	.11	-.21
Because I feel like I'm a part of the message board community	**.61**	-.03	.30	.04

Note: Factor 1 (Interactivity) had an eigenvalue of 8.62

The second factor for subscribers, *information gathering*, contained six items from the questionnaire (Cronbach's α = .81), and accounted for 12.88% of the variance. Two items differed between the subscriber and non-subscriber versions of this factor. The subscriber *information gathering* factor contained two items which dealt with recruiting efforts of the user's team, while the non-subscriber factor instead featured an item

focusing on acquiring information that the user's friends don't know, as well as an item

focusing on finding out gossip about team personnel. The factor loadings for the

subscriber *information gathering* dimension are included in Table 48.

Table 48

Factor Scores of Information Gathering Dimension for Subscribers

Internet Motive Item Factors	1	2	3	4
"I use collegiate sport message boards…"				
Factor 2: Information Gathering				
Because it offers more in-depth coverage of my favorite team(s) than traditional sports media	.13	**.74**	-.01	-.23
To get information about my favorite team(s) that I can't get elsewhere	.15	**.70**	-.04	-.32
To find out news faster than I would using other types of sports media	.11	**.70**	-.03	-.20
To talk about my team's recruiting efforts	.30	**.64**	-.03	.05
To see video clips of top players and/or recruits	-.02	**.61**	-.08	.15
To read good analysis about my favorite team from fellow fans	.28	**.57**	-.02	-.18

Note: Factor 2 (Information Gathering) had an eigenvalue of 5.15

The third factor, *diversion*, also contained six items from the questionnaire

(Cronbach's α = .79), and accounted for 6.35% of the variance. The factor loadings for

the subscriber *diversion* dimension are reported in Table 49. This factor included all four

items contained in the *diversion* factor for non-subscribers, but added two additional items: staying in touch with old friends and classmates, and discussing games in progress.

Table 49

Factor Scores of Diversion Dimension for Subscribers

Internet Motive Item Factors	1	2	3	4
"I use collegiate sport message boards…"				
Factor 3: Diversion				
Because I like to use the non-sports forums to discuss all areas of life	.17	-.05	**.79**	.21
To talk about things other than sports, such as politics and religion	.18	-.06	**.78**	.26
To talk about sports other than football or basketball	.12	-.01	**.68**	.00
To keep up with non-athletic news about my alma mater	.06	-.03	**.60**	-.00
To stay in touch with old friends and classmates	.13	-.16	**.52**	.15
To discuss games in progress	.22	.29	**.45**	.30

Note: Factor 3 (Diversion) had an eigenvalue of 2.54

The fourth and final factor, *argumentation*, contained three items from the questionnaire (Cronbach's α = .80), and accounted for 4.87% of the variance. This factor contained three of the four items in the non-subscriber *argumentation* factor, excluding the item pertaining to complaining when things are going wrong for the user's favorite team. Table 50 contains the factor loadings for the subscriber version of this dimension.

Table 50

Factor Scores of Argumentation Dimension for Subscribers

Internet Motive Item Factors	1	2	3	4
"I use collegiate sport message boards…"				
Factor 4: Argumentation				
Because I enjoy putting other users in their place	.07	-.23	.16	**.73**
To argue with other users online	.19	-.18	.22	**.71**
To "smack talk" to fans of other schools	.09	-.05	.19	**.70**

Note: Factor 4 (Argumentation) had an eigenvalue of 1.95

As with the factor analysis for non-subscribers, the individual dimensions of each of the four factors in this analysis were summed and averaged. The mean scores for each dimension were: *interactivity* (M = 3.46, SD = 0.91), *information gathering* (M = 4.26, SD = 0.70), *diversion* (M = 2.24, SD = 0.89), and *argumentation* (M = 1.79, SD = 0.93).

Following the factor analysis, Pearson product correlations were calculated for subscriber collegiate sport message board usage factors as they related to Internet and collegiate sport message board usage, the results of which can be seen in Table 51. The first factor, *interactivity*, demonstrated a highly significant positive correlation with the factors of *information gathering* (r[716] = .33, p = .000), *diversion* (r[716] = .40, p = .000), and *argumentation* (r[716] = .27, p = .000). *Information gathering* demonstrated no significant relationship with *diversion* (r[716] = -.03, p = .362), and a highly significant negative correlation with *argumentation* (r[716] = -.22, p = .000). The *diversion* factor demonstrated a highly significant moderate positive correlation with *argumentation* (r[716] = .41, p = .000).

Table 51

Correlations for Subscriber Factors between Combined Factor Scale Means, Age, and

Usage

Measure	1	2	3	4	5	6	7
1. Interactivity	-	.33**	.40**	.27**	.20**	.45**	.15**
2. Information Gathering		-	-.03	-.22**	.15**	.13**	.12**
3. Diversion			-	.41**	.26**	.29**	.14**
4. Argumentation				-	.12**	.26**	.11**
5. Hours on Message Boards					-	.43**.	.41**
6. Posts per week						-	.20**
7. Use at Work							-

Note: * p < .05, ** p < .01

All four factors demonstrated a highly significant positive correlation with the hours spent per week on collegiate sport message boards ($M = 3.09$, $SD = 1.23$). The *interactivity* factor demonstrated a weak positive correlation with the variable ($r[716] = .20$, $p = .000$). *Information gathering* demonstrated a very weak positive correlation with hours spent per week on collegiate sport message boards ($r[716] = .15$, $p = .000$). *Diversion* demonstrated a weak positive correlation with the variable ($r[716] = .26$, $p = .000$), and *argumentation* demonstrated a very weak positive correlation with the variable ($r[716] = .12$, $p = .001$).

All four factors also demonstrated highly significant positive correlations with the variable for average number of posts made per week on collegiate sport message boards ($M = 2.10$, $SD = 0.84$). *Interactivity* demonstrated a moderate positive correlation ($r[716] = .45$, $p = .000$), *information gathering* demonstrated a very weak positive correlation ($r[716] = .14$, $p = .000$), *diversion* demonstrated a weak positive correlation ($r[716] = .29$, $p = .000$), and *argumentation* demonstrated a weak positive correlation ($r[716] = .26$, $p = .000$). For the variable dealing with the usage of collegiate sport message boards at work ($M = 2.49$, $SD = 1.53$), all four factors demonstrated highly significant but very weak positive correlations.

The second principal components analysis for Research Question 7 was performed in SPSS on the statements available only to subscribers, and yielded three interpretable factors: *information gathering*, *community*, and *patronage*. These three factors accounted for 55.5% of the variance after Varimax rotation, and the item scores for these factors are detailed in Table 52, Table 53, and Table 54.

The first factor, *premium information*, accounted for 34.36% of the total variance, and contained seven of the 20 statements from the questionnaire (Cronbach's $\alpha = .88$). All statements contained in this factor relate to the acquisition, quality, and uniqueness of information on premium message boards to which the user subscribes, and it is the only factor which contains items relating to the gathering of information. Table 52 contains the loadings for this dimension.

Table 52

Factor Scores of Premium Information Dimension for Subscriber-only Questions

Premium Internet Motive Item Factors	1	2	3
"I am a premium subscriber to a collegiate sport message board…"			
Factor 1: Premium Information			
Because I get access to insider information on the premium message board(s)	**.84**	.17	.16
To gain access to premium content on the message board, such as videos, updates, and recruiting news	**.83**	.04	-.02
To learn things about my favorite team(s) that the media doesn't know	**.77**	.15	.08
To find out news about my team faster than other people	**.76**	.18	.16
To get access to premium content on the front page of the web site	**.73**	.13	.05
Because the quality of premium content is excellent	**.69**	.32	.08
To learn things about my favorite team(s) that my friends don't know	**.61**	.13	.31

Note: Factor 1 (Premium Information) had an eigenvalue of 6.87

The second factor, *community*, contained eight of the items from the questionnaire (Cronbach's α = .87), and accounted for 13.51% of the total variance. This factor contained eight items from the questionnaire, the majority of which dealt with either the high perceived quality of the community of users on the premium message boards, or the

low perceived quality of the community of users on the non-subscriber message boards. The factor loadings for this dimension are displayed in Table 53.

Table 53

Factor Scores of Community Dimension for Subscriber-only Questions

Premium Internet Motive Item Factors	1	2	3
"I am a premium subscriber to a collegiate sport message board…"			
Factor 2: Community			
Because there is less smack talk on the premium board	.12	**.77**	.02
Because the quality of users on the premium side is much better	.27	**.75**	.17
Because I prefer to participate in discussions on the premium message board(s) instead of the free board(s)	.17	**.68**	.21
Because there are too many fans from other schools on the free boards	.14	**.67**	.02
Because I enjoy the community of users on the premium message board	.23	**.66**	.33
Because people on the non-premium boards are more negative about my team	.00	**.64**	.16
Because the users are generally more knowledgeable	.38	**.63**	.13

Note: Factor 2 (Community) had an eigenvalue of 2.70

The third factor, *patronage*, accounted for 7.62% of the total variance, and contained five items from the questionnaire (Cronbach's α = .70). The items in this factor include the user feeling that a subscription supports their favorite school, makes them feel like more of a fan, and helps to support the web site that runs the community. Also

included is a desire to provide insider information to fellow fans, as well as network with the general fan community. Table 54 reveals the factor loadings for this dimension.

Table 54

Factor Scores of Patronage Dimension for Subscriber-only Questions

Premium Internet Motive Item Factors	1	2	3
"I am a premium subscriber to a collegiate sport message board…"			
Factor 3: Patronage			
Because I feel as though I am supporting my school	.07	.08	**.76**
Because it makes me feel like more of a fan	.08	.17	**.75**
To give out "insider" information to my fellow fans	.21	.06	**.61**
To support the web site or company that runs the message board community	-.06	.25	**.51**

Note: Factor 3 (Patronage) had an eigenvalue of 1.53

The individual dimensions of each of the three factors in this analysis were summed and averaged. The mean scores for each dimension were: *premium information* ($M = 4.12$, $SD = 0.86$), *community* ($M = 3.37$, $SD = 0.94$), and *patronage* ($M = 2.71$, $SD = 0.93$).

Following the factor analysis, Pearson correlations were calculated for the three premium-only factors as they related to Internet and collegiate sport message board usage. The first factor, *premium information*, had highly significant positive correlations with both the *community* factor ($r[724] = .46$, $p = .000$) and the *patronage* factor ($r[724]$

= .26, *p* = .000). The *community* factor also had a highly significant moderate positive correlation with the *patronage* factor (*r*[724] = .42, *p* = .000).

When correlated with the number of hours spent on collegiate sport message boards (*M* = 3.11, *SD* = 1.24), the *premium information* (*r*[724] = .03, *p* = 443), *community* (*r*[724] = .03, *p* = .422), and *patronage* (*r*[724] = .05, *p* = .212) factors all failed to demonstrate a statistically significant relationship. Two of the three factors demonstrated a significant relationship with the number of posts made per week on collegiate sport message boards (*M* = 2.11, *SD* = 0.84). The *patronage* factor demonstrated a highly significant but very weak positive relationship with number of posts made (*r*[724] = .10, *p* = 006), while the *community* factor demonstrated a significant but very weak positive relationship (*r*[724] = .08, *p* = .035). The *premium information* factor did not possess a statistically significant relationship with number of posts per week (*r*[724] = .00, *p* = .986). Correlations with amount of time spent on collegiate sport message boards at work (*M* = 2.50, *SD* = 1.54) yielded only one statistically significant relationship, with the *community* factor (*r*[724] = .09, *p* = .021). The factors of *premium information* (*r*[724] = .07, *p* = .061) and *patronage* (*r*[724] = .07, *p* = .064) did not meet the threshold of statistical significance in their relationship with collegiate sport message board usage at work. Table 55 denotes the intercorrelations between variables.

Table 55

Correlations for Subscriber-only Factors between Combined Factor Scale Means, Age,

and Usage

Measure	1	2	3	4	5	6
1. Premium Information	-	.46**	.26**	.03	.00	.07
2. Community		-	.42**	.03	.08*	.09*
3. Patronage			-	.05	.10**	.07
4. Hours on Message Boards				-	.44**.	.40**
5. Posts per week					-	.21**
6. Use at Work						-

Note: * p < .05, ** p < .01

Correlations were also performed on the two separate sets of subscriber factors, to see if the items were related to one another. The strongest statistically significant correlation between the four regular subscriber factors and the three premium-only factors existed between *information gathering* and *premium information* ($r[750] = .62$, $p = .000$). This correlation represented the strongest such correlation between two dimensions of gratification.

The premium-only *community* factor had statistically significant but weak correlations with the *interactivity* ($r[747] = .33$, $p = .000$) and *information gathering* ($r[749] = .33$, $p = .000$) factors. There was no statistically significant correlation between the *community* factor and the *argumentation* factor, and a very weak statistically

significant correlation between the *community* and *diversion* factors ($r[749] = .10$, $p = .007$).

The premium-only *patronage* factor had statistically significant but weak relationships with all four regular subscriber factors. The strongest such correlation was with *interactivity* ($r[748] = .33$, $p = .000$).

Research Question 7 asked what the dimensions of gratification for collegiate sport message board subscribers were. Using factor analysis, four factors were identified as dimensions of gratification for subscribers: *interactivity, information gathering, diversion, and argumentation*. As with the data analyzed in Research Question 6, the *interactivity* factor was found to have a statistically significant positive correlation with the other three dimensions. The *information gathering* dimension did not have a statistically significant relationship with *diversion*, and had a statistically significant but weak negative relationship with *argumentation*. An additional factor analysis was performed on the 20 subscriber-only questions, to ascertain the dimensions of gratification of subscribers for those items which relate solely to the purchase of a premium subscription to a collegiate sport message board. The factor analysis revealed three dimensions for subscribers in this area, namely *premium information, community,* and *patronage*. Pearson product correlations for these dimensions discovered a statistically significant moderate positive relationship between the *premium information* and *community* factors, as well as the *community* and *patronage* factors. The *premium information* factor did not have a statistically significant relationship with any of the usage variables to which it was correlated, while the *community* and *patronage* factors

had statistically significant but very weak positive correlations with the number of posts made per week on collegiate sport message boards.

Research Question 8

Research Question 8 asked whether there were any clear motivational categories or dimensions of gratification for collegiate sport message board users. Unlike the analysis performed in the previous section, where users were split into non-subscribers and subscribers, this section examined the entire sample of collegiate sport message board users. This analysis utilized the motivational statements available to all users, and used SPSS to examine the full range of responses from both non-subscribers and subscribers. As with the factor analyses for non-subscribers and subscribers individually, this analysis yielded four interpretable factors: *interactivity*, *information gathering*, *diversion*, and *argumentation*. These four factors accounted for 45.88% of the total variance after Varimax rotation. Table 56, Table 57, Table 58, and Table 59 contain the items and loadings for each factor.

The first factor from the combined analysis, *interactivity*, accounted for 22.8% of the variance. This factor contained nine items from the questionnaire (Cronbach's α = .90). The combined factor contained all eight items from the *interactivity* factor for non-subscribers, with the combined factor additionally containing the motivational statement "Because I feel like I'm part of the message board community." The combined factor contained seven of the eight items from the *interactivity* factor for subscribers, with only "To belong to a community of like-minded fans" missing, and with the combined factor additionally containing the motivational statements "To discuss X's and O's and general strategy" and "To be able to share my views and experiences anonymously." The items in

the combined *interactivity* factor reflect the same basic principles of user interaction with the community as do the *interactivity* factors for non-subscribers and subscribers, respectively. Table 56 contains the loadings for the combined *interactivity* dimension.

Table 56

Factor Scores of Interactivity Dimension for All Respondents

Internet Motive Item Factors	1	2	3	4
"I use collegiate sport message boards…"				
Factor 1: Interactivity				
To give my input and opinions	**.85**	.11	.08	.13
To participate in discussions about my favorite team	**.78**	.30	.27	.14
Because I enjoy interacting with other users	**.76**	.17	.28	.08
To express myself freely	**.76**	.05	.17	.17
To communicate with fellow fans of my school and/or team(s)	**.71**	.27	.19	.02
To share information I have learned with the community	**.65**	.18	.22	.17
Because I feel like I'm a part of the message board community	**.56**	.21	.41	.03
To discuss X's and O's and general strategy	**.53**	.31	.12	.15
To be able to share my views and experiences anonymously	**.52**	.06	.18	.29

Note: Factor 1 (Interactivity) had an eigenvalue of 9.12

The second factor from the combined analysis, *information gathering*, accounted for 12.14% of the variance. This factor contained eight items from the questionnaire (Cronbach's $\alpha = .78$). The combined factor contained all six items from the *information gathering* factor for non-subscribers, with the combined factor containing two additional

183

motivational statements: "Because I enjoy reading what other users write" and "To see video clips of top players and recruits." The combined factor contained five of the six items from the *information gathering* factor for subscribers, excluding only "To talk about my team's recruiting efforts", and including three factors which did not appear in the subscriber factor; specifically, "Because I enjoy reading what other users write", "To find out the latest gossip about players, coaches, and administrators for my favorite team(s)", and "Because I find out things about my favorite team(s) that my friends don't know." The items in the combined *information gathering* factor appear to more closely match the non-subscriber version of the factor, particularly since the fourth-highest loaded factor for the subscriber version ("To talk about my team's recruiting efforts") is not included in the combined factor. Table 57 reveals the item loadings for this dimension.

