A COMPARISON OF SPONSORSHIP RECOGNITION ABILITY AMONG UNC STUDENT MEN'S BASKETBALL FANS

Ward Gibson

A thesis submitted to the faculty of the University of North Carolina at Chapel Hill in partial fulfillment of the requirements for the degree of Master of Arts in the Department of Exercise and Sport Science (Sport Administration).

Chapel Hill
2006

Approved by:

Advisor: Nathan Tomasini, Ph.D.

Reader: Barbara Osborne, J.D.

Reader: Edgar Shields, Ph.D.

ABSTRACT

WARD GIBSON: A comparison of sponsorship recognition ability among UNC student men's basketball fans.
(Under the direction of Nathan Tomasini)

In 2003, the University of North Carolina-Chapel Hill (UNC) was unable to completely cover its scholarship budget through traditional means, due in part to a rise in tuition rates (Chapel Hill News, 2003). The pattern of elaborate athletic-related spending among competitor universities forced UNC to explore additional revenue streams that could potentially bolster their financial status, with specific attention towards the prospect of commercial signage within Kenan Stadium and the Dean E. Smith Center for the first time (Dick Baddour, personal communication, March 10, 2004).

The study examined the recall and recognition ability of UNC students with respect to commercial sponsors of UNC men's basketball games. The findings showed a significant difference between upperclassmen and graduate students on the basis of sponsor recognition ability, however no difference in recognition between genders and a weak relationship between recognition ability and games attended.

ACKNOWLEDGEMENTS

This study could not have been completed without the efforts and cooperation of my advisor Dr. Nathan Tomasini. The efforts of my committee, Barbara Osborne, J.D. and Dr. Edgar Shields, and are appreciated tremendously. In addition, the cooperation of Art Chansky, Gary Sobba, and the staff of Tar Heel Sports Marketing have served as an invaluable resource throughout this study.

TABLE OF CONTENTS

LIST OF TABLES

CHAPTER ONE

INTRODUCTION

In 2003, the University of North Carolina-Chapel Hill (UNC) was unable to completely cover its scholarship budget through traditional means, due in part to a rise in tuition rates (Chapel Hill News, 2003). With the majority of NCAA collegiate athletic programs operating in a financial deficit (Fulks, 2005), there has become an increasing need to generate alternate forms of revenue besides traditional means such as ticket sales, student fees, alumni gifts, and institutional support. In the fiscal period 1993 to 2003, average operating expenses in NCAA Division I-A grew from $13 million, to $27.2 million (Fulks, 2003). While the deficit many programs find themselves in can be attributed in part to the rising cost of standard operating expenses (Fulks, 2005), another factor is the on-going athletics arms race competition within NCAA collegiate athletic programs and specifically Division I-A programs.

The Arms Race

The "arms race" in collegiate athletics is often used in reference to the on-going competition between Division I-A athletic departments to build and feature the highest quality venues and facilities in comparison to those at other universities. The Knight Commission on Intercollegiate Athletics coined the phrase in their 1991 document, *A Call to Action* that characterized the situation as "an ever growing arms race of spending and building to reach impractical financial goals" (Knight Commission, 2001). At the 2001

NCAA Convention, former NCAA President Cedric Dempsey stated that across 970 NCAA member institutions, just over $3 billion was made in revenue, but $4.1 billion was spent in the same time frame (Knight Commission, 2001). The athletics “arms race” in college athletics has led to an increasing urgency for departments to augment their funds however possible. NCAA Division I schools are spending funds at a rapidly increasing rate (Fulks, 2005; King, 2005). The theory is that increased spending on resources like top-notch training facilities and locker rooms will be the deciding factor in attracting high quality high school recruits. “College football has changed when it comes to recruiting kids,” said Tommie Frazier, former national championship quarterback at the University of Nebraska, who later began working as a fund-raiser for the athletic department (King, 2005, p.22). “It used to be getting on national TV or winning conference championships that attracted them. Now it’s ‘What do you have to offer me’ in terms of the environment” (King, 2005, p.22). If a program can attract enough top recruits, an increase in wins and success for the program is a reasonable expectation (King, 2005).

These universities are in direct competition with each other for the best recruits. This recruiting competition has lead to a necessity to “one-up” the other athletic departments in order to maintain a position of being among the best with regards to facilities and overall program appeal in the eyes and minds of high school recruits. If a competing school unveils plans for a new state-of-the-art facility or million venue renovation, the remaining schools have the option to either find a way to compete, or accept the likelihood of falling behind (King, 2005).

Athletic departments are doing all they can to keep up with capital expenditures at competitor schools. This sets the stage for the “arms race” in that athletic departments are in a constant pursuit to feature better facilities, stadiums, locker rooms, and multi-purpose complexes than the competition. Universities across the NCAA are undertaking projects with costs reaching the $100 millions (King, 2005).

University of North Carolina

The University of North Carolina at Chapel Hill (UNC) is the oldest state university in the nation, admitting its first student in 1795 (www.unc.edu, 2006). UNC features a Division I-A athletic department competing in the Atlantic Coast Conference (ACC), and fields twenty-eight varsity teams with an operating budget of $48.7 million (EADA, 2006). UNC won the inaugural Sears Director's Cup in 1994, awarded annually to the NCAA Division I all sports national champion (www.tarheelblue.com, 2006), has fielded 33 NCAA National Championship teams, and claims twenty-nine individual National Athletes of the Year (www.tarheelblue.com, 2006).

The UNC men's basketball program has won five National Championships, is tied for the most NCAA Final Four appearances at sixteen, and has more wins than any other men's basketball team in ACC history (www.tarheelblue.com, 2006). The University of North Carolina at Chapel Hill (UNC) has had to compete with the increasing number of top-level Division I-A institutions across the nation spending millions on state-of-the-art athletic facilities. Facing these pressures from competitors' spending efforts while trying to maintain an athletic department with 28 competitive varsity teams, the second-highest total in the Atlantic Coast Conference, (Baddour/Lucas 2002) creates a challenge (Dick Baddour, personal communication, June 20, 2002). This challenge is exacerbated with the issue of escalating student tuition costs (Chapel Hill News, 2003). In 2003, the athletic department was unable to cover its scholarship budget by traditional means for the first time (Dick

Baddour, personal communication, March 10, 2004). The department was forced to explore alternate means of fund raising, with specific attention towards increased corporate sponsorship (Dick Baddour, personal communication, March 10, 2004). UNC faces the challenge of keeping up in the race to maintain top-level facilities, pay its scholarship costs, and field top-level athletic teams or else their athletic program is in danger of falling behind the rest (Chapel Hill News, 2003).

NCAA Division I-A programs draw revenues from a number of different sources, the most annually successful being ticket sales (27 percent), alumni cash contributions (18 percent), institutional support (10 percent), and student fees (6 percent) (Fulks, 2003). Unfortunately these means are not sufficient to completely cover the rising expenses for Division I-A programs. Between fiscal years 1999 and 2001, the number of Division I-A programs operating at a financial deficit grew from 56 programs to 74 (Pickle, 2002). In addition, the average deficit for Division I-A programs operating at a loss grew from $3.3 million to $3.8 million during the same time period (Pickle, 2002).

One source of the rise in athletic expenses and the resulting deficit is the expansion of spending for women’s sports programs. Expenses for women’s programs have risen from $1.8 million in 1993 to $4.6 million in 2001 (Pickle, 2002). The expansion of women’s collegiate athletics cannot be viewed as the singular catalyst however, as expenses for men’s programs have also increased during the same period. From 1993 to 2001, average men’s expenses grew from $7.0 million to $10.9 million (Pickle, 2002). Between growing athletic operating expenses and new capital expenditures, deficits are growing in Division I-A. Traditional revenue sources such as ticket sales, cash contributions, and student fees are no longer suitable (Pickle, 2002). Growing expenses across NCAA Division I-A includes UNC as well. UNC is affected like the rest of Division I-A by rising operations costs for men's and women's sports programs. Sponsorships provide an alternate option to help boost revenue.

Sport Sponsorship

"Sponsorship" can be termed as, "the relationship between a sponsor and a property, in which the sponsor pays a cash or in-kind fee in return for access to the exploitable commercial potential associated with the property" (Stotlar, 2005). Sport sponsorship is one of the fastest growing areas of marketing (Mills, 1996). Corporate spending on sponsorships in the United States reached $12.5 billion in 2004, with $8.04 billion being devoted to sport sponsorships specifically (Stotlar, 2005). Sponsorship of college athletics has increased nearly twice as fast as overall sports sponsorships (Wherley, 2003).

UNC had a long-standing policy of no permanent advertising or sponsorships within its venues, which was a source of pride and purity among coaches and alumni for years (Chansky, 1999). The policy softened in 2000 to include temporary sponsorship avenues (A. Chansky, Personal Communication, March 17, 2006). Due to financial difficulties that arose in 2003 with specific respect to scholarship budgets and tuition hikes, UNC had to examine the challenges in operating an athletic program (Dick Baddour, personal communication, March 10, 2004).   Traditional revenue streams like ticket revenues, institutional support, and student fees are inadequate to match escalating athletic expenses for UNC, and Division I-A programs in general (Pickle, 2002). Corporate sponsorships and advertising promotions have become an increasingly productive element for financial survival, and this study aims to not only gauge their effectiveness within the conscious of the UNC student body, but also any differences within their ability to recognize and recall those sponsors.

Summary

When spending across the entire membership body of the NCAA reaches over $1 billion more than its revenue (Knight Commission, 2001), it gives credence to the notion of a climate of competitive spending within college athletics. UNC has traditionally fielded very successful varsity teams, however as time has progressed, issues like tuition increases have made covering its sponsorship budgets a challenge (Chapel Hill News, 2003). This internal financial factor, combined with the climate of spending across the NCAA make by its own admission a situation where UNC must explore and potentially embrace the new revenue stream that corporate sponsorship can provide (Dick Baddour, personal communication, March 10, 2004).

Statement of Purpose

This study will delve into the effectiveness of recognition and recall of advertising among UNC student basketball attendees, in addition to examining any existing differences in recognition and recall among student classifications and genders. The purpose is to gather data that will enable sponsors to better ascertain how well the student body receives their in-game advertising and promotional efforts, and subsequently which sponsors' efforts are falling short of their purpose. While it is difficult to directly quantify the return on a sponsor's investment, the data compiled from this study will provide both UNC and its sponsors with information towards that end. The study will examine three distinct variables and their possible effects on sponsor recognition; subjects' academic class, gender, and amount of games attended. Additionally, direct comparisons will be made in accuracy scores among four specific corporate partners of UNC athletics.

