5-1-2017

Fan Motives for Identifying with Professional Tennis Players

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UNIVERSITY OF NORTHERN COLORADO

Greeley, Colorado

The Graduate School

FAN MOTIVES FOR IDENTIFYING WITH PROFESSIONAL TENNIS PLAYERS

A Dissertation Submitted in Partial Fulfillment
of the Requirements of the Degree of
Doctor of Philosophy

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College of Natural and Health Sciences
School of Sport and Exercise Science
Sport Administration

May 2017

This Dissertation by: Alex Yakon Rondon Azcarate

Entitled: *Fan Motives for Identifying with Professional Tennis Players*

has been approved as meeting the requirement for the Degree of Doctor of Philosophy in College of Education and Natural and Health Sciences in School of Sport and Exercise Science, Program of Sport Administration

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ABSTRACT

Rondon Azcarate, Alex Y. *Fan Motives for Identifying with Professional Tennis Players.* Published Doctor of Philosophy dissertation, University of Northern Colorado, 2017.

The purpose of this study was to examine motivations used by tennis fans in identifying with professional tennis players and thereby developing fan loyalty and support. No prior work has focused on fan motivations toward individual players in an individual sport. This non-experimental study design used an online survey technique to solicit responses from adult tennis fans through a variety of tennis organizations, tennis clubs, tennis training facilities, and tennis websites and blogs. Surveys responses were solicited from January through February 2017. Of the original 460 total respondents, 28% (n = 101) reported having no favorite professional tennis player and were excluded from the analysis. The remaining sample (n = 359) was uniformly divided by gender (male fans = 49.5% and female fans = 50.5%). A favorite male professional tennis player was reported by 98.5% of tennis fans and a favorite female professional tennis player was reported by 56.8% of tennis fans. Fan status was divided between player *and* spectator (93.3% of respondents, n = 335) or spectator *only* (6.7% of respondent, n =24). Experience for player *and* spectator fans was M = 26.5 years (SD = 15.2) and for spectator *only* fans was 26.9 years (SD = 14.8). Confirmatory factor analysis (CFA) validated the proposed eight-factor motivation model for the intended purpose in this study. Principle components analysis (PCA) revealed two components accounting for

57.6% of the total variance: Component 1 (43% of total variance) revealed highest loadings for professional athlete reputation, behavior, personality, philanthropy, and athlete as a hero. Component 2 (14.6% of total variance) revealed highest loadings for athlete physical attractiveness and vicarious identity. Physical attractiveness of male professional tennis players and female professional tennis players was a significant motivation ($p = .0005$) for both male tennis fans and female tennis fans. Fans identifying as player *and* spectator (78% of total) ranked player skills, behavior, reputation, and personality as the top four motivations (based on ranking of mean scores) toward both male and female professional tennis players. Male professional tennis player behavior ($p = .022$), reputation ($p = .035$), and philanthropy ($p = .033$) were significant motivations based on fan experience and the importance of each appeared to increase with increasing fan experience. Male professional tennis player skills were significant ($p = .010$), did not trend with fan experience, but appeared most important to those fans with the most experience. In contrast, female professional player as a hero ($p = .015$) was a significant motivation based on fan experience, but was least important among those fans with the most experience. These findings add to the basic literature concerning fan motivations and may be used by promoters of major tennis events to increase fan attendance and to enhance the fan experience and loyalty. Professional tennis players may also consider these findings as a guide by which they may enhance or repair their standing with tennis fans.

DEDICATION

I would like to dedicate this work to the most wonderful, caring, and loving woman I have ever known, my mother, Maria del Carmen Azcarate. Your devotion, love, care, and teachings have molded me into the person that I am today. I love, admire, and respect you immensely. This is for you for being the greatest mother in the universe.

I also dedicate this work to my sisters, Rondalia Rondon Azcarate and Yacobit Rondon Azcarate. This is for you for being amazing sisters and human beings.

I also dedicate this work to Dr. Roger Culbertson. Your belief in me, encouragement, support, and patience are things that I acknowledge and truly appreciate. This work is also for you.

ACKNOWLEDGEMENTS

There are so many people without whom this journey would have been impossible to undertake and to finish. This journey began way long before I started the program for the Ph.D. degree and before I even entered graduate school. Along the way, I have encountered so many people who, knowingly or unknowingly, contributed to what I am achieving today. I cannot express how thankful I am to all of you, but I will at least acknowledge some of the more significant people.

I would first like to express my gratitude to the members of my graduate committee for their time, help, and guidance. Dr. Dianna Gray, my research advisor, mentor, and instructor, I thank you for your guidance and support throughout my studies and the dissertation process. I also enjoyed our many discussions about our favorite sport of tennis. Dr. Alan Morse, my co-research advisor and instructor, thank you for always being available and willing to help. Dr. James Gould, my committee member, thank you for your helpful input and for your time in guiding me in this process. Dr. Randy Larkins, my committee member and instructor, thank you for your guidance in the classroom and for your time and help in completing my program. Dr. Krystal Hinerman, thank you so much for your classroom teaching and for your time and help in completing my program.

Dr. Roger Culbertson ("Monkey"), your support, encouragement, advice, and patience have been pivotal to my successful completion of this degree. Words do not

seem adequate to convey how grateful I am for your help. Thank you. Thank you. Thank you.

Juaquito Drada, thank you for the solid foundation that you gave me as an athlete and as a person. You were the first person who noticed my academic potential. Your teaching and encouragement are the main reasons that I find myself in this wonderful position today.

Carlos Drada, (Caballero del Zodiaco), you have played a bigger role that you could ever imagine in my achieving this goal today. Thank you for always being willing to help in a selfless manner.

To the rest of the Drada family, thank you for always making me feel like another Drada.

Mr. Gerald L. Truett, that you for your friendship and support. I am sure that, without it, this would not have been possible.

Marisol Ramirez and Patricia Zuluaga (and your families), thank you for your support and encouragement.

Quatra, my little rat terrier, thank you for the many warm welcomes each time I come back home. You are the sweetest pup in the world and I am glad and thankful you were in my life during this journey. Keep on waggin!

All of you share in this achievement with me.

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CHAPTER I

INTRODUCTION

The Celebrity Cult and Fandom

The concepts of stardom and the celebrity cult are well-known components of modern society and extend into many different aspects of American life, including entertainment, politics, and sports (Hollander, 2010). An important underlying question involves the exact nature of celebrity and, more specifically, how the status is formed, cultivated, and maintained particularly among a fan base and why fans feel the need to provide such support and even adoration. Hollander stated, in the general context of the celebrity cult, that looks, physical attractiveness, constant publicity, being entertaining, and being successful are all important attributes of the celebrity. Fan membership in the celebrity cult is thought to provide something that is missing in the lives of ordinary Americans who find some form of fulfillment in living vicariously through celebrities.

An additional factor for understanding the celebrity cult in general, and sport fan motivation specifically, is that these concepts and practices are based upon powerful individual psychological needs and theory that involve perceptions of self-identity, self-worth, and membership in larger social groups. These psychological concepts include the Psychological Continuum Model (Allport, 1945; Funk & James, 2001), Identity Theory (Burke & Tully, 1977; McCall & Simmons, 1978; Stets & Burke, 2000), and Social

Identity Theory (Bowlby, 1979; Hogg & Abrams, 1988; Stets & Burke, 2000) and describe powerful psychological forces that begin in childhood and persist into adulthood.

Sport Fans' Motivations Toward Professional Athletes in General

Certainly, sports stars may share many of the general attributes of other celebrities, such as good looks, being physically attractive, frequent publicity, providing entertainment, and financial success. However, sports stars may also provide an additional level of attraction to fans through other desirable traits that are integral to sports, such as skill, determination, tenacity, physical strength, athletic achievement, sportsmanship, and others. Important among the positive perceptions of sports figures is the cultural concept of the sporting hero, as defined as a person at the center of an epic story or one who exhibits extraordinary bravery, firmness, or greatness of soul (Hughson, 2009). Not surprisingly, fan vicarious identity through athletes has also been found to be an important attraction for fans (Fink, Trail, & Anderson, 2002; Funk, Ridinger, & Moorman, 2003; McDonald, Milne, & Hong, 2002; Wann, Schrader, & Wilson, 1999; Wu, Tsai, & Hung, 2012). These desirable traits may be evident in both team players and in athletes involved in individual sports, but certainly some athletes engaged in individual sports may be afforded more focused attention by fans and by the public, given the different sport context. Individual athletes in tennis, golf, car racing, swimming, gymnastics, and rodeo sports would be prime examples of this category. In the individual sport of professional bass fishing, the prime fan motivations that determined engagement were having and watching a favorite angler and seeing the angler as a role model for young children (Bernthal, Koesters, Ballouli, & Brown, 2015). In contrast, fan motivation

toward NASCAR drivers was found to be primarily the result of media exposure of top drivers and resulted in casual watching of the events (Keaton, Watanabe, & Gearhart, 2015). The special case of the athlete in the individual sport of tennis was the focus of this study.

Professional Tennis Players and Professional Athletes in Other Individual Sports

Professional tennis for both men and women has become big business and is worldwide in reach and appeal. The Association of Tennis Professionals or ATP (the men's organization) reports in 2015 a total of 2785 singles and doubles matches played in the World Tour with total prize money of $165,026,047 ("ATP Singles, Doubles," 2015). There are currently over one-thousand ranked male athletes in singles play. Top ATP players, of course, share much of the awarded prize money and the fame. For example, Roger Federer has career earnings of $97,303,556; Novak Djokovic, $94,050,053; Rafael Nadal, $75,888,125; Andy Murray, $42,435,316; Stan Wawrinka, $20,947,676, and these sums do not include the even more lucrative product endorsements ("ATP Players Home," 2015). Similarly, the ATP is affiliated with the Women's Tennis Association (WTA), the comparable organization for women's professional tennis. The WTA represents over 2500 female professional players from 92 countries and in 2015 awarded record prize money of $129,000,000 ("WTA Sees Broadcast," 2015). Women's Tennis Association broadcast viewership increased by 25% in 2015 to 395 million viewers. The women's tournaments with the top viewership in 2015 included those in China, Singapore, Toronto, Miami, and Indian Wells ("WTA Sees Broadcast," 2015). As in men's professional tennis, the top WTA players share much of the money and the fame. For example, Serena Williams has career winnings of $74,083,421; Venus Williams,

$32,608,015; Agnieszka Radwanska, $21,777,713; Martina Hingis, $22,305,214; Petra Kvitova, $20,391,180, and like the men, these figures also do not include the more lucrative product endorsements. Furthermore, Steve Simon, WTA CEO, stated that "the number of stars coming up through the sport will continue to excite interest" ("WTA Sees Broadcast," 2015). These individual earnings for top professional tennis players reflect not only the talent of individual players and their ability to win, but also their constant participation in tournaments that provide them with revenue, ranking, and fan exposure.

In comparison to another high-profile individual athlete sport, top five career money winners in the Professional Golfers Association (PGA), the world's largest sports organization with over 28,000 members, include the following, as of April 2016: Tiger Woods, $110,061,012; Phil Mickelson, $79,242,310; Vijay Singh, 69,615,118; Jim Furyk, $65,644,297; and Ernie Els, $48,397,589 ("Career Money Leaders," 2016). The comparable women's professional golfing organization, the Ladies' Professional Golf Association (LPGA) reports the top five career money winners as follows: Annika Sorenstam, $22,573,192; Karrie Webb, $19,753,840; Cristie Kerr, $17,375,489; Lorena Ochoa, $14,863,331; and Juli Inkster, $13,918,074 ("Career Money," 2016). Although the career earnings of top players are similarly very high in both sports, it may be noted that the average professional tennis career would be shorter than the average professional golf career. In stark contrast, The Professional Rodeo Cowboys Association (PRCA), with 7,000 members, reported that the season earnings of the eight PRCA world champions in a recent year ranged from $101,685 to a record $507,921 and that only two professional cowboys had career earnings over $3,000,000 ("About the Professional Rodeo Cowboys Association," 2016). Certainly, this is not much financial reward for a

significant risk to life and limb. For an additional perspective, the top career earner among active NASCAR drivers is Jeff Gordon at $151,955,649, but the driver only keeps a percentage of the total earnings and the specific amount allocated to Gordon is not available ("Show Me the Money," 2015).

Importance of the Professional Tennis Ranking System

Although several top individual athlete sports have a player/athlete ranking system, it seems that the system in tennis provides the most focus on the top players and helps to increase interest among fans. Professional tennis players, as members of the ATP and the WTA, are ranked by a points system as defined by the respective governing body. In the ATP, the Emirates ATP Rankings are based upon points accumulated on a rolling basis over the past twelve months ("Emirates ATP Rankings," 2016). The ranking calculation is based upon the total points earned for the four Grand Slam tournaments, eight mandatory ATP World Tour Masters 1000 tournaments, and the player's six best results for all ATP World Tour 500, ATP World Tour 250, ATP Challenger Tour and Futures tournaments for the prior twelve months. This aggregate of scores is referred to as the "Best 18" and the ranking standings are recalculated weekly. The best possible ATP ranking is achieved by the player by participating in a full tournament schedule, by participating in higher category tournaments, and by progressing further through each of the tournaments since greater numbers of ranking points are awarded for each victory. Similarly, the WTA ranking system is also based on a 52-week, cumulative system that includes ranking points from Grand Slams, Premier Mandatory tournaments, and the BNP Paribas WTA Championships Singapore, with a maximum of 16 tournaments for singles ranking ("All About Rankings," 2016). In addition, for Top 20 female players,

their best two results from Premier 5 tournaments also count toward ranking. Ranking points from at least three tournaments are required for WTA ranking.

The ranking system in professional tennis ensures that top players participate in top events not only to gain ranking, but also to increase fan attendance and public awareness of tournament events. The system, therefore, benefits players, tournament events, and fans. A secondary effect is that the ranking system tends to focus fan attention on top-ranked players, especially when top players compete head-to-head in the later stages of tournaments. Professional tennis is, of course, one of the few widely-popular individual athlete sports in which top players compete directly with one another in this specific manner and may do so over a period of days or even weeks. Also, tournament draws often match lower-ranked players with higher-ranked players in the early stages and this helps to draw attention to less-well-known players and may offer a boost to their career, especially if the lower ranked player wins. It seems reasonable to assert that the tennis ranking system serves to focus fan attention and support on top players, especially given the unique nature of play and of tournaments.

Statement of the Problem

Tennis fans, like those of other single athlete sports and in team sports, may devote at least some of their interest and give their support to a favorite player(s) and may closely follow their career. Given their high media profile and status, top tennis stars are even recognized by some non-tennis fans in the public. However, there has been little research to examine the motives that determine these specific fan attachments to individual players in any individual athlete sport, except for golf (Robinson, Trail, & Kwon, 2004). Most prior studies of this type have focused on fan motives for support of

sport teams or specific sports, with vicarious identification often a prominent motive (Fink et al., 2002; Funk et al., 2003; McDonald et al., 2002; Wann, Schrader, et al., 1999; Wu et al., 2012). Despite the high-profile status and stardom of top tennis professionals and a loyal fan-base, little is known concerning why fans find them attractive and worthy of support.

The factors, both psychological and social, that lead to fan attraction to players are complex and may include: (a) hero worship/role model, (b) perceived personality traits (positive or negative) of star athletes, (c) level of fan involvement in the sport, (d) skill and grace of athletes, (e) physical attraction to athletes, (f) extra-sport activities of athletes, (g) winning/success, (h) athlete style of play (aggressiveness/sportsmanship), (i) athlete reputation, and (j) the sense of vicarious identity for the attached fan (Bee & Havitz, 2010). In the specific case of tennis, Bee and Havitz also proposed that fan attraction and fan involvement in the sport determined psychological commitment, which then lead to resistance to change and to eventual behavioral loyalty. Therefore, the purpose of this study was to more clearly define some of the fan motivations that result in attachment to professional tennis players.

Rationale

There are several reasons why it may be useful to explore the motives by which fans attach themselves to individual athletes and, more specifically, to individual professional tennis players. First, the knowledge gained will add to the general academic literature concerning fan motives, but perhaps in a more specific way in relation to athletes in individual sports. Second, this knowledge may allow more specific segmentation of tennis fans for marketing and advertising purposes. Fan identification

with sport teams, per social identity theory, has been shown to be a strong predictor of sport consumption behavior and fan attraction has been a precondition for psychological attachment (Bee & Havitz, 2010; Fink et al., 2002). Avid fans have been the foundation for economic success in the sports industry (DeSarbo & Madrigal, 2011). Fan avidity has been defined by the level of fan interest, involvement, passion, and loyalty. Although fan avidity has been a multidimensional construct, prior research has reduced many of the different behavioral expressions to just four dimensions: (a) on-field participation, (b) passive following, (c) purchasing, and (d) social. Marketing focus on passive followers and social fans could help to maximize revenue generation (Melton, 2011).

Fan identification with individual players, as previously noted, would also have been expected to predict such consumer behavior. In the context of fan motivation, developing a better understanding of who sport consumers were and what factors influenced their consumption behavior was critical to attract sport consumers and ostensibly increase consumption of sport-related products (McDonald et al., 2002). This information would allow better promotion of ATP and WTA events by focusing on the most attractive qualities of participating star tennis players. Also, this knowledge may be similarly used to advantage by those companies who employ tennis stars to promote their products and services. Third, this information may be used by professional tennis players and managers to enhance or even repair their image and appeal with fans. Finally, professional tennis was a good sport to study these factors because top players were identified by a ranking system and because of the high-profile status of top players. This status was based somewhat on player exposure resulting from the one-on-one nature of much of the game and the typical tournament schedule that may extend over days or even

weeks. Observation would suggest that tennis fans were not equally attracted to the same players, even if near the top in rankings. This study used a modified form of the Motivation Scale for Sport Consumption by Trail and James (2001) to examine several motives that may attract fans differently toward ranked tennis players and how certain fan demographic factors may play a role. The findings may provide insight into the important factors that determine fan identification and loyalty toward individual athletes.

Research Questions

This research design lent itself to the generation of several possible research questions. The global question was whether tennis fans engaged any specific motivations in their attachment to their favorite professional tennis players. For the purposes of this dissertation, the research questions focused on two specific areas: (a) the impact of fan gender and professional athlete gender on motivation to follow or support a favorite player and (b) the impact of fan avidity, as expressed by fan status (whether a tennis player *and* spectator or just a spectator) and years of fan experience, on motivation to follow a favorite player. The specific research questions were as follows:

Q1 How do fan gender and professional player gender factor in determining attachment to a favorite tennis player?

Q2 How does fan avidity as expressed by being a tennis player *and* spectator versus just a spectator factor in determining attachment to a favorite tennis player?

Q3 How does fan avidity as expressed by years of fan experience factor in determining attachment to a favorite tennis player?