Table 57

Factor Scores of Information Gathering Dimension for All Respondents

Internet Motive Item Factors	1	2	3	4
"I use collegiate sport message boards…"				
Factor 2: Information Gathering				
To get information about my favorite team(s) that I can't get elsewhere	.07	**.78**	-.16	-.14
Because it offers more in-depth coverage of my favorite team(s) than traditional media	.08	**.74**	-.10	-.11
To read good analysis about my favorite team(s) from fellow fans	.17	**.73**	-.02	-.09
To find out news faster than I would using other types of sports media	.09	**.70**	-.09	-.05
Because I enjoy reading what other users write	.18	**.59**	.08	.01
Because I find out things about my favorite team(s) that my friends don't know	.10	**.53**	.01	.30
To find out the latest gossip about players, coaches, and administrators for my favorite team(s)	-.04	**.52**	-.14	.33
To see video clips of top players and recruits	.07	**.42**	.02	.26

Note: Factor 2 (Information Gathering) had an eigenvalue of 4.86

The third factor from the combined analysis, *diversion*, accounted for 6.05% of the variance. This factor contained six items from the questionnaire (Cronbach's α = .80). The combined factor contained all four items from the non-subscriber version of the

diversion factor, with two additional motivational statements: "To stay in touch with old friends and classmates" and "To meet new and interesting people." The combined factor contained five of the six items from the subscriber version of the *diversion* factor, missing only "To discuss games in progress", and adding "To meet new and interesting people." The items in the combined *diversion* factor appear to reflect the same principles as the non-subscriber and subscriber versions. Table 58 contains the loadings for this dimension.

Table 58

Factor Scores of Diversion Dimension for All Respondents

Internet Motive Item Factors	1	2	3	4
"I use collegiate sport message boards…"				
Factor 3: Diversion				
Because I like to use the non-sports forums to discuss all issues of life	.20	-.07	**.71**	.10
To talk about things other than sports, such as politics and religion	.21	-.09	**.69**	.13
To keep up with non-athletic news about my alma mater	-.03	.07	**.66**	.15
To stay in touch with old friends and classmates	.15	-.12	**.61**	.18
To talk about sports other than football and basketball	.16	-.01	**.61**	.08
To meet new and interesting people	.43	.08	**.55**	.06

Note: Factor 3 (Diversion) had an eigenvalue of 2.42

Finally, the fourth factor from the combined analysis, *argumentation*, accounted for 4.88% of the variance. This factor contained five items from the questionnaire (Cronbach's α = .72), and its loadings are described in Table 59. The combined factor contained all three of the items from both the non-subscriber and subscriber versions of the *argumentation* factor. Additionally, the combined version of the factor added two news items: "To see what people on rival boards are saying about my team(s)" and "To see how fans of other teams are reacting to news about their program."

Table 59

Factor Scores of Argumentation Dimension for All Respondents

Internet Motive Item Factors	1	2	3	4
"I use collegiate sport message boards…"				
Factor 4: Argumentation				
To "smack talk" to fans of other schools	.25	-.24	.18	**.64**
Because I enjoy putting other users in their place	.27	-.36	.16	**.59**
To see what people on rival boards are saying about my team(s)	.04	.26	.02	**.58**
To argue with other users online	.37	-.29	.16	**.57**
To see how fans of other teams are reacting to news about their program	.10	.28	.06	**.55**

Note: Factor 4 (Argumentation) had an eigenvalue of 1.95

As with the non-subscriber and subscriber factor analyses, the four combined factors were summed and averaged. The mean scores for each factor were: *interactivity*

(*M* = 3.26, *SD* = 0.93), *information gathering* (*M* = 4.03, *SD* = 0.68), *diversion* (*M* = 2.17, *SD* = 0.88), and *argumentation* (*M* = 2.30, *SD* = 0.82).

Pearson correlations were calculated for the four combined collegiate sport message board usage factors as they related to amount of time spent on message boards, number of posts made per week, and how often collegiate sport message boards are used at work. As Table 60 indicates, the first combined factor, *interactivity*, had highly significant positive correlations with *information gathering* (*r*[2035] = .34, *p* = .000), *diversion* (*r*[2035] = .46, *p* = .000), and *argumentation* (*r*[2035] = .38, *p* = .000). The second factor, *information gathering*, did not have a significant correlation with *diversion* (*r*[2035] = -.01, *p* = .660), and had a significant but very weak correlation with *argumentation* (*r*[2035] = .05, *p* = .016). The third factor, *diversion*, had a highly significant positive correlation with *argumentation* (*r*[2035] = .39, *p* = .000).

Table 60

Correlations between Combined Factor Scale Means, Age, and Usage

Measure	1	2	3	4	5	6	7
1. Interactivity	-	.34**	.46**	.38**	.25**	.50**	.18**
2. Information Gathering		-	-.01	.05*	.13**	.09**	.10**
3. Diversion			-	.39**	.22**	.29**	.16**
4. Argumentation				-	.17**	.25**	.14**
5. Hours on Message Boards					-	.43**.	.39**
6. Posts per week						-	.25**
7. Use at Work							-

Note: * p < .05, ** p < .01

All four factors also had a significant but weak positive correlation with the variable of hours spent on message boards ($M = 2.81$, $SD = 1.12$). The strongest correlation existed between *interactivity* and hours spent on message boards, $r(2035) = .25$, $p = .000$. The four factors had a significant positive correlation with the number of posts per week made on message boards ($M = 1.94$, $SD = 0.83$). The *interactivity* variable possessed the strongest such correlation, $r(2035) = .50$, $p = .000$. Also noteworthy was the correlation between *diversion* and posts per week, $r(2035) = .29$, $p = .000$. Finally, each of the four factors had a significant but weak positive correlation with the usage of collegiate sport message boards at work ($M = 2.26$, $SD = 1.36$). Again, of the four

combined factors, the *interactivity* factor had the strongest correlation, $r(2035) = .18$, $p = .000$.

Research Question 8 asked whether there were any clear dimensions of collegiate sport message board usage for the full sample of respondents. A factor analysis revealed four dimensions: *interactivity, information gathering, diversion, and argumentation*. As with the findings for Research Questions 6 and 7, the data analysis for Research Question 8 indicated that the *interactivity* dimension had statistically significant positive correlations with the other three factors, as well as a statistically significant moderate positive correlation with number of posts made per week. *Information gathering* did not have a statistically significant correlation with *diversion*, and had a statistically significant but extremely weak positive correlation with *argumentation*.

Research Question 9

The final research question of this study asked how the dimensions of gratification for collegiate sport message board users varied based upon demographics, school of focus, and geographic region. As noted earlier in this chapter, there were insufficient responses on a school-by-school focus to allow for a statistically valid and significant comparison of factors based on school of focus. Furthermore, the key demographics intended for this analysis, namely age and race, were unsuitable for a factor analysis due to the vast majority of both variables falling under one particular gender (male) or racial (White) group. Therefore, no attempt was made to examine dimensions of gratification for these demographic variables.

For dimensions of gratification based upon geographic region, survey responses from the 14 message boards that participated in the study were divided into four regions,

190

based upon the NCAA's separation of Division I member conferences into East, Midwest, South, and West regions, as discussed earlier in this section. An individual principal components analysis for each region was then conducted on the 40-question set of collegiate sport message board motivations which were asked of all users. The results of these factor analyses were then compared, to see whether the dimensions of motivation for collegiate sport message boards were similar from region to region, as well as whether the individual components of these dimensions were similar in nature.

For the East region, a principal components analysis in SPSS revealed three factors which explained 42.18% of the total variance after Varimax rotation. The three factors identified were *interactivity* (13 items, 22.91% of variance), *information gathering* (six items, 13.04% of variance), and *diversion* (six items, 6.24% of variance). Each of the factors' items was examined collectively using scale reliability tests, and the three factors all demonstrated a suitable reliability figure ($\alpha > .70$). The factor analysis also identified two additional potential factors. The first, a *community* factor, included the items "To belong to a community of like-minded fans", "To feel like I'm part of the fan community even though I live far away", "Because I feel like I'm a part of the message board community", and "Because I enjoy reading what other users write." However, this factor did not meet the threshold for scale reliability (Cronbach's $\alpha = .64$), and was therefore not included. The second potential factor was an *argumentation* factor, which contained the items "To see how fans of other teams are reacting to news about their program", "To 'smack talk' to fans of other schools", and "To see what people on rival boards are saying about my team(s)." However, this factor also did not meet the threshold

for scale reliability (Cronbach's α = .69), and was therefore not included. Table 61, Table 62, and Table 63 contain the items and loadings for the factor analysis of the East region.

Table 61

Factor Scores of Interactivity Dimension for East Region

Internet Motive Item Factors	1	2	3
"I use collegiate sport message boards…"			
Factor 1: Interactivity			
To give my input and opinions	**.87**	.04	.04
To participate in discussions about my favorite team	**.81**	.28	.03
To express myself freely	**.78**	-.10	.07
Because I enjoy interacting with other users	**.77**	.07	.23
To communicate with fellow fans of my school and/or team(s)	**.73**	.23	.13
To share information I have learned with the community	**.63**	.07	.22
To discuss X's and O's and general strategy	**.59**	.22	.17
Because I feel like I'm a part of the message board community	**.54**	-.01	.26
To be able to share my views and experiences anonymously	**.54**	-.20	.14
To complain about things going wrong with my favorite team	**.54**	-.04	-.00
To talk about my team's recruiting efforts	**.52**	.46	-.00
To argue with other users online	**.45**	-.33	.23
To discuss games in progress	**.44**	.06	.30

Note: Factor 1 (Interactivity) had an eigenvalue of 9.16

192

Table 62

Factor Scores of Information Gathering Dimension for East Region

Internet Motive Item Factors	1	2	3
"I use collegiate sport message boards…"			
Factor 2: Information Gathering			
To get information about my favorite team(s) that I can't get elsewhere	.04	**.83**	-.06
Because it offers more in-depth coverage of my favorite team(s) than traditional sports media	.06	**.82**	-.04
To find out news faster than I would using other types of sports media	.11	**.76**	-.02
To read good analysis about my favorite team(s) from fellow fans	.08	**.63**	-.03
To find out the latest gossip about players, coaches, and administrators for my favorite team(s)	.02	**.55**	-.15
Because I find out things about my favorite team(s) that my friends don't know	.11	**.41**	-.15

Note: Factor 2 (Information Gathering) had an eigenvalue of 5.22

Table 63

Factor Scores of Diversion Dimension for East Region

Internet Motive Item Factors	1	2	3
"I use collegiate sport message boards…"			
Factor 3: Diversion			
Because I like to use the non-sports forums to discuss all issues of life	.26	-.13	**.74**
To talk about things other than sports, such as politics and religion	.27	-.17	**.73**
To talk about sports other than football and basketball	.21	.49	**.68**
To keep up with non-athletic news about my alma mater	-.07	.00	**.67**
To stay in touch with old friends and classmates	.13	-.28	**.53**
To meet new and interesting people	.38	-.10	**.43**

Note: Factor 3 (Diversion) had an eigenvalue of 2.49

The principal components analysis conducted in SPSS for the Midwest region yielded three factors, which explained 41.68% of the total variance after Varimax rotation. The three factors identified were *interactivity* (15 items, 22.87% of variance), *information gathering* (four items, 12.29% of variance), and *diversion* (five items, 6.52% of variance), and each factor's composite scale had a Cronbach's Alpha of at least .70. Table 64, Table 65, and Table 66 contain the items and loadings for this factor analysis. These factors and their items will be discussed in comparison with the other regions' factors later in this section.

Table 64

Factor Scores of Interactivity Dimension for Midwest Region

Internet Motive Item Factors	1	2	3
"I use collegiate sport message boards…"			
Factor 1: Interactivity			
Because I enjoy interacting with other users	**.83**	.02	.14
To give my input and opinions	**.81**	-.00	.06
To participate in discussions about my favorite team	**.79**	.27	.01
To express myself freely	**.78**	-.06	.11
To communicate with fellow fans of my school and/or team(s)	**.70**	.28	.08
Because I feel like I'm a part of the message board community	**.69**	.05	.21
To share information I have learned with the community	**.68**	.20	.20
To discuss X's and O's and general strategy	**.63**	.30	.17
To be able to share my views and experiences anonymously	**.61**	-.22	.08
To meet new and interesting people	**.55**	-.09	.38
To complain about things going wrong with my favorite team(s)	**.53**	-.16	-.00
To belong to a community of like-minded fans	**.51**	.27	.15
To talk about my team's recruiting efforts	**.46**	.36	.07
To feel like I'm part of the fan community even though I live far away	**.42**	.08	.09
To discuss games in progress	**.42**	.17	.29

Note: Factor 1 (Interactivity) had an eigenvalue of 9.15

Table 65

Factor Scores of Information Gathering Dimension for Midwest Region

Internet Motive Item Factors	1	2	3
"I use collegiate sport message boards…"			
Factor 2: Information Gathering			
Because it offers more in-depth coverage of my favorite team(s) than traditional sports media	.05	**.86**	-.08
To get information about my favorite team(s) that I can't get elsewhere	.11	**.82**	-.06
To find out news faster than I would using other types of sports media	.11	**.74**	.05
To read good analysis about my favorite team(s) from fellow fans	.25	**.62**	-.06

Note: Factor 2 (Information Gathering) had an eigenvalue of 4.92

Table 66

Factor Scores of Diversion Dimension for Midwest Region

Internet Motive Item Factors	1	2	3
"I use collegiate sport message boards…"			
Factor 3: Diversion			
Because I like to use the non-sports forums to discuss all issues of life	.12	-.02	**.75**
To talk about things other than sports, such as politics and religion	.17	-.05	**.73**
To stay in touch with old friends and classmates	.25	-.05	**.72**
To talk about sports other than football and basketball	.19	-.16	**.63**
To keep up with non-athletic news about my alma mater	.02	.09	**.62**

Note: Factor 3 (Diversion) had an eigenvalue of 2.61

Principal components analysis in SPSS for the South region yielded four distinct factors, which accounted for 45.59% of the total variance after Varimax rotation. The four factors, included in Table 67, Table 68, Table 69, and Table 70, were *interactivity* (10 items, 23.20% of variance), *information gathering* (eight items, 11.83% of variance), *diversion* (five items, 5.78% of variance), and *argumentation* (four items, 4.78% of variance). Each of the four factors contained at least three items, and those items combined possessed a Cronbach's Alpha rating of .70 or above in scale reliability testing.

Table 67

Factor Scores of Interactivity Dimension for South Region

Internet Motive Item Factors	1	2	3	4
"I use collegiate sport message boards…"				
Factor 1: Interactivity				
To give my input and opinions	**.84**	.14	.07	.17
To participate in discussions about my favorite team	**.80**	.30	.02	-.05
Because I enjoy interacting with other users	**.78**	.10	.22	.10
To communicate with fellow fans of my school and/or team(s)	**.76**	.15	.11	-.07
To express myself freely	**.74**	.03	.08	.22
To share information I have learned with the community	**.69**	.14	.14	.15
Because I feel like I'm a part of the message board community	**.58**	.08	.32	.04
To belong to a community of like-minded fans	**.54**	.18	.11	-.14
To be able to share my views and experiences anonymously	**.52**	.04	.04	.25
To discuss X's and O's and general strategy	**.49**	.43	.13	.10

Note: Factor 1 (Interactivity) had an eigenvalue of 9.05

Table 68

Factor Scores of Information Gathering Dimension for South Region

Internet Motive Item Factors	1	2	3	4
"I use collegiate sport message boards…"				
Factor 2: Information Gathering				
Because it offers more in-depth coverage of my favorite team(s) than traditional media	.11	**.74**	.07	-.17
To find out news faster than I would using other types of sports media	.09	**.72**	.01	-.13
To get information about my favorite team(s) that I can't get elsewhere	.13	**.72**	-.09	-.26
To read good analysis about my favorite team(s) from fellow fans	.24	**.66**	.00	-.18
To talk about my team's recruiting efforts	.36	**.55**	-.04	.04
To see video clips of top players and/or recruits	.10	**.55**	-.00	.10
Because I find out things about my favorite team(s) that my friends don't know	.12	**.48**	-.04	.16
To hear fair and balanced views on things	.19	**.45**	.12	.13

Note: Factor 2 (Information Gathering) had an eigenvalue of 4.61

Table 69

Factor Scores of Diversion Dimension for South Region

Internet Motive Item Factors	1	2	3	4
"I use collegiate sport message boards…"				
Factor 3: Diversion				
Because I like to use the non-sports forums to discuss all issues of life	.18	-.06	**.81**	.08
To talk about things other than sports, such as politics and religion	.17	-.07	**.80**	.13
To keep up non-athletic news about my alma mater	.07	.04	**.66**	.06
To talk about sports other than football and basketball	.17	.05	**.62**	.12
To discuss games in progress	.33	.16	**.41**	.17

Note: Factor 3 (Diversion) had an eigenvalue of 2.25

Table 70

Factor Scores of Argumentation Dimension for South Region

Internet Motive Item Factors	1	2	3	4
"I use collegiate sport message boards…"				
Factor 4: Argumentation				
Because I enjoy putting other users in their place	.12	-.16	.11	**.80**
To argue with other users online	.20	-.15	.16	**.76**
To "smack talk" to fans of other schools	.09	-.11	.18	**.68**
To complain about things going wrong with my favorite team(s)	.43	.10	.06	**.47**

Note: Factor 4 (Argumentation) had an eigenvalue of 1.86

For the West region, a principal components analysis performed in SPSS revealed four identifiable factors which accounted for 49.30% of the total variance after Varimax rotation. The four factors identified were *interactivity* (nine items, 24.48% of variance), *information gathering* (six items, 13.05% of variance), *diversion* (five items, 6.44% of variance), and *argumentation* (three items, 5.33% of variance). The scales for all four factors possessed a reliability scale Alpha score of over .70. Table 71, Table 72, Table 73, and Table 74 contain the factor loading and items for each dimension.