Research Questions

1. Is there a significant difference between UNC upperclass students and UNC underclass students in recognition and recall of UNC athletic department corporate sponsors at UNC men's basketball games?
2. Is there a significant difference in recognition and recall of UNC athletic department corporate sponsors at UNC men's basketball games between males and females?
3. Is there a relationship between sponsor recognition and recall and the amount of UNC basketball games attended among all student subjects?

Definition of Terms

Sponsor Recognition Ability - This is the main dependent variable that will be accumulated. "S.R.A." will consist of the series of questions on the survey, and their corresponding scores for the subjects. Each subject will receive a score on a 1-5 scale, in accordance to the amount of correct responses to the sponsor-related questions on the survey. Additional scores will be from data such as number of correct scores, number of correct matches with game promotion, and number of incorrect sponsors guessed.

Underclass – This term will refer to freshmen and sophomore student subject responses.

Upperclass – This term will refer to junior, senior, and graduate student subject responses.

BCS – Abbreviation for Bowl Championship Series, the computerized ranking system that pits BCS conference football champions against each other in the Fiesta, Orange, Sugar, and Rose Bowl games, with the goal of crowning a champion. A fifth “bonus” bowl game will be added to the series in 2006. BCS conferences consist of the Atlantic Coast (ACC), Big East, Big Ten, Big 12, Pacific-10 (Pac-10), and Southeastern Conferences (SEC).

Promotion – A contest, giveaway, or exhibit taking place in front of, or in proximity to the public, with the intention of generating exposure for a sponsor.

Recognition – For the purposes of this study, recognition refers to the subjects’ ability to properly identify a sponsor as correctly affiliated with UNC athletics.

Recall - refers to the subjects’ ability to designate the proper sponsors after being exposed to them previously in some capacity in men’s basketball home games in the Smith Center.

Sponsor – A commercial or corporate entity that pays a contracted dollar amount to the university in exchange for advertising and/or promotional exposure in affiliation with the university athletic program.

Assumptions

It is assumed for the purposes of this study that subjects’ responses are truthful and to the best of their ability to recall. It is also assumed that no cooperation or team-work for responses will take place between subjects.

Delimitations

This study is delimited to undergraduate and graduate students that attended UNC men’s basketball games during the 2005-06 season. The study cannot be generalized to the entire UNC student body population, or the Chapel Hill population as a whole. It is merely a representation of the UNC Men's basketball fan base, not an exact scientific proof of sponsor recognition ability for the entire UNC student body. It represents the participating subjects only.

Limitations

The study is limited to undergraduate and graduate UNC men's basketball fans that attended games, and chose to participate in the online survey. The survey was also distributed approximately one month following the final home game of the UNC men's basketball season. This time lapse could have a possible effect on the recall accuracy of student subjects. Additionally, because the survey is distributed and conducted online, there is an inherent risk in subjects cheating or cooperating with another subject nearby to find correct answers.

Additionally, slight differences exist in the nature of sponsorship elements regarding the companies compared in this study. BlueCross BlueShield of North Carolina and Verizon Wireless possess the same promotional elements within the Smith Center. Both clients feature a time-out or halftime contest, and logo displays on the Smith Center video boards at various times during the event. Bojangles also features video board logo displays, and a promotion where students in attendance can receive free biscuits from Bojangles if UNC scored 100 points or more in the previous evening's game. Wachovia's contract features substantially more promotional elements within the Smith Center than the other three. Wachovia is represented on permanent signage adjacent to the four video boards, and courtside digital signage. In addition to those elements, Wachovia is represented during the "Student-Athlete Spotlight" promotion, where a designated UNC varsity team is recognized and honored at mid-court in front of the Smith Center crowd. Wachovia also receives video board logo displays similar to the other three respective sponsors. This disparity serves as a limitation because the differing promotional representation could have an affect on the accuracy scores when compared to each other. Finally, potential subjects with no interest in UNC men's basketball could possibly decline to participate in the survey all together. This would affect the amount of games attended statistic by lowering the quantity of "no games" responses, which could be referred to as a "non-response bias".

Significance of the Study

This study may be important because sponsors and advertisers hope their financial commitment and promotional efforts will translate into not only support and business from those attending basketball games in the Smith Center, but also create a mental and emotional affiliation between their product or company and the UNC athletic program. For example, the brand of Wachovia Corporation could also hope to bolster a local and national image by appearing in the Smith Center for parts of each game that is broadcast on television and within the signage in the arena.

This study will delve into the effectiveness of recognition and recall of advertising among UNC student basketball attendees, in addition to examining any existing differences in recognition and recall among student classifications and genders. . The aim is that certain sponsors will be able to better ascertain how well the student body receives their in-game advertising and promotional efforts, and which sponsors' efforts are largely falling short of their purpose. This study will be directed towards examining what effect academic class, gender, and amount of games attended will have upon sponsor recognition and recall.

CHAPTER II

REVIEW OF LITERATURE

This chapter will discuss the relevant literature relating to the college athletics arms race, finances within Division I-A, sports sponsorship and corporate partnerships, recognition and recall studies, and sponsorship at UNC. The first section will discuss the on-going arms race with regards to exorbitant spending in college athletics. Section two will discuss the financial situation in NCAA Division I-A, with respect to revenues and expenses. Attention will also be paid to the financial disparity between the larger and smaller conferences in Division I-A. The third section will discuss corporate partnerships, not only within college athletics, but in professional sports as well. The fourth section will discuss previous relevant recognition and recall studies. The final section will discuss the issue of corporate sponsorship at UNC, with respect to a history of reluctance towards signage and the circumstances that led to a change of perspective.

Arms Race

The Knight Commission issued three reports in the early 1990s that helped shape adoption of a reform agenda by the NCAA. Its follow-up report in 2001 continued the effort to correct the most glaring problems in intercollegiate sports today: low graduation rates, academic transgressions, athletics expenditures that are outpacing the growth of both athletics revenues and academic expenditures; and ever-growing commercialization. The Knight Commission viewed these factors as further evidence of the growing chasm between big-time college sports, and the ideals of higher education (Knight Commission, 2001).

With relation to college athletics, “arms race” can be a manner to describe the on-going competition between athletic departments to achieve supremacy with regard to facilities, locker rooms, hospitality suites, and playing venues. It describes the notion that indulgent spending in one athletic department triggers indulgent spending at other schools (NCAA News Online, 2004). Former NCAA President Cedric Dempsey called the spending “impractical” (Knight Commission, 2001). Athletic department heads maintain that an ability to feature top-level facilities is vital for the success of their athletes, and competitiveness of their programs as a whole. Any school attempting to curtail their participation in the arms race of spending runs the legitimate risk of being swiftly left behind by other free-spending universities, and will find themselves competitively vulnerable (Knight Commission, 2001).

In reference to the beginning of his tenure as athletic director at the University of Oklahoma in 1998, Joe Castiglione said “We were way behind. Other programs were embracing the notion of what facilities improvements could mean to the recruiting of the best and brightest student athletes” (King, 2005, p.21). In 1999, Oklahoma’s athletic department opened a $6 million football center (King, 2005). This was preceded by the fellow Big 12 conference school, the University of Texas’ $15 million project that included a $10.5 million strength training center in 1998. Other Big 12 athletic programs followed, as in 2001 Oklahoma State renovated its on-campus basketball facility for $55 million (King, 2005). In 2003, Texas A&M opened a $27 million football facility, while

Texas Tech, and Kansas opened training centers for $11 million and $8 million, respectively (King, 2005).

The chase to out-do and out-build the competition expands beyond the Big 12 conference. Atlantic Coast Conference (ACC) member North Carolina State University (NC State) began use of the new Vaughn Towers media and hospitality facility in August of 2005 at a cost of $38 million (Fowler, 2005). Big Ten member University of Wisconsin's Camp Randall stadium underwent a $109.5 Million dollar renovation between 2001 and 2005 (www.uwbadgers.com, 2006). The University of Michigan has plans in the works to renovate their football stadium by 2009 for a price of $200 million (King, 2005). This renovation would push stadium capacity beyond 113,000 (King, 2005) and keep Michigan's place as owner of the largest college football venue in the nation. The Ohio State University completed a $194 million football stadium expansion (King, 2005). The University of Maryland spent $123.5 million for the Comcast Center basketball venue in 2002, making it the most expensive college basketball facility ever (King 2005). The University of Virginia will exceed that amount in 2006 when the $128 million John Paul Jones Arena opens for use (King 2005).

The University of Oregon took some criticism for its lavish athletic department spending. The $11 million locker room and weight rooms feature wood-paneling, plasma televisions, and climate control (Bruscas, 2003). Oregon also spent $90 million on luxury suites that circle the addition to their football stadium, and $14.6 million on an indoor practice facility (Bruscas, 2003). Oregon's lavish spending went beyond facilities, as they invested $300,000 on billboards in downtown Manhattan to market a star quarterback for an individual award. Oregon drew criticism for spending such a large amount of athletic department funds on a campaign for a single player (Bruscas, 2003).

Additional random spending can also lead an athletic department into financial trouble, as with the University of Louisville. In 2001, Louisville hired Rick Pitino as their new men's basketball head coach for a contract of $12.4 million over six years (Sylwester and Witosky, 2004). The financial matter was complicated because Louisville was still paying former coach Denny Crum $2.5 million over three years (Sylwester and Witosky 2004). Louisville had also built a new football venue, and added several women's sports to aid in gender equity, making their twenty-year old philosophy of financing athletics solely through sports revenue and contributions suddenly inadequate (Sylwester and Witosky, 2004). Louisville's Papa John's football stadium was referenced indirectly in the Knight Commission's 2001 report "A Call to Action" with the question, "And what does higher education sacrifice when a school names its football stadium after a pizza chain" (Knight Commission, 2001). In August of 2005, the University of Virginia signed head football coach Al Groh to a new contract worth $1.7 million per year (Carlton, 2005). Their conference and in-state rival Virginia Tech responded soon after by offering their head coach $2 million per year (Carlton, 2005).