Research Assumptions

This study, being fundamentally like other research studies, was conducted with awareness of and reliance upon basic assumptions and was constrained by both

delimitations and limitations. In this context, basic assumptions reflected the researcher's knowledge that certain conditions existed and that the specific behavior in question could be observed and measured. As such, assumptions impacted the quality of the research product as they determined whether the researcher could address the research questions and the extent to which the findings may be more widely applied (Hagger & Chatzisarantis, 2009). The specific basic assumptions in this study included the knowledge that fans were indeed attracted to different professional tennis players, that fan motivations likely differed among fans, and that this behavior could be both observed and measured using a validated survey instrument that included most of the expected fan motivations for attachment to players, as suggested by prior studies of fan motivations in team sports.

Research Delimitations

Research study delimitations referred to choices the researcher made to narrow the scope and define a workable research problem. The first major delimitation in the present study was that focus of fan motivations was limited to the single sport of tennis, rather than extended to other similar individual athlete sports. However, as previously explained, tennis may be the best sport to examine such motivations, given the ranking system, the exposure and prominence of top players among fans, and the unique nature of tennis play and tournament structure. The second delimitation in the present study was that participants were restricted to a single large city and to those who were actively engaged in tennis through affiliation with an organized tennis program. Certainly, there were tennis fans located in many other parts of the country, and the world, who were engaged with the sport of tennis through other avenues. However, the approach in the

present study hopefully solicited those fans who were among the most engaged and most likely to have strong motivations for attachment to professional tennis players. The key in this study, and in all research studies, was to use reasonable delimitations to make the study feasible without severely limiting the external validity of the findings. The approach in this study struck that balance.

Research Limitations

Research study limitations referred to an influence that either could not be controlled or was the result of delimitations imposed by the investigator. Delimitation and limitations were obviously connected and, the more restrictive the delimitations, the more severe the resulting limitations may be. The limitations in the present study may relate to the extent to which the proposed motivations (the eight factors) account for fan motivations in life. That is, could there be other fan motivations or combinations of motivations not included in the survey that may also play a role in fan attraction? Another limitation may involve the extent to which the results of this study involving tennis fans may be extrapolated to other single athlete sports. Finally, the findings may be limited by the inability of the survey to locate those fans who self-identify as only spectators, since they may not be formally affiliated with tennis organizations, or may be so only in small numbers. Regardless of these limitations, the results may still have validity and may be at least applicable to the sport of tennis.

CHAPTER II

REVIEW OF LITERATURE

This review of literature is divided into four sections. The first section presents a brief review of the basic psychological theories that underlie fan motivations and fan attachment to teams, individual team members, and to athletes in individual sports. The second section presents a summary of the relevant literature concerning the specific fan motivations that lead to fan attachment and support for teams. The third section presents a summary of the relevant literature concerning the specific fan motivations that may lead to fan attachment and support for athletes in individual sports. The final section provides a chronological account of the development and refinement of scales that have been used to attempt to measure fan motivations in a variety of sports settings.

Psychological Theories Underlying Fan Motives

Psychological explanations of fan motivations in sports have been based in several theories and these have included identity theory (Burke & Tully, 1977; McCall & Simmons, 1978; Stets & Burke, 2000), social identity theory (Bowlby, 1979; Hogg & Abrams, 1988; Stets & Burke, 2000), the psychological continuum model (Allport, 1945; Funk & James, 2001), and attachment theory (Bowlby, 1979). The goal of these theories was to explain how individuals first develop positive attachments in childhood to immediate caregivers and how this concept is carried into adulthood; how individuals develop a sense of personal identity; how personal identity becomes part of the larger

social identity or community; and how the need for attachments influences fan identification with teams, players, organizations, and other members of the community and the enhancement of perceived self-status. A brief discussion of these theories follows.

Identity Theory and Social Identity Theory

Identity theory and social identity theory have been used to help explain fan identity and eventual attachment and behavioral loyalty in sports for several years (Jacobson, 2003; Stets & Burke, 2000). These behaviors were founded on the observation that fan identity is beneficial to the individual in that it provides not only a concept of self, but also a feeling of community and belonging with other fans who share their interest and passion. The concepts of identity theory and social identity theory differ slightly in explaining these motivations. Identity theory is based upon the role-identity concept and depends upon the individual taking actions based upon both how they like to see themselves and how others see them (Burke & Tully, 1977; Jacobson, 2003; McCall & Simmons, 1978; Stets & Burke, 2000). Identity theory describes how individuals develop their own individual identity.

In contrast, social identity theory is based upon the concept of social comparison suggesting that individuals prefer to attach themselves to other individuals who are similar or slightly better (Bowlby, 1979; Hogg & Abrams, 1988). Social identity theory describes how individual identities are then tied to social groups to become communities of like-minded individuals. In either case, an individual's relation with a particular identity and social group leads to commitment and to the concept of identity salience, or the importance of this particular identity to the concept of self (Stets & Burke, 2000).

Jacobson similarly concluded that the development of individual identity in relation to sports requires both an interpersonal or network level and a symbolic level, giving fans both private and public components and underlying motives.

Psychological Continuum Model (PCM)

The basic psychological concepts underlying the PCM were published by Allport in 1945. This initial work described six fields of human activity where individual involvement may develop: (a) vocational, (b) educational, (c) recreational, (d) political, (e) theological, and (f) familial. In this context, involvement referred to an individual's participation in various activities and was also based upon the individual's apparent insatiable desire for personal status, per Allport. Using this basic concept, Funk and James (2001) then developed the PCM as a framework by which to organize and understand the streams of literature addressing the relationship between the individual and the connection to various types of sports and recreation. The stages of the PCM included: (a) awareness of opportunities, (b) attraction to participate or associate, (c) attachment resulting in emotional, functional, and symbolic meaning, and (d) allegiance leading to durability of involvement and loyalty.

Later, Lock, Taylor, Funk, and Darcy (2012) applied the Psychological Continuum Model to team identification among sport fans to further explain how social identity is developed over time. Team identification in this model depended upon fans moving through several psychological stages from awareness, to attraction, to attachment, and to eventual allegiance to the team. In a study by Lock et al., progression through the stages was found to depend upon the relationship becoming internalized by the fan, fans seeing players as distinct with recognizable personas, fans searching media

sources for team news, and by fans actively promoting the team to others. The underlying elements of identity theory and social identity theory can be recognized in this model. Lock et al. encouraged sports teams to use the PCM concepts to promote fan progression along the stages and growth of the fan base. Ultimately, team identification has been found to be "a strong predictor of sport fan consumption behavior" and should be important to the sport manager (Fink et al., 2002, p. 195). The importance of similar fan identification with players in individual athlete sports may also be anticipated.

Points of Attachment

Attachment theory from psychology has been used as the basis for the concept of points of attachment in sport research (Reams, Eddy, & Cork, 2015). The basic attachment theory was first developed by Bowlby (1979) and refers to those essential, favorable attachments that develop in early childhood toward immediate caregivers. The positive experiences of those early attachments then extend into adulthood and are necessary for the formation of many kinds of new favorable relationships in many different contexts, including sports (Carr, 2013). The adult extension of attachment theory into sports fandom has led to the concept of points of attachment (Reams et al., 2015). Points of attachment in the context of sport refers to the specific sites or focus toward which fans motives are directed, loyalty is developed, and psychological needs are fulfilled.

A discussion of fan motivations and motivation measurement would be incomplete without mentioning the analytical concept of points of attachment, since this was often a component of studies using motivation scales, especially the MSSC (Gencer, Kiremitci, & Boyacioglu, 2011; Kwon, Trail, & Anderson, 2005; Robinson et al., 2004;

Spinda, Wann, & Hardin, 2015; Woo, Trail, Kwon, & Anderson, 2009). The Point of Attachment Index (PAI) was developed by Robinson and Trail (2005) to provide a means by which to measure the different role identities of a fan within a sport. The underlying premise was that sport fans/consumers may have multiple identities regarding different aspects of a sport team and these may include things such as the level of sport, players, the coach, the university, the team, the sport, and the community. The importance of PAI analysis is that different points of attachment may be related to different motivations and result in different consumer behaviors.

Fan Loyalty and Motivations

Fan Loyalty

The concept of fan loyalty is based upon the previously outlined psychological concepts and is the behavioral expression of support or commitment to a specific sport or team, or perhaps for a university athletic program or other sport organization (Tokuyama & Greenwell, 2011). Funk, Haugtvedt, and Howard (2000) emphasized the importance of the fan's self-concept and social identification as being the foundational elements eventually leading to the willingness to invest in developing loyalty to a sports team. According to Scanlan, (1993), this commitment defined the intensity of desire which a fan expresses by continuing to engage in a particular sport or to watch a particular sport. Research has also shown that such fan psychological commitment translates into future intention, including time devoted to being a fan, frequency of attendance, amount of ticket purchases, and even the frequency of sport participation (Iwasaki & Havitz, 2004; Kim, Scott, & Crompton, 1997). Tachis and Tzetzis (2015) summarized the mechanism of fan loyalty development as follows: (a) fans' involvement affects psychological

commitment, (b) psychological commitment influences attitudinal loyalty, and (c) attitudinal loyalty then has direct effects on behavioral loyalty. The concept of attitudinal loyalty may simply be an attitude that strengthens the psychological connection to a specific team resulting in resistance to change, persistence, a specific way of thinking about the team, and fan behavior (Funk & James, 2001). Similarly, Tsiotsou (2013) proposed an approach to fan loyalty based upon a hierarchy of effects model that consists first of fan cognitive appraisals of the team, followed by fan affective attachment to the team, and, finally, with conative/behavioral responses. Ultimately, fan loyalty consists of initial psychological attachment and eventual behavioral consistency (Backman & Crompton, 1991; Mahony, Nakazawa, Funk, James, & Gladden, 2002).

Most prior research of fan loyalty has centered upon fan support for teams, rather than fan commitment and loyalty to individual players in team sports or to athletes in individual sports. Fan psychological commitment and behavioral loyalty may be based upon any of several motivation factors. The major factors of interest are discussed in the following sections.

Fan Motivations in Team Sports

Prior studies have applied and confirmed these basic psychological concepts to fan motives for attachment to team sports in general or to specific team sports (Fink et al., 2002; Funk et al., 2003; Lock, Taylor, & Darcy, 2011; McDonald et al., 2002; Wann, Schrader, et al., 1999; Wu et al., 2012). Concerning team sports, fan vicarious achievement has been found to be a key factor leading to team identification and attendance and is based upon the observation that fans derive increased self-esteem and

positive self-image through the success of the team with which they are identified (Lock et al., 2011; Wu et al., 2012).

Other motives may also have an influence on fan identification and loyalty. In the sport of basketball, James and Ridinger (2002) found that males appreciated the beauty and grace displayed by athletes in both men's and women's basketball, whereas females found women's basketball more aesthetically appealing. Some studies focused on differences in fan motivations among sports. McDonald et al. (2002) also found differences in motivation among spectators of different sports. For example, athlete physical risk was an important motivator for fans of auto racing and ice hockey. Artistry and beauty were motivators for spectators of golf and basketball and aesthetics were rated the highest in basketball and golf. Wann, Grieve, Zapalac, and Pease (2008) examined several sports and reported differences in the motivational profiles of the fans. Aesthetics was important to fans of individual sports, non-aggressive sports, and stylistic sports. Family, entertainment, eustress, group affiliation, and self-esteem were important motivators for fans of team sports. Fans of non-stylistic sports (professional hockey and tennis) were motivated by economics, self-esteem, family, eustress, entertainment, and group affiliation. Entertainment was found to be the most important motive across all the sports that were studied. Finally, Funk, Mahony, and Ridinger (2002) measured fan motivation factors in women's professional soccer. Five factors—sport interest, team interest, vicarious achievement, role modeling, and entertainment value—accounted for 54% of the variance in spectator interest/support. These studies reveal at least some of the differences in fan motivations that can be expected among different types of sports.

Fan Motivations in Individual Athlete Sports

Only a few studies have examined the motivations for spectators of individual-athlete sports and these motivations may differ from those of team sports (Robinson et al., 2004). Many events in which individual athletes compete are spread over several days or weeks and this difference in viewing structure, compared to that of many team sports, may have an impact on fan motives. Wu et al. (2012) concluded that fan intention for repeat patronage was more dependent on team identification than on player identification in baseball. However, it was also found that fan identification with individual players increased with better player performance. Wu et al. (2012) also concluded that fans more easily develop an association through vicarious achievement with players than with "intangible objects such as teams" (p. 187). In the individual athlete sport context, Kim, Greenwell, Andrew, Lee, and Mahoney (2008) examined the motives that attracted spectators to martial arts and found that interest in the sport, vicarious achievement, and national pride were significant among males and that primary sport interest and drama were significant among females. Spectators of golf were found to be primarily motivated by the display of skill of players or were motivated by vicarious achievement (McDonald et al., 2002; Robinson et al., 2004). In addition, spectators of auto racing strongly affiliated with their favorite driver and shared in reflected glory when their driver won.

Although there are many factors that impact fan attraction, one may suspect that the motives for fan attraction to an individual athlete, especially in a single athlete sport, may be of a more personal nature than those attracting fans to teams. One of the complexities is that some of these motive categories overlap to a small or even a large extent. Sun (2010) concluded that even fans of team sports tended to connect more to

their favorite player than to their favorite team (not restricted to sport) since the connection seemed more personal and real. The phenomenon of identification with players and/or events also occurs in sports with individual players such as golf or tennis (Robinson et al., 2004). Some factors are innate to the individual fan and other factors are related to the professional skills or to the perceived personal qualities of the individual player. In addition, public relations now play a complex and strategic role in defining and balancing the image of sport celebrities (Summers & Johnson Morgan, 2008).

The factors, psychological and social, that lead to fan attraction to players are complex and may include hero worship/role model, perceived personality traits (positive or negative) of star athletes, level of fan involvement in the sport, skill and grace of athletes, physical attraction to athletes, extra-sport activities of athletes, winning/success, athlete style of play (aggressiveness/sportsmanship), athlete reputation, and the sense of vicarious achievement for the attached fan (Bee & Havitz, 2010). In the specific case of tennis, Bee and Havitz also proposed that fan attraction and fan involvement in the sport determined psychological commitment, which then lead to resistance to change and to eventual behavioral loyalty. These factors may be based upon reality, may depend upon the public image of the star athlete as created by various media, and may be created in the mind of the enthusiastic fan.

Psychological Motives for Fan Attachment to Individual Players

Athletes as Heroes and Role Models

The concepts of hero worship and role models are probably as old as humans have lived together in social groups. The concept of the noble hero was certainly alive among the ancient Greeks as described in the Heroic Age by Homer and throughout world

history (Durant, 2001; Mitchell, 2011). Even today, after thousands of years, many recall the tragic hero, Achilles (swift of foot), who was beloved by his soldiers, admired by the other Greeks, and feared by the Trojans. Today, military heroes (and others) may be recognized for their bravery and other actions by the awarding of medals, such as the Medal of Honor (Borch, 2013). Widely-recognized heroes in the past were often associated with war or social conflict, but in the modern world the same status has been transferred, maybe without justification, to some sport figures and to others. Many people see special traits to be admired and emulated, such as hard work, dedication, perseverance, success, fair play, self-sacrifice, charity, bravery, and occasional humility, in those perceived as modern heroes.

The modern concept of sport heroes appeared around the beginning of the twentieth century and sport has served as a key source of current cultural heroes, but the concept may be defined in different ways (Hughson, 2009). The basic concept of hero depends upon "leadership, innovation, and superiority in a way that places the hero above the common person" (p. 85) and their mundane daily existence. Hughson considered sports heroes to be of two types. The prowess hero in sport refers to the "display of expertness" (p. 86) and may either depend on actual skill and/or may be aesthetic, depending on artistry and drama. In this context, the sport prowess hero becomes both the artist and the subject of the artist. The moral hero in sport exhibits "bravery, firmness, fortitude or greatness of soul" (p. 86). In sport, the prowess hero is supreme because of the public emphasis on that aspect, but the prowess image can be easily diminished if athlete moral behavior is questionable. Ultimately, heroism balances greatness and common humanity while recognizing the imperfection of all humans, as exemplified by

Achilles. Hughson further argued that for hero status to be lasting and appreciated, the hero must be understood in historical context and that the most notable heroes are those who can display a combination of prowess and morality, to be seen both above common people and yet still one of them.

Shuart (2007) stated that true heroism (for example, as demonstrated by firefighters and others on 9/11/2001) was rarely achieved in sport, but still found that three-quarters of college students in the study admitted to having a famous sports hero whom they admired. For the purposes of the study, Shuart defined the various categories in the following ways:

> *Hero* = distinguished person, admired for their ability, bravery or noble qualities and worthy of emulation.
>
> *Celebrity* = famous person.
>
> *Sports Hero* = status given to one who succeeds in sport and reaffirms American value structure.
>
> *Sports Anti-Hero* = athlete who does not affirm the predominant value system in American society.
>
> *Celebrity Endorser* = well-known person used in advertisements, whose function it is to sell products. (2007, p. 128)

Shuart found that those athletes who were perceived to be both a celebrity and a hero were the best spokesperson for a specific product. Also, with the passage of time, the negative behavior of sports heroes may be forgotten and their positive attributes become glorified (as in the case of Babe Ruth).

In modern society, it seems that many still confuse the concept of hero with that of simple celebrity, but there are critical distinctions, as previously stated. Hollander (2010) also discussed that celebrity, as distinct from heroism, was a modern concept that

first appeared in America and may be peculiar to American culture. The concept has since spread to other parts of the world. Celebrity worship provides entertainment and vicarious gratification for people who feel otherwise anonymous and unnoticed by society and has been defined in both mild, non-pathological and extreme pathological forms that include stalking (Hollander, 2010; McCutcheon, Lange, & Houran, 2002). Real heroes were distinguished by achievement, whereas only good looks and publicity were important for celebrity. The basic precondition for celebrity was simply that the individual only becomes well-known, regardless of the reason, and television has contributed to this trend (McCutcheon et al., 2002). Celebrity status is often transient and may not be based on any action that could be remotely considered heroic, admired, or respected. Hollander concluded that achievement is the distinguishing feature of the hero and celebrity only depends upon image or trademark and their entertainment value. Essentially, heroism may inspire others, but celebrity simply entertains. Finally, attraction to some sports figures may be based upon a combination of hero worship and physical attraction/eroticism, even among male fans of American football and Australian football (Klugman, 2015).

Some fans also consider some athletes to be cultural icons, role models, and persons to be admired and copied, because of public impressions (real, imagined, or created) concerning the character and actions of the athlete and athlete role model status is promoted by coaches, sports leaders, and the media (Guest & Cox, 2009; Summers & Johnson Morgan, 2008). Guest and Cox concluded that the issues concerning athletes as role models included: (a) who tends to be identified as role models, (b) what qualities are admired and considered necessary for role models, and (c) should athletes be even

considered as role models at all? Top athletes have often been held to a high standard and are expected to win with humility, without using drugs or cheating; to display good manners and sportsmanship; to lose with dignity; and to exemplify the ideals of sports. Sports stars are expected to "epitomize and symbolize" (p. 180) the cultural values of sports fans. Summers and Johnson Morgan concluded that although the public is aware of these high standards, it also expects at least some top athletes to behave badly and can accept these failures if the athlete continues to perform well at their job.