Table 71

Factor Scores of Interactivity Dimension for West Region

Internet Motive Item Factors	1	2	3	4
"I use collegiate sport message boards…"				
Factor 1: Interactivity				
To communicate with fellow fans of my school and/or team(s)	.84	.09	.25	.07
To participate in discussions about my favorite team	.79	.22	.07	.11
Because I enjoy interacting with other users	.75	.09	.10	.22
To give my inputs and opinions	.72	-.02	-.06	.38
To belong to a community of like-minded fans	.70	.30	.23	-.06
To share information I have learned with the community	.70	.05	.12	.09
To express myself freely	.67	-.03	.11	.43
To meet new and interesting people	.58	.20	.39	.10
Because I feel like I'm a part of the message board community	.53	.20	.43	.10

Note: Factor 1 (Interactivity) had an eigenvalue of 9.79

Table 72

Factor Scores of Information Gathering Dimension for West Region

Internet Motive Item Factors	1	2	3	4
"I use collegiate sport message boards…"				
Factor 2: Information Gathering				
To get information about my favorite team(s) that I can't get elsewhere	.07	**.87**	-.09	-.07
Because it offers more in-depth coverage of my favorite team(s) than traditional sports media	.24	**.84**	.03	.00
To read good analysis about my favorite team(s) from fellow fans	.26	**.76**	.06	.01
To find out news faster than I would using other types of sports media	.03	**.70**	-.14	-.12
To find out the latest gossip about players, coaches, and administrators for my favorite team(s)	-.08	**.63**	-.10	.07
To hear fair and balanced views on things	.07	**.52**	.32	-.14

Note: Factor 2 (Information Gathering) had an eigenvalue of 5.22

Table 73

Factor Scores of Diversion Dimension for West Region

Internet Motive Item Factors	1	2	3	4
"I use collegiate sport message boards…"				
Factor 3: Diversion				
To stay in touch with old friends and classmates	.21	-.06	**.73**	.09
To talk about sports other than football and basketball	.08	-.15	**.63**	.11
To keep up with non-athletic news about my alma mater	.15	-.09	**.62**	.03
To discuss games in progress	.16	.08	**.59**	.42
To talk about things other than sports, such as politics and religion	.29	-.13	**.47**	.40

Note: Factor 3 (Diversion) had an eigenvalue of 2.58

Table 74

Factor Scores of Argumentation Dimension for West Region

Internet Motive Item Factors	1	2	3	4
"I use collegiate sport message boards…"				
Factor 4: Argumentation				
To argue with other users online	.22	-.07	.08	**.82**
To complain about things going wrong with my favorite team(s)	.37	.08	.19	**.69**
Because I enjoy putting other users in their place	.15	-.11	.24	**.65**

Note: Factor 4 (Argumentation) had an eigenvalue of 2.13

Each region's set of dimensions included a factor for *interactivity*, a factor for *information gathering*, and a factor for *diversion*. Two regions, the South and the West, contained a fourth factor, *argumentation*. These four factors are the same ones identified in both the non-subscriber and subscriber principal components analyses conducted earlier in this section.

The *interactivity* factor accounted for the highest percentage of variance across all four regions. For each of these regions, the factor contained seven items: "To participate in discussions about my favorite team", "To communicate with fellow fans of my favorite school and/or team(s)", "Because I enjoy interacting with other users", "To give my input and opinions", "To share information that I have learned with the community", "To express myself freely", and "Because I feel like I'm a part of the message board community."

For the *interactivity* factor, three items loaded onto the factors for three of the four regions. The item "To belong to a community of like-minded fans" loaded onto this factor for the Midwest, South, and West regions, but not the East. The items "To discuss X's and O's and general strategy" and "To be able to share my views and experiences anonymously" loaded onto this factor for the East, Midwest, and South regions, but not the West.

The *information gathering* factor accounted for the second-highest percentage of variance across all four regions. Four items ("To get information about my favorite team(s) that I can't get elsewhere", "Because it offers more in-depth coverage of my favorite team(s) than traditional sports media", "To find out news faster than I would

using other types of sports media", and "To read good analysis about my favorite team(s) from fellow fans") appeared in each of the four regions' *information gathering* factors.

The *diversion* factor accounted for the third-highest percentage of variance across all four regions. For each of the four regions, three items appeared in their respective *diversion* factors: "To talk about things other than sports, such as politics and religion", "To talk about sports other than football and basketball", and "To keep up with non-athletic news about my alma mater".

For the *diversion* factor, two items loaded onto the factors for three of the four regions. The item "Because I like to use the non-sports forums to discuss all areas of life" loaded onto the factor for the East, Midwest, and South regions, but not the West. The item "To stay in touch with old friends and classmates" loaded onto the factor for the East, Midwest, and West regions, but not the South.

The *argumentation* factor appeared in the factor analysis of the South and West regions alone. Only one item loaded solely on this factor for both regions. "Because I enjoy putting other users in their place" appeared in the *argumentation* factor for the South and West.

Certain items loaded onto different factors in different regions. An example of this is the item "To complain about things going wrong with my favorite team(s)", which loaded onto the *interactivity* factor for the East and Midwest regions, while it loaded onto the *argumentation* factor for the South and West regions. Another example is the item "To discuss games in progress", which loaded onto the *interactivity* factor for the East and Midwest regions, while it loaded onto the *diversion* factor for the South and West

regions. No item loaded onto more than two different factors among the region-by-region factor analyses, indicating that the factors were relatively consistent across all regions.

An examination of the mean scores for each factor's scale demonstrates the salience of each factor to that particular region. As Table 75 indicates, the *information gathering* factor was the most salient dimension of collegiate sport message board usage across all four regions. It was the most salient in the Midwest region ($M = 4.42$, $SD = 0.73$). The *interactivity* factor was the most salient in the South region ($M = 3.42$, $SD = 0.88$), which was also the region where *information gathering* was the least salient. The *diversion* factor was most salient in the South region ($M = 2.46$, $SD = 0.99$), and least salient in the Midwest region ($M = 1.82$, $SD = 0.79$), which was the only region that saw a mean score for *diversion* fall below 2.00.

Table 75

Factor Scale Means for All Regions

Region	Interactivity Mean (*SD*)	Information Gathering Mean (*SD*)	Diversion Mean (*SD*)	Argumentation Mean (*SD*)
East	2.95 (0.88)	4.15 (0.78)	2.14 (0.88)	-
Midwest	3.11 (0.84)	4.42 (0.73)	1.82 (0.79)	-
South	3.42 (0.88)	3.89 (0.69)	2.46 (0.99)	1.99 (0.88)
West	3.37 (0.93)	3.96 (0.80)	2.28 (0.88)	2.23 (1.08)

Correlations were performed on each region's factors as they related to each other, as well as to collegiate sport message board usage, and similar results to those

uncovered in the correlations performed on the larger groups of non-subscribers and subscribers were encountered. The East region's *interactivity* factor possessed a weak correlation with *information gathering* ($r[744] = .23, p = .000$), and a moderate correlation with *diversion* ($r[746] = .48, p = .000$), while the *information gathering* factor possessed a weak negative correlation with *diversion* ($r[772] = -.12, p = .001$). The strongest significant correlation between a factor and message board usage was between *interactivity* and posts per week on collegiate sport message boards ($r[755] = .52, p = .000$).

The Midwest region's *interactivity* factor demonstrated a weak positive correlation with *information gathering* ($r[252] = .28, p = .000$), and a moderate positive correlation with *diversion* ($r[252] = .39, p = .000$). The *information gathering* factor demonstrated no statistically significant relationship with *diversion* ($r[252] = -.07, p = .306$). As with the East region, the strongest factor/usage correlation was between *interactivity* and posts per week ($r[252] = .52, p = .000$).

The *interactivity* factor for the South region demonstrated moderate positive correlations with *information gathering* ($r[971] = .47, p = .000$) and *diversion* ($r[971] = .44, p = .000$), and a weak positive correlation with *argumentation* ($r[971] = .37, p = .000$). *Information gathering* demonstrated a weak positive correlation with *diversion* ($r[971] = .11, p = .001$), and no statistically significant correlation with *argumentation* ($r[971] = -.04, p = .204$). *Diversion* demonstrated a weak positive correlation with *argumentation* ($r[971] = .38, p = .000$). Once again, the strongest factor/usage correlation existed between *interactivity* and posts per week ($r[971] = .46, p = .000$).

The West region's *interactivity* factor demonstrated a weak positive correlation with *information gathering* (r[118] = .28, p = .000), and moderate positive correlations with *diversion* (r[118] = .51, p = .000) and *argumentation* (r[118] = .54, p = .000). *Information gathering* did not demonstrate a statistically significant relationship with *diversion* (r[118] = -.02, p = .873) or *argumentation* (r[118] = -.01, p = .925). *Diversion* demonstrated a moderate positive correlation with *argumentation* (r[118] = .54, p = .000). The strongest factor/usage correlation existed between *interactivity* and posts per week (r[118] = .55, p = .000).

Research Question 9 examined the similarities and differences of dimensions of gratification for respondents from the East, Midwest, South, and West regions. Factor analyses for the East and Midwest regions indicated three dimensions of gratification, namely *interactivity*, *information gathering*, and *diversion*. The analysis performed on responses from the South and West regions indicated that the aforementioned three dimensions existed for those regions, as well as a fourth dimension, *argumentation*. Scale means for the four regions were examined, and it was determined that *information gathering* possessed the highest mean score for each of the four regions, followed by *interactivity*, and then *diversion*. The *argumentation* dimension had the lowest factor scale mean score for the South and West regions. Pearson product correlations for the revealed dimensions indicated similar correlation patterns between the dimensions as were found in Research Questions 6, 7, and 8, in that socialization-related motives of collegiate sport message board use (*interactivity, diversion, argumentation*) were generally positively correlated with message board usage variables, while information-

related motives (*information gathering, premium information*) generally did not possess a significant correlation with message board usage variables.

Summary of Data Analysis

This chapter analyzed the results from the data generated by users of collegiate sport message boards who completed the survey questionnaire. The following summaries detail the data from both the general results and the nine research questions.

Summary of General Results

The results of this study included data analysis of 2,339 responses from collegiate sport message board users. The largest number of responses came from the University of Alabama message board (*n* = 487). In terms of network affiliation, the *SportsWar* network-affiliated message boards generated the largest number of responses (*n* = 1,611). After separating the message boards by NCAA-defined region, the South generated the largest number of responses (*n* = 1,084).

Summary of Research Questions

Research Questions 1 and 2 analyzed the demographic characteristics and distributions for non-subscribers and subscribers. Non-subscribers were found to be slightly younger than subscribers. Subscribers reported a slightly higher household income than non-subscribers, and spent slightly more time on both the Internet in general, collegiate sport message boards in particular, and on collegiate sport message boards while at work. Subscribers were also found to have spent more money per year on subscriptions to sport media than non-subscribers. Both non-subscribers and subscribers were found to be predominantly White, male, married, possessing at least an undergraduate degree, employed in a full-time capacity, and living in the United States.

Analysis was performed on the mean responses of non-subscribers and subscribers for the 40 motivation and usage statements utilized in the study to ascertain dimensions of gratification. The statement "To get information about my favorite team(s) that I can't get elsewhere" received the highest mean response from both groups. The same analysis was performed on the mean responses of subscribers to the 20 premium motivation and usage statements utilized in the study; the statement "To gain access to premium content on the message board, such as videos, updates, and recruiting news" received the highest mean score.

Research Question 3 analyzed the differences in demographic and usage data for non-subscribers and subscribers for statistical significance and, when applicable, directional relationship. The data analysis utilized crosstabulations and independent samples *t*-tests. The crosstabulations performed indicated significant differences between groups within several variables. Only two variables demonstrated a notable directional relationship with subscriber status: Hours spent per week on collegiate sport message boards demonstrated a weak positive correlation, while average amount spent per year on subscriptions to sport media demonstrated a somewhat stronger (yet still weak) positive correlation. The independent samples *t*-tests indicated similar statistically significant differences to the crosstabulations on the majority of variables.

Research Question 4 asked whether there were significant differences in demographic and usage data based on the school of focus. This research question could not be adequately explored, due to an insufficient amount of data from certain message boards.

Research Question 5 asked whether significant differences existed in demographic and usage data for the four NCAA-defined regions. ANOVA was used to calculate differences between these regions. Notable findings included the discovery that respondents from the South reported lower levels of education, the donations of money to collegiate athletic programs, and amount of money spent on subscriptions to sport media than respondents from the other three regions, and the discovery that respondents from the East spent less time on collegiate sport message boards than respondents from the South and West.

Research Question 6 asked what dimensions of gratification existed for non-subscribers. Through factor analysis, four dimensions were identified: *interactivity*, *information gathering*, *diversion*, and *argumentation*. *Interactivity* was the factor which explained the largest percentage of variance, while *information gathering* was the most salient factor in terms of factor mean scores. The *interactivity* factor demonstrated a significant moderate positive correlation with posts per week on collegiate sport message boards.

Research Question 7 asked what dimensions of gratification existed for subscribers. Two factor analyses were performed on this group. The first indicated that there were four dimensions of gratification for subscribers in relation to the 40 motivation and usage questions, and these dimensions were *interactivity, information gathering, diversion, and argumentation*. The second factor analysis was performed on the 20 motivation and usage questions relating to premium subscriptions, and three dimensions were identified: *premium information, community, and patronage*. Pearson correlations

indicated a statistically significant moderate positive correlation between the *information gathering* and *premium information* dimensions.

Research Question 8 examined the dimensions of gratification for the combined samples of non-subscribers and subscribers. As was seen in the factor analyses for non-subscribers and subscribers separately, four dimensions of gratification were identified for the combined sample: *interactivity, information gathering, diversion, and argumentation*. The *interactivity* dimension was found to have a statistically significant moderate positive correlation with posts per week on collegiate sport message boards.

Research Question 9 asked whether there were differences in the dimensions of gratification for users in the aforementioned NCAA-defined regions. Factor analyses were performed for respondents from each of the four regions separately. Three dimensions of gratification were identified for the East and Midwest region, namely *interactivity, information gathering, and diversion*. Those three dimensions were also present in the South and West, along with an additional dimension, *argumentation*. The *interactivity* dimension explained the largest percentage of variance across all four regions, while the *information gathering* dimension was the most salient usage of collegiate sport message boards for the four regions.

CHAPTER V

DISCUSSION AND CONCLUSIONS

Discussion

The purpose of this study was to examine the demographic characteristics and Internet and media usage characteristics of collegiate sport message board users, as well the reasons that these individuals utilize collegiate sport message boards. The study utilized a survey methodology to ascertain these characteristics from a large convenience sample, with users from a geographically diverse set of collegiate sport message boards participating. By utilizing statistical analysis of the demographic and media usage data, further knowledge was gained about the characteristics of collegiate sport message board users. The study also utilized the uses and gratifications approach to analyzing why these individuals used collegiate sport message boards.

Discussion of Research Questions

Research Question 1

The results of Research Question 1, which examined the demographic characteristics and usage data for non-subscribers, revealed the non-subscriber population as being a group of relatively casual fans, both in terms of collegiate sport message board usage and in terms of sport and media consumption in general. By and large, this group neither attended large numbers of collegiate athletic events nor donated money to college athletic departments, making it likely that non-subscribers followed their favorite teams through the media, rather than in person. The most salient reasons for using collegiate sport message boards of this group all dealt directly with either reading information about their favorite teams or reading content generated from other fans, indicating that non-subscribers are using message boards primarily to gather information and interact with others.

Research Question 2

  Research Question 2 examined the demographic characteristics of subscribers. The results of this question indicated that subscribers were more heavily invested in their favorite college team, as they spent more money on tickets and donation, spent more time on message boards, and made more posts than non-subscribers. The most salient reasons for subscribers using collegiate sport message boards dealt directly with gaining information, a pattern which is reinforced by subscribers' average responses to premium motivation statements. Based on these statements, premium subscribers appeared to be more highly identified or invested with their favorite teams, and use the message boards as a vehicle to stay informed about those teams.

Research Question 3

  Research Question 3 examined significant differences between non-subscribers and subscribers for demographic and usage data. Taken as a whole, subscribers tended to be slightly older, make slightly more money, spend more time on the Internet in general and on collegiate sport message boards in particular, post more messages per week on collegiate sport message boards, spend more on tickets to athletic events, attend more collegiate athletic events, donate more money per year to collegiate athletic programs, watch more television, and spend more money on subscriptions to sport media than non-subscribers. These differences seem to indicate that subscribers are either more willing or more able to invest themselves more fully in activities than non-subscribers, particularly in terms of message board activities such as spending time online or making posts. It would not be surprising to discover that subscribers as fans are more highly identified with their teams than non-subscribers. Conversely, it would not be at all surprising to find

that non-subscribers are more casual fans, who visit message boards occasionally but are not willing to invest further time and money into their usage.