Some would argue however with the notion that an arms race does not exist within college athletics. "Empirical Effects of Collegiate Athletics: An Interim Report", an study contracted by the NCAA, found that an arms race does not exist in college athletics today in an overall sense, but may be isolated exclusively to capital expenditures (Litan, Orzag, & Orzag, 2003). A study by Robert H. Frank corroborated similar assertions regarding the absence an arms race (NCAA News Online, 2004). The Frank study concluded that an arms race may in fact exist among schools within the same conference, but a broader generalization cannot be made (NCAA News Online, 2004). Jonathan and Peter Orzag even termed the magnitude of the arms race “modest” in different article, “The Physical Capital Stock Used in College Athletics” (Orzag and Orzag, 2005).

Southern Methodist University President Gerald R. Turner asserted that the entire body of research on the arms race notion should cause athletic departments to be more prudent when deciding how to allocate athletic expenses, an assertion he claims is emphasized by NCAA findings on the arms race topic (NCAA News Online, 2004). Knight Commission chair William Friday added, “It is clear that the commercialization of college sports and the rising and uncontrollable costs of athletics are two of the most important issues we face as a body -- particularly with the arms race and commercialization of athletics rapidly spreading to youth sports in both scholastic and non-scholastic programs” (Brown, 2004).

Division I-A Athletic Department Finances

Universities in Division I-A are in direct competition with each other for top-notch facilities, high-level recruits, and overall success within the NCAA, which is the driving force behind the “arms race” notion. Universities that bring in high revenue amounts are able to then spend million dollar amounts on facilities, locker rooms, and upgrades, and not rely solely on private donations or alumni gifts. The greater amount a university athletic department makes in revenue, the greater that university’s ability to commit a high amount towards lavish athletic expenditures, with capital projects serving as one example. The university athletic departments that reap high-dollar revenues have the ability to spend lavishly in the "arms race" competition. In Division I-A, there are six power conferences that have also been termed BCS Conferences, (ACC, Big Ten, Big 12, Big East, Pacific-10, and SEC). After the fiscal year 2002, these conferences had average revenues of $35.2 million, with average expenses of over $34 million (Fulks, 2003). By comparison however, the other five conferences in Division I-A (Conference USA, Mid-American, Mountain West, Sun Belt, Western Athletic Conferences) had an average revenue of nearly $12.3 million, with average expenses of $14.3 million in the fiscal year 2002 (Fulks, 2003). Among the BCS Conferences, the Big Ten reported the largest revenue at $44.5 million and expenses at $40.3 million (see Table 1). The Big East reported the smallest revenue in 2002 at nearly $27.2 million, and the smallest expenses at $30.9 million (Fulks, 2003). By comparison the largest non-BCS revenue was the Mountain West at $18.4 million, which also reported the largest non-BCS expenses at $17.9 million (see Table 1). The smallest non-BCS conference revenues and expenses were in the Sun Belt at over $6.7 million and nearly $9.3 million (see Table 1).

Table 1

2002 Total Program Revenues, Expenses, and Net Profit (In Thousands of Dollars)

Conference		2002
ACC		
	Total Revenues	31,332
	Total Expenses	31,681
	Net Profit	350
Big 12		
	Total Revenues	34,397
	Total Expenses	31,897
	Net Profit	2,500
Big East		
	Total Revenues	27,184
	Total Expenses	30,971
	Net Profit	3,787
Big Ten		
	Total Revenues	44,507
	Total Expenses	40,313
	Net Profit	4,193
C-USA		
	Total Revenues	14,421
	Total Expenses	17,708
	Net Profit	3,287
MAC		
	Total Revenues	10,102
	Total Expenses	12,067
	Net Profit	1,965
Mountain West		
	Total Revenues	18,428
	Total Expenses	17,955
	Net Profit	472
Pac-10		
	Total Revenues	33,014
	Total Expenses	33,897
	Net Profit	883
SEC		
	Total Revenues	41,192
	Total Expenses	35,303
	Net Profit	5,889
Sun Belt		
	Total Revenues	6,783
	Total Expenses	9,293
	Net Profit	2,510
WAC		
	Total Revenues	11,704
	Total Expenses	14,644
	Net Profit	2,941

The BCS conferences send their yearly football champions to one of the respective BCS Bowl Games (Rose, Sugar, Orange, and Fiesta Bowls) and these conferences can reap yearly bowl revenues in excess of $20-$30 million. (Wieberg, 2005). The Big Ten has averaged $27.8 million in bowl revenues since the BCS system was first implemented in 1998 (Wieberg, 2005). The Southeastern Conference (SEC) has an average revenue of $29.5 million since 1998, and in 2005 earned a bowl revenue of

$32.55 million (Wieberg, 2005). After the 2005 college football bowl season, the Big Ten saw a bowl prize of $35 million, dispersing roughly $3 million to each member school (Wieberg, 2005). The 2006 BCS bowl games individually paid out a base share of nearly $14.9 million to BCS participants Ohio State University, the University of Notre Dame, the University of Georgia, West Virginia University, Penn State University, and Florida State University respectively (www.bcsfootball.org, 2006).

In 2002 the BCS conferences have generated revenues ranging from $27 million to $44 million (Brown, 2004). For the fiscal year 2004-2005, Ohio State University reported revenues of $78.4 million and expenses of $61.4 million (EADA 2005), with a margin of roughly $17 million. Over the ten year period ending in 2005 however, Ohio State has spent $345 million in facility expansions and upgrades alone (King 2005). For the fiscal year 2004-2005, NC State reported total athletic revenues of $57.6 million and total athletic expenses of $44.8 million (EADA 2005), with a rough difference of $12.8 million. Over the ten year period ending in 2005, NC State spent $169 million on facility upgrades and expansion (King 2005), with an average figure of $16.9 million per year.

On the list of the top fifteen schools with relation to finances spent on athletic facility construction over the past decade ending in 2005, only one of the schools was not a BCS conference member (King, 2005). The schools averaged $179 million spent on facilities, with Big Ten member Ohio State having the highest total of $345 million, and Big East member Louisville finishing fifteenth with a total of $100 million (see Table 2).

Table 2

Athletic Facility Spending Between 1995-2005

Rank	School	Facility spending
1	Ohio State	$345 M
2	Michigan	$233 M
3	Maryland	$222 M
4	Virginia	$221 M
5	Penn State	$188 M
6	Texas Tech	$180 M
7	North Dakota	$171 M
8	NC State	$169 M
9	Texas	$163 M
10	Florida State	$156 M
11	LSU	$153 M
12	Oklahoma State	$144 M
13	Stanford	$130 M
14	Purdue	$112 M
15	Louisville	$100 M

Source: David Broughton, SportsBusiness Journal research

With new capital expenditures at times requiring funding in the hundreds of millions, the general operating budgets of an athletic program are not suitable to provide for these projects alone (Fulks, 2005). For the fiscal year 2003, the average total revenues for a Division I-A athletic program was $29.4 million, with an average total expense of $27.2 million (Fulks, 2005). However once institutional support is subtracted, the average Division I-A program reports a deficit of $600,000 for 2003 (Fulks, 2003).

Other means of funding such as private donations, ticket costs, and student fees can also be insufficient or improper for such massive campaigns like these. While the general operation costs of an athletic program have continued to rise, corporate sponsorship has become a vital and arguably necessary source of revenue for college athletics.

Corporate Partnerships

"Sponsorship" can be termed as, "the relationship between a sponsor and a property, in which the sponsor pays a cash or in-kind fee in return for access to the exploitable commercial potential associated with the property" (Stotlar, 2005). In 2001, corporate sponsorship in NCAA Division I athletic programs generated approximately $158 million in revenues (Fulks, 2002). Of this amount, Division I-A athletic programs averaged $1.13 million in corporate sponsorship revenues in 2001, an increase from a 1997 average of $591,000 (Fulks, 1998).

While individual athletic programs' sponsorship revenues increased, White and Irwin (1996) assessed the overall NCAA corporate marketing partnerships, where those partnerships reach limits, and how they can be maximized. White and Irwin's article refers to the task force that was designed to analyze and assess current NCAA actions relating to program operations and services to its membership. The task force opined that the NCAA should enhance corporate partner programs and marketing activities because if it's fiduciary responsibilities to its membership (White and Irwin, 1996).

Tomasini, Frye, and Stotlar's (2004) study examined the ability of Division I athletic department marketing administrators to properly understand and address their corporate sponsors' objectives. The study revealed that the two most valuable sponsor categories across Divisions I-A, I-AA, and I-AAA were banking/financial, and soft drink (Tomasini, Frye, and Stotlar, 2004). The study holds significance with regard to UNC, since the first company to purchase permanent signage rights within a UNC playing venue is a banking/financial company, Wachovia Corporation (www.tarheelblue.com, 2006). In addition, the Tomasini, Frye, and Stotlar study asserted that corporate sponsorship dollars in college athletics may not reach their maximum levels, due to the inability to clearly quantify and show return on investment with respect to sponsorships and promotions (Tomasini, Frye, and Stotlar, 2004).

The prestige of a respective sponsorship association or relationship plays a role in consumer impression, whether positive or negative (Goodman, 2006). Sponsorships of Olympic events hope to create a "halo effect" in sharing some of the positive sentiment that emanates from a widely-appreciated event (Goodman, 2006). A study featured in Goodman's article pointed out that 46% of consumers polled view Olympic sponsors as "industry leaders (Goodman, 2006). The theory of the "halo effect" in the minds of prospective consumers could also be applicable on a smaller scale, to sponsors of UNC athletics much in the same way it applies for sponsors of the Olympics (Goodman, 2006).

Corporate sponsorships are helpful as a means of supplementing budgets, as Kurt Badenhausen and Robert Stanfl's 2000 study addressed, in relation to professional sports franchises attempting to cover escalating salaries for star players. NBA and NHL average ticket prices are $51 and $48 respectively, putting fans in a difficult position to attend games (Badenhausen and Stanfl, 2000). The franchises have turned to corporate sponsorships to recoup the lost revenues. Staples Center is controlled by Philip Anschutz, who is the owner of the National Hockey League's Los Angeles Kings and minority owner of the National Basketball Association's Los Angeles Lakers. Anschutz signs ten "founding" sponsors inside the Staples Center for multi-year deals of roughly

$2-$3 million, operating on the premise that limited quantities will translate into higher sponsorship value. Bank of America features online banking centers and ATMs within the Staples Center, and a “Chairman’s Room”, open at halftime to fans who pay $1,200 for court-side seats (Badenhausen and Stanfl, 2000).