However, despite all of this, the premises underlying the role-model argument are often unclear (Petersen, 2010). Petersen's main point was that athletes should not even be considered role models because this status places an unwanted burden upon them, and they have not consented to being placed in that status. The counter argument by Petersen was that being a role model is not something consented to; it simply develops whether the athlete wants it or not. The basic question was whether top athletes should even be considered as role models because of unreasonable expectations and the potential for a bad outcome. Regardless, many fans still see top athletes as role models. For example, Sack, Singh, and DiPaolo (2009) found that women are more likely to report that they attend women's tennis events to support their gender in sports, their favorite players, and to increase their self-esteem through the concept of role models. Role modeling was also found to be a significant factor in fan level of support for women's professional soccer (Funk et al., 2002). Interestingly, some fans of professional bass fishing consider professional anglers as role models for their children (Bernthal et al., 2015). However, despite the public holding athletes up as role models, they may not necessarily have an actual direct influence on the public (Guest & Cox, 2009). Rather, athletes may simply

serve as cultural icons that reflect a wide range of qualities from athletic prowess to personal character and individual athletes may have differing opinions as to what constitutes role mode status.

There certainly have been other arguments made that discredit the concept that star athletes should even be considered as heroes and role models. First, some have argued that expecting athletes to serve as role models was unfair to the athlete since they did not ask for that status. Public expectations have often been too high and have created stress, the image of athletes may have been exploited by leagues and others, and athletes may have been stalked and victimized for financial or professional gain (Burch & Murray, 1999; Sailes, 2001). Burch and Murray stated that athletes may be considered as role models inherently, because of the impact of their actions on the lives of fans, or unwillingly, simply because their employment places them in the public spotlight. The counter-argument, of course, would be that professional athletes are aware of public attention and what is expected of them going into the profession and that they are well-compensated for the risks. Second, Hyman and Sierra (2010) reported that idolizing sport celebrities by adolescents may lead to psychologically unhealthy obsession in 10% or more of adults. Some of the negative results in those adults may include declining psychological well-being among obsessed fans; over-identification, stalking, and obsessive behavior toward celebrities; and blurring of the lines between fantasy and reality.

Also, embedded in these concepts is the idea of the anti-hero. Retired tennis professional John McEnroe may be cited as an example of an anti-hero in tennis during his playing years for his well-known temper and arguments with officials (Hughson,

2009). Mueller and Sutherland (2010) found that the use of sports heroes and villains (or anti-heroes) was one of the most effective ways to achieve increased fan involvement. Furthermore, they found that in sports in which fans are more involved, heroes are more important, and in sports where fans are less involved, villains are more important. Tennis would seem to qualify as a sport in which fans are more involved given the more focused and intimate nature of the contest and the observation that many tennis spectators and fans are also players. The present study will examine the importance of athlete hero/role model status as one possible factor in fan attraction to professional tennis players.

Athlete Personality Traits

The perceived personality traits of the athlete may also have an impact on fan attachment and the athlete's celebrity status, and these traits ay be displayed both on and off the playing field or court. In this context, the version of personality presented to the public is typically controlled by the individual and may not offer the complete picture (Goffman, 1959). Goffman, in *Presentation of Self in the Everyday Life,* stated that most people are selective in their self-presentation of their image to the public. That is, individuals have both a component designated as the frontstage performance and another designated as the backstage performance, the former being more formal and the latter being less formal and more familiar. The self-image presented to the public may be carefully controlled by the individual and may accentuate certain traits and hide others for the benefit of public image. Certainly no one is immune from this practice. Still, it would seem reasonable that fans, and the public in general, may be naturally attracted to those who display traits that are universally admired (such as fairness, persistence, humility, or sportsmanship) or to players who display personality traits shared with the

individual fan. That is, a fan may naturally relate more to an athlete who displays a shared, common trait, regardless of what it is.

Research findings are somewhat at odds concerning the importance of athlete personality to fans. Madrigal (2006) stated that the unique personality of the athlete may be an important factor in fan appreciation of a skilled performance and may even be considered more important than the appreciation of the performance itself. In addition, when watching aesthetic sports (generally those that are judged, such as gymnastics or figure skating), fan interest was found by Madrigal (2006) to be significantly correlated with the personality of the athlete. Uniqueness of player personality (good or bad) may draw extra fan attention to the athlete, the event, and the sport and this may be especially true in individual sports since the athlete is more prominently displayed. In a study of athletes' perceptions of their status as role models, Guest and Cox (2009) also found that elite women soccer players focused on the importance of meritocratic personality traits (discipline and hard work) and on interpersonal abilities (caring and generous) rather than on athletic prowess as the basis.

In contrast, a recent study by Lebel and Danylchuk (2014) examined how sport consumers interpreted and valued athlete self-presentation on Twitter. These researchers surveyed golf fans' reactions to professional golfers' self-presentations on Twitter to determine which strategies (backstage or frontstage) were of most interest. The backstage strategies used by professional golfers on Twitter were categorized as the conversationalist, the sport insider, the behind-the-scenes reporter, the super fan, the informer, and the analyst. The frontstage strategies were categorized as the publicist, the fan aficionado, the superintendent, and the brand manager. Survey participants selected

the frontstage strategy of the sport insider as the most important and showed the greatest interest in discussions of athlete performance, athlete fitness, and athlete expertise. The conclusion by Lebel and Danylchuk was that fans may not actually be as interested in athlete personal details outside of the sport, in contrast to previous findings. In support of this conclusion, Clavio and Kian (2010) previously found that fans were most attracted to the athlete's Twitter postings because of the perceptions of the athlete's expertise in their sport and to the unexpected attraction to the writing style of the athlete.

In addition, there may also be a difference between actual athlete personality and being perceived as a "personality" by fans, as well as the distinction between athlete personality and character. One researcher (Smith, 2013) made a distinction between being a "personality" and the more desirable distinction of having "character" (p. 1). As previously stated, John McEnroe was very well known for his explosive behavior on the court and his distinction would be that of a "personality" (Hughson, 2009, pp. 88-89). Other tennis players are well-known among fans and in the press for their perceived level of good sportsmanship and good behavior and they are said to have "character" (Smith, 2013, p. 1). Examples would include Rod Laver, Roger Federer, Andy Murry, Novak Djokovic, and Rafael Nadal. One potential problem with athletes with modest character was that they may also have been considered boring by some of the public. Some people find character to be too predictable and not entertaining. Nadal is often admired in the popular press and among fans for his level of class and sportsmanship during and after competition (Fui, 2011; Halliwell, 2013). In the present study, the importance of fans' perceptions of athlete personality was examined as one possible factor through which

fans may be attracted to professional tennis players. “Aesthetics captures a culture’s ideas of beauty, proportion, and taste” (Wieting, 2005, p. 15).

Fan Physical Attraction to Athletes

Although sport aesthetics also concerns beauty, form, movement, and taste, there can be an additional physical, or even erotic, component when the mixture includes other humans. As summarized by Grauerholz et al. (2012): “Physical or sexual attraction plays an important role in shaping a wide range of relationships in myriad ways.” (p. 167). Furthermore, physical attraction is common among humans and is almost a universal trait. Although initial attraction between humans may be at first based on physicality, other factors (such as personality, values, or compatibility) may then either increase or decrease the strength of the initial attraction over time. Finally, some researchers have noted that the wide and varied theories underlying human attraction as “making it quite difficult to ascertain a concise summary of all its constituent sources” (Lanzieri & Hildebrandt, 2011, p. 275).

The process of biological evolution provides a strong foundation for physical attraction among humans as it does among lower animals. In this context, Koscinski (2012) found that even the mere shape of the body in other athletes had an impact on attractiveness and preference, at least among competitive swimmers. That is, body averageness was stated to be a sign of high biological quality and individuals develop a mental standard for what is considered average by the context in which they operate. In the study by Koscinski, male competitive swimmers, as compared to male non-swimmers, were shown to be attracted by just the silhouette of female competitive swimmers whereas male non-swimmers made no such distinction. Therefore, only the

simplest of visual clues may be enough for physical attraction in the right context. In addition, Murray (2014) found that even attraction to political leaders was based upon weight, height, body mass index, and public perceptions of being physically strong and intimidating, especially if conditions seemed threatening. Such physical attraction was also argued to have an evolutionary basis in that relying on physically powerful leaders in the past had often resulted in followers gaining important resources and protection.

Physical attraction between fans and athletes is also a factor in attachment in several contexts. Madrigal (2006) found that the interest generated in aesthetic sports such as gymnastics (as opposed to purposive sports such as tennis, basketball, or football which involve offense, defense, and strategy) was significantly correlated with fan appreciation of athlete physical attractiveness. In addition, research by Fink and Parker (2009) found that there was a gender difference in fan motives concerning athlete physical attractiveness. That is, the physical attraction motive was found to be more important to females than males, at least toward NFL players, although it was near the bottom of female fan motives. One explanation for this finding was that the physical features of football players are not very visible, given the covering by uniforms, pads, and helmets. In contrast, the bodies of players in some individual sports (like tennis, swimming, or gymnastics) are not hidden from view and this may possibly enhance the physical attractiveness of these athletes for some fans.

Even facial features have been found to play a role in fan attraction to certain athletes and in their financial rewards. A 2011 study by Berri, Simmons, Van Gilder, and O'Neill reported that physical attractiveness among NFL quarterbacks, as measured by facial symmetry, resulted in greater salaries regardless of actual player performance. In

general, more attractive people were perceived as being more competent, more productive, having greater leadership skills and social skills, having greater self-esteem, and having higher levels of motivation. The conclusion by Berri et al. was that beauty matters and that sport managers may increase support and generate more fan revenues by promoting it. In contrast, Trail and James (2001) found that athlete physical attractiveness was not a factor in fan attraction among professional baseball season ticket holders. Of course, the concept of athlete physical attractiveness in the case of baseball must also be viewed in the context of a team sport in which players wear a full uniform, even if it fits tightly, and they are often also seen from a considerable distance (if attending games in person).

Perhaps not surprisingly, physical attraction to athletes may also have an erotic component (Klugman, 2015; Lanzieri & Hildebrandt, 2011; Nelson, 2002). Klugman found expressions of erotic desires and pleasures among some male fans of Australian football and American football. These emotions were apparently tied to both eroticism and to hero worship among some avid fans who expressed feelings of love and devotion toward individual players. The conclusion was that too much emphasis on aggressive hegemonic masculinity has ignored the unstated, but, important roles of love, devotion, and even desires in the motivation of male sports fans. Similarly, gay male attraction to muscular and athletic men has been found to also be based on concepts of hegemonic masculinity, or the dominant social group notions of masculinity, and how it impacts social, psychological, and behavioral practices (Lanzieri & Hildebrandt, 2011). In Nelson's study of male and female spectators of women's sports, some spectators were found to see athletes as sexually attractive. However, expressions of athlete sexual

attraction were found in only 1 in 20 sports fans, but in 1 in 5 members of the public. Although non-fans saw and commented on athlete physical attractiveness much more so than did sports fans, this marked difference was unexplained. Perhaps fans were more focused on the technical aspects of the game or the intensity of the competition rather than simply physical features of players. Erotic attraction has even been documented between sport psychologists and athletes in their care and between many other types of social scientists and their study subjects and is cause for concern about ethics and scientific integrity (Grauerholz et al., 2012; Stevens & Andersen, 2007).

Even though tennis is a purposive sport, per the definition provided by Madrigal (2006), there may still also be an aesthetic quality. Wann et al. (2008) found that in a study of thirteen different sports, the aesthetic motivation of fans in tennis was only exceeded by the aesthetic motivation of fans in figure skating, gymnastics, and boxing, with that of figure skating being the highest. This aesthetic quality may be based not only on player physical attributes, but possibly also upon the nature of a contest in which fan attention is often focused on only one or two athletes at a time (as compared to team sports). Tennis match play can extend for hours, thereby allowing fans more time to view and appreciate the physical traits and athleticism of individual players. In addition, the trend in modern professional tennis is toward super-fitness and athleticism, especially among top players (Fernandez-Fernandez, Ulbricht, & Ferrauti, 2014). The increasing focus on fitness by athletes may enhance their physical attractiveness for some fans and this could be a factor at least partially accounting for fan attraction to certain players.

The physical attraction of well-known athletes may also play an important role in product endorsement and is commonly used, convenient, and effective (Liu, Shi, Wong,

Hefel, & Chen, 2010). In this application, highly attractive endorsers are more effective than less-attractive endorsers, but other factors may also be important (Erdogan, 1999; Ohanian, 1991; Tellis, 1998). The additional factors that are potentially important for effective endorsement include expertise, trustworthiness, similarity, liking, familiarity, and respect of the endorser. Finally, there must be a credible match-up between the image of the endorser and the message about the product, despite any physical attractiveness of the endorser. This match-up should be the first step in selecting an effective endorser (Kahle & Homer, 1985; Liu et al., 2010).

Fan Vicarious Identity Through Athletes

Vicarious identity is known to be a factor in attaching fans to certain teams, team players, and to individual athletes (Fink et al., 2002; McDonald et al., 2002; Robinson et al., 2004). This motive was based on the concept that some individuals feel the need to enhance their own self-image, self-esteem, and sense of accomplishment by linking to successful organizations and people and sharing in their accomplishments. This can be a strong motivator for some sport fans. Vicarious achievement has been previously identified by Fink et al. as a significant factor in establishing team identification for fans and was found to be the single most important factor in determining team identification for both males and females (more important to males) among the eight motives included in the study. Vicarious achievement was also found to be an important factor determining fan interest in women's professional soccer (Funk et al., 2002). Finally, vicarious achievement accounted for a moderate to large amount of the variance in identification with a golfer, the tour, and the hosting community in another study of motives and points of attachment (Robinson et al., 2004).

Social Motives for Fan Attachment to Individual Athlete's Reputation

Athlete Reputation

The concept of reputation is unexpectedly complex when considering definitions, formation, distinction from other similar social constructs, differences based on social context, and measurement. Bromley (2001) stated that, "the words identity, personality, image and reputation can be ambiguous when used in a cross-disciplinary context" (p. 316). The complexities arise at different levels including how reputation is defined and how reputation is developed and perceived. However, the potential value of reputation is well-known and reputation research has more often been applied, for example, to universities, products, corporations, organizations, or even countries. (Abbott & Ali, 2009; Alsamydai, 2015; Chandler, Haunschild, Rhee, & Beckman, 2013; Chun, 2005; Claeys & Cauberghe, 2015; Jain & Winner, 2013; Lange, Lee, & Dai, 2011; Rindova, Williamson, & Petkova, 2010). Although there is a body of research addressing the reputations of corporations and organizations and the consequences, there is less research concerning the concept of individual reputation and its potential impact (Han & Ki, 2008). Only a relatively small number of studies has dealt with individual reputation and even fewer with individual athlete reputation (Agyemang, 2014; Anderson & Shirako, 2008; Brown, 2010; Cavazza, Guidetti, & Pagliaro, 2015; Davies, 2012; Fine, 2008; Zinko, Furner, Herdman, & Wikhamn, 2011). The following discussion will deal with definitions of reputation, the social foundations of reputation, the value of reputation, and the limited information concerning individual reputation

One of the clearest definitions of reputation was provided by Bromley (2001) as follows: "Reputation can be defined as a distribution of opinions (the overt expressions of

collective image) about a person or other entity, in a stakeholder or interest group" (p. 317). The difference between stakeholder group and interest group was stated by Bromley as primarily based upon the degree of involvement with the reputation holder. A stakeholder has deep involvement and a member of an interest group has only some involvement with the reputation holder. Furthermore, Bromley concluded that although members of interest groups may have only casual or temporary interest in the reputation holder, the numbers in this group may be larger than that of the stakeholder group. This distinction between stakeholder groups and interest groups was also argued to result in each individual reputation holder (person or organization) having different reputations between the groups. Bromley concluded that the formation of reputation, for either an individual or other entity, also depends upon the extent of agreement concerning the specific attributes of reputation as shared by members of the stakeholder group or the interest group.

Fine (2008) provided a similar definition for reputation: "an organizing principle by which the actions of a person (or a group, organization, or collectivity) are linked to a common assessment" (p. 78). Reputation exists at one level as an organizing principle of personal perception and at another level as the collective perceptions held in the context of relationships. Fine also stated that these two perceptions may, of course, differ and that there is the added dimension of community expectations tied to reputation.

Individual reputation in the context of an organization or work environment may have a slightly different definition per Zinko, Ferris, Humphrey, Meyer, and Aime (2012). In this environment, individual reputation was defined as "the extent to which individuals are perceived by others, over time, as performing their jobs competently, and

being helpful toward others in the workplace" (p.157). Furthermore, Zinko et al. (2012) did not suggest that performance and character were the only components of individual reputation, but rather that these traits could be among the first recognized by others in the workplace and may be the base upon which reputation was built.

Anderson and Shirako (2008) discussed that although having a good reputation may imply trustworthiness, virtue, or ethical behavior to some people, the concept of reputation is more complex. These researchers defined individual reputation as "when multiple community members (but not all) share the same perception or belief about him or her" (p. 321). Reputation is constructed by the community, is specific to the context of that community, and the more people who share the belief about a reputation, the stronger the reputation (Anderson & Shirako, 2008). In contrast, it has been suggested that most attributes contributing to reputation were shared by only a small proportion of members of the community or the attributes contributing to reputation may have been idiosyncratic (Bromley, 2001). This finding, of course, would complicate the actual measurement of reputation, since the concept is so nebulous in its composition.

Anderson and Shirako (2008) suggested that individual reputation lies somewhere between the two extremes of inaccuracy and gossip at one end of the spectrum and actual prior behavior of the individual at the other end. In this context, these researchers found that on average an individual's reputation was only mildly related to their history of behavior. However, it was also found that the link between prior behavior and reputation was stronger for those individuals who were already well-known in the community and who received more social attention. As expected, prior behavior was found to have little impact on the reputation of those who were not well-known in the community.

Reputation has also been stated to not only be about what the community believes, but also about what it expects from the individual bearing the reputation (Fine, 2008).

In addition, Anderson and Shirako (2008) divided the concept of reputation into two forms: firsthand reputation and secondhand reputation. Firsthand reputation is based upon direct experience with the individual and secondhand reputation is based upon what the firsthand interaction partners tell others about their direct experiences. Per Anderson and Shirako, the difficulties with forming firsthand perceptions is that individuals may behave differently toward different interaction partners and because interaction partners may find it difficult to keep up with the actions of very many other individuals making reputation difficult to form. In addition, the difficulties with secondhand reputation are similar in that firsthand interaction partners may not pass along their perceptions to others or they may do so selectively. Regardless, Anderson and Shirako hypothesized that reputation is still based upon individual behavior.