However, a surprising finding of this study was that there were not more pronounced differences between the two groups. With the exception of the variable dealing with money spent on sport media subscriptions, the data did not show more than a very weak positive relationship between being a subscriber and the demographic and usage variables collected. The lack of any clear relationships between subscriber status and other variables, besides sport media subscriptions, suggests that the availability of information may be the key element in a non-subscriber deciding to become a subscriber. The fact that subscribers spent significantly more on sport media subscriptions may indicate that these users look at their subscription to a collegiate sport message board as one of many ways to keep up on news and information related to their team that they could not receive otherwise. The question then becomes: What triggers the desire for more (or better) information in collegiate sport message board users? That answer is unclear; however, one potential trigger might be simple enticement. On many message boards, non-subscribers are allowed to see the post titles for discussions on the premium board, but they cannot read the actual content of the posts. As one message board moderator told the researcher, the purpose of allowing non-subscribers to see the post titles is akin to a department store placing a big-screen television in its storefront window, the idea being that the non-subscriber will become sufficiently intrigued to purchase a trial subscription. Further research into the motives of recent subscribers is needed to sufficiently answer the question of why certain users decide to change their status from non-subscriber to subscriber.

Research Question 4

Research Question 4's purpose was to ascertain whether there were significant differences in demographic characteristics and distributions between the different message boards. As noted in the data analysis section, there were insufficient responses from certain message boards, thereby endangering the potential statistical significance of the resulting findings. Therefore, the question could not be addressed in a proper scholarly manner.

Research Question 5

The purpose of Research Question 5 was to determine whether statistically significant differences existed for message board users based upon conference affiliation or region. As mentioned in the data analysis section, only certain conferences were represented by a sufficient number of schools, thereby precluding an analysis on that element of the question. However, it should be noted that the NCAA-defined regions utilized in the data analysis of message board respondents are based on conference affiliation, rather than necessarily being based on a school's geographical location. Therefore, it is probable that the results from a statistical breakdown by conference affiliation would be very similar to the results gleaned from the region-based analysis that this study used.

The East and South regions demonstrated the greatest number of differences from other regions on several variables. For instance, East region respondents were more likely to be female, which is significant in and of itself due to the preponderance of males in the sample. It is possible that female sports fans in the East region are more comfortable with collegiate sport message boards than those in other regions, perhaps due to greater

familiarity or comfort with computer usage. East region respondents also used the Internet and collegiate sport message boards less than the other three regions, made fewer posts than the other three regions, and used message boards at work less than the other three regions. It is possible that the lower rate of Internet usage affects the other usage variables, but it is not clear why respondents from the East region would be using the Internet less than other respondents. What makes this finding even more surprising is that the message board with the largest number of respondents (Duke University) was part of the East region.

Respondents from the South region indicated lower levels of income and education than the other regions, as well as lower reported levels of attendance at collegiate athletic events, lower donation amounts to athletic programs, and lower amounts of money spent on sport media subscriptions. This region also had the highest percentage of non-subscribers (79.9%) of the four regions. The lower level of income could be affecting the other variables, although that seems unlikely, since the mean response for income level by South region respondents still puts the average income at between $60,000 and $100,000 per year. Another possible explanation is that South region respondents utilize collegiate sport message boards as a surrogate for other types of fan participation, including attending athletic events or donating money to athletic programs.

Research Question 6

Research Question 6's purpose was to examine the dimensions of gratification for non-subscribers. There were four dimensions uncovered via factor analysis: *interactivity*, *information gathering*, *diversion*, and *argumentation*. Taken as a whole, these dimensions

indicate that non-subscribers are primarily motivated to use collegiate sport message boards in order to interact and communicate with fellow message board users, and to find information about their teams. Discussing non-sports items and arguing with other users, although a motivation for some, are not primary motivating factors for non-subscribers to use message boards. Pearson correlations indicated that those users motivated by the interactive elements of message boards made more posts on the boards than those interested in the other elements. As a result, those users who expressed the greatest interest in interacting with others tended to do so, and on a much more frequent basis. Due to the similarities in the non-subscriber and subscriber dimensions, the dimensions will be analyzed in greater detail in the discussion of dimensions of gratification later in this chapter.

Research Question 7

The purpose of Research Question 7 was to examine the dimensions of gratification for subscribers, both using the 40-question motivation list and the subscriber-only 20-question motivation list. As with the non-subscriber dimensions revealed in Research Question 6, there were four dimensions of gratification for subscribers: *interactivity*, *information gathering*, *diversion*, and *argumentation*. Much like non-subscribers, subscribers appear most interested in utilizing collegiate sport message boards for gathering information and interacting with fellow users. These characteristics were reinforced by the factor analysis performed on the subscriber-only motivation list, which revealed three dimensions of premium motivation: *premium information*, *community*, and *patronage*. The *premium information* dimension was the most salient motivation for subscribers, indicating that their reason for using collegiate

sport message boards was primarily one of gaining access to exclusive information not available to non-subscribers. The implications of these factors, and their relationship with the non-premium factors for the entire sample of message board users, are analyzed in greater detail in the discussion of gratifications later in this chapter.

Research Question 8

The purpose of this research question was to examine the entire sample of collegiate sport message board users, searching for overarching dimensions of gratification regardless of subscriber status. In the factor analysis of motivations for collegiate sport message board users, four dimensions of gratification were consistently encountered: *interactivity*, *information gathering*, *diversion*, and *argumentation*. Those four dimensions were encountered in factor analysis for non-subscribers, subscribers, the full sample of respondents, and two of the four regions into which respondents were separated. Further analysis of these factors, their relation to each other, and to collegiate sport message board users as a whole, can be found in the discussion of dimensions of gratifications section later in this chapter.

Research Question 9

Finally, Research Question 9's purpose was to examine any differences in dimensions of gratification for collegiate sport message board usage between users in the four regions. Three dimensions of gratification were constant across all four regions; those dimensions were *interactivity, information gathering, and diversion*. A fourth dimension, *argumentation*, was found in the factor analysis of respondents from the South and West regions. As mentioned in the discussion for Research Question 5, analysis of variance of demographic and usage variables did identify some statistically

significant differences between users in different regions of the country. However, there appeared to be little connection between these differences and the individual dimensions of gratification for the four regions. Instead, users in each region appeared to synthesize the same dimensions of gratification somewhat differently. For instance, users in the East region included the items "To complain about things going wrong with my favorite team" and "To argue with other users online" in the *interactivity* dimension. This may indicate that message board users in the East region consider the argumentative elements of message boards as just another facet of interaction with other users, rather than a separate reason for using message boards. Another example existed with the item "To talk about my team's recruiting efforts", which appeared as part of the *interactivity* dimension in the East and Midwest, but appeared as a part of the *information gathering* factor in the South, and did not load on any factor in the West. It is possible that message board users in the South, which is widely seen as the epicenter of college football recruiting, consider discussions of recruiting an informational function, whereas users in the East and Midwest view recruiting discussions as part of the normal give-and-take of message board conversation.

Discussion of Dimensions of Gratification

The items which comprised the *interactivity* dimension indicated that respondents to the survey whose usage fell under that dimension used collegiate sport message boards primarily for the purposes of interaction with other users. That interaction took the form of participating in discussions, expression of one's opinions, sharing one's views, and communicating with fellow fans. Of the four dimensions, *interactivity* consistently contained the most items, explained the highest percentage of variance, and possessed the

highest item loadings. The predominance of the *interactivity* dimension in these areas indicates that collegiate sport message board users whose usage falls under this dimension are most interested in the social interaction which surrounds discussion of their favorite team(s). This finding corresponds with Rubin's (1993) contemplation of the true nature of audiences, which suggested that people were generally seen by audiences as more influential than media. However, it is interesting to note that the mean score for the *interactivity* dimension scale consistently fell below that of the *information gathering* dimension, indicating that interactivity may be a less salient reason for using collegiate sport message boards than information gathering.

The items which comprised the *information gathering* dimension indicated that respondents whose usage fell under that dimension valued the unique informational aspects that collegiate sport message boards provide. The perception that collegiate sport message boards offered more in-depth and unique coverage of users' favorite team than traditional media, and did so in a more timely fashion than traditional media, dominated the *information gathering* dimension. Furthermore, the ability to read analysis from fellow fans, to learn things that others do not know, and to hear about rumors and innuendo relating to the users' team were all important elements of this dimension. The *information gathering* dimension consistently explained the second-highest percentage of variance across all factor analyses, and the mean for the scale of items within the dimension was consistently the highest, meaning that users more strongly agreed with the individual elements of the scale more regularly than the other three dimensions.

The *diversion* dimension was perhaps the most unusual of the revealed dimensions. Previous uses and gratifications studies have identified the usage of media as

a diversion; that is, one could classify the usage of collegiate sport message boards as a diversion in and of itself. However, the elements which made up this dimension dealt more with the desire of users to interact with the community about items that did not pertain to the *raison d'être* of the message board site; that is, the discussion of popular sports from the school on which the message board was focused. Instead, respondents whose usage fell under this factor were interested in non-sports news and issues, or sports other than the hegemonic subjects of football and basketball. While this was the least salient of the four factors of Internet usage ($M = 2.17$, $SD = 0.88$), it is important to note that most message boards contain at least one so-called "off-topic" or "water cooler" forum, where non-sports discussions are encouraged (Clavio, 2007a).

The final dimension, *argumentation*, represents a new and interesting element of Internet usage for academic study. As mentioned earlier in this chapter, this factor's items dealt directly with the less congenial elements of online interaction: smack talk, putting other users "in their place", arguing with other users, etc. There is an Internet term which fits the characteristics of many of these items, called *trolling*. As noted by the Internet dictionary site NetLingo (Troll, 2007), "Internet trolls are people who fish for other people's confidence and, once found, exploit it. Trolls vary in nature" (¶1). Whether the participants whose usage fell under this factor are indeed trolls is uncertain, but the presence of the factor in this analysis supports further research into this area. While this factor was not the most salient of the four, it did have a higher mean score than the *diversion* factor.

The intercorrelations between the four dimensions from the factor analysis of all users provide some interesting avenues for analysis. The *interactivity* dimension

correlated moderately with the three other factors, as one might expect from a dimension which explains such a relatively large percentage of the variance. *Information gathering*, however, did not correlate at all with the *diversion* dimension, and had practically no correlation with the *argumentation* dimension. Furthermore, *information gathering* had the weakest correlation with hours spent on collegiate sport message boards, number of posts made per week, and usage of message boards at work. These statistical elements suggest that users who visit collegiate sport message boards for the main purpose of gathering information may be less likely to engage in the *diversion* or *argumentation* elements of the message board. In other words, message board users who utilize the message boards to find out information about their team may not consider interaction with fellow users to be part of the process. The low (or lack of) correlation between the *information gathering* dimension and the variables relating to usage, especially in comparison with the other three factors' significant and positive correlations with usage variables, presents the possibility that *information gathering* users are primarily consumers of message board content, rather than creators of content.

As mentioned earlier, the factor analysis from the 20-question list of premium-only collegiate sport message board motivations revealed three dimensions of gratification: *premium information*, *community*, and *patronage*. In comparing these dimensions to the factors derived from the 40-question list, the first dimension, *premium information*, most closely resembles the *information gathering* factor. The two dimensions are correlated more strongly with one another than any other two factors discovered in this study. Both factors focus on the acquisition of information, as well as the benefits of utilizing the unique qualities of a premium subscription for the former, and

224

collegiate sport message boards in general for the latter. The correlation between these two factors would seem to indicate that the salience of gathering information is consistent across the entire sample, with both non-subscribers and subscribers placing particular importance on it. As with the *information gathering* factor, the *premium information* factor possessed the highest scale mean ($M = 4.12$, $SD = 0.86$), indicating that it is the most salient usage of premium forums for subscribers to collegiate sport message boards. Interestingly, it explains a great deal more of the variance after rotation (34.36%) of the premium-only factors than *information gathering* did, either in the factor analysis for subscribers only (12.88%) or in the combined factor analysis of all users (12.14%). It can be hypothesized from these findings that the informational elements are seen as the primary attraction for being a subscriber, while for non-subscribers, the informational elements have their importance somewhat diffused by the prevalence of socialization elements (such as the *interactivity* dimension). In other words, the desire to gather information is the primary motive for being a subscriber, and the premium message board environment is oriented towards satisfying that motive. By contrast, the desire to gather information is a highly salient motive for non-subscribers (as witnessed by the high mean score for the *information gathering* dimension), but the non-subscriber message board environment is oriented towards satisfying the socialization needs of the user more than the informational needs.

This line of hypothetical reasoning is reinforced by the results relating to the second premium-only factor, *community*. The items making up the *community* factor focus on the quality of the premium message board community and the benefits of participating in discussions with that community, and are generally similar to those

included in the *interactivity* factor from the combined factor analysis. Given these similarities, one might expect the *community* factor to explain the highest percentage of variance for the premium-only factor analysis, as the *interactivity* factor did for all other factor analyses. However, the *community* factor explained only 13.51% of the total variance after rotation, nearly three times less than the *premium information* factor. It is possible, therefore, that subscribers make the decision to pay for a premium subscription (or maintain an already-existing subscription) primarily for the "insider" information that it provides, rather than joining for the express purpose of belonging to a more exclusive, program-friendly community of users. While membership in that exclusive community of users obviously has some salience to subscribers, it does not appear to be the primary reason for their subscriber status.

The third factor, *patronage*, accounted for 7.62% of the premium-only variance after rotation. This item's scale mean ($M = 2.71$, $SD = 0.93$) indicated that it had the lowest salience among subscribers as a premium use for collegiate sport message boards. It was expected that this factor would have both a higher scale mean and explain a larger percentage of the variance, due to comments made by users in the pilot study who indicated that supporting their school or the message board's web site was a major reason for their subscription (Clavio, 2007a). The *patronage* factor is interesting because its component items do not bear a resemblance to either the *diversion* or *argumentation* factors from the subscriber factor analysis. The low scale mean score indicates that this is not a particularly important reason for most subscribers to either obtain or maintain a subscription to a message board site, at least in comparison to the other two premium-only factors. The highest-loading items on this factor involved supporting one's school

and feeling like more of a fan. It is possible that most subscribers do not consider having a subscription to a message board to be a demonstration of fanhood. Similarly, it is highly likely that the vast majority of premium users do not feel that a premium subscription does anything to support one's school, and for good reason — premium message board posts are not visible to fans of others schools or to non-subscribers, and the money generated from these subscriptions does not go towards the school's athletic department. Finally, while one item of this dimension related to giving out insider information to fellow fans, that item had the second-lowest mean score of all 20 questions. This would indicate that most premium message board users either do not have access to insider information, or if they do, do not intend to disseminate that information to the message board. This, coupled with the high mean score and variance explanation of the *premium information* factor, indicates that most premium subscribers are there to consume premium information, rather than create it.

The correlations for premium-only factors indicated that all three factors were positively correlated with one another to some degree. Only the *patronage* factor had a highly significant positive correlation to a factor of collegiate sport message board usage, and that correlation, to the variable for number of posts made per week on message boards, was very weak. No other potential premium-only factors were encountered in the principal components analysis. This would seem to support the hypothesis that premium subscriptions serve a relatively narrow purpose for subscribers, and that purpose is focused on the gathering of information.

In evaluating the full range of factors uncovered by the principal components analyses in this study, it appears that all users (both non-subscribers and subscribers) rate

the function of gathering information as the most salient usage of collegiate sport

message boards, and that the availability of premium information is the dominant

dimension of subscribers' usage of premium message boards. The fact that the

dimensions of *information gathering* and *premium information* are correlated together so

strongly could indicate that the cultivation of information seekers potentially translates

into those users becoming premium subscribers. This cultivation could take several

forms, including the "teasing" of crucial news information to non-subscribers and/or a

concerted marketing effort by the message board publisher which highlights the exclusive

information content that a premium subscription offers.

The function of interacting with other users was a less salient use according to

users, but explained more of the variance in every factor analysis performed except the

premium-only analysis. One possible explanation for the apparently discrepancy between

dimension salience and variance explained is that information gathering is common to

nearly all users, and therefore does not stand out as a particular dimension of

gratification.

Dimensions of Gratification As Compared to Pilot Study

Clavio's (2007b) pilot study of collegiate sport message board uses and

gratifications revealed five preliminary dimensions of gratification. The first of these, a

community interaction dimension, contained elements of the *interactivity* and *information*

gathering dimensions of this study. This indicates that throughout the samples for both

this study and the pilot study, the motives of gathering information and interacting with

other users were considered highly salient motives. Much as the *interactivity* and

information gathering dimensions explained the largest percentage of variance in the

factor analysis for all users in this study, the *community interaction* dimension explained the largest percentage of variance for the pilot study respondents. This separation of this dimension into two separate dimensions for this study suggests that some message boards' users may synthesize *interactivity* and *information gathering* into the same basic reason for usage.