While the difference exists among professional and collegiate corporate sponsorships and the opportunities available, there are some aspects of professional venue sponsorship that could enhance the UNC Athletic Department’s ability to prosper financially.

Recognition and Recall

This section will examine existing literature and studies conducted relating to recognition and recall ability. Prior studies are central to the construction of this thesis study as to better ascertain how to most appropriately test the UNC student body on their recognition and recall abilities with respect to home men’s basketball games in the Smith Center.

Stotlar and Johnson (1989) examined the impact and effectiveness of stadium advertising with respect to the issue of advertising recognition within collegiate sporting venues. Stotlar and Johnson’s research examined recognition ability of spectators, and possible effects on purchasing habits. The researchers found strong recognition rates among the subjects surveyed. However, seat location, age, and income level were not shown to have significant relationships with advertising recognition ability (Stotlar and Johnson, 1989). Purchasing habits are only one of the several aspects important to corporate sponsors (Tomasini et al., 2004), however the ability to move product is still an important one.

Dubow (1995) examined recall ability between age groups. The study concluded that subjects younger than 18 years old have greater brand recall and recognition ability than subjects ages 18-34. The study also concluded that young adults below age 35 have greater recall ability than adults 35 and older. The study was conducted with the aid of ASI, a copy-research company that utilizes a system where respondents are pre-recruited to watch a given cable television show. The next day, respondents return and are asked questions designated to elicit "day after recall". ASI works with clients who target various age ranges, thus they identified and chose from 996 commercials which spanned the full age range of men and women ages 18 through 65 (Dubow 1995).

Recall gets worse as age increases (Dubow 1995), according to the scores obtained in the study. Ages 18-34 saw average correct recall scores of 21%. Ages 35-49 saw an average score of 19%, and ages 50-65 recorded an average of 15% .

Alfred White and Richard Irwin's 1996 research found low familiarity among on-site event spectators regarding NCAA corporate sponsors. While taking into account NCAA limitations for on-site corporate exposure, the recognition rates for each of the thirteen corporate partners were all respectively low. Coke was listed with the highest recognition rate of 34%, while Pizza Hut and All Sport energy drink showed rates of 25% and 21%, respectively. Many competitor companies were incorrectly cited as NCAA corporate partners, which would be of interest to the official sponsorship groups. For example, 25% of patrons surveyed claimed to be purchasing corporate partners' products due to their NCAA sponsorship (White and Irwin 1996). Another 20% of patrons claimed to be willing to do so (White and Irwin 1996). Administrators at NCAA host institutions yielded similarly low recognition results, however they raised the issue that

NCAA policy limits the ability to maximize corporate partner involvement (White and Irwin, 1996).

James Busser's 2001 study focused on recognition levels among spectators at a Professional Golf Association (PGA) Tour event. Busser's study analyzed the effect of amount of impressions and exposures of a respective client on subjects' recognition ability. Amount of impressions and exposures were isolated by sponsorship group levels; multi-level, exposition, skybox, and dummy . "Dummy" sponsors were included in the survey to present subjects with the avenue of guessing an incorrect, or non-existent sponsor (Busser, 2001). In Busser's study, dummy sponsors received largely the lowest recognition percentage scores.

Gender is occasionally a variable considered in marketing or advertising efforts. Gender was called a "critical factor in developing marketing strategy" in Lori Wolin's 2003 article, "Gender issues in advertising--an oversight synthesis of research: 1970-2002". Proportions of male and female populations among a target audience is usually a standard piece of information gathered when developing marketing or advertising strategy (Scarborough Research, 2006).

There is somewhat conflicting result data on male and female abilities to process advertising and marketing information (Putrevu, 2004). The few studies that have examined gender differences in advertising and marketing report mixed findings. Some researchers have found that women exhibit increased discrimination ability concerning advertising, and they process advertising more comprehensively than men (Putrevu, 2004).

Research on the issue of gender in advertising, with respect to the food category is limited. Ewing, Napoli, and Du Plesis' (1999) research on commercial recall among food categories examined 1,022 food commercials, and found that females recall food advertising at a better rate than males (Ewing, et al., 1999).

Another factor to be considered in subject recall and recognition ability is relative familiarity of product (Bayles, 2002). In their 2001 study "Recall and recognition of static vs. animated banner advertisements", Bayles and Chaparro analyzed the effects of animated graphics versus static graphics on internet banner advertisements for companies Amazon and Ebay. It was found that animation had a moderate effect on subject recall, however relative subject familiarity with the companies prior to the study may have affected the findings (Bayles, 2002). In the 2002 study, Bayles substituted newer companies in the study in place of Amazon and Ebay to gauge the effect of animated internet graphics on subjects' ability to properly recognize and recall. As with the previous study, less than half of the subjects were able to properly recall the presence of at least one ad (Bayles, 2002). One of the novice companies, "Zip" had just a 38% recall rate of subjects remembering its presence, however only 12% were able to actually recognize it by name, with one subject actually submitting an incorrect name (Bayles, 2002).

The manner by which subjects develop their images of a sponsor are important, and there are several research articles and studies that support this. Keller's 1993 article, "Conceptualizing, Measuring, and Managing Customer-Based Brand Equity" asserts that band associations for subjects can be influenced when that particular brand becomes linked with a celebrity or event through sponsored activities in that event (Keller, 1993).

Most UNC sponsors hope for a similar result by linking themselves with UNC athletics. Kahle and Homer's 1985 study proposed that branding images are strengthened when there is a commonality between the product and the endorser, for example an automobile product or part being endorsed by a prominent motor sports athlete. Finally, articles by McDonald (1991) and Gwinner (1997) suggest that the most effective manner by which sponsors can create an image link in the minds of spectators is to utilize "functional based" marketing campaigns (Gwinner, 1997). In this sort of promotional campaign, the product is actually featured or used during the sporting event in some manner, for example a water or sports drink company being consumed on the sidelines of a sporting event. An environment such as the Smith Center where affiliations and allegiances with UNC are strong among spectators could be an ideal atmosphere to take advantage of functional based campaigns.

UNC Athletics

The University of North Carolina at Chapel Hill (UNC) is the oldest state university in the nation, admitting its first student, James Hinton in 1795 (www.unc.edu, 2006). UNC won the inaugural Sears Director's Cup in 1994, which is awarded annually to the NCAA Division I all sports national champion (www.tarheelblue.com, 2006), has fielded 33 NCAA National Championship teams, and claims twenty-nine individual National Athletes of the Year (www.tarheelblue.com, 2006).

Prior to the fall of 2005, UNC had never before featured corporate signage inside of the Dean Smith Center or Kenan Stadium. In order to appease UNC athletic sponsors that were able to attain permanent signage at other athletic venues but were stifled by UNC's non-signage tradition, sponsor-related impressions or logo displays were used for select clients with higher financial commitment levels on the arena video boards inside the Dean Smith Center beginning in 2000 (A. Chansky, personal communication, April 3, 2006). A new video board was installed in Kenan Stadium for the 2003 football season (Dick Baddour, personal communication, June 20, 2002), allowing for the sale of five similar sponsor-related impressions per game (A. Chansky, personal communication, April 3, 2006), however these impressions were not the same as permanent corporate signage inside the respective venues. The sponsor-related impressions were temporary in nature, appearing on the video board for a set amount of seconds, which limited Smith Center fans' ability to notice the respective sponsor. A permanent corporate sign greatly increases the probability that fans will glance at or notice the advertisement, possibly multiple times before leaving the venue.

Corporate signage was taboo for many years within the UNC athletic department (A. Chansky, 1999). Spear-headed by former men's basketball head coach Dean Smith's insistence that the Smith Center remain advertisement free, the UNC alumni and fan community embraced the "signage-free" philosophy for a number of years (A. Chansky, 1999). Unfortunately this philosophy, once a source of pride within the UNC athletic community (A. Chansky, Personal Communication, March 17, 2006) became a hindrance once the athletic scholarship program experienced a $300,000 financial shortfall in 2003, thanks in part to a raise in student tuition rates (Chapel Hill News, 2003). Despite the objections to the "commercialism" of the athletic brand, the financial troubles could not be ignored.

With UNC unable to completely cover its scholarship budget through the traditional Rams' Club Educational Foundation annual giving funds for the first time

(Dick Baddour, personal communication, March 10, 2004) athletic department operating funds were used to cover the financial short-fall (Dick Baddour, personal communication, March 10, 2004). The Board of Trustees asked the athletic department to explore additional revenue streams that could potentially bolster their financial status, with specific attention towards the prospect of commercial signage within Kenan Stadium and the Smith Center (Dick Baddour, personal communication, March 10, 2004).

With the aid of a task force consisting of representatives from the Educational Foundation, faculty, staff, trustees, students, Alumni Association and athletic department, UNC athletic director Dick Baddour addressed the challenges, and the resulting solutions that corporate signage presented: “As athletic director, it is a change I believe - and think many of our constituents would agree - is far preferable than the possibility of eliminating sports and cutting student-athlete opportunities” (Dick Baddour, personal communication, September 1, 2004).

Additional funds will be beneficial for the athletic department at UNC to remain competitive and continue to thrive. For the fiscal year 2004-2005, UNC reported 2003-2004 revenues of $49.1 million and expenditures of $48.7 million (EADA, 2005).

Summary

The cost of athletic facilities is rising, as is general athletic-related spending . The general cost to operate a successful functioning athletic department is on a steady rise (Baddour, personal communication, September 1, 2004). Corporate sports-related sponsorship has increased as a viable means of augmenting income and revenue, in particular for NCAA Division I athletic departments (Fulks, 1998). The UNC athletic department was forced to reconsider its long-standing hesitancy towards corporate signage (A. Chansky, 1999) and explore signage and sponsorships as a means of assisting the overall budget (Baddour, personal communication, September 1, 2004). The continuity of UNC's corporate relationships with respect to signage and promotions will in large part depend on the success of those advertising vehicles. While return on investment success with sponsorships is a difficult thing to quantify directly, success in this case applies to UNC students' ability to recognize and recall associations between certain sponsors and UNC athletics. This study will aim to investigate the recall and recognition ability of UNC students relating to signage and sponsors of UNC men's basketball.