How then do these assessments by others come together among stakeholders or members of interest groups to eventually result in the formation of individual reputation? According to Fine (2008), sociologists have developed three models to explain this process. The three models included different approaches: objective, functional, and constructed. The objective approach is based upon the assumption that the world is transparent, that individuals earn their reputation by their own actions, and that truth is a fundamental component of reputation. Per this approach, great actions, known to members of society, result in great figures with great reputations. In contrast, Fine described that the functional approach is based on the observation that society needs individuals that function as leaders and that this need requires some type of social

hierarchy. History and memory in this approach are less important than the actual needs of society, with includes some individuals who are heroes and some who are villains. Reputation then defines those roles and fills those needs. Finally, in the constructed approach, as described by Fine, individuals (or organizations) gain power, resources, and prestige by building reputation through social strategies that promote their own interests as those of society at large. This form of reputation building would be common to some in political life.

Sabater and Sierra (2002) expressed that individual reputation is multifaceted and explained reputation based upon three dimensions: individual dimension, social dimension, and ontological dimension. In this model, the individual dimension is based upon the use of direct interaction with other members of society to build reputation and was considered the most reliable. The social dimension is based upon the use of information from other members of society and social relations to build reputation. The ontological dimension is based upon using the different types of reputation to build other more complex types of reputation. Sabater and Sierra then presented very complex mathematical algorithms to express these dimensions of reputation based upon social interactions.

Fine (2008) further stated that individual reputation begins within the inner circle of personal friends and then spreads outward to the larger community. Individuals then become concerned with reputation because of the options that having a good reputation may provide and because public reputation has a direct impact upon how one then comes to view themselves. Fine concluded that the individual alters or shapes perceptions through impression management to continue to appeal to those whose opinions are

valued. Also, in the modern media world, reputations are often established through what are now called parasocial interactions, in that they are developed through second-hand exposure to the public.

Other researchers have highlighted the importance of gossip in the development of individual reputation, given the need for dissemination of the impressions required for the formation of reputation into the community (Zinko et al., 2011). In this model, gossip was both positive and necessary for building reputation in that an essential requirement of the process was that the individual becomes "known for something" (p. 40). Gossip then becomes the vehicle by which reputation travels and becomes spread in the community. This mechanism may be even more effective than formal ways in which reputation may be disseminated. Zinko et al. (2011) further concluded that for those individuals building reputation, they must first be aware of the norms of the community in which the gossip will occur. The individual building the reputation must then consciously deviate from the accepted norms of the community to attract attention. Finally, those in the community must be made aware of the deviations from the norms, either by direct observation or by hearing of them through gossip. Reputation is built by being different from others in the community and this difference is then spread by gossip. The risk, of course, is that this mechanism may also disseminate a negative or unintentional reputation in the same way and with negative effect.

Personality has been seen by some researchers as playing a role in the development of individual reputation (Cavazza et al., 2015). These authors found that individual concern for reputation was sensitive to differences in personality traits. Specifically, prevention-focused individuals (those mainly concerned with avoiding

failures) were especially concerned with reputation, since failures would negatively impact their positive reputation. In addition, those individuals who saw self-worth as dependent on the approval of others were also especially concerned with reputation. A negative reputation would then decrease the perception of individual self-worth. Cavazza et al. also found that both mechanisms indirectly impacted concern for individual reputation by stimulating more self-monitoring of reputation by the individual. The exact causal relationships among these factors, however, were not subjected to direct analysis, were uncertain, and were suggested as topics for future research. In addition, Cavazza et al. stated that this research again showed that individual concern for reputation is unstable and varies with both situation and personality traits.

In summary, reputation is based upon individual actions and self-perceptions used to create self-promotional performances and these are first expressed through intimate interaction partners who then share the perceptions with the wider community. The perceptions are then either validated or rejected (Brenaman & Lemert, 1997). Feedback to the individual is an important and essential component in shaping reputation (Colapinto & Benecchi, 2014). Reputation is ultimately formed by the community and becomes stronger as more members of the community come to share the same perceptions of the individual (Anderson & Shirako, 2008).

What then is the value of a good or strong reputation to an individual? Cavazza et al. (2015) stated that individual reputation is a personal asset in that it provides access to valuable resources (such as customers, fans, partners, or trust-based social exchanges), and increases the influence that one may have over other people. Also, having a good reputation was cited as increasing the possibility of positive social feedback and avoiding

social blame. A good reputation may allow a more effective relationship between the individual and the stakeholders and may contribute to financial gain or other advantages (Agyemang, 2014).

Brown (2010) stated the value of a strong reputation in more practical terms as "the Reason Everyone Pays" (REP; p. 57) and added that a strong reputation results in financial gain, more attention, and more respect. In this definition, reputation is a form of social capital and "in many ways is the most valuable thing you own" (p. 57). Reputation is even seen as more important than experience, skills, or knowledge. Brown proposed that personal reputation was ultimately based upon a core of character and personal brand. In this model, character is who you are (your true values) and was expressed in both your personal brand and reputation. Personal brand is "your public face" (p. 58) or how your inner values are expressed. Reputation is the product of both character and personal brand and is what others ultimately think or say about you. Building a strong reputation, as described by Brown, requires that the individual constantly communicate who they are to the appropriate stakeholder or interest groups and build relationships.

Zinko et al. (2012) added to the benefits of having a strong individual reputation. These benefits included power and autonomy resulting from individual reputation. In addition, having an individual reputation reduces uncertainty and may be used to fill information gaps about the individual in certain circumstances in organizations, as in the consideration of hiring or promotion. Uncertainty is reduced because having an individual reputation then suggests a more predictable pattern of behavior into the future. Zinko et al. (2011) also stated that having a reputation made an individual part of the community and was used to obtain rewards and personal fulfillment.

What then are some of the risks associated with individual reputation? As may be predicted, many of the previously stated positive outcomes of having a strong individual reputation (such as trust, certainty, influence, promotion, power, being part of the community, and avoiding blame) may be diminished, lost, or never gained if an individual has a negative or weak individual reputation. Brown (2010) cautioned that reputation can take years to build and can be quickly destroyed. This realization of the fragile nature of reputation requires that the individual must actively build and maintain reputation and be ready to repair it when necessary, given its potential value.

The definition of reputation as applied to athletes has been less clear and concise, but also expresses the same basic concept as proposed by Bromley (2001). That is, individual athlete reputation may include the publics' impressions of an athlete's proven ability to excel in his or her chosen sport over time, the consistent high quality of the effort and the result, and the way the athlete conducts himself/herself in the sport and in the broader social context (Agyemang, 2014; Zinko et al., 2012). Thus, the components of athlete reputation may include differing interest group impressions of athletic ability, athletic accomplishment, sportsmanship, style of play, and personal behavior. However, exactly how these are assembled into the concept of athlete reputation is not necessarily consistent among members of different stakeholders and interest groups.

There has been little academic research on the topic of athlete reputation and most focused on athlete skill as one indicator of reputation. The exception is one study in which reputation was included one component of "athlete citizenship" as described by Agyemang (2014, p. 34). In this context, having a strong reputation was cited as an important way by which to engage stakeholders in a positive fashion and to potentially

increase athlete financial gain and positive publicity for the sport organization. A damaged reputation would result in the opposite effects.

Concerning athlete skill as a component of reputation, Findlay and Ste-Marie (2004) examined whether positive athlete reputation and name recognition influenced how the athletes were perceived and scored by judges in figure skating competition. That is, does having knowledge of prior performances set up expectations in the minds of judges and lead to expectation/reputation bias? Findlay and Ste-Marie found that expectation/reputation bias was evident when judging and scoring skaters as demonstrated by higher rankings for technical merit for known skaters when compared to unknown skaters. The finding was based upon the rationale that the known positive athlete reputation for performance then caused judges to expect a more solid and aesthetic performance from the skater and that this difference in expectation resulted in a higher final placement. Expectation bias was also demonstrated in a study by Rainey, Larsen, and Stephenson (1989) in which they studied whether the reputation of a baseball pitcher had an impact on umpires' calls of balls and strikes. Indeed, it did. Those pitchers known for ball control were held to a higher standard than pitchers who were known for wild pitches. This finding again confirmed the impact of athlete reputation (for performance) upon what should have been an objective evaluation by the umpire. Finally, Solomonov, Avugos, and Bar-Eli (2015) studied whether the known clutch player reputation of basketball players correlated with winning the game. Their research suggested that the reputations of clutch players were justified because clutch ability was evident by improved performance in the final and most decisive parts of the game. The lack of more studies of athlete reputation is unexplained, but may partially reflect the

multi-faceted nature of reputation in the sport context and the difficulty in developing a specific, valid measurement technique.

Athlete Philanthropy and Support for Social Causes

The association of athletes with various philanthropic organizations or social causes could be one motivating factor causing certain fans to identify with individual athletes, especially given the increasing importance of social issues to sport-related industries and the role of strategic philanthropy (Babiak, Mills, Tainsky, & Juravich, 2012; Ratten & Babiak, 2010). It has become common practice and is now expected for top athletes to be involved in philanthropy and social causes and there may be both altruistic and egoistic athlete motivations (Babiak et al., 2012; Ilicic & Baxter, 2014). Sports teams and individual athletes have realized the importance of strong community connections and the role that philanthropy may play in increased public recognition, increased social status, enhanced public image, increased self-esteem, and tax relief (Babiak et al., 2012). Babiak et al. also found that athletes who had been around for a while, had been successful, and had established something of a brand had the most impact in philanthropic work.

Although philanthropic work is often expected of top athletes, the exercise is not without difficulty since the athletes who form new organizations may not be aware of the complexity and potential problems in running them (Burch & Murray, 1999). In many cases, athletes find that running an effective charitable organization may be beyond their ability and they may run into difficulties in keeping them going, especially during difficult economic times when corporate donations may decrease (Bebea, 2009; “Make charity last,” 2011). Successful athletes may start their own private foundations, but they

may be more effective in just lending their support to existing charitable organizations (Burch & Murray, 1999, "Make charity last," 2011). To assist other professional athletes, several sports stars (including Andre Agassi, Lance Armstrong, and others), formed a charity in 2007 specifically to educate professional athletes, fans, and others in the importance of philanthropy (Wilhelm, 2007). One goal of the organization, called Athletes for Hope, is to encourage young, less-well-known athletes to become involved with philanthropy and then also helps them to design programs that allow athletes to then raise money and awareness. The most effective association depends upon the functional fit between the celebrity/athlete and the charitable organization since this perceived relationship has been found to encourage positive fan altruistic attributions in terms of celebrity social responsibility and this translates into donation intention (Ilicic & Baxter, 2014).

Certainly, top tennis professionals would qualify as potential philanthropists and supporters of various social causes given their status, recognition, and financial success. It would be reasonable to expect that some fans may at least partially base their player identification upon an athlete's known support for such causes, but there has been little academic work regarding player philanthropy, support of social causes, and its various ramifications. The present study will examine fan perceptions of athlete philanthropy and support for social causes as one possible motivation factor for tennis fan attachment.

Professional Player Athletic Skills and Style of Play

Fan appreciation of professional athlete skills and style of play (possibly resulting in fan acquisition of knowledge) may be factors in attracting some fans to individual players. Although there is no consensus on whether sport spectators and sport participants

share the same motivations, the skills of professional athletes have been found to be an attraction for both male and female spectators at one tennis event and this may be related to the finding that many spectators were also tennis players (Sack et al., 2009; Tokuyama & Greenwell, 2011). Tennis fans who are also players, in contrast to non-players, were better able to appreciate the difficulty of tennis athletic skills and considering highly-skilled professionals as a learning experience. As may be expected, spectator participation in tennis was a significant predictor of interest. In a study of soccer fans who were both players and spectators, Tokuyama and Greenwell found that affiliation with the sport predicted commitment among highly-involved individuals, whereas stress reduction was more predictive among lesser-involved individuals. The length of time spent as a fan (possibly implying more knowledge and experience of the game) has also been shown to account for the most variance in sport attachment in one study (Mahony et al., 2002). Spectator involvement with the activity of tennis and the associated fan attraction were also confirmed in the study by Bee and Havitz (2010) as important in developing psychological commitment and fan loyalty. Additional attractions included the drama associated with close matches, basic love of the game of tennis, and the long rallies that are common to women's tennis matches (Sack et al., 2009). If these factors are true for a specific tennis event and for other sports, then they may possibly play roles in developing loyalty to a highly-skilled tennis player. Fan appreciation of skill and acquisition of knowledge has even been identified as important motivations among followers of professional bass anglers (Bernthal et al., 2015). In contrast, Keaton et al. (2015) found that NASCAR fans primarily identified with individual drivers because of the substantial level of media coverage some drivers receive rather than because of any

appreciation of skill and primarily watch racing events to keep busy and to occupy free time.

Historical Development of Fan Motivation Scales in Sports

This portion of the literature review will primarily focus on the development and evolution of some of the scales to measure fan attraction and identification in sports, limitations, and applications. The scales are discussed in chronological order of publication.

Sport Spectator Identification Scale (SSIS)--1993

In 1993, Wann and Branscombe developed and published what they considered the first valid and reliable scheme for measuring the degree to which sports fans identify with their team. In this study, the authors examined several behavioral, affective, and cognitive factors to measure the degree to which fans identified with a university's male basketball team. The study consisted of a seven-item questionnaire given to undergraduates who strongly identified with the team, moderately identified with the team, or identified with the team at a low level. The survey specifically addressed the following possible fan motivations: (a) eustress, (b) self-esteem, (c) escape, (d) entertainment, (e) economic, (f) aesthetic, (g) group affiliation, and (h) family reasons.

Statistical analysis revealed that Cronbach's alpha was .91 for the overall scale (.70 or higher is acceptable), inter-relatedness of items was also significant, and reliability was strong based upon good test-retest results (Wann & Branscombe, 1993). Spectators who strongly identified with the team felt more involved with the team, received a greater ego boost when the team won, were more positive about the team's

future performance, invested more time and money to watch the team, and were more likely to feel that fans of the team had special qualities when compared to non-fans. These findings can be seen to support the underlying concepts of identity theory and social identity theory as previously discussed. However, it may be stated that some researchers have been critical of studies that rely solely on the responses of students, since they may not be representative of other sports fans (Pons, Mourali, & Nyeck, 2006). The arguments against the use of students have included that they are not real consumers, that they may be more educated and more articulate than non-student sports fans, and that they may respond differently from less-well-educated fans. In the Wann and Branscombe study, this potential problem may be even more exaggerated since all the students were from just one school. However, this study was an early effort to develop a way to measure fan motivation and the shortcomings should be put into historical context. Additional validation and application of the SSIS followed and the scale would be used in this type of research for several years (Theodorakis, Wann, Carvalho, & Sarmento, 2010). Theodorakis et al. even applied the SSIS to a study in a Portuguese-speaking country and confirmed that it was still reliable and valid for assessing sport team identification. The scale has also been translated into several other languages.

Sport Fan Motivation Scale (SFMS)--1995/1999

In 1995, Wann continued with research in this area with the development and publication of the Sport Fan Motivation Scale (SFMS) in a preliminary study consisting of two parts. The first part of the study again used university students (receiving course credit for taking the survey), but also included subjects associated with a recreational softball league, providing at least a bit more diversity. However, one potential limitation

was that 90% of survey participants were White, as opposed to a more uniform mixture of races. The survey included demographic items and a section to assess the importance of the eight different dimensions/motivations: (a) eustress, (b) self-esteem, (c) escape, (d) entertainment, (e) economic, (f) aesthetic, (g) group affiliation, and (h) family reasons. These motivations were presented in a Likert-scale format. The responses were first submitted to exploratory factor analysis to reduce the number of items per subscale. Cronbach's reliability alpha for the entire scale was .90 (.70 or higher is acceptable) and alpha for the subscales was reported as "quite high" (p. 381). The SFMS and subscales were then correlated with demographic and sports questions to help to determine the criterion validity and to explore any relationships between these variables. These analyses, per Wann, indicated that the SFMS was "a normally distributed instrument containing eight factors" (pp. 386-387), strong psychometric properties were confirmed by the internal consistency, and the predictive validity of the scheme was confirmed.

The test-retest reliability of the scale was examined in the second part of the same study by Wann (1995) in which undergraduate psychology students (who also received course credit for taking the survey) were the subjects and 92% were White. The survey consisted of three parts: (a) demographic data, (b) the SFMS survey from the first study, and (c) a part asking the extent to which participants liked to watch thirteen different sports. Responses were recorded by a Likert-scale format. Confirmatory factor analysis of the SFMS revealed "exceptional" (p. 388) fit for the eight-factor model and Cronbach's alpha was again .90. Test-retest reliability for total SFMS scores showed a high level of consistency.

Wann (1995) also concluded that the results confirmed the SFMS eight-factor scale and the strong reliability of the technique. The author also stated that the SFMS was appropriate for examining the psychology of sports fans and proposed additional applications such as in fan violence, fan enjoyment, and fan bias in relation to sport team performance. Some of the suspected limitations of the study were stated by Wann and these included the overwhelming survey participation by White students, the lack of much age variation among participants, and possible differences in motivation among sports. Also, the use of only psychology students in the survey may possibly induce selection bias in the study (Thomas, Nelson, & Silverman, 2005).

The original SFMS published in 1995 by Wann was expanded by additional work published four years later (Wann, Schrader, et al., 1999). Specifically, the later study was designed "to test the factor structure of the SFMS" (p. 116) using a more diverse survey sample (one of the noted limitations of the prior study), to examine relationships between fan motivations and different sports, and to test the hypothesis that individuals with either intrinsic or extrinsic athletic motivation tend to have similar intrinsic or extrinsic motivation as fans.

In the first part of the expanded SFMS study, Wann, Schrader, et al. (1999) made telephone calls to random listings in phone books in the region and recorded verbal responses demographic questions and to the SFMS 23-item Likert scale from 96 participants. Although this technique resulted in a more diverse group of participants based upon age and level of education, no comment was made on racial diversity. Confirmatory factor analysis indicated that data fit the model extremely well and internal

consistency was highly reliable (Cronbach's alpha = .96), as in the prior study. The psychometric qualities of the SFMS were confirmed per the researchers.

In the second part of the expanded SFMS study by Wann, Schrader, et al. (1999), the researchers again surveyed students to examine the relationships between motivations and different sports. All the participants were enrolled in psychology courses. One may again question how this selected group of students may possibly have impacted results as compared to a more diverse group of students. The survey included demographic questions, the SFMS 23-item questionnaire, and students were then asked to state which sport they most enjoyed watching. Statistical analysis of the data included Pearson correlations between age, level of fandom, and SFMS scores and 2 x 8 MANOVA to examine sport type preference predictions.