The second dimension from the pilot study, dubbed a *flaming/troublemaking* dimension, was analogous to the *argumentation* dimension found in this study. The presence of this dimension across both studies increases the likelihood that *argumentation* is a constant element of message board usage. The relatively low salience of this dimension in both studies indicates that it is important only to a small percentage of message board users, but that those users for whom it is important are present on the majority of collegiate sport message boards.

The third dimension, dubbed *social utility*, closely resembled the *diversion* dimension discovered in this study. Again, the presence of this dimension across both studies, and the relatively low salience of the dimension in comparison to *interactivity* and *information gathering*, indicates that *diversion* is only important to a small percentage of users, but that those users are present on all collegiate sport message boards.

The final two dimensions from the pilot study, *pass time* and *commercial activity*, appeared as potential dimensions of gratification in this study's factor analyses. However, both of these potential dimensions of gratification contained only two items, rendering them unsuitable for scale reliability analysis. The lack of a *pass time* dimension was surprising, given its appearance in other Internet uses and gratifications studies (e.g.,

229

Ebersole, 2000; Ferguson & Perse, 2000; LaRose & Eastin, 2004; Papacharissi & Rubin, 2000). Future research efforts involving collegiate sport message board uses and gratifications should endeavor to include additional *a priori* pass time and commercial activity statements, to see if dimensions for either of these areas exist within the collegiate sport message board population, or whether they are superseded by different dimensions of motivation.

Dimensions of Gratification As Compared to Other Studies

The nature of the factors identified by this study corresponded with existing uses and gratifications literature. The 10 motive dimensions for media use suggested by Lin (1999), for example, included motives of *information*, *entertainment*, *diversion*, and *social interaction*. Each of these dimensions has an analogue in the dimensions uncovered for collegiate sport message board users. Lin's *information* dimension and this study's *information gathering* are similar in nature, as both involve the acquisition of information. Lin's *diversion* and *entertainment* dimensions are both similar in nature to this study's *diversion* dimension, particularly when one considers that this study's *diversion* dimension contains items relating to the discussion of non-sport items, despite the respondents' usage of a sports-related message board. Finally, the *social interaction* dimension suggested by Lin appears similar to both the *interactivity* and *argumentation* dimensions of this study; one could interpret *interactivity* as the "positive" side of social interaction, and argumentation as the "negative" side.

Rubin and Rubin's (1985) five underlying assumptions of the uses and gratifications perspective (i.e., goal-directed media and interpersonal communication use, media utilized to satisfy personal needs, self-identification of needs by the user, users

being capable of providing an accounting of his/her own motives and gratifications, and every user is affected by a variety of internal and external influences which can impact communication selection and usage) are also salient to this study's findings, particularly those involving subscribers to collegiate sport message boards. The large amount of variance explained by the *premium information* dimension indicates a highly goal-directed usage of media, which satisfies a personal and self-identified need — in this case, the acquisition of information about a favorite sports team — through the choice of a particular communication channel. Similarly, the large amount of variance explained by the *interactivity* dimension for all users indicates that users choose to utilize collegiate sport message boards to satisfy a need for interpersonal communication with a community of fans. What is unknown at this time is whether these needs truly existed prior to the user's entrance into the world of collegiate sport message boards, or whether the message boards generated these needs after usage of the boards began.

As mentioned in the review of literature for this study, Cutler and Danowski (1980) proposed a dichotomous separation of gratifications into the categories of content gratification, or enjoyment of the content of messages from a medium, and process gratifications, or enjoyment of the usage of the medium itself. Stafford and Stafford (2001) later suggested the addition of socialization as a gratification, focused on the enjoyment of interactive elements. The findings of this study would tend to support the suggestion of Stafford and Stafford, as interactivity is obviously a highly salient reason for usage of collegiate sport message boards. The presence of two socialization-related dimensions, *interactivity* and *argumentation*, and particularly the high percentage of

variance explained by the *interactivity* dimension, shows that respondents consider socializing with other users to have some level of importance.

This study's findings also suggest a potential melding of content gratifications and socialization gratifications. The item "To read good analysis about my favorite team(s) from fellow fans" loaded highly across all *information gathering* factors, and was among the five most highly rated motive statements by both subscribers and non-subscribers. This could indicate that fans consider certain content to be an element of socialization, and vice versa. These findings may represent a potentially new development for uses and gratifications research, where users' enjoyment of the content of the messages is in some way dependent on the socialization elements of those messages. In other words, users may be more receptive to the content of an information-laden message if they are able to engage the creator of that message in discussion. This would coincide with Ruggiero's (2000) suggestion that the time-honored uses and gratifications concepts of both "active" and "audience" might have to be revisited. For collegiate sport message board users, the combination of receiving information (as an audience member) and interacting with both the messenger and the message (as an active participant) may be the ideal mode of communication.

A comparison of the dimensions of collegiate sport message board usage for this study to the motivations for Internet usage found in previous literature finds both similarities and differences. James et al. (1995), in their study of CompuServe and Prodigy users, grouped open-ended responses into usage categories. The most prevalent usage of bulletin boards was *informational*, followed by *socialization*, *medium appeal*, *business*, and *entertainment* or special interest. While not a factor analysis, the findings

from James et al. are important to mention in relation to this study of collegiate sport message boards, due to the prevalence of socialization and information-related motives among the most salient factors discovered. With the most salient reason for message board usage being *information gathering*, and the largest percentage of variance explained through *interactivity* (a socialization dimension), the findings of the factor analyses of collegiate sport message board users' dimensions of gratification appear to be in line with the two most prevalent usages of bulletin boards in James et al.'s study.

The three dimensions revealed in Garramone et al. (1986), *personal identity*, *surveillance*, and *diversion*, are similar to the dimensions uncovered in this study in all but name. The *personal identity* dimension contained items relating to comparing ideas, learning what others think, and acquiring support for ideas, all of which are conceptually similar to the *interactivity* dimension found in this study. Similarly, the *surveillance* dimension is analogous to this study's *information gathering* dimension, including items relating to keeping up with current events and gaining an understanding of issues. The *diversion* dimension also shares many of the same characteristics of the *diversion* dimension found in this study. These similarities indicate that the most salient reasons for using online message board communities have remained relatively constant, with motives relating to interaction and information pre-dating the emergence of the World Wide Web.

Papacharissi and Rubin's (2000) factor analysis of Internet motive statements resulted in five interpretable factors. *Interpersonal utility*, which accounted for 18.1% of the variance in their study, contained items such as "I use the Internet to help others", "I use the Internet to participate in discussions", and "I use the Internet to express myself freely." The motives in Papacharissi and Rubin's *interpersonal utility* factor are very

similar to the *interactivity* factor found in this study. However, one difference of note can be found in the comparison of scale means between the two factors. Papacharissi and Rubin's *interpersonal utility* factor possessed the lowest mean score ($M = 2.43$, $SD = 0.94$) of the five factors they uncovered. By comparison, the collegiate sport message board *interactivity* factor possessed a considerably higher mean score ($M = 3.26$. $SD = 0.93$), which ranked it second among the four factors uncovered. This could indicate that users of collegiate sport message boards are more interested in the interactive elements of the online environment. An alternative explanation is that Internet users in general have grown to consider interactivity a more salient reason for using the Internet in the intervening years between Papacharissi and Rubin's study and this study.

The other four factors encountered by Papacharissi and Rubin (2000) were a *pass time* factor, an *information seeking* factor, a *convenience* factor, and an *entertainment* factor. While the factor analysis of collegiate sport message board users did not uncover a valid factor for *pass time*, a potential factor for this motivation was identified. This factor was excluded due to loading only two items, thereby excluding it from reliability analysis. Papacharissi and Rubin's *information seeking* factor contained items such as "To look for information", "To get information for free", and "New way to do research." These items share some similarity with the *information gathering* factor from the collegiate sport message board factor analysis. It is worth noting that, just as the *information gathering* factor scale possessed the highest mean score of the four factors discovered in the factor analysis of collegiate sport message board users, so too did the *information seeking* factor possess the highest mean scores for Papacharissi and Rubin's

factor analysis. This supports the hypothesis that information-related motives of Internet use are relatively constant across samples of users, and over time.

Stafford and Stafford (2001) uncovered five factors of Internet usage. The first factor, a *search* factor, contained items which indicated that users were motivated to use the Internet's process of searching in order to find information. The second factor, a *cognitive* factor, contained items dealing with education, information, learning, and research, indicating a motive by users to gather information. The third factor, a *new and unique* factor, dealt with the uniqueness of the Internet as a process. The fourth factor, *social*, dealt mostly with interaction. The fifth factor, *entertainment*, dealt mostly with fun and games. Mean scores were not revealed for the individual scales of these factors. In examining the component items of each factor, the *social* factors appears to contain elements which correspond to items included in the *interactivity* and *diversion* dimensions of the collegiate sport message board factor analysis. This supports the stance that interaction-related motives of Internet use are not solely the preserve of collegiate sport message board users. Additionally, Stafford and Stafford's *cognitive* factor appears roughly analogous to this study's *information gathering* factor. The *search* and *cognitive* factors, taken together as information-related motives, support the findings of this study that the gathering of information is a salient motive for Internet usage.

Although not a factor analysis, End's (2001) study found that the most common function of message board posts was *information sharing*, followed by *blasting*, or derogatory messages aimed at fans of opposing teams, followed by *BIRGing* messages. This finding is particularly salient to the factor analysis of collegiate sport message boards, because it is the only one discovered that specifically mentions a function of sport

message boards which resembles argumentation. The fact that *blasting* messages were more prevalent than *BIRGing* messages in End's study indicates that *argumentation* is a motive for message board use that extends beyond collegiate sport message boards. In fact, this finding makes it surprising that *argumentation* was not found in the factor analysis for all four regions. It is possible that other demographic factors, such as culture or geographic region, affect the salience of *argumentation* for message board users. However, without knowing the demographic characteristics of End's study, it is impossible to compare the findings specifically to geographic region. Furthermore, End's finding of information sharing being the most common function of message board posts is consistent with the discovery of *information gathering* as the most salient dimension of collegiate sport message boards by users. It seems logical to assume that information-related motives are the most consistent reasons for sport fans to utilize sport message boards.

Other studies utilized factor analysis to derive a set of Internet usage factors. Ebersole (2000), in a study of middle school and high school students, found eight such factors: *research and learning, easy access to entertainment, communication and social interaction, something to do when bored, access to material otherwise unavailable, product info and tech support, games and sexually explicit sites*, and *consumer transactions*. Charney and Greenberg (2002), in their factor analysis of an Internet uses survey of college students, discovered eight factors. The first factor was a *keep informed* factor, and explained nearly 40% of the variance. This was followed by a *diversion-entertainment* factor, a *peer identity* factor, a *good feeling* factor, a *communication* factor, a *sights and sounds* factor, and a *coolness* factor. The finding of both studies that a factor

involving the gathering or retrieval of information had a high level of salience among Internet users corresponds with the findings of this study. As mentioned earlier, the importance of the gathering of information to premium users, and the high mean scores of the *information gathering* dimension for all users, points to information-related motives being a reason for collegiate sport message board usage that is consistent across all the message boards in this sample.

Seo and Green's (2008) development of the Motivation Scale for Sport Online Consumption identified several factors which bear similarities to the dimensions of motivation uncovered in this study. The items included in the researchers' *interpersonal communication, fan expression,* and *team support* factors were similar in nature to the items contained in this study's *interactivity* dimension. Despite the researchers' study concentrating on users of professional team web sites rather than message boards, the presence of motives relating to interaction indicates that sport fans in general consider these elements particularly salient when using sport-related Internet sites. The researchers also found that *information*, while important, was not a particularly salient motive of sport web site use when compared to other factors in the scale. This was reinforced by the finding that the *information* factor had a moderately strong positive correlation with *fanship* and *entertainment*, but not with *interpersonal communication*; in fact, there was a very weak negative relationship between *information and interpersonal communication* in Seo and Green's findings. This indicates a potential disconnect in motivation between users engaging in online sport consumption primarily for reasons relating to interaction, and those engaging in online sport consumption primarily for reasons relating to information exchange. The general lack of correlation in the study of collegiate sport

message board users between the *interactivity* and *information gathering* seems to support this potential disconnect.

Discussion of Combined Demographic Results

There are several implications from the demographic data gathered in this study. The fact that the vast majority of collegiate sport message board users are male partially explains the prevalence of discussion forums related to male sports on these sites (Clavio, 2007a). Further implications of the gender variable are discussed later in this chapter, in the analysis of this study's demographic findings as compared to existing literature.

The prevalence of White users in the sample is interesting, because it indicates that message boards have not cultivated an audience outside of this racial group. Why this is the case is not clear, particularly in light of existing literature. For instance, Armstrong (2002), via a self-report questionnaire distributed to Black sport consumers, found that these consumers were active in their consumption of sport, with 68% reporting that they talked about sports to their friends frequently, and 75% watched sports frequently on television. Furthermore, the scholar noted that the most salient usage of sport for Black sport consumers within the examined sample was entertainment. There was no data relating to the importance of information to Black consumers' consumption of sport. In light of the dimensions of motivation for collegiate sport message board users uncovered in this study, it is possible that Black sport consumers (and minority sport consumers in general) view collegiate sport message boards as primarily focused on the exchange of information, rather than entertainment, and are therefore not interested in participating. Alternatively, the lack of racial diversity among respondents to this study

may simply indicate a lack of effort on the part of message board publishers to attract minority users.

The prevalence of highly-educated users in this study's sample is not unexpected, given the likelihood that an alumnus of a particular school would be interested in keeping up with his/her alma mater's athletic program. However, the curious part of this finding is that only 59% of respondents indicated that the message board on which they spent the most time was focused on their alma mater, and that there was not a statistically significant difference between non-subscribers and subscribers for this variable. This indicates that alumni affiliation is not the only variable which affects the desire of an individual to spend time on, or subscribe to, a collegiate sport message board. The 41% of respondents who were not alumni of the schools in question could very well have developed an affinity for a team that is based more in geographical or cultural concerns than in alumni affiliation.

One of the most surprising results from the demographic examination of both groups was the average household income reported by respondents, particularly by subscribers. As noted in the data analysis, 49.3% of subscribers indicated a household income level of $100,000 or greater. This stands in sharp contrast to the average national median income as reported by the U.S. Census Bureau (2007), which found in 2006 that the median income for households in the United States was $48,201. Even if one were to take the median household income for married couples as a comparative figure (*Mdn* = $69,716), the difference is sizeable. A possible explanation for this difference in median income is the high level of education of subscribers, but even with that, one would expect the median income to be somewhat near the national average. Another explanation is that

239

the nature of collegiate sport message boards attracts a more affluent consumer, perhaps due to the intellectual pursuit of information. Regardless of the explanation, this finding represents a potentially lucrative untapped market for college athletic programs, since 41.7% of subscribers reported donating no money to athletic departments.

The variables relating to message board usage, particularly those relating to hours spent on collegiate sport message boards, posts made per week on collegiate sport message boards, and amount of time spent on collegiate sport message boards at work, reveal some interesting implications for the assessment of message board users as a market segment. The data indicates that the majority of non-subscribers are spending 5 or fewer hours per week on collegiate sport message boards, while the majority of subscribers are spending 6 or more hours on the message boards. Despite this, over 80% of both groups are only posting between zero and 20 times per week. This calls into question whether a message board user's level of activity should be measured more by posting activity or by content consumption, particularly when 28.2% of all users report not posting any messages at all. Based upon the other results from this study, it would seem appropriate to examine message board users from the standpoint of two separate variables: the amount of material consumed (or read) on the site, and the amount of material created (or posted) on the site. Both of these elements would seem to play a large role in the activity level of the collegiate sport message board user, and some users appear to prefer consumption of material to the exclusion of creating material.

The variables relating to collegiate athletic event attendance and athletic department donations were meant to offer another way of measuring user affiliation with both the message board's sport team of focus, and with collegiate sports in general. As

240

mentioned earlier in this section, the biggest surprise from these variables was the lack of donations to athletic programs by users, despite the high household income levels reported. Again, given these numbers, collegiate athletic departments would do well to consider cultivating message board users as potential donors, particularly message board subscribers.

Finally, the variables relating to other types of media use were included to see whether consumption of certain types of media was a predictor for collegiate sport message board usage. Interestingly, only the consumption of sport media demonstrated a notable positive relationship with message board use, as subscribers were found to purchase sport media subscriptions in other mediums more often than non-subscribers. This would seem to support the findings of the factor analysis for this study, which highlighted the perceived importance of gathering information. Sport media subscriptions could very easily be interpreted by users as information sources.

Combined Demographic Results As Compared To Pilot Study

Demographic results from the pilot study (Clavio, 2007b) appeared to foreshadow the demographic results from this study. For instance, 95% of respondents to the pilot study reported their gender as male, compared to 87.8% of respondents to this study. 82.8% of respondents to the pilot study were at least 30 years old, while 83% of the respondents to this study were at least 30 years old. A total of 94.7% of respondents to the pilot study indicated that they were White, compared to 92.1% of respondents to this study. Nearly all (94.9%) of respondents to the pilot study indicated that their household income was at least $40,000 per year, compared to 92.9% of respondents to this study. In terms of education level, 85.8% of respondents to the pilot study indicated they possessed

at least an undergraduate degree, similar to the 81.7% of respondents to this study who indicated at least an undergraduate degree. For marital status, 66.5% of pilot study respondents indicated that they were currently married, a similar number to the 62.1% of respondents to this study who indicated that they were married. A total of 53% of pilot study participants said that they were not the primary or shared caregiver for any children, compared to 53.8% of respondents to this study. Pilot study respondents overwhelmingly reported that they lived in the United States (99.7%), as did respondents to this study (98.6%). Also, 84.4% of pilot study respondents reported either full-time or self-employment, compared to 82.1% of respondents to this study.