CHAPTER III

METHODOLOGY

This chapter will discuss the issues related to the methodology of the study. The chapter will explain the nature of the subjects used to participate and respond to the survey for purposes of the study. In addition, the chapter will address the instrumentation of the study, the procedures and protocol for collecting the data, and the nature of the analysis tests that will be run on the resulting data.

Subjects

For the purposes of this research, a survey will be distributed to the entire population of the students as included in a campus-wide student listserv. The surveys will be distributed via email. The final amount of subjects will be determined by the number of surveys that are answered completely and returned.

Instrumentation

The survey was constructed using a web-based survey company and will distributed electronically via email. The survey was distributed to a group of eighteen graduate students to serve as a pilot study, prior to proposal. The validated instrument will be distributed via email to a campus-wide student listserv. Permission to distribute to the campus-wide listserv was applied for and granted by the UNC-Chapel Hill Mass Email system with the assistance of Debra Eatman.

Student subjects will be instructed to answer the survey questions to the best of their ability to recognize and recall, and will be asked not to enlist any outside help in their responses.

Procedures and Protocol

The final UNC men's home basketball game of the 2005-06 season occurred on Wednesday, March 1st, 2006 against the University of Virginia. The surveys will be sent on Thursday, April 20, 2006, and will be active until Monday, April 24, 2006. There will be no follow-up with subjects after the survey is de-activated. Immediately after the survey is inactive, the resulting statistics will be downloaded into SPSS data system for compilation and analysis.

Data Analysis

In order to analyze the data collected in this study, three separate tests will be run. A t-test will be run to determine if there is a significant difference between the dependent variable of sponsor recognition and recall ability for independent variables of upperclass and underclass subjects and for independent variables of gender respectively. A simple regression test will be run to determine if there is a relationship between number of games attended, and the dependent variable of sponsor recognition and recall ability. A One-way between subjects analysis of variance (ANOVA) test will be run to determine if there is a significant difference between accuracy rates for questions regarding sponsors BlueCross BlueShield, Bojangles, Verizon Wireless, and Wachovia.

CHAPTER FOUR

ANALYSIS

This chapter will discuss the results and data from the email survey. The first section of this chapter will discuss the demographics of the sample. The second section will examine recognition and recall rates of the sample. The final section will examine the research questions.

Demographics

The campus email Listserv yielded 1120 returned surveys, with 143 that were incomplete, for a final total was 977 subjects (n = 977). The sample size of 977 comes out of a UNC student body total of 26,878 students, 16,525 of those being undergraduates, and 10,353 graduate and professional students (EADA, 2006).

Listed in Table 3 is the gender distribution of the subjects. There were 594 female subjects (60.8%) and 383 male subjects (39.2%). In 2006, this is similar to the overall population of UNC students, where the student body enrollment break down is 57.9% female to 42.1% male (Institute of Education Services, 2006).

Table 3

Gender of Respondents

Gender	*n*	% of total
Male	383	39.2
Female	594	60.8
Total	977	100

Of the 997 respondents, 183 freshmen (18.7%) and 178 sophomores (18.2%), comprise the 361 "underclassmen" (36.9%) group (see Table 4). A total of 184 juniors (18.8%), and 162 seniors (16.6%) comprised the "upperclassmen" group. The graduate student group was extracted from the original upperclass student sample, and comprised of 235 subjects (24.1%). A total 35 subjects (3.6%) listed "other" as their academic class.

Table 4

Academic Class of Respondents

Class	*n*	% of total
Underclassmen	361	36.9
Upperclassmen	346	35.4
Graduate Students	235	24.1
Other	35	3.6
Total	977	100

Listed in Table 5, Health/Medicine was the most frequent response of majors among respondents, with 211 responses (21.6%). The second most frequent response was Business/Economics, with 115 (11.8%), and Communications/Journalism received the third most frequent responses, with 84 (8.6%).

Table 5

Subjects' Academic Major

Major	*n*	% of total
Art/Music	14	1.4
Business/Econ.	115	11.8
Comm./Journalism	84	8.6
Education	41	4.2
English	34	3.5
EXSS	64	6.6
Health/Medicine	211	21.6
History	41	4.2
Language/International Stud.	35	3.6
Political Science	61	6.2
Law	21	2.1
Psychology	50	5.1
Chemistry/Biology	53	5.4
Math/Economics	18	1.8
Social/Public Policy	32	3.3
Environment Science	17	1.7
Undecided	41	4.2
Other	62	6.3
Total	977	100

Results of Number of Games Attended

There was a very even distribution of responses by subjects to the question, "How many UNC men's basketball home games did you attend during the 2005 - 2006 academic year? (Please select number to the best of your ability)". Possible responses ranged from one game to the entire seventeen game home schedule. Six games was the most frequent response, by 95 subjects (9.7%), with two games as the next most frequent response, with 86 subject responses (8.8%). Seven and eleven games were the next most frequent responses, with 83 responses each (8.5%). 66 subjects (6.8%) responded that they had not attended any games during the 2005-06 season.

For further analysis the responses were divided into five groups based on amount of games attended (see Table 6). The largest group of subjects responded to having attended “1-4” games, yielding a total of 307 responses. The next largest group yielded 293 responses, which was the “5-8” games group. The smallest group of responses was for the “none” category, yielding a total of 66 subjects.

Table 6

Number of Games Attended in 2005-06 Season

Games	*n*	% of total
none	66	6.8
1 to 4	307	31.4
5 to 8	293	29.9
9 to 12	176	18.0
13 to 17	135	13.8
Total	977	100

The 66 subjects that did not attend any home games during the 2005-06 season, were then led to respond to the question, “Have you attended ANY UNC men's home basketball games in the last five years?” Thirty-five subjects (53%) responded “yes”, 31 subjects (47%) responded “no” (see Table 7).

Table 7

Any Home Games Attended in Last Five Years

Response	*n*	% of total
Yes	35	53
No	31	47
Total	66	100

Of those subjects that answered “Yes” in Table 8, indicating they have attended home men’s basketball games at UNC in the last five years, those subjects were sent to the following question, “How many UNC men's basketball home games have you attended in the last five years (Please select number to the best of your ability)?” This question yielded 12 of 35 subjects had attended one single game in the last five years (34.3%). The second most frequent response was three and ten-plus games attended in the last five years. Both responses yielded 5 subjects (14.3%), presented in Table 8.

Table 8

Number of Games Attended in the Last Five Years

Games	*n*	% of total
1	12	34.3
2	1	2.9
3	5	14.3
4	4	11.4
5	4	11.4
7	1	2.9
8	3	8.6
plus 10	5	14.3
Total	35	100

To further examine potential differences, crosstabulations were run between academic class and games attended in 2005-06. Graduate students were extracted from the upperclass sample. A total of 54.9% of the graduate students attended four games or fewer, versus 30.6% of upperclass subjects. Conversely, 45.0% of graduate students attended five games or more in 2005-06, compared to 69.4% of upperclass students (see Table 9)

Table 9

Crosstabs of Academic Class and Games Attended

Games	Class	
	Grad. Students	Upperclass
"none"	23	19
% of total	9.8	5.2
"1 to 4"	106	93
% of total	45.1	25.4
"5 to 8"	54	126
% of total	22.9	34.4
"9 to 12"	36	64
% of total	15.3	17.5
"13 to 17"	16	64
% of total	6.8	17.5
Total	235	366

Results of Recognition and Recall of Sponsors

This section will analyze the recognition and recall rates of respondents. Four sponsors were examined, Wachovia, Verizon Wireless, BlueCross BlueShield, and Bojangles. Dummy variables were utilized for recognition.

Subjects' responses to the question, "Which one of the following companies is the official corporate banking sponsor of UNC Men's Basketball" yielded the most frequent responses toward Wachovia, with 789 responses (80.8%). Bank of America, a dummy variable was the second most frequent response, with 72 subjects (7.4%), presented in Table 10.

Table 10

Official Banking Sponsor

Sponsor	*n*	% of total
Bank of America	72	7.4
BB&T	33	3.4
First Citizens Bank	17	1.7
NCESCU	12	1.2
RBC Centura	54	5.5
Wachovia	789	80.8
Total	977	100

The question, "Which of the following companies is the official wireless sponsor of UNC Men's Basketball" resulted in more balanced data. Verizon Wireless yielded 608 responses, (62.2%). Cingular Wireless, a dummy variable was the second-most popular response, with 237 subject responses (24.3%), presented in Table 11.

Table 11

Official Wireless Sponsor

Sponsor	*n*	% of total
Cingular	237	24.3
Nextel	46	4.7
Sprint	41	4.2
SunCom	21	2.1
T-Mobile	24	2.5
Verizon	608	62.2
Total	977	100

There were significant differences between the groups divided according to games attended for the official wireless sponsor question. As shown in Table 12, each amount of games attended group yielded a significant difference, except for groups “9-12” and “13-17”.

Table 12

Wireless Sponsor Recognition Against Amount of Games Attended

Dependent Variable	Group 1	Group 2	Sig.
Official Wireless Sponsor Recognition	"none"	"1 to 4"	0.210
		"5 to 8"	0.000
		"9 to 12"	0.000
		"13 to 17"	0.000
	"1 to 4"	"none"	0.021
		"5 to 8"	0.002
		"9 to 12"	0.000
		"13 to 17"	0.000
	"5 to 8"	"none"	0.000
		"1 to 4"	0.002
		"9 to 12"	0.005
		"13 to 17"	0.000
	"9 to 12"	"none"	0.000
		"1 to 4"	0.000
		"5 to 8"	0.005
		"13 to 17"	0.753
	"13 to 17"	"none"	0.000
		"1 to 4"	0.000
		"5 to 8"	0.000
		"9 to 12"	0.753

*Significant at <.05 level

Subjects were then asked to respond to the following question, “Which one of the following companies is the official sponsor of the time-out promotion where two youths race to put on over-sized UNC basketball uniforms and shoes, and dribble the length of the court to make a basket?” Results displayed in Table 13 demonstrate BlueCross BlueShield of North Carolina was the overwhelmingly popular response, with 744 subjects (76.2%). Lowe's and Verizon, dummy variables, were the second most frequent response with 9.5% and 9.2% of the sample, respectively.