In the final part of the expanded study by Wann, Schrader, et al. (1999), the researchers examined differences between intrinsic and extrinsic athletic motivations of individuals as expressed in either intrinsic or extrinsic motivation as fans. Students in psychology courses were again surveyed and questions included demographic factors, the extent to which each student considered themselves a sports participant, and then the SFMS questionnaire. Statistical analyses included Pearson correlations between age, level of sport fandom, and SFMS scores and 2 x 2 MANOVA.

Wann, Schrader, et al. (1999) concluded that by expanding the basic SFMS model to a more diverse group of participants and by adding different parameters, the validity and utility of the model were tested and confirmed. However, others have since disagreed. For example, the Sport Fan Motivation Scale has been severely criticized for lacking scale content validity, no description of how items were selected to be included in

the scales, lack of clarity in some of the scale items, inappropriate labeling of some scale categories, and inappropriate statistical analysis (Trail & James, 2001). This critique by Trail and James concluded that the SFMS had deficiencies in content validity, discriminant validity, criterion validity, and convergent validity.

Sport Involvement Inventory (SII)--1998

Shank and Beasley (1998) developed and published the Sport Involvement Inventory to primarily examine the behavior of sport fans regarding their actual participation (rather than just fandom). Their goal was to "capture the construct of sports involvement" (p. 435) by examining the relationship between sports involvement and sports-related behaviors and the underlying cognitive and affective dimensions. The study sample consisted of 136 consumers in the area around a Midwestern city, to whom a questionnaire was provided. The questionnaire consisted of four sections: (a) the Sports Involvement Inventory, (b) questions about media habits related to sports, (c) questions about participants' participation in sports, and (d) demographic questions.

The items in the Sports Involvement Inventory included a Likert-type scale in which participants were asked to rate sports in the following ways: (a) boring or exciting, (b) interesting or uninteresting, (c) valuable or worthless, (d) appealing or unappealing, (e) useless or useful, (f) not needed or needed, (g) irrelevant or relevant, and (h) important or unimportant (Shank & Beasley, 1998). Some confusion was evident in the inventory in that possible responses on half of the items were reversed and no explanation was provided as to why this was done. Factor analysis allowed the items to be grouped into an "affective" category or a "cognitive" category (p. 438). Shank and Beasley then reported relationships between these two categories and viewing sports on television,

reading about sports in magazines and newspapers, attending sporting events, and participating in sports. Unfortunately, there was nothing presented in the methodology to confirm the validity or reliability of the scales for the intended purposes. This could, of course, limit the potential usefulness of the results and the method, at least until more validation is done.

Motivations of the Sport Consumer (MSC)--1999

In their work, Milne and McDonald (1999) provided twelve different motivations for sports spectators: risk-taking, stress reduction, aggression, affiliation, social facilitation, self-esteem, competition, achievement, skill mastery, aesthetics, value development, and self-actualization. However, this particular scheme was also criticized by Trail and James (2001) who stated concerns with content validity, lack of examination of either discriminant or convergent validity in the construction of the scales, inappropriate use of exploratory factor analysis, errors related to sample size, lack of internal consistency estimates, combining of subscales without recalculation of internal consistency, and inclusion of participation motivations with those related to spectator motivations. These criticisms of the MSC were then used as one argument to justify the development of the Motivation Scale for Sport Consumption by Trail and James, which they contended was more valid.

Sport Interest Inventory (SII)--2001

The Sport Interest Inventory, developed to measure consumer motives at team sporting events was published by Funk, Mahony, Nakazawa, and Hirakawa in 2001. This study focused on consumer interest in the 1999 FIFA Women's World Cup competition

and examined the role of ten spectator motives: (a) sport interest, (b) vicarious achievement, (c) excitement, (d) team interest, (e) supporting women's opportunity in sport, (f) aesthetics, (g) socialization, (h) national pride, (i) drama, and (j) player interest. The rationale for the development of the scale was stated as assisting marketers in developing advertising, determining how to best present events in the sport facility, and developing fan/consumer profiles to appeal to corporate sponsors. After analyzing the survey responses of spectators (n = 1,321), Funk et al. found that 35% of variance in spectators' interest could be explained by team interest, excitement, supporting women's opportunity in sport, aesthetics, and vicarious achievement, although the relative importance of the motives in predicting attendance was not determined. Some of the obvious limitations of the SII included that the study focused only on women's team play and that not all the possible motivation factors may not have been identified to be included in the survey. The authors concluded that the basic technique, however, could be easily modified to be applied to other sports and events.

Motivation Scale for Sport Consumption (MSSC)--2001

Trail and James (2001) developed and published the Motivation Scale for Sport Consumption to also measure the motivations behind the consumption behavior of sports fans. These authors stated that previous scales to measure fan motivations often suffered from weaknesses in "content, criterion, and construct validity" (p. 108). Trail and James cited several specific failures, especially those of the SFMS and the MSC, and commented that previous scales focused primarily on sport demand rather than actual fan motivations. Trail and James stated that their new MSSC was based upon review of the

literature, evaluation of the shortcomings of the SFMS and MSC, and was founded in the motives of the sport sociology literature.

The MSSC by Trail and James (2001) examined nine factors or motives that may impact fans following sports: (a) achievement, (b) acquisition of knowledge, (c) aesthetics, (d) drama/eustress, (e) escape, (f) family, (g) physical attractiveness of athletes, (h) the quality of skill of athletes, and (i) social interaction. The psychometric properties of the scale were measured through a survey of major league baseball team season ticket holders mailed to participants. Responses were taken by a seven-point Likert scale for each of the nine factors with a total of 27 survey items. Trail and James then performed confirmatory factor analysis by the ROMONA Covariance Structure Modeling (CSM) technique to prevent problems with model fit not addressed by other techniques and the model was found to fit the data "reasonably" well (p. 113). Model construct validity was then determined through a test for convergent validity and a test for discriminant validity. Convergent validity testing was used to determine if the items in a scale contributed to the underlying theoretical construct and discriminate validity was used to determine whether the constructs were unique. Only the Family Needs subscale was slightly below the acceptable value for convergent validity and all correlations were acceptable when tested for discriminate validity. Cronbach's alpha coefficients were used to test each factor's internal consistency and the value for the overall scale was 0.87, well within the acceptable range. Criterion validity was determined by comparing each of the nine MSSC factors to demographic criteria: (a) level of fan identification with a favorite sports team, (b) general fanship of the team, and (c) number of games attended by each fan. Trail and James concluded that the results of these calculations and others

demonstrated that the subscales were predictive of fan behavior and that the MSSC was best for measuring fan psychometric properties that related to sport consumption behavior, when compared both to the Sport Fan Motivation Scale and to the Motivations of Sport Consumers Scale.

The MSSC by Trail and James (2001) was developed and tested by very experienced researchers in this topic and the technique has since seen considerable application by others. Some researchers have used the original MSSC and others have adapted the MSSC to their specific uses. To provide several examples, Gencer et al. (2011) used the MSSC to investigate spectator motives in professional basketball in Turkey and confirmed the validity and reliability of the model. A comparison of sport consumption motives between female and male sports fans was made using the MSSC by James and Ridinger (2002). Motives of golf spectators were investigated using the MSSC by Robinson et al. (2004). Fink et al. (2002) applied the MSSC to fan identification with a college basketball team. Fink and Parker (2009) used the MSSC to examine spectator motives for watching their favorite team compared to when their favorite team was not playing. Motivations influencing the behavior of J. League spectators in Japan were investigated using the MSSC (Mahony et al., 2002). An examination of motives most important for team identification was completed using the MSSC (Fink & Parker, 2002). Motives among college football spectators were tested using the MSSC by Woo et al. (2009). A study by Hoye and Lillis (2008) applied the MSSC to measure travel motivations among Australian Football League spectators. Byon, Cottingham, and Carroll (2010) adapted the MSSC to examine motivations and sport consumption behavior among wheelchair rugby spectators. An adaptation of the MSSC was used by

Izzo et al. (2011) to examine sports fans' motivations among Romanian soccer spectators. An adaptation of the MSSC was used to compare sport consumer motivations between South Korea and Japan (Won & Kitamura, 2007). The extensive use of both the original and adapted versions of the MSSC attest to its validity, reliability, and applicability in many different settings.

Sport Fandom Questionnaire (SFQ)--2002

Wann (2002) published the Sport Fandom Questionnaire (SFQ) to provide another means to examine the relationship between fan identification and the social role of the sport fan. In this scheme, the instrument consisted of a Likert-scale format in five parts (categories included family, friends, schools, community, and famous player), each of which was designed to determine the degree to which identification related to being a sports fan. The scale was considered reliable and valid and has been used in studies of sport fandom, interests, socialization, aggression, and other behaviors by other researchers (Melnick & Wann, 2011, 2004; Wann et al., 2008; Wann, Peterson, Cothran, & Dykes, 1999). However, it should be noted that the authors of all the above cited studies using the SFQ technique (and an apparent earlier version in 1999), and stating its validity, included the originator of the questionnaire (Wann, 2002). Applications of the SFQ by other researchers were not identified in the literature.

As this review reveals, researchers in sport psychology and sport marketing have been attempting to develop ways to identify, define, and measure fan motivations for many years (Table 1). The historical view of the various scales suggested an evolutionary process in which motivation factors were increasingly understood, more valid and reliable scales were developed, and application of the scales was expanded. The

Motivation Scale for Sport Consumption (MSSC) by Trail and James (2001) seems to be the most valid and reliable and the most-used of all the scales, based upon this literature review. There is apparently no more appropriate or valid scale for applications of this type. Another benefit of the MSSC is that it can be easily adapted to examine motivation in different sport settings.

The MSSC was adapted and applied in my study of fan motivations toward top professional tennis players. Several of the original MSSC motivation factors can be directly applied in my study and others can be constructed, validated, and applied for my specific research questions, as has been done in several of the prior cited studies. Professional tennis players was also the primary point of attachment to be examined in my study. This was the first study to specifically measure fan motivations toward individual athletes

Table 1

Summary of Motivation Scale Development

Year	Scale	Author(s)	Motives Categories	Comments
1993	Sport Spectator Identification Scale (SSIS)	Wann/ Branscombe	8	Only surveyed students at one school. Limited use in subsequent research.
1995/ 1999	Sport Fan Motivation Scale (SFMS)	Wann	8	Developed in 1995 and extended in 1999. Only surveyed students, 90% White, little age variation. Criticized for lack of content validity/clarity; inappropriate scales and analysis. Limited use in subsequent research.
1998	Sport Involvement Inventory (SII)	Shank/Beasley	8	Primarily focused on motives for sport participation rather than fandom. Confused methodology with no validation. Not used in subsequent research.
1999	Motivations of the Sport Consumer (MSC)	Milne/McDonald	12	Criticized for lack of content validity; inappropriate design and analysis; combining of subscales; combining motives for participation and spectatorship. Not used in subsequent research.
2001	Sport Interest Inventory (SII)	Funk/Mahony/ Nakazawa/Hirakawa	10	Focused only on one FIFA Women's Soccer event. Not used in subsequent research.
2001	Motivation Scale for Sport Consumption (MSSC)	Trail/James	9	Addressed limitations of prior scales and based on sport sociology literature. Widely modified and used by other sport motivation researchers.
2002	Sport Fandom Questionnaire (SFQ)	Wann	5	Used in subsequent research but usually in studies that included the original author (Wann).

Concluding Remarks

Previous studies have primarily examined the motives that attract fans to teams or to a specific sport, but few have addressed fan attraction to individual players in any sport. Except for the MSSC, one of the major complaints is that none provided the actual survey instrument in the publications. This omission complicates the direct comparison of the scales or even the application of the scales in other research situations. Fortunately, the authors of the MSSC provided the actual survey questions and perhaps this, along with the quality of the scale design, accounts for the widespread use by other researchers. This study used a modified form of the Motivation Scale for Sport Consumption by Trail and James (2001) to examine several, but not all, possible motives that may attract fans differently toward ranked tennis players, how these were related to additional points of attachment, and how certain fan demographic factors may play a role.

Professional tennis is a good sport to study these factors because top players are identified by a ranking system and because of the high-profile status of top players. This status is also based somewhat on player exposure resulting from the one-on-one nature of much of the game. Observation would suggest that tennis fans were not equally attracted to the same players, even if near the top in rankings. The findings may provide insight into the important factors that determined fan identification and loyalty, even toward players with similar historical performance and whether the differences were primarily player-specific.

As previously stated, understanding the fan/consumer is the first step in developing an effective marketing strategy to increase behavioral loyalty, repeat attendance, and repeat sales (McDonald et al., 2002). A better understanding of the

motives involved in identification and fan loyalty toward certain players may allow marketers of professional sports to better promote events and products by highlighting certain desirable player attributes that most appeal to fans. Some fan motivation factors may also be extrapolated from tennis players to players in other individual athlete sports. Effective use of this information has led to more sport consumption and even greater economic success.

CHAPTER III

METHODS

The purpose of this study was to examine the motivations that fans use in attaching themselves to top professional tennis players and how these motivations may be related to a set of specific demographic and behavioral factors. This study is one of few to focus on fan motivations toward players in individual sports, rather than on fan motivations in team sports. The information gained may be useful in more effective marketing of events with top professional tennis players by emphasizing those motivations that fans find most compelling. This section was divided into the following sections: Research Questions and Variables, Participants in Main Study, Survey Instrument, Statistical Methods, and Pilot Study.

Research Questions and Variables

Research Questions

The following questions were specifically addressed in this study:

Q1 How do fan gender and professional player gender factor in determining attachment to a favorite tennis player?

Q2 How does fan avidity as expressed by being a tennis player *and* spectator versus a spectator *only* factor in determining attachment to a favorite tennis player?

Q3 How does fan avidity as expressed by years of fan experience factor in determining attachment to a favorite tennis player?

Independent Variables

Independent variables (also termed experimental variable or treatment variable) may be defined as those which the researcher is manipulating (Huck, 2011). In the present study, the independent variables were fan gender, gender of professional player, and fan avidity (as expressed by fan status and years of fan experience).

Dependent Variables

Dependent variables are the effects of the independent variables, the yield, or the measured characteristic from the population from whom the data are collected (Huck, 2011). The dependent variables in the present study were the eight specific motivation factors through which fans may form attachments to their favorite professional tennis players. These included vicarious achievement/identity, fan physical attraction to the athlete, athlete physical skill, athlete as a hero, athlete as a role model, athlete personality, athlete reputation, and athlete philanthropy/support for social causes.

Study Participants

Study Population

Following university Institutional Review Board (IRB) approval (Appendix A), participants at least 18 years of age were solicited by email (Appendix B), primarily through the membership roster of the United States Tennis Association (USTA), Houston, Texas, section, through other local tennis clubs and college tennis programs, and through tennis blogs and online tennis bulletin boards to complete the online survey. The USTA is the official governing body for tennis in the United States, consists of seventeen sections across the country with approximately 700,000 members, and promotes tennis at all levels of competition (“About USTA,” 2016). Houston was

selected as the primary survey site since it is a large city with a diverse population and it also has a very large and active tennis community. In this regard, one of the advantages of the online survey is that potential respondents with special interests in the research topic may be recruited through relevant organizations (Van Selm & Jankowski, 2006).

Sampling Frame

The purpose of the study was explained in the initial email contact (Appendix B) and willing participants were directed to the University of Northern Colorado Qualtrics website to consent (Appendix C) to complete the online questionnaire through a hyperlink in the email (http://www.unco/edu/assessment/SurveyResearch/Qualtrics/index.html). Qualtrics is a web-based survey tool commonly used for research purposes. The goal was to have at least 384 usable responses to the survey, based upon survey size calculation at 95% confidence level and 5% confidence interval ("Sample Size Calculator," 2012). A participant survey response was considered usable if the participant was at least eighteen years of age, voluntarily agreed to take the survey, completed the essential portions of the survey, and submitted the survey for evaluation. The essential portions of the survey consisted of those responses required to address the specific study questions. These responses included fan gender, fan age, fan status, years of fan experience (as player *and* spectator or spectator only), whether the fan had a favorite male and/or female tennis player, and each of the corresponding motivation questions. Survey participant completion of the essential responses was assured by designating each of them as "force response" in Qualtrics. The remaining non-essential demographic questions were

designated as “request response” items in Qualtrics. Surveys were considered complete when all “force response” questions are answered.

The sampling frame was potentially broadened by encouraging the “snowball” survey technique in which participants were asked to share their experience in participating in the study with their tennis friends/spouses to encourage them to also participate (Atkinson & Flint, 2001; Goodman, 1961). This technique may be a complementary strategy in generating more comprehensive data to address research questions. Although the snowball technique has been used to engage “hidden” populations, it may also be used in elite groups to include more respondents through an emphasis on social networks and interactions (Atkinson & Flint, 2001; Goodman, 1961). This active tennis community may be considered such a social group with common interests and interactions. The snowball technique in this setting may serve to engage tennis fans who may not be as active online as others or non-USTA members, may not be players, and who may otherwise be excluded from the study. The meta-analysis by Nulty (2008) found an average response rate of 33% to online surveys when examining the results of eight different survey studies. Given this finding and to achieve the required number of survey responses, contacts in the present study were first made with as many potential participants as possible through the USTA and then through a variety of other channels to achieve the required number of study participants.

Research Design

This study was conducted using a non-probability, purposive online sampling technique. The survey technique relied upon the non-random selection of a sample of participants from a pre-determined population of interest with the intention that the

information obtained from the sample then be used to make inferences about the larger population (Kelley, Clark, Brown, & Sitzia, 2003). Respondents were assured of anonymity and confidentiality since these may be key issues with online surveys (Sheehan & McMillan, 1999). The main advantages of the online technique are that the resulting data are derived from real-world observations or responses, absence of interviewer bias, convenience to participants, reach (ease of approaching potential participants), flexibility of format/question diversity, ease of collecting large samples, speed/timeliness of data collection, ease of data entry and analysis, and relative ease in reducing sampling error by increasing the number of participants (Evans & Mathur, 2005; Van Selm & Jankowski, 2006).

Disadvantages of online surveys may include the possible lack of detail or depth in the responses, possible lack of clear focus in the research questions to be addressed, skewed attributes of the internet population (such as age, gender, or economic status), lack of representativeness, the impersonal nature of the process, privacy issues, and low response rate (Evans & Mathur, 2005; Kelley et al., 2003). Response to web-based surveys may be mixed, including a strong response, a low response, or something in between (Millar & Dillman, 2011; Sheehan, 2001). Millar and Dillman (2011) stated that improved survey participation may result from using a combination of both mail and email contact, delivering token cash as an incentive, or repeated mail or email contact. In this research study, the concept of issue salience may also prove helpful in improving survey response (Sheehan, 2001). That is, avid tennis players/spectators or just tennis spectators typically have favorite players and may be eager to express their support through a survey that parallels one of their interests in tennis. Finally, Huck (2011)

advised that care must be taken in generalizing the results from non-probability samples to the larger population, but in this study, the larger population of interest only included tennis players and/or spectators who may also be reasonably expected to have favorite professional tennis players. The public with little or no interest in tennis would not be expected to have any favorite players in most instances.