There are also some similarities in the message board usage rates between the pilot study and this study. For instance, 57.2% of pilot study respondents reported having two or more computers with Internet access in their primary residence, as did 65.6% of respondents to this study. Also, just over half (53.3%) of pilot study respondents indicated spending only 1-5 hours per week on collegiate sport message board users, a similar number to the 51.8% of respondents to this study who reported collegiate sport message board usage of 1-5 hours per week. A list of selected pilot study demographic and usage results is included in a series of tables in Appendix B of this study.

The most surprising thing about the similarities between the pilot study and this study in terms of demographics and message board usage is the fact that the two studies' convenience samples were drawn from completely different message boards, approximately four months apart. It might be expected that the results from this study, containing demographic responses from message board users across a much larger geographic area and conducted at a different time of the sport season, would skew in a

different direction from the pilot study numbers. The fact that these numbers appear so similar might indicate that the demographic profile of collegiate sport message board users is relatively consistent from message board to message board, and throughout the sport season. While the results of both the pilot study and this study may not be generalized to the entire message board population due to convenience samples being utilized in both, the similarity of demographic and usage characteristics in each convenience sample does help to bolster the validity of the findings of this study. Further research should be conducted on collegiate sport message boards, to confirm whether the characteristics of the population are relatively consistent from site to site.

Combined Demographic Results As Compared to Other Studies

These demographics were similar to those revealed in the non-sport survey by James et al. (1995) in their examination of the online subscription-only communities of CompuServe and Prodigy, where it was found that 74% of respondents were male, 87% held jobs in a professional or managerial capacity, and 89% possessed a college degree. What is particularly noteworthy about the similarities in demographics between the two studies is the dissimilarity of the mediums examined. This study examined collegiate sport message boards, which do not require a subscription for access and usage; indeed, the majority of respondents to this study identified themselves as non-subscribers. By contrast, the entities of CompuServe and Prodigy which James et al. examined were subscription-only services that were only accessible by using a modem to dial directly into the respective services' computers, while the collegiate sport message boards examined in this study are all accessible through a standard Internet connection.

There were other Internet-related studies which reported demographics of respondents to surveys. Stafford et al. (2004) reported demographic data from their uses and gratifications study of AOL users. The researchers found that 51.9% of the sample was female, 16.6% was 18-24 years of age, and 64.4% was 35 or older. Flaherty et al. (1998) invited users from technology computer newsgroups and college students to participate in an email-based survey, and found that 55% of respondents were female, while almost all had completed a four-year college degree. LaRose and Eastin (2004), in a survey which in part Internet users in two Midwestern communities, found that 58% of respondents indicated they were male, with the average age of respondents being 42 years old. Eighty-nine percent of respondents were Caucasian, 58% had household incomes above $50,000 per year, and the average respondent had completed four years of college (LaRose & Eastin, 2004).

Demographic comparisons to other uses and gratifications studies of the Internet are problematic. Some studies (Ko et al., 2005; Papacharissi & Rubin, 2000; Stafford & Stafford, 2001) did not report demographic data from their samples, while others (Charney & Greenberg, 2002; Ebersole, 2000; Ferguson & Perse, 2000; Flanagin & Metzger, 2001; LaRose et al., 2001; Rafaeli, 1986; Schiffman et al., 2003) primarily or exclusively utilized high school or college students for their samples.

Based on the demographic results reported from previous studies and from the pilot study, it appears that males are more prevalent within the sample of collegiate sport message board users than the populations that other studies have examined. A possible reason for this is the focus of collegiate sport message board forums, which attend overwhelmingly to male sports (Clavio, 2007a). However, this does not explain the

relative lack of female participation, as previous research has shown females are interested in men's sports as spectators and fans (Armstrong, 2002; Dietz-Uhler, Harrick, End, & Jacquemotte, 2000; James & Ridinger, 2002).

One possible explanation can be found in existing literature on sport fan behavior and attitudes for males and females. Dietz-Uhler et al. (2000), in an investigation of gender-based sport fan behavior, uncovered several findings pertinent to this examination of collegiate sport message board users. The researchers found that, while large number of both men and women considered themselves to be sport fans, men were significantly more likely to strongly identify with being a sport fan than women. Furthermore, men were found to spend significantly more time discussing sports and watching sports on television than women, and were also found to possess more knowledge of sport than women. These findings existed in spite of men and women reporting equal levels of attendance at sporting events. The researchers also discovered that females were more likely than males to engage in sport fanhood for social reasons, while males engaged in sport fanhood both because they like sports in general and because they, "seem to enjoy acquiring information about sports through such means as reading the sports page" (p. 226).

The findings of Dietz-Uhler et al. (2000) help to at least partially explain the predominance of males in the sample of collegiate sport message board users, particularly in light of the demonstrated salience of information-related motives among both non-subscribers and subscribers. If collegiate sport message boards are seen by consumers as primarily focused on the dissemination and sharing of information related to sport teams, then it is understandable that males would be more attracted to these message boards than

females. What the findings do not help explain is why females are not more attracted to the socialization elements of collegiate sport message boards, such as the *interactivity* and *diversion* dimensions of gratification. A possible reason for this is that collegiate sport message boards may not market themselves as places of socialization; therefore, many females are not aware of the social facets that message boards possess. If true, this finding could represent an untapped source of consumers for message board publishers. By emphasizing the social and interactive elements that message boards contain, publishers could potentially increase the female demographic.

Also pertinent to the discussion of gender in relation to collegiate sport message boards are the findings by Mitra et al. (2005), which noted that females were more likely to use the Internet in a way that adapts to their everyday practices, while males tended to use the Internet for the sake of using the technology itself. It was mentioned in the review of literature that males might be more likely to use sport message boards than women due to the entertainment and specialized content elements that these boards possess. Based upon the dimensions of gratification uncovered in this study, particularly the large amount of variance explained by *interactivity* and *information gathering*, this hypothetical line of thought appears to have been validated. Collegiate sport message boards may not be considered useful by females unless they somehow fit into the everyday practices of females.

Discussion Summary

This chapter included discussion and analyses of the results of the study, as well as a comparison of those results to existing scholarly literature dealing with uses and gratifications as they relate to Internet usage. The results included an examination of the

demographics of collegiate sport message board users, their usage of both the Internet and collegiate sport message boards, and their dimensions of gratification for the usage of collegiate sport message boards.

The purpose of the study was to determine the characteristics of collegiate sport message board users, both in terms of demographics and in terms of the uses and gratifications that message board users identified. A survey methodology was utilized over a one-week period (October 24, 2007 through October 31, 2007), and users of 14 collegiate sport message boards were invited to complete a questionnaire designed to identify demographic information, Internet and message board usage information, and dimensions of gratification. A total of 2,339 questionnaires were identified as completed by the web site used to collect the data, and were utilized as a convenience sample for the purposes of statistical analysis. A series of nine research questions were asked, the goal of which was to ascertain the characteristics of collegiate sport message board users, and to examine their reasons for using collegiate sport message boards through the lens of uses and gratifications.

Demographics

Klopfenstein (2002) stated that in examinations of uses and gratifications, the initial research on users generally focuses on the identity of those users. Because the study was dealing with an unknown and heretofore unstudied population, users were also asked to provide information about their demographic characteristics.

Collectively, the collegiate sport message board users who participated in this study were found to be primarily male, White, and at least 30 years old. These users tended to have at least an undergraduate degree, full-time employment, and a household

income of at least $80,000 per year. Over half of these users were married, and were not currently the primary or shared caregiver for any children. Nearly all users lived in the United States. Over half of these users spent at least 16 hours a week on the Internet, but fewer than 10 hours per week on collegiate sport message boards. The majority made 20 or fewer posts per week on those message boards, with approximately 28% of users indicating that they made no posts per week. A majority of users spent at least some time on collegiate sport message boards while at work. Over half the users attended five or fewer collegiate athletic events in the past year, while giving no money to collegiate athletic programs. A majority of users spent at least some money on subscriptions to sport media other than collegiate sport message boards. Over 75% of users identified football as the collegiate sport that they followed most closely, and nearly all users identified a male sport as that which they followed most closely.

Of all respondents, 34% identified themselves as subscribers to a collegiate sport message board. Of those subscribers, 35% indicated that they had been a subscriber for at least 48 months, and 24% indicated that they subscribed to more than one collegiate sport message board.

There were some differences in the demographic characteristics and usage data between non-subscribers and subscribers. Subscribers reported higher average household income levels and higher levels of education than non-subscribers. Subscribers were also found to spend more time per week on collegiate sport message boards, make more posts per week, and spend more time on collegiate sport message boards at work than non-subscribers. Finally, subscribers attended more collegiate athletic events, donated more money to collegiate athletic programs, and spent more money on subscriptions to sport

media than non-subscribers. While there were statistically significant differences between non-subscribers and subscribers in all of these variables, only the variable relating to sport media subscriptions indicated a notable relationship with subscriber status.

A comparison of the demographic and usage data from this study to similar data available in existing scholarly literature found both similarities (i.e., education level, employment level, household income) and differences (i.e., prevalence of males) to previous studies of Internet populations. The demographic data from this study did bear a striking similarity to demographic data collected for a pilot study of collegiate sport message board uses and gratifications.

Overall, the demographic findings mean that users of collegiate sport message boards are primarily well-educated, fully-employed White males over the age of 30 who live in the United States. The lack of females in the convenience sample implies that collegiate sport message boards are either not viewed as an attractive medium of sport communication by females, or that collegiate sport message board publishers have not actively courted the female demographic as audience members. Similarly, the prevalence of Whites in the demographic findings indicates that collegiate sport message board publishers have not effectively marketed these message boards to minority consumers.

It was discovered that the majority of users in both groups reported an average household income well above the median income for the United States (U.S. Census Bureau, 2007), and that approximately 49% of subscribers reported an average household income that was more than double that of the average for the United States. This finding, in conjunction with the finding that approximately 52% of collegiate sport message board

users do not donate money to college athletic programs, indicates that these users represent an untapped source of money for athletic departments.

The finding that approximately 28% of users do not post messages indicates that a certain segment of the message board sample does not engage in the exchange of information on the message boards, but rather engages in consumption of content. In terms of education level, while approximately 77% of respondents reported having at least a bachelor's degree, 41% of respondents were not primarily using the message board focused on their alma mater. This indicates that alumni status is not the sole predictor of message board use, and that a collegiate sport message board's audience is likely to include individuals who are attracted to that school's athletic program for reasons other than alumni affiliation.

Uses and Gratifications of Collegiate Sport Message Board Users

Uses and gratifications theory was described by Katz et al. (1974) as an attempt to explain why people use communications to satisfy needs and achieve goals, and to arrive at that explanation by asking them their reasons for communication use. This study attempted to do so, by asking collegiate sport message board users to explain their usage of the medium through a series of motivation and usage questions.

Respondents were asked to respond to a series of motivation and usage statements, to ascertain why they used collegiate sport message boards. A series of 40 questions relating to these motivations and usages was asked of all respondents. Those respondents who identified themselves as subscribers were asked an additional 20 questions dealing specifically with premium elements of collegiate sport message boards. The responses to these items were then examined via factor (principal components)

analyses, and the individual items were reduced into a series of factors, in order to clarify the uses sought and gratifications obtained by respondents. Several such analyses were performed, to ascertain whether the dimensions of gratification differed for various subgroups within the convenience sample. Overall, the analysis yielded four primary dimensions of gratification for collegiate sport message board users: *interactivity*, *information gathering*, *diversion*, and *argumentation*. These four dimensions explained roughly 45-50% of the variance in all subgroups. A further three dimensions of gratification were revealed from principal components analysis performed on the 20-question series asked of subscribers: *premium information*, *community*, and *patronage*. These three factors accounted for 55.5% of the observed variance among subscribers for these questions.

Overall, the uses and gratifications findings of this study indicate that collegiate sport message board users are primarily interested in information-related and social-related elements of these sites. The high salience of the items comprising the *information gathering* factor, and the large amount of variance explained by the *premium information* factor for subscribers, highlight the importance of gathering information to all users. While this factor did not explain the largest percentage of variance in the motivation questions given to all users, it is possible that information-related motives of message board use are common to all users, and therefore it does not stand out as an independent motivation or predictor of variance.

Based upon the items comprising both the general and subscriber-only dimensions of gratification, the dimensions' relative salience, and the statistical correlations with message board usage, it appears that the gathering of information is a highly salient

motive for all users. However, the non-subscriber collegiate sport message board environment is oriented towards encouraging and satisfying social and/or interactive motives of use, while the subscriber-only collegiate sport message board environment is oriented towards encouraging and satisfying information-related motives of use. This is the most surprising finding of the factor analyses for dimensions of gratification of collegiate sport message board users, and the one which contains the most implications for both users and publishers.

The *interactivity* and *information gathering* dimensions of gratification, taken in conjunction with message board usage, also indicate that the nature of active users on collegiate sport message boards should be considered on two separate levels. The first level, consumption of content, is related directly to how much message board content that a user views. The second level, creation of content, is related directly to how much message board content that a user posts. Nearly 30% of all respondents to this study indicated that they did not post messages at all, yet these users are obviously active in gathering information. Classifying activity simply by measuring the number of posts that users create ignores an important function of collegiate sport message boards, and future research of sport message boards would do well to consider quantifying the term "active" in this dichotomous manner.

Of the dimensions uncovered in this study, the *argumentation* dimension appears to be unique to collegiate sport message board users. While this dimension was not present as a motivating factor for all four regions, it nevertheless indicates that *argumentation* is a salient reason for using collegiate sport message boards for at least some of the participants. Furthermore, the component items of the *interactivity* dimension

252

for the regions which did not include an *argumentation* dimension (e.g., East and Midwest) indicated that users in those regions may interpret *argumentation* as being a part of *interactivity*, rather than a separate dimension of message board use.

The dimensions of gratification for collegiate sport message boards were similar to those found by other scholars who have examined Internet uses and gratifications (Charney & Greenberg, 2002; Ebersole, 2000; Garramone et al, 1986; Papacharissi & Rubin, 2000; Stafford & Stafford, 2001). Collegiate sport message board dimensions of gratification supported four (*diversion*, *entertainment, information, social interaction*) of the 10 suggested motive areas for Internet usage suggested by Lin (1999). The dimensions of gratification uncovered in this study also supported the findings of the content analysis of sport message boards by End (2001). End's study revealed that the sharing of information was the most common function of message board posts, which corresponded with the *information gathering* factor's high salience in this study. Furthermore, the presence of *blasting* messages in End's study matched the appearance of the *argumentation* dimension for collegiate sport message board users in this study.

The results of the factor analyses supported Stafford and Stafford's (2001) suggestion that a socialization gratification be added to Cutler and Danowski's (1980) dichotomous separation of gratifications into content and process. The salience of both information gathering and interactivity to collegiate sport message board users, combined with component items of these factors which included the consumption of information content generated by fellow users, as opposed to a traditional media outlet, indicated a potential melding of the content and socialization gratifications in the collegiate sport message board environment.

Conclusions

What can be taken from this study is that collegiate sport message board users are, on the whole, a group of well-educated, fully employed, and financially secure individuals, who utilize the medium of collegiate sport message boards to interact with fellow fans and gather information about their favorite teams. Some collegiate sport message board users also utilize the message boards to pursue non-sports related conversation topics, or to engage in arguments with other users.

There were key findings in this study for both demographic information and dimensions of motivation. In terms of demographics, the study revealed that message board users are predominantly White and male, indicating either that collegiate sport message boards are not an attractive media option to females and/or minorites, or that collegiate sport message board publishers have not been able to effectively court these demographics. The study also revealed that, while the education level for all users was high, 41% of users were spending the most time on a collegiate sport message board that did not focus on their alma mater. This indicated that alumni status was not the only predictor for collegiate sport message board use. Also revealed was the fact that the majority of all users' reported household incomes were well above the median household income for the United States, yet nearly 42% of users did not donate any money to collegiate athletic programs.

In terms of dimensions of motivation, they key findings included the prevalence of two factors, *interactivity* and *information gathering*, as highly salient motives for the use of collegiate sport message boards. Based upon the mean scores and percentages of variance explained for both non-subscriber and subscriber dimensions of gratification, it

can be concluded that the gathering of information is a consistently salient reason across all groups for using collegiate sport message boards. Interactive elements of message boards are also salient to users, particularly non-subscribers, as they explain the largest percentage of variance for the non-subscriber factor analysis. It can be further concluded that the non-subscriber message board environment emphasizes the interactive elements of collegiate sport message boards, while the subscriber-only message board environment emphasizes the informational elements.