Table 13

Kid's Race Time-Out Promotion Sponsor

Sponsor	*n*	% of total
Blue Cross	744	76.2
Lowe's	93	9.5
Verizon	90	9.2
Wachovia	50	5.1
Total	977	100

The results for the kid's race time-out sponsor when compared against amount of games attended yielded fairly defined results. As shown in Table 14 the "13-17 games" group had significant differences between both the "none" group (.002), and the "1-4 games" group (.003). In fact, in comparison to the "none" group, the results became more significant as the amount of games attended increased.

Table 14

Kid's Race Sponsor Recognition Against Amount of Games Attended

Dependent Variable	Group	Group	Sig.
Kids' Race Time-Out Promotion Recognition	"none"	"1 to 4"	0.634
		"5 to 8"	0.216
		"9 to 12"	0.065
		"13 to 17"	0.002
	"1 to 4"	"none"	0.634
		"5 to 8"	0.744
		"9 to 12"	0.254
		"13 to 17"	0.003

*Significant at < .05 level

In response to the question, "Which one of the following Food and Beverage companies sponsors a giveaway whenever the Tar Heels score 100 points in a game?", Bojangles was the most frequent response, with 763 subject responses (78.1%). Chick-Fil-A, a dummy variable was the second-most frequent response, with 130 responses (13.3%), displayed in Table 15

Table 15

100 Point Giveaway Sponsor

Sponsor	*n*	% of total
Bojangles	763	78.1
Chick-Fil-A	130	13.3
Domino's	73	7.5
TCBY	11	1.1
Total	977	100

The same group of choices were made available to subjects in the following question, "All of the following Food and Beverage companies serve concessions inside the Smith Center during basketball games, EXCEPT for which company?" Presented in Table 16 Bojangles was the most frequent response, with 749 subjects (76.7%). TCBY, a dummy variable that sells food in the Smith Center, was the second most frequent response, with 121 (12.4%).

Table 16

Food & Beverage Sold in Smith Center

Sponsor	*n*	% of total
Bojangles	749	76.7
Chick-Fil-A	66	6.8
Domino's	41	4.2
TCBY	121	12.4
Total	977	100

Research Question Results

Is there a significant difference between UNC underclass, upperclass, and graduate students in recognition of UNC athletic department corporate sponsors at UNC men's basketball games?

Recognition scores were cumulated on a 1-5 scale based upon the amount of correct responses by each subject to questions regarding respective corporate sponsors. After performing an Independent Sample t-test between the Independent Variable of Academic Class (underclass and upperclass) and the Dependent Variable of sponsor recognition. No statistically significant results were found $F(940) = .381$, $p = .912$.

The graduate student subjects were extracted from the upperclass sample and an ANOVA was then run between underclass, upperclass, and graduate students. Results determined there were statistically significant differences between groups with the Official Banking Sponsor $F(2,941) = 8.334$, $p < .05$, Kid's Race Time-Out Promotion Sponsor $F(2,941) = 2.799$, $p < .05$, the 100 Point Sponsor $F(2,941) = 11.010$, $p < .05$,and Food & Beverage Sold at the Smith Center $F(2,941) = 8.431$, $p < .05$. A Tukey's post hoc test was utilized to determine where the differences were located. As presented in Table 17, significant differences were found between upperclass and graduate students with regards to the Official Banking Sponsor question ($p<.05$), Official Kid's Race Sponsor ($p<.05$), the 100 Point Sponsor ($p<.05$), and the Official Food and Beverage Sponsor questions ($p<.01$).

The one significant difference between Underclass and Graduate Students was the 100 Point Sponsor ($p<.01$). While there were no significant differences located between Underclass and Upperclass, the Official Banking Sponsor (p = .079), and the Food & Beverage Sponsor (p = .086) approached significance.

Table 17

Analysis of Variance Between Academic Class and Recognition Ability

Dependent Variable	Model	Sig.
Banking Sponsor	Difference between Underclass & Upperclass	0.079
	Difference between Underclass & Graduate Students	0.078
	Difference between Upperclass & Graduate Students	0.000*
Kid's Race Sponsor	Difference between Underclass & Upperclass	0.659
	Difference between Underclass & Graduate Students	0.249
	Difference between Upperclass & Graduate Students	0.049*
100 Point Sponsor	Difference between Underclass & Upperclass	0.997
	Difference between Underclass & Graduate Students	0.000*
	Difference between Upperclass & Graduate Students	0.000*
Food & Beverage Sponsor	Difference between Underclass & Upperclass	0.086
	Difference between Underclass & Graduate Students	0.067
	Difference between	

Upperclass & Graduate Students	0.000*

*Significant at <.05 level

2. Is there a significant difference in recognition and recall of UNC athletic department corporate sponsors at UNC men's basketball games between males and females?

An Independent Samples t-test was run between the independent variable of gender and the dependent variable of sponsor recognition, and the results determined there were no significant differences for gender F(975) = 2.014, p = .169. Results are displayed in Table 18.

Table 18

Analysis of Variance Between Gender and Recognition Ability

Gender	df	F	Sig
Male	975	2.014	0.156
Female	831.371		

*Significant at < .05 level

As presented in Table 19, the male subjects answered the official 100 point sponsor question with greater recognition accuracy than did the female subjects (81.7% to 75.8%), however the females answered the Smith Center food and beverage sponsor with greater accuracy (see Table 20) than did the males (80.6% to 70.5%).

Table 19

Gender Recognition Responses of 100 Point Sponsor

Variable	*n*	correct	% correct
Males	383	313	81.7
Females	594	450	75.8

Table 20

Gender Recognition Responses of Food & Beverage Sponsor

Variable	*n*	correct	% correct
Males	383	270	70.5
Females	594	479	80.6

An Independent Samples t-test was run between the independent variable of gender, and the dependent variable of sponsor recall, and the results determined there was a significant difference F(975) = 5.996, p = .015.

Table 21

Analysis of Variance Between Gender and Recall Ability

Gender	df	F	Sig
Male	975	5.996	0.015*
Female	741.006		

*Significant at < .05 level

3. Is there a relationship between sponsor recognition and the amount of UNC basketball games attended among all student subjects?

Presented in Table 22, a Simple Regression test was run between the independent variable, amount of games attended in 2005-06 and the dependent variable of sponsor recognition. The resulting Pearson-r = .220, therefore a fairly weak relationship was shown to exist between the two variables.

Table 22

Summary of Hierarchical Regression Analysis Between Games Attended and Recognition (N = 977)

Variable	R	R^2
Games Attended in 2005-06	0.469	0.22

In addition, the researcher collapsed the number of games into groups of "1 – 4", "5 – 8", "9 – 12", and "13 – 17" to examine for significant differences between groups in recognition ability. An ANOVA was run and the results determined there were statistically significant differences between groups with the Official Banking Sponsor $F(4,972) = 10.989$, $p < .05$, Official Wireless Sponsor $F(4,972) = 27.393$, $p < .05$, Kid's Race Time-Out Promotion Sponsor $F(4,972) = 5.100$, $p < .05$, the 100 Point Sponsor $F(4,972) = 36.175$, $p < .05$,and Food & Beverage Sold at the Smith Center $F(4,972) = 10.557$, $p < .05$. A Tukey's post hoc test was utilized to determine where the differences were located.

For the Official Banking Sponsor, significant differences were found between attending no games and attending "5 – 8", "9 – 12", and "13 – 17" ($p < .05$). Significant differences were also found between attending 1 – 4 games and attending "5 – 8', "9 – 12", "13 – 17". No other significant differences were found. See Table 23.

Table 23

Tukey HSD Results for Official Banking Sponsor by number of games

Official Banking Sponsor Recognition	# of Games Attended		
Attended No Games	5 - 8	0.000	*
	9 - 12	0.000	*
	13 - 17	0.000	*
			*
Attended 1 - 4 Games	5 - 8	0.004	*
	9 - 12	0.000	*
	13 - 17	0.000	*

*Significant at <.05 level

For the Official Kid's Promotion Sponsor, Tukey's post hoc found two significant differences between number of games attended groups and sponsor recognition. See Table 24.

Table 24

Kid's Race Sponsor Recognition Against Amount of Games Attended

Kid's Race Promotion	# of games attended	Group	Sig.
Attended no games	"13 to 17"	0.002	*
"1 to 4"	"13 to 17"	0.003	*

*Significant at < .05 level

For the 100 Point Sponsor, Tukey's post hoc found many significant differences between number of games attended groups and sponsor recognition. Two groups were found not to be statistically significant, attended "5 – 8" and "9 – 12" games (p = .654), attended "9 – 12" and "13 – 17" games (p = .119). See Table 25.

Table 25

100 Point Sponsor Recognition Against Amount of Games Attended

100 Point Sponsor	# of games attended	Sig.	Sig.
Attended no games	"1 to 4"	0.000	*
	"5 to 8"	0.000	*
	"9 to 12"	0.000	*
	"13 to 17"	0.000	*
“1 to 4”	"5 to 8"	0.000	*
	"9 to 12"	0.000	*
"5 to 8"	"13 to 17"	0.000	*
	"1 to 4"	0.000	*
	"9 to 12"	0.654	
"9 to 12"	"13 to 17"	0.119	

*Significant at < .05 level

There were also significant differences between the “none” group and the remaining groups regarding which food and beverage companies sell their products in the Smith Center (see Table 26).

Table 26

Food and Beverage Vendor Recognition Against Amount of Games Attended

Dependent Variable	Group	Group	Sig.
Food & Beverage	"none"	"1 to 4"	0.044*
Sponsor Recognition		"5 to 8"	0.000*
		"9 to 12"	0.001*
		"13 to 17"	0.000*
	"1 to 4"	"none"	0.044*
		"5 to 8"	0.093
		"9 to 12"	0.344
		"13 to 17"	0.000*
	"5 to 8"	"none"	0.000*
		"1 to 4"	0.093
		"9 to 12"	0.998
		"13 to 17"	0.040*
	"9 to 12"	"none"	0.001*
		"1 to 4"	0.344

	"5 to 8"	0.998
	"13 to 17"	0.040*
"13 to 17"	"none"	0.000*
	"1 to 4"	0.000*
	"5 to 8"	0.040*
	"9 to 12"	0.040*

*Significant at <.05 level

Alcohol Consumption

Subjects were asked if they consume alcohol prior to attending games at the Smith Center. A total of 952 subjects responded to this question, with 25 subjects neglecting to submit a response, represented in Table 27. A total of 569 subjects, (59.8%) responded that they "never" drink alcohol prior to attending games at the Smith Center. The next-most given response was "rarely", with 206 subjects (21.1%). "Sometimes" was the third-highest response, of 150 subjects (15.4%).