Delimiting factors in surveys are those that help to ensure that questionnaires are completed by those who have the answers to the questions to be studied. In this regard, the representativeness of the sample is considered more important than the size of the sample in providing meaningful data. The major delimiting factor in this study was that participants have an active interest in the sport of tennis and, therefore, would be more likely to have attached themselves to one or more top professional tennis players as their favorites and could be reached to complete the survey. Membership in the USTA, association with a local tennis club or organization, or association with a college tennis program was used to signify active interest in tennis, as a player and/or spectator of the game. This approach likely excluded some potential participants who self-identify as only spectators and may not, therefore, be a member of such organizations, but the "snowballing" sampling technique was used to address this problem (Atkinson & Flint, 2001).

Instrumentation (Questionnaire)

The questionnaire (Appendix D) was a modified form of the Motivation Scale for Sport Consumption as developed by Trail and James (2001). This scale has been validated and used in the original form and in several modified forms to address fan motivations in various sports settings (Byon et al., 2010; Fink & Parker, 2009; Gencer et

al., 2011; Izzo et al., 2011; James & Ridinger, 2002; Robinson et al., 2004). The confidential online survey consisted of an initial section to collect demographic data and then eight categories (24 questions) related to fan motivations toward a favorite male professional tennis player and/or eight categories (24 questions) related to fan motivations toward a favorite female professional tennis player in a 7-point Likert-type format (see Appendix D). Likert-type scales are commonly used in such survey questionnaires and are considered suitable and reliable (Leung, 2011; Maeda, 2015). Demographic questions included (a) fan gender, (b) fan age, (c) years of tennis fan experience as an indication of avidity, (d) fan status as a tennis player *and* a spectator or as a spectator only as an indication of avidity, and (e) attendance at major tennis tournaments and Grand Slams. Other questions included whether the fan has a favorite male and/or female player, ranking of the player(s), and methods of following the player(s). The categories of questions related to fan motivations included: (a) athlete achievement/vicarious identity, (b) athlete physical attraction, (c) athlete physical skill, (d) athlete as a hero, (e) athlete as a role model, (f) athlete personality, (g) athlete reputation, and (h) athlete involvement in philanthropy/social causes. Completion of the entire survey by each participant was estimated at 10 minutes. This was considered a reasonable time investment to encourage compliance, since the basic rule is that the longer the questionnaire, the less likely people will respond (Van Selm & Jankowski, 2006).

Data Analysis

Descriptive Statistics

Each variable of demographic information was summarized using the descriptive statistical techniques of mean, standard deviation, and range (Huck, 2011; McHugh, 2003). Such techniques aid in organizing and describing the demographic variables in ways that allow the researcher to validate assumptions and to more clearly understand the implications of the research findings (Huck, 2011). Special emphasis was placed on the specific demographic categories of fan gender, fan status (player only versus player/spectator), fan experience, and favorite professional athlete gender since these variables were the basis for the main study questions.

Reliability Testing of Motivation Scales

Statistical analysis of the research data using SPSS 21.0 began with Cronbach's alpha coefficient to test the reliability of the motivation factors since this technique has been typically used for this purpose and is widely accepted. Factors with alpha values >.70 were accepted (Huck, 2011).

Inferential Statistics

Inferential statistical analysis included confirmatory factor analysis (CFA), principle components analysis (PCA), and multivariate analysis of variance (MANOVA; Huck, 2011). Confirmatory factory analysis was used to examine the data for the nature of and relations among latent variables and to test the validity of the proposed eight-factor motivation model (Pure-Stephenson, 2009). Principle components analysis, with Varimax Rotation and Kaiser Normalization, was used to mathematically reduce the dimensionality of the data (the motivation factors specifically) by identifying

uncorrelated variables that successively maximize variance (Jolliffe & Cadima, 2016; Ringner, 2008). One-way MANOVA was used to compare the relationships between the independent variables of fan gender, fan status, and fan experience with the dependent variables of motivation. Ranking of means (*M*) for the eight motivation factors was used for comparisons between favorite male and favorite female professional tennis players only in Research Question 2.

Pilot Study

A pilot study was conducted to evaluate the mechanics of the online survey and to confirm the internal consistency of the eight fan motivation scales using Cronbach's alpha coefficient (Huck, 2011). Following Institutional Review Board exemption (Appendix E), a total of 34 participants, including 19 males (55.9%) and 15 females (44.1%), from a local athletic club (Work-Out-West, Greeley, CO) responded to initial email contact (Appendix F) and consented to the online survey (Appendix G). Of these, 33 surveys were completed and were valid for statistical analysis. Participants' age frequencies were as follows: 18-24 years = 2.9%, 25-34 years = 8.6%, 35-44 years = 2.9%, 45-54 years = 22.9%, 55-64 years = 34.3%, and 65-74 years = 22.9%. Participants self-identifying as spectators *only* accounted for 30.3% of responses and those self-identifying as both players *and* spectators accounted for 69.7% of responses. Seventy-six percent of participants self-identifying as spectators *only* reported 11 or more years of experience and 79% of participants self-identifying as both players *and* spectators reported 11 or more years of experience. Fifty-five percent of participants reported having attended a major tennis tournament (non-Grand Slam event) and 18% reported having attended a Grand Slam tennis event.

Following the survey, participants were solicited to personally voice any difficulties or any concerns regarding the demographic or motivation questions and regarding the survey format. None were presented. Each of the eight motivation scales was submitted to reliability testing using Cronbach's alpha coefficient calculation (Huck 2011). The results are presented in Table 2. Cronbach's alpha coefficient for the overall scale of eight items was 0.81. The alpha coefficients for six of the eight individual motivation scales were greater than 0.7, indicating acceptable scale reliability and internal consistency, and most were relatively high (range of 0.753 to 0.906). The alpha coefficients for two of the eight motivation scales (athlete as role model and athlete personality) were slightly below 0.7, but may be expected to move into the acceptable range with increased number of participants in the full study.

Table 2

Cronbach's Alpha Coefficients for Motivation Scale in Pilot Study

Motivation Scale	Cronbach's Alpha Coefficient
Athlete as hero	0.894
Athlete as role model	0.660
Athlete personality	0.507
Athlete philanthropy/social causes	0.763
Athlete reputation	0.768
Athlete physical attractiveness	0.843
Athlete physical skill	0.862
Vicarious achievements through athlete	0.906

Findings from the pilot study revealed at least two important pieces of information for application to my larger dissertation study. First, participants voiced no difficulty in completing the online survey or had any other concerns. Therefore, only minor changes were made to portions of the demographic section for greater clarity. Second, Cronbach's alpha coefficient analysis of the motivation factors revealed that most of the scales were well within the acceptable range for internal validity and reliability (> 0.7).

CHAPTER IV

RESULTS

This chapter presents the demographic and survey data concerning tennis fan motivations for identifying with professional tennis players generated from the online survey. The chapter begins with the demographic descriptive data and then proceeds with a results section dedicated to each of the three research questions. These questions included: (a) How do fan gender and professional athlete gender factor in determining fan motivation? (b) How does fan status (player *and* spectator or spectator *only*) factor in determining fan motivation? (c) How does fan avidity, as measured by years of fan experience, factor in determining fan motivation? Finally, the results are summarized in a concluding section.

Description of the Sample Population

Collection Techniques

Data were collected using an online survey posted at several well-known tennis sites (clubs, blogs, and organizations) from January 06, 2017, to February 25, 2017, and 460 surveys were collected. The survey request was accompanied by a letter describing the nature and intent of the study and a hyperlink to the survey at the UNCO Qualtrics website. Respondent (to be hereafter referred to as “fans”) consent was indicated by the willingness to complete and submit the survey for evaluation. The online survey consisted of an initial section containing participant demographic information, followed by eight factors, of three items each, related to fan motivations toward favorite male

and/or female professional tennis players. The favorite professional tennis player's current ranking, but no player name identification, was requested. Responses were excluded from analysis if no favorite professional tennis player was indicated.

Demographics

Of the total 460 submitted online surveys, 359 (78.0%) were deemed useable after data cleaning procedures eliminated 101 surveys (22.0%) in which fans indicated no favorite male or female professional tennis player. The remaining fans having a favorite professional tennis player(s) were nearly evenly divided by gender, with 49.3% (*n* = 177) being male and 50.7% (*n* = 182) being female (Table 3).

Table 3

Fan Gender

Fan Gender	*n*	Percent
Male	177	49.3
Female	182	50.7

Among all useable surveys, fan ages ranged from 18 to 80 years, with a mean age of 44.3 years (*SD* = 15.0). Ages among male fans ranged from 18 to 79 years (*M* = 43.7, *SD* = 15.3) and among female fans ranged from 18 to 80 years (*M* = 44.8, *SD* = 14.7) as shown in Table 4. As presented in the fan age histograms (Figures 1 and 2), the distributions of ages for male fans and female fans were very similar, with peaks around the means and both having spikes for fans in their early twenties.

Table 4

Fan Age in Years by Fan Gender

Fan Gender	*n*	Range	*M*	*SD*
Male	177	18 - 79	43.7	15.3
Female	182	18 - 80	44.8	14.7

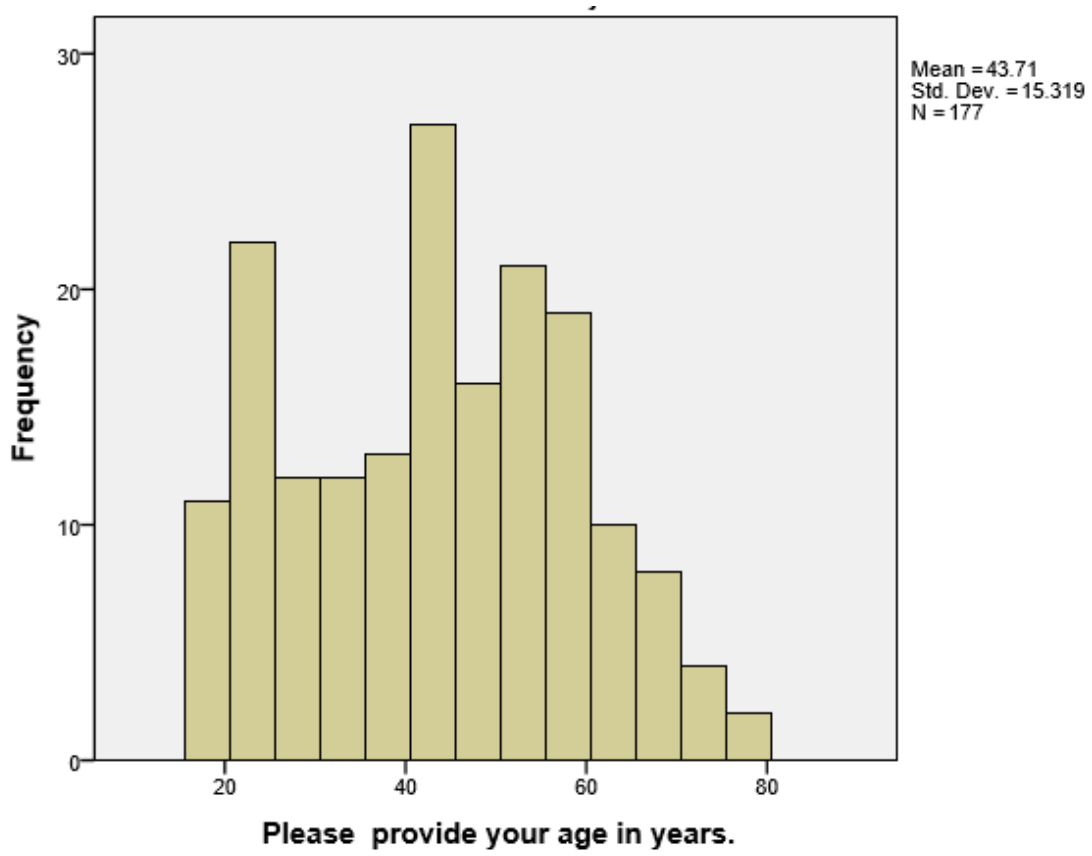

Figure 1. Histogram of male tennis fan ages

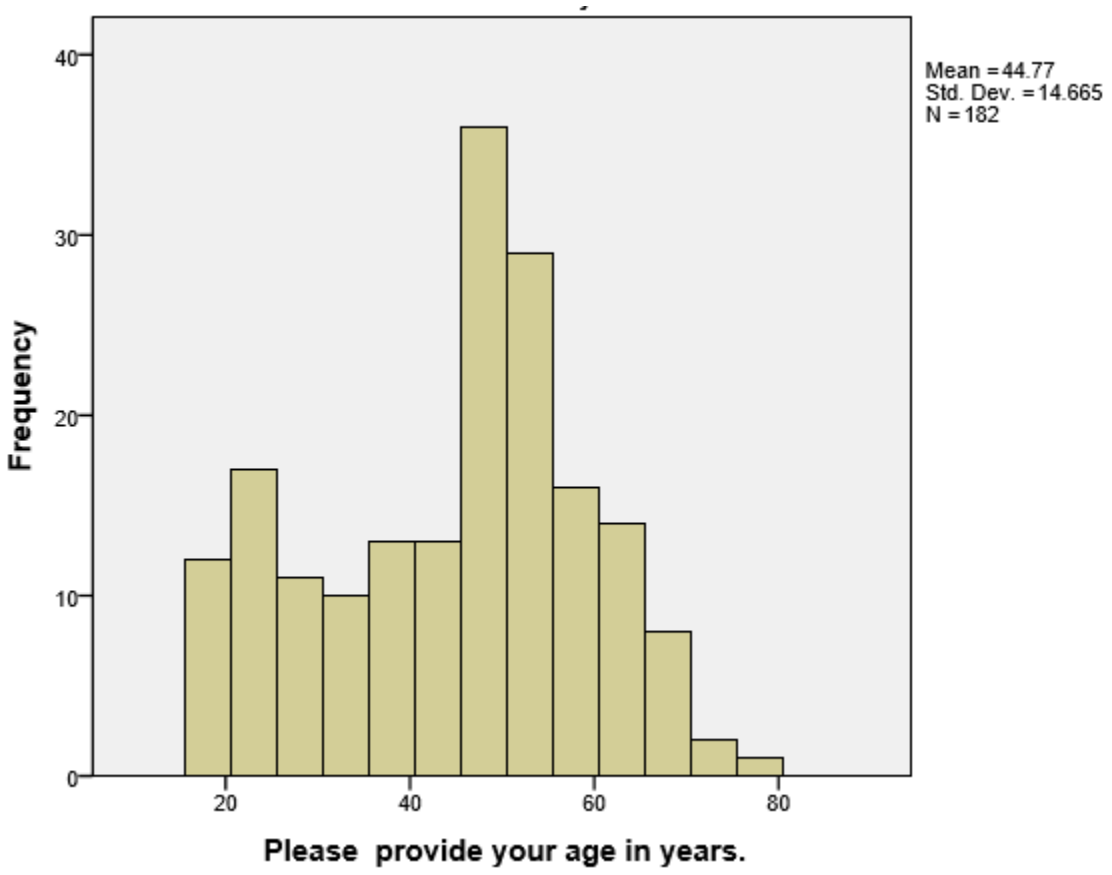

Figure 2. Histogram of female tennis fan ages

Fans self-identified as player *and* spectator in 93.3% (*n* = 335) of the survey population and as a spectator *only* in 6.7% (*n* = 24) of the survey population (Table 5). Fans self-identifying as a player *and* spectator yielded a range of experience that extended from 2 to 66 years (*M* = 26.5, *SD* = 15.2). The mean experience as a player *and* spectator among male fans was 27.5 years (*SD* = 15.1) and among female fans was 25.5 years (*SD* = 15.2; Table 6). Fans self-identifying as a spectator *only* yielded a range of experience that extended from 1 to 66 years (*M* = 25.3, *SD* = 14.9). The mean experience

as a spectator *only* among male fans was 26.9 years (*SD* = 14.8) and among female fans was 23.9 years (*SD* = 14.8).

Table 5

Fan Status by Fan Gender

Fan Status	*n*		Percent	
	Male	Female	Male	Female
Players *and* Spectator	168	167	94.9	91.8
Spectator *only*	9	15	5.1	8.2

Table 6

Fan Years of Experience by Fan Status and Fan Gender

Fan Status	Experience Range (Years)		*M*		*SD*	
	Male	Female	Male	Female	Male	Female
Player *and* Spectator	3 - 63	2 - 66	27.5	25.5	15.1	15.2
Spectator *only*	2 - 60	1 - 66	26.9	23.9	14.8	14.8

Other Respondent Parameters

Male fans reported having a favorite male professional tennis player in 98.9% (*n* = 175) of responses and having no favorite male professional tennis player in only 1.1% (*n* = 2) of responses (Table 7). Similarly, female fans reported having a favorite male professional tennis player in 98.4% (*n* = 179) of responses and having no favorite male professional tennis player in only 1.6% (*n* = 3) of responses. In contrast, male fans reported having a favorite female professional player in only 45.2% (*n* = 80) of responses

and no favorite female professional tennis player in 54.8% (*n* = 97) of responses (Table 8). Similarly, female fans reported having a favorite female professional tennis player in only 60.4% (*n* = 110) of responses and having no favorite female professional tennis player in 39.6% (*n* = 72) of responses. Having both male and female favorite professional tennis players was reported by 41.6% of male tennis fans and having both male and female favorite professional tennis players was reported by 57.8% of female tennis fans.

Table 7

Favorite Male Professional Tennis Player by Fan Gender

	n		Percent	
	Male	Female	Male	Female
Favorite player	175	179	98.9	98.4
No favorite player	2	3	1.1	1.6

Table 8

Favorite Female Professional Tennis Player by Fan Gender

	n		Percent	
	Male	Female	Male	Female
Favorite player	80	110	45.2	60.4
No favorite player	97	72	54.8	39.6

Favorite male and female professional tennis player rankings by fan gender are presented in Table 9. Favorite professional tennis player rankings ranged from 1 to 50.

The mean rankings for both male and female favorite professional tennis players were higher among female fans than for those among male fans.

Table 9

Favorite Professional Tennis Play Ranking by Fan Gender

Fan Gender	Ranking Range of Professional Tennis Players		Mean		*SD*	
	Male	Female	Male	Female	Male	Female
Male Fans	1 - 50	1 - 44	10.1	11.4	7.6	12.1
Female Fans	1 - 30	1 - 50	7.5	6.7	5.6	10.0

The various media sources used by fans to follow favorite professional tennis players are presented in Table 10. Usage was very similar between male and female fans. Television coverage was by far the most commonly used media source, with 92.1% of male fans and 89.0% of female fans using this medium. Internet access by both male and female fans was the second most common media source (males = 71.8% and females = 69.2%). The newspaper was indicated as source of tennis coverage by 25.4% of male fans and 20.9% of female fans. Tennis pod-casts and radio were the least commonly used sources among male and female fans.