Another key finding from the dimensions of motivation was the discovery of a new dimension, *argumentation*. This dimension was present in the factor analysis of all collegiate sport message board users, as well as two of the four region-specific factor analyses. While the salience of this dimension was relatively low, it appears to be a consistent dimension of motivation among certain groups of users on most collegiate sport message boards. A close examination of the component items for the regions that did not include *argumentation* as a dimension of gratification indicated that the users in these regions interpret *argumentation* as a part of *interactivity*, rather than as a separate dimension of gratification.

Finally, the findings of both the demographic investigation of users and the analyses of dimensions of motivation revealed the need to evaluate the concept of "active" users through a dichotomous method. The independence of the *information gathering* dimension from the *interactivity* dimension, and the corresponding correlations with message board usage figures for both dimensions, leads to the conclusion that measurements of user activity should take into account the amount of content that a user consumes as a separate element from the amount of content that a user creates.

This study fills a void in the literature relating to online sport consumption, as well as Internet uses and gratifications. By targeting a specific type of sport consumer (i.e., collegiate sport message board users), insight was gained into who these users are, why they consume online sport content in a particular mass medium (i.e., collegiate sport message boards), and the differences within that sample of consumers for both demographics and dimensions of motivation. Furthermore, this study highlights the need to look at the concept of an "active" online sport consumer, by considering both the consumption and production qualities of that user in the online environment.

Although the results of this study cannot be quantitatively applied to message board users outside the convenience sample utilized, the demographic characteristics of the sample were remarkably similar to the characteristics of the convenience sample utilized in an earlier pilot study of collegiate sport message board users. Furthermore, the dimensions of gratification revealed in this study are consistent with those uncovered in other studies of Internet uses and gratifications. Overall, collegiate sport message board users are a population that appears worthy of future scholarly inquiry.

Recommendations

Several recommendations can be drawn from this study. First, collegiate sport message board users, and the message board web sites that they frequent, warrant attention from both collegiate athletic programs and scholars. As mentioned earlier, the demographic data gleaned from this study illustrate the collegiate sport message board user as a well-educated, fully employed, and financially secure individual who takes time out of his/her week to communicate with other fans of a collegiate athletic program. As

such, these users represent sport consumers who may have considerable influence as opinion leaders in their non-Internet interactions with others.

For the administrators of these athletic programs, the population of collegiate sport message board users could represent an untapped source of revenue. As the demographic and usage data indicated, over 50% of users are currently donating no money to collegiate athletic programs, and over 55% of users are attending five or fewer collegiate athletic events per year. When one considers that 58% of message board users are making at least $80,000 a year in household income, the potential importance to cash-strapped collegiate athletic departments of cultivating this population appear clear. This cultivation might take the form of closer media relations ties with the owners and operators of message board web sites. One message board operator noted that the relationship between the athletic department and the message board web site's reporters was practically non-existent, and that the school's athletic director seemed to feel that the web site did not warrant a press credential because it was not a legitimate media site. Given the demographic results from this study, an athletic director in a similar situation might want to reconsider that notion, particularly in light of message board users rating the information gathering aspects of collegiate sport message board usage so highly.

For message board publishers and administrators, this study reveals several key findings, both about the audience that is currently using message boards and the audience that is not. The prevalence of Whites and males among the demographic characteristics of all users indicates that message board publishers have yet to make their sites attractive or necessary to either females or minorities. Given the existing literature which demonstrates that both females and minorities are interested, active consumers of male

sports, these demographic groups represent an area of audience growth for message board

publishers. One area that might increase the attractiveness of collegiate sport message

boards to females would be to market the message board environment's socialization

features. It is possible that female online sport consumers are simply not aware that

collegiate sport message boards feature a great deal of interactive social elements, in

addition to the informational elements which they possess.

In regards to the users currently on message boards, publishers should consider

increasing the socialization aspects of the subscriber-only message boards. Based on the

dimensions of gratification uncovered in this study, subscribers are primarily motivated

by access to premium information. While the gathering of information was the most

salient dimension of gratification for both non-subscribers and subscribers, there were

obviously a considerable number of non-subscribers who were motivated by interactive

and social elements (i.e., *interactivity*, *diversion, argumentation*). Message board

publishers interested in increasing their subscriber base might consider marketing their

subscriber-only message boards as locations for social interaction as well as the gathering

of information.

For scholars, the population of collegiate sport message board users represents an

accessible group of highly identified sport fans who have embraced the interactive and

information gathering capabilities of the Internet. Further scholarly research should be

conducted into who users are, from both a quantitative and qualitative perspective. Such

inquiries need not be done strictly from a uses and gratifications perspective. Potential

studies include scholarly investigation of message board content, as seen in previous

studies (e.g., End, 2001; End et al., 2003; Ruddock, 2005). Literally hundreds of

messages per day are posted onto collegiate sport message boards across the country.

These messages represent a nearly endless resource for sport communication scholars.

The ever-growing popularity of collegiate sport message boards (Freeman, 2006; Oates,

2007; Skretta, 2007), and the unique characteristics of these boards which allow for users

to participate both as the creators and the consumers of such content, should be seen as a

new frontier of sorts for sport communication scholars.

Collegiate sport message boards represent merely one facet of a larger enterprise.

Message boards exist for a wide variety of sport entities across the globe. Major Internet

sport media venues such as *ESPN.com* and *CBS Sportsline* have joined the message board

world, either through announcing partnerships with existing sites (ESPN 2007a; 2007b)

or by integrating user comments into the web pages of their stories. The message board

network *Rivals.com* even has a group of message boards dedicated solely to discussion

and coverage of high school athletics. While this study filled a void in the existing

literature by examining one part of the message board milieu, future research should

further expand the body of knowledge by performing similar examinations on these other

message board environments and their users.

While traditional media messages, such as those from newspapers, magazines,

and television, still warrant considerable scholarly attention, the media messages

emanating from message boards are obviously of interest to those individuals who

consume them. The number of people who are consuming those messages is already

sizeable, and likely to continue growing. It is of paramount importance to the academic

field of sport communication that scholars utilize appropriate scientific techniques to

study these users, the messages that they consume, and the messages that they create, so

that we may better understand the popularity of message boards, as well as their implications for the world of sport media and the field of sport communication. As this study shows, collegiate sport message board users consider the content they consume on message boards to be both unique and important, to the point that it supersedes content generated by traditional mass media. In a media environment where these users are engaged in near-simultaneous consumption and creation of content, and where that content is a primary source of information for sport media consumers, studying who those users are, how they use the medium, and why they use the medium is vital.

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APPENDICES

APPENDIX A

INTERNET COLLEGIATE SPORT MESSAGE BOARD USERS SURVEY

Official Sport Message Board Users Survey

1. Survey Information

STUDY INFORMATION SHEET

INDIANA UNIVERSITY - BLOOMINGTON
STUDY INFORMATION SHEET
Message Board Uses and Gratifications Study

You are invited to participate in a research study. The purpose of this study is to learn about the people who use internet collegiate sport message boards.

INFORMATION

This study asks you to take a survey regarding some information about you, as well as your feelings towards certain aspects of internet sport message boards. After agreeing to take the survey, you will be directed to a page which contains the survey. The survey should take you approximately 5-10 minutes to complete. It is expected that you will be one of several hundred message board users taking this survey.

BENEFITS

This study will help to shed light on the internet sport message board community, and will expand the general body of knowledge in that area.

CONFIDENTIALITY

Your responses will be anonymous, and therefore cannot be tied back to you individually. Your answers to the survey will be analyzed as part of the larger population of sport message boards, both on this forum and in the larger world of sport message boards.

CONTACT

If you have questions at any time about the study or the procedures, you may contact the researcher, Galen Clavio, at 1025 E. 7th Street, Rm 112, Bloomington, IN, 47405, (812) 679-8298 and gclavio@indiana.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 not been honored during the course of this project, you may contact the office for the Indiana University Bloomington Human Subjects Committee, Carmichael Center L03, 530 E. Kirkwood Ave., Bloomington, IN 47408, 812/855-3067, or by e-mail at iub_hsc@indiana.edu.

PARTICIPATION

Your participation in this study is voluntary, you may refuse to participate without penalty. If you decide to participate, you may withdraw from the study at anytime 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.

10/15/2007

IRB Approved
Approval Date: July 15, 2007
Expires: July 15, 2008

1 of 1

Official Sport Message Board Users Survey

* 1. I have read and understood the survey information included above, and I wish to participate in the survey.

◯ Yes

◯ No

2. User age

* 2. What is your age?

◯ Under 18

◯ 18-22

◯ 23-29

◯ 30-39

◯ 40-49

◯ 50-59

◯ 60 and over

3. Sport Message Board Uses, Gratifications, and Motivations

For each of the statements listed below, please respond based on the following scale:

1 - Strongly Disagree
2 - Somewhat Disagree
3 - Neither Agree nor Disagree
4 - Somewhat Agree
5 - Strongly Agree

278

3. I use collegiate sport message boards:

	1	2	3	4	5
To find out news faster than I would using other types of sports media	○	○	○	○	○
To read good analysis about my favorite team (s) from fellow fans	○	○	○	○	○
Because I find out things about my favorite team(s) that my friends don't know	○	○	○	○	○
To hear fair and balanced views on things	○	○	○	○	○
To feel like I'm part of the fan community even though I live far away	○	○	○	○	○
To see what people on rival boards are saying about my team(s)	○	○	○	○	○
To talk about sports other than football and basketball	○	○	○	○	○
To express myself freely	○	○	○	○	○
To talk about things other than sports, such as politics and religion	○	○	○	○	○
To discuss X's and O's and general strategy	○	○	○	○	○
To keep up with non-athletic news about my alma mater	○	○	○	○	○
To stay in touch with old friends and classmates	○	○	○	○	○
To pass time when I'm bored	○	○	○	○	○
To meet new and interesting people	○	○	○	○	○
To discuss games in progress	○	○	○	○	○
To talk about my team's recruiting efforts	○	○	○	○	○
To read what others have to say, even though I don't participate in discussions myself	○	○	○	○	○
To find people who can sell me tickets or memorabilia	○	○	○	○	○

To give my input and opinions	○	○	○	○	○
To see how fans of other teams are reacting to news about their program	○	○	○	○	○
To complain about things going wrong with my favorite team(s)	○	○	○	○	○
To communicate with fellow fans of my school and/or team(s)	○	○	○	○	○
Because I like to use the non-sports forums to discuss all issues of life	○	○	○	○	○
To see video clips of top players and/or recruits	○	○	○	○	○
To find people to whom I can sell tickets or memorabilia	○	○	○	○	○
To "smack talk" to fans of other schools	○	○	○	○	○
To hear about other users' personal encounters with coaches and players	○	○	○	○	○
Because I feel like I'm a part of the message board community	○	○	○	○	○
To argue with other users online	○	○	○	○	○
Because it offers more in-depth coverage of my favorite team(s) than traditional sports media	○	○	○	○	○
Because I enjoy reading what other users write	○	○	○	○	○
To get information about my favorite team (s) that I can't get elsewhere	○	○	○	○	○
Because I enjoy putting other users in their place	○	○	○	○	○
To participate in discussions about my favorite team	○	○	○	○	○
Because it gives me something to do at work	○	○	○	○	○
To find out the latest gossip about players,	○	○	○	○	○

280

coaches, and
administrators for my
favorite team(s)

To be able to share my views and experiences anonymously	◯	◯	◯	◯	◯
To share information I have learned with the community	◯	◯	◯	◯	◯
Because I enjoy interacting with other users	◯	◯	◯	◯	◯
To belong to a community of like-minded fans	◯	◯	◯	◯	◯

4. If there are any other reasons why you use collegiate sport message boards other than those listed above, please list them here

Reason #1 [   ]

Reason #2 [   ]

Reason #3 [   ]

4. User demographics

5. Are you:

◯ Female

◯ Male

6. Which of the following categories best describes your race/ethnicity?

◯ American Indian or other Native American

◯ Asian or Asian American

◯ Black or African American

◯ Hispanic, Latino, or Spanish origin

◯ Native Hawaiian or other Pacific Islander

◯ White

◯ Other

7. What is your approximate household income?

( ) $19,999 or less
( ) $20,000-39,999
( ) $40,000-59,999
( ) $60,000-79,999
( ) $80,000-99,999
( ) $100,000-199,999
( ) $200,000+

8. Which best indicates your education level?

( ) Some high school
( ) High school diploma
( ) Some Undergraduate
( ) Undergraduate Degree
( ) Some Graduate
( ) Master's Degree
( ) Doctorate/Law degree

9. If you attended college, which institution(s) did you attend? Please list all that apply, starting with the first school you attended:

Institution #1 [   ]
Institution #2 [   ]
Institution #3 [   ]
Institution #4 [   ]
Institution #5 [   ]

10. Are you:

( ) Married
( ) Engaged or Living with a Partner
( ) Widowed
( ) Separated
( ) Divorced
( ) Never married

11. For how many children are you the primary or shared caregiver?

( ) 0
( ) 1
( ) 2
( ) 3
( ) 4 or more

12. In what country is your primary residence located?

- ⚪ United States
- ⚪ Canada
- ⚪ Mexico/Caribbean
- ⚪ Australia
- ⚪ Europe
- ⚪ Other

13. If you answered "United States" to the previous question, in which state is your primary residence located? Also, if you answered "Other", please list the country where your permanent residence is located

[   ]

5. Computers and Employment

14. How many computers in your primary residence have internet access?

- ⚪ 0
- ⚪ 1
- ⚪ 2
- ⚪ 3 or more

15. How many hours a week would you estimate you spend on the Internet?

- ⚪ 0 hours
- ⚪ 1-5 hours
- ⚪ 6-10 hours
- ⚪ 11-15 hours
- ⚪ 16-20 hours
- ⚪ 21-25 hours
- ⚪ 26 or more hours

16. How many hours a week would you estimate you spend on collegiate sport message boards?

- ⚪ 0 hours
- ⚪ 1-5 hours
- ⚪ 6-10 hours
- ⚪ 11-15 hours
- ⚪ 16-20 hours
- ⚪ 21-25 hours
- ⚪ 26 or more hours

17. On average, how many posts would you estimate you make per week on collegiate sport message boards?

○ 0 (lurker only)
○ 1-20
○ 21-40
○ 41-60
○ More than 60

18. Which best indicates your current employment level?

○ Full-time employment
○ Part-time employment
○ Self-employed/business owner
○ Student
○ Retired
○ Unemployed

19. If you are employed, please describe your occupation or industry.

[   ]

20. Do you ever use collegiate sport message boards at your place of employment? If so, how much do you use them on a typical day?

○ I don't use message boards at work
○ 1-30 minutes
○ 31-60 minutes
○ 61-120 minutes
○ More than 120 minutes
○ Constantly throughout the day

6. Athletics and Media usage

21. On average, how much do you spend a year on tickets to athletic events?

○ $0
○ $1-99
○ $100-199
○ $200-299
○ $300-399
○ $400-499
○ $500 or more

22. How many collegiate athletic events did you attend in person last year?

- ◯ 0
- ◯ 1-5
- ◯ 6-10
- ◯ 11-15
- ◯ 16-20
- ◯ More than 20

23. On average, how much per year do you donate to college athletic programs?

- ◯ $0
- ◯ $1-99
- ◯ $100-299
- ◯ $300-499
- ◯ $500-999
- ◯ $1000 or more

24. How often do you read print media, such as newspapers and magazines?

- ◯ Never
- ◯ Rarely
- ◯ A few times a week
- ◯ Daily
- ◯ I only read the online version(s)

25. How much television would you estimate that you watch in an average week?

- ◯ 0 hours
- ◯ 1-5 hours
- ◯ 6-10 hours
- ◯ 11-15 hours
- ◯ 16-20 hours
- ◯ 21-25 hours
- ◯ 26 or more hours

26. On average, how much do you spend per year on subscriptions to sport media such as magazines, newspapers, and television (i.e., ESPN GamePlan, ESPN Full Court)?

○ $0
○ $1-99
○ $100-199
○ $200-299
○ $300-399
○ $400-499
○ $500 or more

7. Users

* 27. What is the name of the message board that you spend time on the most? If you subscribe to this board, please place an asterisk (*) next to its name.

[text box]

28. What other collegiate sport message boards do you use frequently? List all that apply. If you are a subscriber to any of these boards, please place an asterisk (*) next to the name(s).

Site #1 [text box]
Site #2 [text box]
Site #3 [text box]
Site #4 [text box]
Site #5 [text box]

* 29. Are you a premium subscriber to a collegiate sport message board?

(i.e., do you pay a monthly or yearly fee in order to gain access to premium content, such as premium message boards or premium recruiting news?)