Table 27

Do You Drink Alcohol Before Attending Games?

Response	*n*	% of total
Never	569	58.2
Rarely	206	21.1
Sometimes	150	15.4
Always	27	2.8
Non-response	25	2.6
Total	977	100

An ANOVA was run between subjects responses to what degree they consume alcohol prior to coming to the Smith Center and recognition ability, and a significant difference was found between the alcohol consumption level variable and the recognition question regarding the 100 point giveaway sponsor. After running a Chi-Square test, a significant difference was found between subjects that "never" drank alcohol and subjects that “always” drank alcohol (.031). As presented in Table 27, another significant difference was found between subjects that “always” drank alcohol, and those that “rarely” drank alcohol (.021).

Table 27

Alcohol Consumption Against 100 Point Giveaway Sponsor Recognition

Dependent Variable	Group	Group	Sig.
100 Point Giveaway Sponsor Recognition	never	rarely	0.936
		sometimes	0.291
		always	0.031*
	rarely	never	0.936
		sometimes	0.206
		always	0.021*

*Significant at <.05 level

CHAPTER FIVE

SUMMARY

This chapter will summarize and discuss the results of the survey, and further address the research questions. Rationale for some of the findings will be tendered, as well as comparisons with previous literature. The chapter will also include recommendations for advancement on this study and future considerations.

Research Questions

1. *Is there a significant difference between UNC upperclass students and UNC underclass students in recognition of UNC athletic department corporate sponsors at UNC men's basketball games?*

An ANOVA was run between Academic Class and Recognition Scores, and significant differences were found when investigating the academic classes further. Graduate students were extracted from the upperclass student subject group, and when running a Tukey Multiple Comparison analysis, significant differences were found between both groups in recognition, with means being significant at the .05 level. In recognition for the official banking sponsor question, there was a .000 difference between graduate students and upperclassmen responses. There was a significant difference of .049 found between graduate students and upperclassmen on the question relating to the time-out promotion involving youths. In addition, significant differences of .000 were also found between the same two subject groups for the questions regarding the official 100 point giveaway sponsor, and the official Smith Center food and beverage vendors.

While upperclass and graduate students may be closer in age than underclass and graduate students, age may not be the simple factor to examine when analyzing reasons for the significant differences. One possible factor is that many graduate students attended different schools for their undergraduate education. Another factor to be examined is amount of games attended between the two groups. As shown in Table 9, 45.0% of graduate students attended five games or more in 2005-06, compared to 69.4% of upperclass students. With fewer graduate students attending more than five games than upperclass students, their propensity to notice and develop a mental relationship between sponsors and UNC men's basketball is likely lessened.

2. Is there a significant difference in recognition of UNC athletic department corporate sponsors at UNC men's basketball games between males and females?

An ANOVA was run between variables of Gender and Recognition, and two significant differences were found. Both significant differences were involving questions featuring food and beverage sponsors as responses. The survey question relating to the official 100 point giveaway sponsor resulted in a .028 significance level. The question regarding food and beverages sold in the Smith Center resulted in a .001 significance level. No post hoc test could be run since there were only two groups involved in this ANOVA.

Research is limited as to whether males and females have differing recall abilities. The study by Ewing, Napoli, and Du Plessis (1999) found that women have stronger food category recall than males (Ewing, et al., 1999), however male subjects recorded better recognition scores for the 100 point sponsor giveaway.

3. Is there a relationship between sponsor recognition and the amount of UNC basketball games attended among all student subjects?

The Simple Regression test run showed a fairly weak (.220) relationship between games attended and recognition ability. A possible explanation is that once subjects' game attendance crosses the five-game barrier, the ability to recognize and remember the Wachovia signage elements within the Smith Center become stronger. The assertion could be made that it requires five games for students' recognition to formulate.

Wachovia – Official Banking Sponsor

Wachovia received 80.8% of the responses to the question, "Which one of the following companies is the official corporate banking sponsor of UNC Men's Basketball?" A possible explanation for such a dominant percentage of the responses could be attributed to Wachovia's status as the only corporate sponsor with permanent signage within the Smith Center. Kevin Lane Keller (1993) suggested that brand associations are influenced when that brand "becomes linked with a sporting event through sponsorship activities" (Keller, 1993). The theory is that the notions held regarding a sporting event (in this case UNC men's basketball) become mentally linked with a particular brand or company when sponsorship or promotions are utilized. Wachovia's status as the lone Smith Center signage company takes steps towards creating links between UNC men's basketball, and itself in the conscious of game attendees.

Wachovia was also a popular response of subjects when asked to recall any UNC men's basketball sponsors they remembered before reaching the recognition portion of the survey. Of the 977 subjects, 268 subjects only recalled one sponsor, 149 of those listed Wachovia as their only response. Wachovia's dominant position within the Smith Center can be traced as a possible reason. Studies by Stotlar and Johnson (1989) and White and Irwin (1996) assert that stadium signage goes a long way to increase spectators' ability to both recognize correct sponsors, and recall them at a later time. Wachovia's status as the lone corporate partner with in-venue signage, combined with their positive recognition and recall scores on this survey help corroborate the assertions made in those previous studies. In addition, Wachovia's on-campus presence at UNC could be a factor that further integrates their brand into the consciousness of students.

Verizon Wireless – Official Wireless Sponsor

The showings for the official wireless sponsor question yielded significant differences between all groups with relation to amount of games attended, except for groups "9-12" and "13-17". A possible analysis of the drastic difference among most of the groups could be that Verizon's promotion occurs in an alternating game-by-game format, rotating between the first time-out of the game, and halftime. The sporadic nature of Verizon's location could make it difficult for students to develop the ability to strongly recall this sponsor, and their recognition scores in relation to amount of games attended is one indication.

On the survey question regarding the official wireless sponsor of UNC men's basketball, Verizon Wireless returned 608 responses (62.2%). Cingular was the response of 237 subjects (24.3%) however, and a possible reason could be Cingular's status as the on-campus telephone provider for UNC, which could have led to confusion among some of the subjects. Another possible factor in the confusion could be the fact that the survey was conducted in April of 2006, the month following the NCAA men's basketball tournament. Cingular ran commercials during the CBS television broadcasts of the tournament games, as commensurate with their status as an official corporate sponsor of the NCAA. To students unaware, this could have caused some confusion as to the official wireless sponsor for UNC men's athletics.

BlueCross Blue Shield

These statistics in Table 14 show that subjects that attended enough games to qualify for the highest amount group had significantly higher recognition of this promotion, in comparison to those that went to the fewest amount of games. One important factor is that similar to the Verizon Wireless promotion, BlueCross BlueShield's kids' race promotion has a rotating position during time-outs and halftimes during the season. This factor could be relevant to why subjects that attended the most games stood the best chance to accurately answer this recognition question.

This child-including on-court promotion is a popular one among Smith Center fans, featuring the BlueCross BlueShield logo on the arena video boards, and the participating youths wear bright-colored yellow t-shirts with the company logo printed on the front. The popular promotion can create a positive place for BlueCross BlueShield within the conscious of fans, similar to the "halo effect" referred to in Goodman's (2006) article. The popularity of the promotion could have contributed to BlueCross BlueShield's excellent percentage, receiving 76.2% of the recognition responses from subjects.

The utilization of youths meshes to a degree with the findings of Kahle and Homer (1985) in their study of the convergence between image of product or sponsor and image of endorser. Their study found support for the notion that advertising is more effective when the image of the product endorser relatively matches the image of the product. The success of the BlueCross and BlueShield promotion targeting parents and families by using two children in their promotion seems to support some of the previous literature, and the findings by Kahle and Homer specifically.

Bojangles

Bojangles does not feature an on-court time-out promotion like Wachovia or Verizon Wireless. Since the giveaway must occur contingent on a specific scenario (the UNC men's team scoring at least 100 points), the "exposures" for Bojangles are understandably limited, especially for subjects with a relatively low amount of games attended.   This factor could be a possible explanation for why there was a significant difference in recognition across the amounts of games attended.

Literature by McDonald (1991) and Gwinner (1997) address the issue of a sort of "functional based marketing" (Gwinner, 1997). This refers in essence to a confluence between product and event.   The literature suggests that marketing efforts are strengthened when the respective product is utilized in someway during the event or within the venue in a way that is apparent to spectators (Gwinner, 1997). Bojangles serves as a food vendor within the Smith Center, therefore an on-court promotion of some kind could increase the propensity for spectators to strengthen their images and relationships of Bojangles, at least according to assertions made in works by McDonald and Gwinner.

Bojangles did receive 78.1% of responses to the 100 point giveaway recognition question on the survey. The promotion is successful in part because of the excitement generated by students at the prospect of receiving the free or discounted food from Bojangles. The ability to draw customers into the restaurant with this promotion is beneficial not only because it establishes a connection with UNC men's basketball in the minds of students, but also because it stands to increase sales, which is important in the minds of sponsors (Tomasini, Frye, & Stotlar, 2004).

There were also significant differences between the "none" group and the remaining groups regarding which food and beverage companies sell their products in the Smith Center (see Table 26). A possible explanation for the significant difference could be that those who never attend games in the Smith Center have a significantly more difficult time identifying food and beverage vendors inside the venue than do those subjects that attend games.

Alcohol Consumption

An ANOVA was run between subjects responses to what degree they consume alcohol prior to coming to the Smith Center and recognition ability, and a significant difference was found between the alcohol consumption level variable and the recognition question regarding the 100 point giveaway sponsor. After running a Chi-Square test, a significant difference was found between subjects that "never" drank alcohol and subjects that "always" drank alcohol (.031). As presented in Table 27, another significant difference was found between subjects that "always" drank alcohol, and those that "rarely" drank alcohol (.021). The significant differences resulting from the comparisons against subjects that "always" drank alcohol display that at least with respect to the 100 point giveaway sponsor, alcohol consumption does in fact have an effect.