Table 10

Fan Media Sources Used to Follow Professional Tennis Players

Media Type	% Using Media Source	
	Male Fans (n = 177)	Female (n = 182)
Television	92.1	89.0
Internet	71.8	69.2
Tennis magazines	39.0	32.4
Newspapers	25.4	20.9
Other tennis or specialty publications	23.7	25.8
Radio	6.2	3.8
Tennis pod-casts	5.1	3.3

* Multiple media selections allowed for each fan.

Cronbach's Alpha Coefficient for Motivation Factors

Cronbach's alpha coefficient was used to test the reliability (or internal consistency) of each of the eight motivation factors since this technique has been typically used for this purpose and is widely accepted. Factors with alpha values >.70 were accepted (Huck, 2011). This technique is specifically used to test internal consistency in questionnaires using multi-item scales. Cronbach's alpha coefficients are presented in Table 11. Cronbach's alpha was greater than .70 for all motivation factors. Alpha for motivation factors applied to male professional athletes ranged from .740 to .854 and for the same motivation factors applied to female professional athletes ranged

from .715 to .897. The internal consistency for all motivation factors was determined to be acceptable.

Table 11

Cronbach's Alpha Coefficients for Motivation Factors by Professional Tennis Player Gender

Motivation Factor	Cronbach's Alpha Coefficient	
	Male Players	Female Players
Vicarious achievement	.854	.897
Athlete physical attractiveness	.781	.886
Athlete physical skills	.819	.732
Athlete as a hero	.740	.784
Athlete personality	.785	.715
Athlete behavior	.794	.810
Athlete reputation	.815	.842
Athlete philanthropy	.826	.843

Confirmatory Factor Analysis (CFA)

Confirmatory factor analysis using LISREL 8.80 was used to evaluate the fit of the current model in which eight latent factors were represented by the eight measured fan motivation factors (Joreskog & Sorbom, 2006). Resulting from the original survey construction, the fan motivation factors for male professional tennis players could not be combined with the fan motivation factors for female professional tennis players for factor analysis. Confirmatory factor analysis, therefore, was calculated separately for the eight-factor model applied to male professional tennis players and for the eight-factor model applied to female tennis professional players.

Eight-factor Model for Male Professional Tennis Players

A summary of the fit indices for the applied model for fan motivation factors as applied to male professional tennis players are presented in Table 12. Each of the model's 24 items' estimates were significant at $p < .01$, indicating acceptable fit of each item. Root mean square error of approximate (RMSEA), Non-normed fit index (NNFI), and Comparative Fit Index (CFI) all fell within the "acceptable fit," "good fit," and "good fit" categories, respectively. Additionally, loadings for each of the 24 items exceeded .60 and were acceptable as shown in Table 13 (Browne & Cudeck, 1992; Hu & Bentler, 1999; Lai & Green, 2016).

Table 12

Fit Indices for Study Model for Motivation Factors for Male Professional Tennis Players

Model	χ^2	*df*	*RMSEA*[a]	*NNFI*[b]	*CFI*[b]
Motivation Factors for Male Professional Tennis Players	501.86	224	0.062	0.95	0.96

[a]Root mean square error of approximation (*RMSEA*) values ≤ .05 indicate "good" fit and values between .05 and .10 indicate "acceptable" fit (Browne & Cudeck, 1992; Hu & Bentler, 1999).

[b]Non-normed fit index (*NNFI*) and Comparative Fit Index (*CFI*) values ≥.95 indicate "good" fit (Hu & Bentler, 1999).

Table 13

Tennis Fan Motivation Scale for Male Professional Tennis Players with Factors, Items, Completely Standardized Factor Loading and Cronbach's Alpha

Factor/Item	Loadings	Cronbach's Alpha
Vicarious Identity (*AVE* = .82)		.85
I feel like I have won when my favorite male player wins.	.83	
I feel a personal sense of achievement when my favorite male player wins.	.90	
I feel proud when my favorite male player wins.	.73	
Physical Attractiveness (*AVE* = .78)		.78
I enjoy watching my favorite male player because he is physically attractive.	.61	
The main reason that I watch my favorite male player is because he is physically attractive.	.90	
"Sex appeal" is a big reason why I watch my favorite male player.	.79	
Physical Skill (*AVE* = .82)		.82
The physical skills of my favorite male player are something that I appreciate.	.64	
Watching my favorite male player in a well-executed performance is something that I enjoy.	.92	
I enjoy a skillful performance by my favorite male player.	.86	

Table 13 (continued)

Factor/Item	Loadings	Cronbach's Alpha
Athlete as Hero (*AVE* = .70)		.74
I feel that my favorite male player is a hero.	.71	
I feel that my favorite male player is powerful.	.65	
I feel that my favorite male player has great soul.	.73	
Athlete Personality (*AVE* = .74)		.79
My favorite male player's personality is important to me.	.78	
My favorite male player shares important personality traits with me.	.62	
I enjoy my favorite male player's personality.	.81	
Athlete Behavior (*AVE* = .76)		.79
Good behavior by my favorite male player is important to me.	.64	
I feel that others should appreciate the good example set by my favorite male player.	.85	
I look up to my favorite male player because of his good behavior.	.77	
Athlete Reputation (*AVE* = .79)		.82
The reputation of my favorite male player is important to me.	.82	
The reputation of my favorite male player should be respected by other fans.	.80	
I respect the reputation of my favorite male player.	.76	

Table 13 (continued)

Factor/Item	Loadings	Cronbach's Alpha
Athlete Philanthropy/Social Causes (*AVE* = .79)		.83
I am aware that my favorite male player is involve in philanthropy and social causes.	.64	
It is important to me that my favorite male player is involved in philanthropy and social causes.	.85	
I think that other fans should also appreciate my favorite male player's involvement in philanthropy and social causes.	.87	

Eight-factor Model for Female
Professional Tennis Players

A summary of the fit indices for the applied model for fan motivation factors as applied to male professional tennis players are presented in Table 14. Each of the model's item estimates were significant at $p < .01$, indicating acceptable fit of each subscale item. Root mean square error of approximate (RMSEA), Non-normed fit index (NNFI), and Comparative Fit Index (CFI) all fell within the "acceptable fit," "good fit," and "good fit" categories, respectively. Additionally, loadings for 22 of the 24 sub-items exceeded .60 and were acceptable. The two items in which loadings did not exceed .60 were: (a) physical skills of my favorite female player are something that I appreciate (.43) and (b) aware that my favorite female player is involve in philanthropy and social causes (.58) as shown in Table 15.

Table 14

Fit Indices for Study Model for Motivation Factors for Female Professional Tennis Players

Model	χ^2	*df*	*RMSEA*[a]	*NNFI*[b]	*CFI*[b]
Motivation Factors for Female Professional Tennis Players	444.19	223	0.073	0.95	0.96

[a]Root mean square error of approximation (*RMSEA*) values ≤ .05 indicate "good" fit and values between .05 and .10 indicate "acceptable" fit (Browne & Cudeck, 1992; Hu & Bentler, 1999).

[b]Non-normed fit index *(NNFI*) and Comparative Fit Index (*CFI*) values ≥.95 indicate "good" fit (Hu & Bentler, 1999).

Table 15

Tennis Fan Motivation Scale for Female Professional Tennis Players with Factors, Items, Completely Standardized Factor Loading and Cronbach's Alpha

Factor/Item	Loadings	Cronbach's Alpha
Vicarious Identity (*AVE* = .87)		.90
I feel like I have won when my favorite female player wins.	.90	
I feel a personal sense of achievement when my favorite female player wins.	.94	
I feel proud when my favorite female player wins.	.76	
Physical Attractiveness (*AVE* = .86)		.89
I enjoy watching my favorite female player because he is physically attractive.	.76	
The main reason that I watch my favorite female player is because he is physically attractive.	.90	
"Sex appeal" is a big reason why I watch my favorite female player.	.90	
Physical Skill (*AVE* = .78)		.73
The physical skills of my favorite female player are something that I appreciate.	.43	
Watching my favorite female player in a well-executed performance is something that I enjoy.	.90	
I enjoy a skillful performance by my favorite female player.	.92	

Table 15 (continued)

Factor/Item	Loadings	Cronbach's Alpha
Athlete as Hero (*AVE* = .75)		.78
I feel that my favorite female player is a hero.	.76	
I feel that my favorite female player is powerful.	.69	
I feel that my favorite female player has great soul.	.80	
Athlete Personality (*AVE* = .69)		.72
My favorite female player's personality is important to me.	.73	
My favorite female player shares important personality traits with me.	.64	
I enjoy my favorite female player's personality.	.70	
Athlete Behavior (*AVE* = .77)		.81
Good behavior by my favorite female player is important to me.	.64	
I feel that others should appreciate the good example set by my favorite female player.	.77	
I look up to my favorite female player because of his good behavior.	.89	.89
Athlete Reputation (*AVE* = .81)		.84
The reputation of my favorite female player is important to me.	.81	
The reputation of my favorite female player should be respected by other fans.	.89	
I respect the reputation of my favorite female player.	.73	

Table 15 (continued)

Factor/Item	Loadings	Cronbach's Alpha
Athlete Philanthropy/Social Causes (*AVE* = .79)		.84
I am aware that my favorite male player is involve in philanthropy and social causes.	.58	
It is important to me that my favorite male player is involved in philanthropy and social causes.	.83	
I think that other fans should also appreciate my favorite male player's involvement in philanthropy and social causes.	.92	

Principle Components Analysis (PCA)

Principle components analysis (PCA) with Varimax rotation and Kaiser Normalization was run on the eight fan motivation factors after first determining the suitability for components analysis as outlined by Laerd Statistics (2015). The correlation matrix revealed that seven of eight motivation factors had at least one correlation coefficient greater than 0.3, with "athlete physical skill" being the exception. Sampling adequacy, as measured by the Kaiser-Meyer-Olkin method, was .808 and was within the "meritorious" category (Kaiser & Rice, 1974). Also, calculated significance with Bartlett's Test of Sphericity was .000 (>0.05), indicating that the motivations could likely be factored.

Principle components analysis revealed two components with eigenvalues greater than 1.0 and the clear inflection point on the scree plot indicated that two components should be retained (Figure 3). Components 1 and 2 accounted for 57.6% of the total variance and for 43.0% and 14.6% of the variance, respectively (Table 16). The rotated

component matrix (Table 17) indicated that Component 1 had strong loadings for athlete reputation (.877), athlete behavior (.817), athlete personality (.794), athlete philanthropy (.722), and athlete as a hero (.610). Component 2 had strong loadings for athlete physical attractiveness (.830) and athlete vicarious identity (.756).

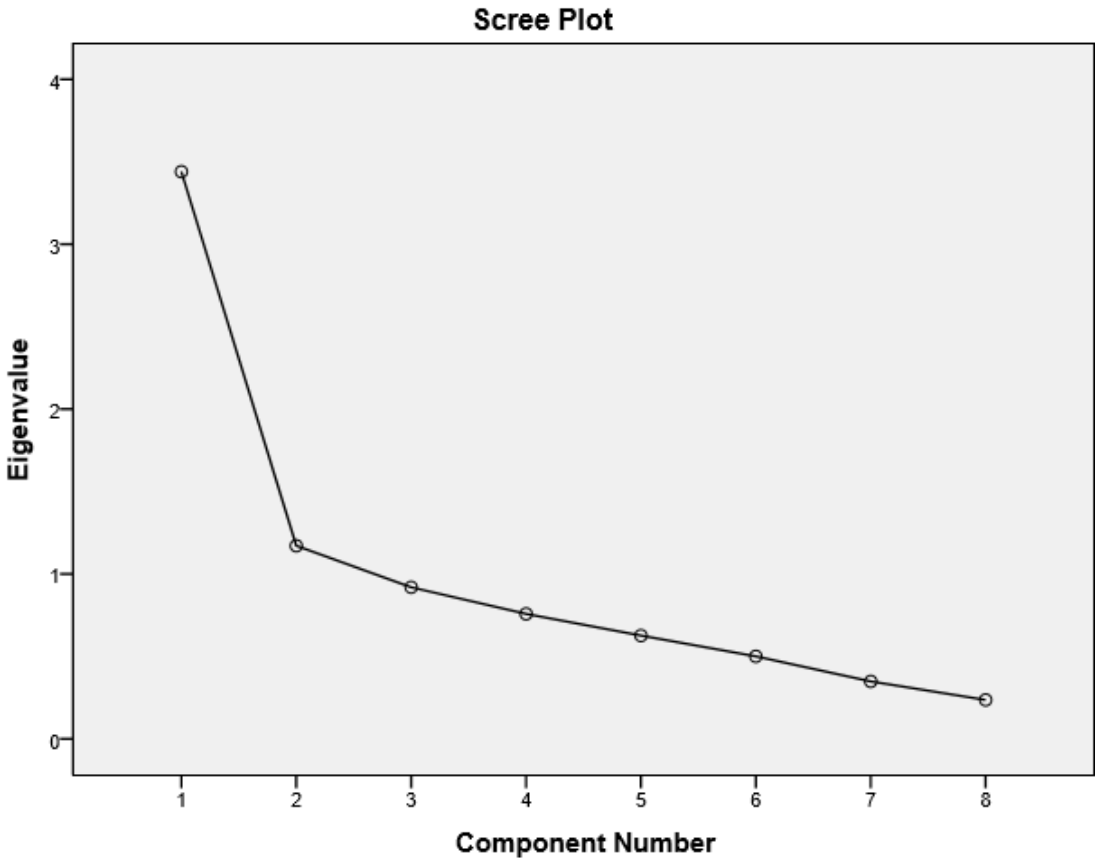

Figure 3. Scree Plot for Components

Table 16

Total Variance Explained by Components

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.440	43.004	43.004	3.440	43.004	43.004	3.204	40.047	40.047
2	1.171	14.639	57.643	1.171	14.6396	57.645	1.408	17.596	57.643
3	.919	11.492	69.135						
4	.758	9.477	78.612						
5	.626	7.828	86.440						
6	.500	6.254	92.694						
7	.348	4.354	97.049						
8	.236	2.951	100.00						

Table 17

Rotated Component Matrix[a]

Fan Motivation	Component	
	1	2
Reputation	.877	.155
Behavior	.817	.046
Personality	.794	.072
Philanthropy	.722	.088
Hero	.610	.326
Physical skills	.400	.049
Physical attraction	-.044	.830
Vicarious achievement	.286	.756

[a]Varimax with Kaiser Normalization

Research Question 1

Research question 1 concerned the impact of tennis fan gender and favorite professional tennis player gender on motivations. As previously stated, because of the original construct of the survey questionnaire, the motivations for all favorite professional tennis players (both genders) could not be considered as one group. Therefore, MANOVA analysis was run to first examine the impact of tennis fan gender upon motivations toward favorite male professional tennis players and then a second MANOVA analysis was run to examine the impact of tennis fan gender upon motivations toward favorite female tennis players.

Fan Gender and Motivations Toward Favorite Male Professional Tennis Players

A one-way MANOVA was run using SPSS 21.0 to determine the effect of fan gender on motivations toward favorite male professional tennis players. Box's Test of Equality of Covariance Matrices yielded $p = .056$ (>.001), indicating homogeneity of variance-covariance (Pallant, 2007). Wilks' Lambda revealed significant differences in motivation between male tennis fans and female tennis fans toward male professional tennis players, $F(8, 291) = 8.063$, $p < .0005$; Wilks' $\Lambda = .819$; partial $\eta^2 = .181$, rejecting the null hypothesis. Tests of between-subjects effects revealed that only male professional tennis player attractiveness was significant ($p < .0005$). Examination of estimated marginal mean scores revealed that male tennis fans and female tennis fans differed slightly on the motivation of male player attractiveness. For male tennis fans $M = 1.999$ ($SE = .102$) and was slightly lower than for female tennis fans $M = 2.966$ ($SE = .098$). Fan gender differences between means of all other motivations toward favorite male professional players were negligible.

Fan gender and Motivations Toward Favorite Female Professional Tennis Players

A one-way MANOVA was run using SPSS 21.0 to determine the effects of fan gender on motivations toward favorite female professional tennis players. Box's Test of Equality of Covariance Matrices yielded $p = .002$ (>.001), indicating homogeneity of variance-covariance (Pallant, 2007). Wilks' Lambda revealed significant differences in motivation between male tennis fans and female tennis fans toward female professional tennis players, $F(8, 140) = 3.976$, $p = .0005$; Wilks' $\Lambda = .815$; partial $\eta^2 = .185$, rejecting

the null hypothesis. The tests of between-subjects effects revealed that only female professional tennis player attractiveness was significant ($p < .0005$). Examination of estimated marginal means revealed that male tennis fans and female tennis fans differed slightly on the motivation of female player attractiveness. For male tennis fans $M = 3.723$ ($SE = .189$) and was slightly higher than for female tennis fans $M = 2.392$ ($SE = .156$) for player attractiveness. Fan gender differences between means of all other motivations toward favorite female professional tennis players were negligible.

Research Question 2

Research question 2 concerned the impact of fan status (player *and* spectator versus spectator *only*) on motivations toward favorite professional tennis players. As previously stated, because of the original construct of the survey questionnaire, the motivations for all favorite professional tennis players (both genders) could not be considered as one group for MANOVA analysis. Also, the spectator *only* group was very small ($n = 24$) and was not considered adequate for statistical analysis. Therefore, fan motivations' factor means for the remaining player *and* spectator group were compared for favorite male professional tennis players and favorite female professional tennis players (Table 18). Professional tennis player skills, behavior, reputation, and personality ranked highest among motives for both male professional tennis players and female professional tennis players. Research question 2 could not be specifically answered given the unexpectedly low survey response from spectators *only*.

Table 18

Player and Spectator Motivation Factor Ranking of Means for Male and Female Professional Tennis Players

Player Gender/Motivation	*n*	*M*	*SD*
Male Professional Players			
Player skills	319	6.358	0.782
Player behavior	314	5.633	1.061
Player reputation	3.09	5.464	1.000
Player personality	314	5.369	0.982
Player philanthropy	307	5.038	1.194
Vicarious achievement	3.19	4.888	1.326
Player as hero	319	4.880	1.211
Player physical attractiveness	319	2.526	1.212
Female Professional Players			
Player skills	161	6.228	0.710
Player reputation	161	5.112	1.043
Player behavior	162	5.084	1.100
Player personality	162	4.957	0.896
Player philanthropy	157	4.801	1.096
Player as hero	162	4.759	1.187
Vicarious achievement	163	4.616	1.425
Player physical attractiveness	162	2.918	1.475

Research Question 3

Research question 3 concerned the impact of fan experience in years on motivations toward favorite professional tennis players. As previously explained, because of the original construct of the survey questionnaire, the motivations for all favorite professional tennis players (both genders) could not be evaluated as one group. Therefore, MANOVA analysis was run to first examine the impact of tennis fan experience (in years) upon motivations toward favorite male professional tennis players and then a second MANOVA analysis was run to examine the impact of tennis fan experience (in years) upon motivations toward favorite female tennis players. For the purposes of this evaluation, tennis fan experience was divided into three levels: Low Experience Fans (LEF) = 1 - 10 years, Medium Experience Fans (MEF) = 11 - 25 years, and High Experience Fans (HEF) = 25+ years.