○ Yes
○ No

8. Premium users

For each of the statements below, please respond based on the following scale:

1 - Strongly Disagree
2 - Somewhat Disagree

3 - Neither Agree nor Disagree
4 - Somewhat Agree
5 - Strongly Agree

30. I am a premium subscriber to a collegiate sport message board:

	1	2	3	4	5
Because there is less smack talk on the premium board	◯	◯	◯	◯	◯
Because it makes me feel like more of a fan	◯	◯	◯	◯	◯
Because I feel as though I am supporting my school	◯	◯	◯	◯	◯
To learn things about my favorite team(s) that the media doesn't know	◯	◯	◯	◯	◯
To learn things about my favorite team(s) that my friends don't know	◯	◯	◯	◯	◯
Because there are too many fans from other schools on the free boards	◯	◯	◯	◯	◯
Because the quality of users on the premium side is much better	◯	◯	◯	◯	◯
Because I prefer to participate in discussions on the premium message board(s) instead of the free board(s)	◯	◯	◯	◯	◯
Because people on non-premium boards are more negative about my team	◯	◯	◯	◯	◯
To give out "insider" information to my fellow fans	◯	◯	◯	◯	◯
Because the users are generally more knowledgeable	◯	◯	◯	◯	◯
Because I get access to insider information on the premium message board(s)	◯	◯	◯	◯	◯
To get access to premium content on the front page of the website	◯	◯	◯	◯	◯

To support the web site or company that runs the message board community	○	○	○	○	○
To find out news about my team faster than other people	○	○	○	○	○
Because I enjoy the community of users on the premium message board	○	○	○	○	○
Because it allows me to better network with the fan community of my favorite team(s)	○	○	○	○	○
Because there is more of a family feeling on the premium board	○	○	○	○	○
To gain access to premium content on the message board, such as videos, updates, and recruiting news	○	○	○	○	○
Because the quality of premium content is excellent	○	○	○	○	○

31. If there are any other reasons why you use the premium sport message board other than those listed above, please list them here:

Reason #1 _____

Reason #2 _____

Reason #3 _____

32. How many months have you been a subscriber to this message board?

○ 1-12 months
○ 13-24 months
○ 25-36 months
○ 37-48 months
○ More than 48 months

33. Are you a subscriber to more than one collegiate sport message board?

○ Yes
○ No

9. Exit questions

34. What collegiate sport are you the biggest fan of, or follow most closely?

◯ Baseball
◯ Men's Basketball
◯ Women's Basketball
◯ Football
◯ Hockey

Other (please specify)

_____

35. Do you have any general feedback or comments about message boards, the message board community, or this survey?

10. End

Thank you for participating in this survey! If you have any questions or concerns, please email them to Galen Clavio at gclavio@indiana.edu.

APPENDIX B

SELECTED DATA TABLES FROM COLLEGIATE SPORT MESSAGE BOARD

PILOT STUDY

Table 76

Self-reported Age of Users in Message Board Pilot Study

Age	Frequency (%)
Under 18	2 (0.6)
18-22	14 (4.1)
23-29	59 (17.1)
30-39	86 (24.9)
40-49	74 (21.4)
50-59	77 (22.3)
60 and over	31 (9.0)
No response	2 (0.6)
Total	345

Table 77

Gender of Users in Message Board Pilot Study

Gender	Frequency (%)
Female	15 (4.3)
Male	288 (83.5)
No Response	42 (12.2)
Total	345

Table 78

Racial or Ethnic Background of Users in Message Board Pilot Study

Race/Ethnicity	Frequency (%)
American Indian / Native American	2 (0.6)
Asian or Asian-American	5 (1.4)
Black or African-American	3 (0.9)
Hispanic or Latino	1 (0.3)
Pacific Islander	1 (0.3)
White	306 (88.7)
Other	5 (1.4)
No Response	22 (6.4)
Total	345

Table 79

Household Income of Users in Message Board Pilot Study

Household income	Frequency (%)
Less than $19,999	9 (2.6)
$20,000 - $39,999	16 (4.6)
$40,000 - $59,999	47 (13.6)
$60,000 - $79,999	56 (16.2)
$80,000 - $99,999	45 (13.0)
$100,000 - $199,999	112 (32.5)
$200,000+	28 (8.1)
No Response	32 (9.3)
Total	345

Table 80

Education Level of Users in Message Board Pilot Study

Education level	Frequency (%)
HS Diploma	13 (3.8)
Some Undergraduate	43 (12.5)
Undergraduate Degree	135 (39.1)
Some Graduate	41 (11.9)
Master's Degree	68 (19.7)
Doctorate/Law Degree	21 (6.1)
Other	3 (0.9)
No Response	21 (6.1)
Total	345

Table 81

Relationship Status of Users in Message Board Pilot Study

Relationship Status	Frequency (%)
Married	212 (61.4)
Living with a partner	14 (4.1)
Widowed	3 (0.9)
Separated	2 (0.6)
Divorced	15 (4.3)
Never Married	73 (21.2)
No Response	26 (7.5)
Total	345

Table 82

Country or Region of Residence of Users in Message Board Pilot Study

Country/Region	Frequency (%)
United States	319 (92.5)
Europe	1 (0.3)
No Response	25 (7.2)
Total	345

Table 83

Number of Children for whom Users in Message Board Pilot Study are Primary or

Shared Caregiver

Children	Frequency (%)
0	169 (49.0)
1	49 (14.2)
2	69 (20.0)
3	20 (5.8)
4	12 (3.5)
No Response	26 (7.5)
Total	345

Table 84

Current Employment Level of Users in Message Board Pilot Study

Employment level	Frequency (%)
Full-time employment	244 (70.7)
Part-time employment	6 (1.7)
Self-employed / business owner	26 (7.4)
Student	13 (3.8)
Retired	24 (7.0)
Unemployed	7 (2.0)
No Response	25 (7.2)
Total	345

Table 85

Estimated Number of Hours Spent on Collegiate Sport Message Boards by Users in

Message Board Pilot Study

Hours	Frequency (%)
1-5 hours	170 (49.3)
6-10 hours	91 (26.4)
11-15 hours	25 (7.2)
16-20 hours	21 (6.1)
21-25 hours	3 (0.9)
26 or more hours	9 (2.6)
No Response	26 (7.5)
Total	345

BIOGRAPHICAL SKETCH

Galen Clavio was born August 27, 1979 in Terre Haute, Indiana. He graduated from William Henry Harrison High School (West Lafayette, Indiana) in 1997. His education continued at Indiana University (Bloomington, Indiana), where he graduated in 2001 with a Bachelor of Science in Sport Communication.

Clavio's educational experience continued at Indiana University (Bloomington, Indiana), where he received his Master of Science degree in Sport Management in December, 2005. In the Spring of 2006, Clavio enrolled at Indiana University to pursue his Ph.D. in Sport Management. While at Indiana, he served as an associate instructor and research assistant in the school of Health, Physical Education, and Recreation. In the Fall of 2007, Clavio was hired as a visiting professor in sport administration at the University of Miami.

In addition to his academic endeavors, Clavio spent four years working in the sport industry. He spent the 2001 baseball season as the play-by-play broadcaster for the Evansville Otters of the Frontier League. Following this, Clavio moved on to arenafootball2, where he served as Director of Broadcasting and Media Relations for the Roanoke Steam for the 2002 season. Clavio then took a job with the Cape Fear FireAntz of the Atlantic Coast Hockey League as play-by-play broadcaster and Public Relations Director.

After leaving the FireAntz, Clavio moved to Ottumwa, Iowa, where he served as Sports Director for 1240 KBIZ-AM. After nearly a year in Ottumwa, Clavio then took over the play-by-play and media relations reins of the Memphis RiverKings of the Central Hockey League for the 2003-04 season.

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EDUCATION

Ph.D.	Indiana University, Bloomington, IN. Human Performance/Sport Marketing, 2006-2008
M.A.	Indiana University, Bloomington, IN. Sport Marketing, 2005
B.S.	Indiana University, Bloomington, IN. Sport Communication, 1997-2001

PROFESSIONAL SERVICE

Representative, Sport Communication Doctoral Student Presenter for the Conversation with Dick Enberg, Indiana University, School of Journalism Auditorium (Bloomington, IN): November 9, 2006.

PROFESSIONAL EMPLOYMENT/EXPERIENCE HISTORY

Visiting Professor, University of Miami, Coral Gables, FL; 2007-08.

Owner and Editor, The Meaningful Collateral sports blog; 2007.

Associate Instructor, Indiana University, Bloomington, IN; 2007. (Taught Issues in Sport Communication [P445]).

Associate Instructor, Indiana University, Bloomington, IN; 2006. (Taught Issues in Sport Communication [P445]).

Associate Instructor, Indiana University, Bloomington, IN; 2005. (Taught Sport Marketing [P418]).

Director of Broadcasting and Media Relations, Memphis RiverKings/Memphis Xplorers, Maddox Sports, LLC, Southaven, MS: 2003-04.

Sports Director / Play-by-play broadcaster, KBIZ-AM / KTWA-FM, Fairfield Media Group, Ottumwa, IA: 2002-03

Director of Broadcasting and Media Relations, Cape Fear FireAntz, Fayetteville, NC: 2002

Director of Broadcasting, Media Relations, Community Relations, and PR, Roanoke Steam Arena Football, Roanoke, VA: 2002

Play-by-play broadcaster, Evansville Otters, Evansville, IN: 2001

Sports Director / Public Relations Director / Play-by-play broadcaster, WIUS-AM Student Radio, Bloomington, IN: 1998-2001

Sportswriter, Indiana Daily Student, Bloomington, IN: 1999

Freelance Writer, Lafayette Leader, Lafayette, IN: 1995

INTERNSHIPS

WTHR, NBC-13, Indianapolis, IN. 2000. (Assisted production and on-air staff for the sports department).

TEACHING AND PROFESSIONAL DEVELOPMENT

University of Miami

Spring 2008: Sport Marketing (ESS 302)
              Sport Information Management (ESS 403)
              Careers in Sport Administration (ESS 204)
Fall 2007:   Sport Marketing (ESS 302)
              Careers in Sport Administration (ESS 204)

Introduction to Sport Administration (ESS 201)
Intersessions: Sports Broadcasting Techniques (In Development)
Intensive Sports Public Relations (In Development)

Indiana University
Summer 2007: Sport Marketing (K524), Guest Lecturer
Spring 2007:   Issues in Sport Communication (P445), Instructor.
Fall 2006:   Issues in Sport Communication (P445), Instructor.
Spring 2006:   Issues in Sport Communication (P445), Instructor.
Fall 2005:   Sport Marketing (P418), Instructor.

MEMBERSHIP IN PROFESSIONAL ASSOCIATIONS

American Alliance of Health, Physical Education, Recreation & Dance (AAHPERD). 2006-Present.

North American Society for Sport Management (NASSM). 2006-Present.

Sport Marketing Association (SMA). 2006-Present

JOURNALS AND ACADEMIC PUBLICATIONS

International Journal for Sport Communication (IJSC). Reviewer, 2007-present

HONORS & ACHIEVEMENTS

School of Health, Physical Education, and Recreation Fellowship: 2006

Founder's Day Honoree, Indiana University, Bloomington, IN: 2001

Founder's Day Honoree, Indiana University, Bloomington, IN: 2000

RESEARCH AND CREATIVE ACTIVITY

SCHOLARLY INTEREST

The influence of electronic and new media on the interactions between sport organizations and sport consumers.

PUBLICATIONS – REFEREED ARTICLES

Clavio, G., & Pedersen, P.M. (2007). Analyzing the connection between the print

and broadcast properties of ESPN: An investigation of the alignment of editorial written and photographic coverage in ESPN The Magazine with ESPN's broadcasting rights. *International Journal of Sport Management, 8*(1), 95-114.

Clavio, G., Geurin, A., Miloch, K. S., & Pedersen, P. M. (2007). Communicating in crisis: A case study of media management and its marketing implications. *Book of Papers from the Sport Marketing Association's 4th Annual Conference*.

Pedersen, P.M., Miloch, K.S., Fielding, L., & Clavio, G. (2007). Investigating the coverage provided to males and females in a comparable sport: A content analysis of the written and photographic attention given to interscholastic athletics by the print media. *Applied Research in Coaching and Athletics Annual, 22,* 97-125.

PUBLICATIONS - ACCEPTED

Clavio, G., Kraft, P., & Pedersen, P.M. (2007) Communicating with consumers through video games: An analysis of brand development within the video gaming segment of the sport industry. *International Journal of Sport Marketing and Sponsorship* (Accepted July, 2007).

Clavio, G. & Miloch, K. (2007). Agenda setting in minor league hockey: A strategic justification and practical guide. *International Journal of Sport Management and Marketing* (Accepted September, 2007).

PUBLICATIONS - SUBMITTED

Whisenant, W., Pedersen, P., & Clavio, G. (2007, July). Analyzing ethics in the administration of interscholastic sports: Three key gender-related ethical dilemmas faced by educational leaders. *Educational Management Administration & Leadership*. (resubmitted with revisions: original submission June, 2005).

PUBLICATIONS – WORKS IN PROGRESS

Clavio, G. (2007). Uses and gratifications of collegiate sport message board users. Dissertation topic. Target completion date is March 7, 2008.

Whisenant, W., Mathis, K., & Clavio, G. (2007). Content analysis of the media coverage given to the UM-FIU fight of 2006. Target submission date is April, 2008.

Clavio, G. (2007). Open Forum: A content analysis of Internet collegiate message board forums, for the *International Journal of Sport Communication*. Target submission date is January, 2008.

Clavio, G. Broken Ice: An examination of the public relations efforts associated with the aborted launch of the new World Hockey Association, for the *International Journal of Sport Communication.* Target submission date is March, 2008.

Clavio, G. Low Minors: The underbelly of the sport industry. Book publication. Target completion date is June, 2009.

PUBLICATIONS – BOOK CHAPTERS & AUDIO RECORDINGS

Clavio, G. (2007). Madden Football and EA Sports. In J. Lee (Ed.), *Branding in Sport Business: Industry Profile*s (In Press).

PRESENTATIONS - REFEREED

Clavio, G., Kraft, P., & Pedersen, P.M. (2007, November 1). Communicating with consumers through video games: An analysis of brand development within the video gaming segment of the sport industry. *SMA 5th Annual Conference.* Pittsburgh, PA.

Clavio, G., & Pedersen, P.M. (2007, June 1). Mixing the Messages? The alignment of editorial coverage in ESPN The Magazine with ESPN's broadcast rights. *2007 North American Society for Sport Management Conference.* Ft. Lauderdale, FL.

Pedersen, P.M., Clavio, G., & Eagleman, A. (2007, March 14). A content analysis of the coverage given to boys' and girls' high school basketball. *American Alliance for Health, Physical Education, Recreation and Dance (AAHPERD) 2007 National Convention and Exposition*. Baltimore, MD.

Pedersen, P.M., Eagleman, A., Clavio, G., & McNary, E. (2007, March 15). Facilitating, increasing, and improving media coverage for interscholastic athletics. *American Alliance for Health, Physical Education, Recreation and Dance (AAHPERD) 2007 National Convention and Exposition.* Baltimore, MD.

Clavio, G., Geurin, A., Miloch, K. S., & Pedersen, P. M. (2006, Nov. 3). Communicating in crisis: A case study of media management and its marketing implications*. SMA 4th Annual Conference.* Denver, CO

Pedersen, P. M., Clavio, G., Geurin, A., Fielding, L., & Whisenant, W. (2006, April 27). Strategic Sport Communication: Keys to Relationship Building and Increased Coverage. *American Alliance for Health, Physical Education, Recreation and Dance (AAHPERD) 2006 National Convention and Exposition.*

Salt Lake City, UT.

Clavio, G. (2006, April 8). Friends in High Places: Selection and Seeding processes of the NCAA Men's Basketball Tournament. *Southern Sport Management Conference.* Troy, AL.

PRESENTATIONS – INVITED

Clavio, G. (2007, October 24). Ethics and the Sport Media. Guest speaker to sport administration graduate students in Ethics and Sport (ESS 531) on the topics of ethical dilemmas in sport media, sport and media relations, and the impact of the Internet on media. *Sport Administration Graduate Program, School of Education, University of Miami.* Coral Gables, FL

Clavio, G. (2006, October 25). Geographical Influences on Sport Marketing Strategy. Guest speaker to sport marketing students in Sport Communication (P427) on the topics of regional, environmental, and geographical elements as they relate to sport marketing efforts. *Sport Marketing and Management Program, School of Kinesiology, HPER, Indiana University.* Bloomington, IN.

Clavio, G. (2006, April 18). Sport Communication Industry Notes. Guest speaker to sport management students in Sport Marketing (P418) on the topics of sport communication, job market, and other areas. *Sport Marketing and Management Program, School of Kinesiology, HPER, Indiana University.* Bloomington, IN.

PRESENTATIONS – ACCEPTED

None at this time.

PRESENTATIONS – SUBMITTED

Clavio, G. & Pedersen, P.M. (advisor). Communicating sport in cyberspace: An analysis the potential agenda setting effects of internet collegiate sport message boards. *2008 North American Society for Sport Management Conference.* Toronto, ON.

Mullane, S., Mathis, K., & Clavio, G. Miami foot-brawl and the Malice in the Palace: Examining gender reporting differences in the sports media. *2008 North American Society for Sport Management Conference.* Toronto, ON.

GRANTS

Clavio, G. (Fall, 2006). $1000 Fellowship from the school of Health, Physical

Education, and Recreation for exceptional academic status.

Miloch, K. S., & Clavio, G. (Fall, 2006). $1250 from the Faculty/Student Research Fund of the Dean's Office of Health, Physical Education, and Recreation for a study on media effects on team marketing.

Pedersen, P. M., & Clavio, G. (Fall, 2005). $700 from the Faculty/Student Research Incentive Program of the Dean's Office of Health, Physical Education, and Recreation for a study on print sport media journalists.

REFERENCES (In Alphabetical Order)

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REVISED: March 16, 2008