How much of an effect however is uncertain. Since the 100 point giveaway does not have an actual in-arena promotion, the connection cannot clearly be drawn between ability to pay attention to time-out contests and promotions, and regular alcohol consumption.

Recommendations

The purpose of this study was to gauge recognition and recall ability among UNC men's basketball student fans, and to explore effectiveness of promotions within the Smith Center. This is definitely a topic of study that should be explored in greater depth in the future. For future study, the body of subjects should be expanded to include the general public population of fans within the Smith Center. Perhaps an on-site email sign-up registration would allow for consent to be granted by would-be subjects. Including general subjects like alumni and adult fans would allow for a different set of recognition and recall subjects. In addition, it would allow for the study of promotion and sponsorship effectiveness to be expanded upon. This may allow sponsors to study their results and "effectiveness" by demographic, and allow them to ascertain the impact on their desired target market.

With Wachovia featuring such substantial advertising exposure in relation to the other sponsors due to their arena signage, one recommendation could be to issue a point value for each sponsor-related question. This may allow for the effect of the exposure discrepancy to be quantified in some fashion.

Since many of the sponsors have exposures that expand past men's basketball at UNC, future study to include promotions within Kenan Stadium during UNC football season could be beneficial. This would also allow for an partially different set of subjects to participate.

Conclusions

The findings seem to suggest that BlueCross BlueShield, Bojangles, Wachovia, and Verizon Wireless are each receiving excellent representation within the Smith Center. Each company received recognition scores above 70% and would appear to be doing a solid job of creating an image within the conscious of student spectators. The findings would suggest that Wachovia's signage investment has paid off well, with respect to subjects' ability to recognize them as the official banking sponsor of UNC athletics.   It could be perceived as odd however that the dummy banking sponsors received any responses at all, given the magnitude of the exposure Wachovia receives inside the UNC venue. Bojangles' relatively high recognition scores in the absence of an on-court promotion bodes well for their status as a sponsor, however it could suggest to the other companies that it is possible to achieve recognizable status among the UNC student body without having to sponsor an actual live promotion. In addition, it could be beneficial to both Verizon and BlueCross BlueShield to stop alternating positions of their promotions. A consistent position (halftime or timeouts) of each promotion could allow spectators to better develop their mental association between the sponsor and UNC men's basketball, whereas a rotation of the client positions can lead to confusion for spectators that sporadically attend games.

REFERENCES

Books and Articles

Badenhausen, K. & Stanfl, R. (2000). Name Games. (importance of arena sponsorship revenue to professional basketball and hockey teams). *Forbes*, December 11, 2000, 132.

Bayles, M. & Chaparro, B. (2001). "Recall and Recognition of Static vs. Animated Banner Advertisements". Proceedings of the Human Factors and Ergonomics Society 45th Annual Meeting, USA.

Bayles, M. (2002). "Designing Online Banner Advertisements: Should We Animate?" *Usability News*. April 2, 2002

Brown, G. T. (2004). "Conference data emphasize financial gaps". NCAA News. April 12. 2004. http://www.ncaa.org/wps/portal/!ut/p/kcxml/04_Sj9SPykssy0xPLMnMz0vM0Y_QjzKLN4j3NQDJgFjGpvqRqCKO6AI-YXARX4_83FR9b_0A_YLc0NCIckdFAEuT364!/delta/base64xml/L3dJdyEvUUd3QndNQSEvNElVRS82XzBfTFU!?CONTENT_URL=http://www.ncaa.org/news/2004/20040412/active/4108n02.html

Brown, G. T. (2004). "Knight Commission looks to strengthen fiscal responsibility". The NCAA News Online, November 8, 2004. http://www2.ncaa.org/portal/media_and_events/association_news/ncaa_news_online/2004/11_08_04/association_wide/4123n17.html

Bruscas, A. (2003). "Moos kindles athletics arms race at Oregon". Seattle Post-Intelligence, October 31, 2003.

Busser, J. A. (2001). "The Impact of Sponsorship Type and Exposure on Spectator Recognition". February 23, 2001.

Carlton, J. (2005). "Expansion elevates ACC to 'high-stakes table" *Greensboro News & Record*. August 28, 2005.

Chansky, A. (1999) Dean's Domain. Longstreet, Inc. Atlanta: 1999. p.259

Chapel Hill News (2003). "Commercialization of UNC sports.", July 27, 2003. A6

Cutler, D. (1999). Corporate sponsorship: A Necessary Evil in Collegiate Athletics Today. *Cyber-Journal of Sport Marketing*, 3(3).

Dubow, J. (1995). Advertising recognition and recall by age – including teens. *Journal of Advertising Research*, Sept-Oct 1995 v35 n5 p55 (6).

Equity in Athletics Disclosure Website. http://ope.ed.gov/athletics/index.asp

Ewing, M., Napoli, J., and Du Plesis, E. (1999) "Factors Affecting In-market Recall of Food Product Advertising". *Journal of Advertising Research*. July 1999. p29.

Fowler, L. G. (2005) "2004-05 NC State Annual Report"

Fulks, D. (1998) "Revenues and Expenses of Divisions I and II Intercollegiate Athletic Programs: Financial Trends and Relationships – 1997.

Fulks, D. (2002) "Revenues and Expenses of Divisions I and II Intercollegiate Athletic Programs: Financial Trends and Relationships – 2002.

Fulks, D. (2003). "Revenues and Expenses, Profits and Losses of Division I-A Intercollegiate Athletics Programs Aggregated by Conference – 2003 Fiscal Year". 2003.

Fulks, D. (2005). "2002-03 NCAA Revenues and Expenses of Divisions I and II Intercollegiate Athletics Programs Report". February 2005.

Goodman, C. (2006). "Analyst Speak: Brands must make most of sponsorship chances". New Media Age. London: February 23, 2006. p7

Gwinner, K. (1997). “A Model of Image Creation and Image Transfer in Event Sponsorship”. *International Marketing Review*, 14 (3), p145-158.

Helitzer, M. (1996) The Dream Job: Sports Publicity, Promotion, and Marketing (2nd Ed.). Athens, OH: University Sports Press.

http://www.bcsfootball.org (2006)

http://www.turnkeysports.com

http://www.scarborough.com

http://www.unc.edu

http://www.uwbadgers.com/facilities/camp_randall/index.aspx

Kahle, L. and Homer, P. (1985). “Physical Attractiveness of th Celebrity Endorser: A Social Adaptation Perspective.” *Journal of Consumer Research*, 11 (4), p954-961.

Keller, K. L. (1993). “Conceptualizing, Measuring, and Managing Customer-Based Brand Equity,” *Journal of Marketing*, 57 (1), p. 1-22.

King, B. (2005) Race For Recruits. *SportsBusiness Journal.* December 5-11, 2005, 19-25.

Knight Foundation Commission (2001). “A Call to Action:
Reconnecting College Sports and Higher Education.” Report of the Knight Foundation Commission on Intercollegiate Athletics, June 2001

Litan, R., Orzag, J., & Orzag, P.. (2004) “The Empirical Effects of College Athletics: An Interim Report”. August 2003.

Lucas, A. "A Q & A With AD Dick Baddour: Budget Concerns" June 20, 2002. http://tarheelblue.collegesports.com/genrel/062002aaa.html

McDonald, C. (1991). "Sponsorship and the Image of the Sponsor." *European Journal of Marketin*g. 25 (11) p5-10

Meenaghan, T. (1994). "Ambush Marketing: Immoral or Imaginative Practice? *Journal of Advertising Research*, 34,5, 77.

Mills, D. (1996). "What's the point of event sponsorship if isn't done well?" *Campaign*, 17.

NCAA News Online (2004). "Knight Commission study latest to refute spending myths". September 13, 2004. http://www2.ncaa.org/portal/media_and_events/association_news/ncaa_news_online/2004/09_13_04/association_wide/4119n08.html.

Orzag, J. & Orzag, P. (2005). "The Physical Capital Stock Used In College Athletics". April 2005.

Pickle, D. (2002). "Gaps widen between financial haves and have-nots." NCAA News Online. September 2, 2002. http://www.ncaa.org/wps/portal/!ut/p/kcxml/04_Sj9SPykssy0xPLMnMz0vM0Y_QjzKLN4j3NQDJgFjGpvqRqCKO6AI-YXARX4_83FR9b_0A_YLc0NCIckdFAEuT364!/delta/base64xml/L3dJdyEvUUd3QndNQSEvNElVRS82XzBfTFU!?CONTENT_URL=http://www.ncaa.org/news/2002/20020902/active/3918n01.html

Putrevu, S. (2004). "Communicating with the sexes: male and female responses to print advertisements." *Journal of Advertising* 33.3 (Fall 2004): p51(12).

Rombeck, T. (2003). "Athletics arms race: Programs' successes tied to money". December 7, 2003. http://www.kusports.com/news/kunews/story/108749

Sleight, S. (1989) Sponsorship: What it is and how to use it. Maidenhead: McGraw-Hill

Stotlar, D.K., & Johnson, D.A. (1989). Assessing the impact and effectiveness of stadium advertising on sport spectators ad division I institutions. *Journal of Sport Management*, 3 (2), 90-102.

Stotlar, D.K., (2005). Developing Successful Sport Sponsorship Plans. Morgantown, WV: Fitness Information Technology, Inc.

Sylwester, M. & Witosky, T. (2004). "Athletic spending grows as academic funds dry up". *USA Today*. February 18, 2004.

Tomasini, N., Frye, C., and Stotlar, D. (2004). NCAA Corporate Sponsor Objectives: Are There Differences Between Divisions I-A, I-AA, and I-AAA?. *Sport Marketing Quarterly*, Vol. 13, No. 4, 2004.

Wherley, S. A., Ph.D., (2003). "Collegiate sport sponsorship: Matching institutional components with corporate desires." The University of Connecticut, 2003.

White, A. B., & Irwin, R. L. (1996) Assessing a corporate partner program: A key to success. *Sport Marketing Quarterly*, V (2), 21-28.

Wieberg, S. (2005)."Bowls Give Big Ten Conference a big pay day" USAToday.com. December 7, 2005 .http://www.usatoday.com/sports/college/football/2005-12-06-bowl-payouts_x.htm

Wolin, L. (2003). "Gender issues in advertising--an oversight synthesis of research: 1970-2002." *Journal of Advertising Research* 43.1 (March 2003): p111(19).