Fan Experience and Motivations
Toward Favorite Male
Professional Tennis
Players

A one-way MANOVA was run using SPSS 21.0 to determine the effects of fan experience in years on motivations toward favorite male professional tennis players. The population included Low Experience Fans (LEF; $n = 48$), Medium Experience Fans (MEF; $n = 108$) and High Experience Fans (HEF; $n = 148$). Box's Test of Equality of Covariance Matrices yielded $p = .056$ (>.001), indicating homogeneity of variance-covariance (Pallant, 2007). Wilks' Lambda revealed significant differences in motivations among Low Experience, Medium Experience, and High Experience tennis fans toward male professional tennis players, $F(16, 582) = 2.597$, $p = .001$; Wilks' $\Lambda = .871$; partial $\eta^2 = .067$, rejecting the null hypothesis. The tests of between-subjects effects

revealed four significant motivation factors: player skills (p = .010), player behavior (p = .022), player reputation (p = .035), and player philanthropy (p = .033).

Examination of estimated marginal means for male professional player skills revealed a mean of 6.389 (*Standard Error* = .111) for LEF, M = 6.177 (SE = .076) for MEF, and M = 6.479 (SE = .064) for HEF. Estimated marginal means for male professional player behavior revealed a mean of 5.313 (SE = .152) for LEF, M = 5.541 (SE = .104) for MEF, and M = 5.773 (SE = .087) for HEF. Estimated marginal means for male professional player reputation revealed a mean of 5.118 (SE = .144) for LEF, M = 5.483 (SE = .098) for MEF, and M = 5.545 (SE = .082) for HEF. Estimated marginal means for male professional player philanthropy revealed a mean of 4.771 *(*SE = .171) for LEF, M = 4.926 (SE = .116) for MEF, and M = 5.221 (SE = .098) for HEF. When ranking the estimated marginal means for each of the significant motivations, some patterns were evident: (a) for professional player skills, M was highest for HEF (HEF > LEF > MEF); (b) for professional player behavior, M was highest for HEF and lowest for LEF (HEF > MEF > LEF); (c) for professional athlete reputation, M was highest for HEF lowest for LEF (HEF > MEF > LEF); and (d) for professional athlete philanthropy, M was highest for HEF and lowest for LEF (HEF > MEF > LEF). These comparisons suggest that fan motivations toward male professional players may change with increasing fan experience. That is, tennis fans with more experience seemed to place more emphasis or value on the professional player traits that related to the overall character of the player (behavior, reputation, and social engagement) as well as player skill. In contrast, these motivations ranked lowest among novice tennis fans, who may not have yet developed the knowledge and experience to fully appreciate them.

Tukey post-hoc comparisons revealed that favorite male professional player skills were significant between MEF and HEF (p = 0.14). Favorite male professional player behavior was significant between LEF and HEF (p = .028). Favorite male professional player reputation was significant between LEF and HEF (p = 0.26). Favorite male professional player philanthropy was near significance between MEF and HEF (p = .056).

Fan Experience and Motivations Toward Favorite Female Professional Tennis Players

A one-way MANOVA was run using SPSS 21.0 to determine the effects of fan experience in years on motivations toward favorite female professional tennis players. The population included Low Experience (n = 25), Medium Experience (n = 58) and High Experience (n = 70). Box's Test of Equality of Covariance Matrices yielded p = .002 (>.001), indicating homogeneity of variance-covariance (Pallant, 2007). Wilks' Lambda revealed significant differences in motivations among Low Experience, Medium Experience, and High Experience tennis fans toward female professional tennis players, $F(16, 280) = 1.677$, p = .050; Wilks' Λ = .833; partial η^2 = .087, rejecting the null hypothesis. Estimated margin means for female professional player as a hero revealed a mean of 4.844 (*(SE* = .234) for LEF, M = 5.022 *(SE* = .153) for MEF, and M = 4.426 (*SE* = .139) for HEF. Ranking of M by fan experience indicates MEF > LEF > HEF, suggesting that female professional player as a hero is least important to fans with the most experience. Tukey post-hock comparisons revealed that female professional player as a hero was significant between MEF and HEF (.010), but not for LEF.

Summary of Research Results

The somewhat surprising finding that 22% (n = 101) of total survey respondents reported having no favorite professional tennis player substantially reduced the study population, but an adequate number (n = 359) remained for analysis. Of more concern was the very small number of respondents who identified their fan status as spectator *only* (n = 24) and this prevented their inclusion for analysis and, subsequently, specific answering of Research Question 2. Confirmatory factor analysis (CFA) validated the proposed eight-factor motivation model for the intended purpose in this study. Principle components analysis (PCA) revealed two components accounting for 57.6% of the total variance: Component 1 (43% of total variance) revealed strong loadings for professional athlete reputation, behavior, personality, philanthropy, and athlete as a hero. Component 2 (14.6% of total variance) revealed strong loadings for athlete physical attractiveness and vicarious identity. Physical attractiveness of male professional tennis players and female professional tennis players was a significant motivation for both male tennis fans and female tennis fans. Findings suggested that those fans identifying as player *and* spectator (78% of total) identified player skills, behavior, reputation, and personality as the top four motivations (based on M scores for motivations) toward both male and female professional tennis players. Male professional tennis player skills, behavior, reputation, and philanthropy were significant motivations based on tennis fan experience. In contrast, player as a hero was the only significant motivation for female professional tennis players based on tennis fan experience. Estimated marginal means (M) for these factors suggested some trends. The means for male professional tennis player behavior, player reputation, and player philanthropy/support for social causes each tracked

positively with tennis fan experience. No such clear trends were evident with male professional tennis player skills although the mean for this motivation was highest among those fans with the greatest experience. For female professional tennis player as a hero, the mean value was lowest among those fans with the most experience.

CHAPTER V

DISCUSSION

This final chapter will restate a brief rationale and goals for the study and will then proceed to discuss some aspects of the online survey, demographic data, and findings concerning each of the research questions. The chapter will conclude with sections dealing with limitations and possible future research in the area.

Research Rationale and Goals

The idea for this research project was based upon both my lifelong interest in the sport of tennis and the lack of any research data to account for why most fans (including me) attach themselves to professional tennis stars and closely follow their performances and careers. The obvious demonstration of athletic prowess alone would not seem to fully account for attachment to tennis stars, since all top tennis professionals are superbly skilled. The motivations for attachment must be more complex and must also be based upon other factors, some of which may be less clearly defined. This study was designed to address some of those possible motivations. In this discussion, the terms “player” and “athlete” was used interchangeably to refer to tennis professionals.

Fan attachment and loyalty to sports teams, often professional or collegiate, are well-known in modern society and are powerful economic and social forces (Fink et al., 2002; Funk et al., 2003; Lock et al., 2011; McDonald et al., 2002; Wann, Peterson, 1999; Wu et al., 2012). The psychological theories to explain such attachments have been based

on social identity theory and the psychological continuum model and the underlying desire of fans to gain identity, social status, and self-worth from being a member of the group (Funk et al., 2000; Tokuyama & Greenwell, 2011). Also, in the case of team sports, fan vicarious achievement has been found to be a key factor leading to team identification and attendance and is based upon the observation that fans derive increased self-esteem and positive self-image through the success of the team with which they are identified (Lock et al., 2011; Wu et al., 2012).

Little research has been dedicated to fan motivations and attachment in individual athlete sports and has been limited to martial arts and golf. The motives that attracted spectators to martial arts included interest in the sport, vicarious achievement, and national pride among male fans and primary sport interest and drama among female fans (Kim et al., 2008). That study, however, focused on the sport rather than on individual athletes. In a study of motivation among golf spectators, the display of skill of players and vicarious achievement were primary factors (McDonald et al., 2002).

Although not equal to some of the more popular professional sports such as American football or soccer in attendance or revenues, professional tennis for both men and women has become big business and is worldwide in reach and appeal ("ATP Players Home," 2015; "ATP Singles, Doubles," 2015; "WTA Sees Broadcast," 2015). Top professional tennis stars are well-known among both fans and even among non-fans and their faces appear regularly in various media outlets. The fame and exposure of top tennis stars has also been enhanced by the ATP and WTA ranking systems that have serv to focus public attention on the top athletes. This study examined some possible

motivations, based on prior research in fan motivations in team sports, used by fans in attaching themselves to top tennis stars.

Online Survey

The use of the online survey technique has both advantages and potential disadvantages (Evans & Mathur, 2005; Selm & Jankowski, 2006). The reported advantages have included: (a) global reach, (b) flexibility, (c) speed, (d) convenience for both researcher and respondent, (e) ease of data entry and analysis, (f) diversity of potential survey questions, (g) low cost of survey administration, (h) ease of obtaining large samples, (i) absence of interview bias, (j) required answering of some or all questions, and (k) tailoring of the survey to fit individual respondents. Potential disadvantages of online surveys have included (a) the risk that email solicitations for survey participation may be perceived as junk mail, (b) skewing of the study population depending upon internet access, (c) insuring randomness of the samples, (d) lack of online experience by potential respondents, (e) impersonal nature of online surveys, and (f) privacy and security issues. Finally, the response rate to online surveys has been reported to be less than that with paper surveys, but what matters in the end is whether an adequate number of responses are received from a representative sample of the study population (Guo, Kopec, Cibere, Li, & Goldsmith, 2016; Maeda, 2015; Nulty, 2008).

In the present study, the advantages of online survey were considered to out-weigh any possible disadvantages. Requests for respondents were sent to a variety of groups (recognized tennis organizations, tennis clubs, tennis training facilities, and tennis blogs and websites) to target those who would more likely be avid tennis fans and, consequently, to more likely have a favorite professional tennis player. Also, soliciting

from several sources was intended to broaden the potential study population to include individuals of different fan status, experience, and age. More than the required number of responses were received in the allocated survey time frame (n = 384 required; n = 460 received). One difficulty encountered was access to those fans who self-identified as spectators *only.* To address this issue, the sampling frame was potentially broadened using the "snowball" technique by encouraging participants to share their experience in participating in the study with their tennis friends/spouses to encourage them to also participate (Atkinson & Flint, 2001; Goodman, 1961). This technique may be a complementary strategy in generating more comprehensive data to address research questions. Although the snowball technique has been used to engage hidden populations, it may also be used in elite groups to include more respondents through an emphasis on social networks and interactions (Atkinson & Flint, 2001; Goodman, 1961). The active tennis community was considered such a social network. The demographic characteristics of the study respondents are discussed in more detail in the following section.

Study Demographics

A total of 460 responses were received from the online survey. Of these, 101 (22.0%) were rejected from analysis based upon the respondent indicating no favorite tennis player. The remaining 359 (78.0%) valid submissions consisted of a near-equal distribution of male tennis fans (49.3%) and female tennis fans (50.7%). Interestingly, this demographic feature was almost identical to that of the general population of the United States in which the 2010 census reported 49.1% males and 50.9% females (Howden & Meyer, 2011). The gender division in the present study differs slightly from that previously reported for global tennis fans among which 59% were male and 41%

female (Vasquez, 2016). Participants in the only other somewhat similar research involving fan motivations in individual athlete sports consisted of 76.9% male fans and 23.1% female fans in the mixed martial arts study by Kim et al. (2008) and 79.9% male fans and 20.1% female fans in the golfer motivation study by Petrick, Backman, Bixler, and Norman (2001). When compared to sports in general, a survey by Gallup found that 66% of men and 51% of women identified as sports fans (Jones, 2015). In comparing gender division in the present study to other specific sports, fans of the National Basketball Association (NBA) were 70% male and 30% female, fans of the National Football League (NFL) were 65% male and 35% female, fans of Major League Soccer (MLS) were 68% male and 32% female, fans of the National Hockey League (NHL) were 68% male and 32% female, fans of the Professional Golfers' Association (PGA) were 65% male and 35% female, fans of Major League Baseball (MLB) were 70% male and 30% female, and fans of the National Association for Stock Car Auto Racing (NASCAR) were 63% male and 37% female (Eby, 2013). The basis for the near-equal gender division in the present study compared to the larger gender differences in the other cited works was unknown.

Ages among all survey respondents ranged from 18-80 years (M = 43.7, SD = 15.3), among male tennis fans ranged from 18-79 years (M = 43.7 years, SD = 15.3), and among female tennis fans ranged from 18-80 years (M = 44.8, SD = 14.7). In comparison, Vasquez (2016) reported that 21% of adult tennis fans in the United States were also 45-54 years of age (the largest age group bracket). Vasquez (2016) also provided the other adult tennis fan age brackets and they included 10% in ages 18-24 years, 16% in ages 25-

34 years, 19% in ages 35-44 years, 16% in ages 55-64 years, and 18% in ages 65 years and over. These findings suggest the lifelong interest and appeal of the sport of tennis.

Of the 359 respondents in the present study, 93.3% (n = 335) indicated their fan status as both a tennis player *and* spectator and 6.7% (n = 24) indicated their fan status as a spectator *only.* This finding included 94.9% of male tennis fans and 91.8% of female tennis fans as both a tennis player *and* spectator and 5.1% of male tennis fans and 8.2% of female tennis fans as a spectator *only*. Whether a male tennis fan or a female tennis fan or both a player *and spectator* or spectator *only*, the mean experience in years was very similar among the different groups and ranged from 23.9 years (female tennis fan/spectator *only*) to 27.5 years (male tennis fan/player *and* spectator). It may not be surprising that the clear majority of tennis fans consider themselves as both a player *and* spectator since tennis is a popular participation sport enjoyed by enthusiasts of all ages. There are no similar studies in the existing literature with which to compare or contrast these findings.

Other Respondent Parameters

Regarding having a favorite professional tennis player, 78.0% of all initial tennis fan respondents reported having a favorite professional tennis player (male professional player, female professional player, or both). Interestingly, 22.0% of initial respondents reported having no favorite professional tennis player and their responses were excluded from further analysis. Although this study was focused on tennis fans *with* favorite professional tennis players, had such a substantial percentage of respondents with no favorite player been anticipated, additional specific questions could have been provided to attempt to simultaneously examine the motivations of this subgroup as well. A slight

difference in the favorite professional tennis player gender was evident between male tennis fans and female tennis fans. Among male tennis fans, 98.9% reported having a favorite male professional tennis player and 45.2% reported having a favorite female professional tennis player. A somewhat different result was seen among female tennis fans where 98.4% reported having a favorite male professional tennis player and 60.4% reported having a favorite female professional tennis player.

Existing literature concerning gender bias in sports may offer at least a partial explanation for the preference for favorite male professional tennis players among both male tennis fans and female tennis fans. Gender disparity in both the extent of sports media coverage and the content of media coverage has been known for many years (Higgs, Weiller, & Martin, 2003; Hilliard, 1984; Kovalchik, 2015; Schifflet & Revelle, 1994). The historical underrepresentation of women's sports in all media has been basically attributed to market forces (Cuneen, & Claussen, 1999; Fink, Parker, Cunningham, & Cuneen, 2012; Hilliard, 1984). Sports media determines how the public sees sports and feed the narrative that men's sports are more exciting and desirable. Although the situation is slowly improving, gender bias has been previously documented in coverage of the Olympic Games through the "trivialization of women's athletic performance," the use of the term "girl" (compared to "men" or "young men" for male athletes), and the less frequent use of strength descriptors for female athletes (Higgs et al., 2003). In the tennis context, Cameron (2012) commented that the women's game in tennis has not been able to "keep up" with the "incredible" talent and level of competition in the men's game. Kovalchik (2015) suggested that even the format of women's tennis play (best-of-three versus best-of-five for men) in Grand Slam tournaments tends to make

the outcomes less exciting and less predictable than that of men's play. Given such pervasive bias, the preference for favorite male professional tennis players would be expected.

Favorite player ranking data were similar between both male tennis fans and female tennis fans and average rankings for all favorite professional tennis players fell within the top twelve. The primary focus on top players may be expected since even casual observation would suggest that these players are afforded the most extensive media coverage thereby possibly also enhancing their fan status. Marketing practices, of course, may play a large role in promoting top players with fans.

The survey results concerning tennis fans' media sources were both expected to some extent and unexpected. The expected result was that 92.1% of male tennis fans and 89.0% of female tennis fans relied on television as the primary source for information related to their favorite professional tennis player. One readily-available television source is, of course, The Tennis Channel, which is entirely devoted to live tennis tournament play or to rebroadcast of prior tennis tournaments. The coverage of professional tennis may have become available to more fans (both avid and casual) with coverage of Grand Slam events by ESPN, although not without some potential problems (Chase, 2015). The interesting and unexpected finding was that 25.4% of male tennis fans and 20.9% of female tennis fans reported still using newspapers as a source of coverage for their favorite players.

Research Question 1

This question concerned how fan gender and favorite professional player gender may factor in fan motivations and was stated as follows: How do fan gender and

professional player gender factor in determining attachment to a favorite tennis player? At least some significant findings concerning the importance of professional tennis player attractiveness were found. First, although the physical attractiveness of favorite male professional tennis players was significant for both male fans and female fans, the *M* for female fans with slightly higher than the *M* for male fans. That is, attractiveness of male professional players seemed somewhat more important to female fans than for male fans. Second, physical attractiveness of female professional tennis players was also significant for both male and female fans. However, as might be expected, the mean for male fans was somewhat higher than the mean for female fans, suggesting that physical attractiveness of female professional players seemed somewhat more important to male fans than to female fans. The importance of athlete physical attractiveness has been documented in prior studies and some also document differences based on fan gender (Fink & Parker, 2009; Hoegele, Schmidt, & Torgler, 2016; Klugman, 2015; Madrigal, 2006). The research by Fink and Parker (2009) concluded that there was a gender difference in fan motives concerning athlete physical attractiveness. That is, the physical attraction motive was found to be more important to females than males, at least toward NFL players, although it was near the bottom of female fan motives. Madrigal (2006) reported that the interest generated in aesthetic sports such as gymnastics (as opposed to purposive sports such as tennis, basketball, or football which involve offense, defense, and strategy) was significantly correlated with fan appreciation of athlete physical attractiveness. Even expressions of erotic desires and pleasures among some male fans of Australian football and American football were reported by Klugman (2015). An interesting study by Hoegele et al. (2016) provided additional insight into the topic of

athlete physical attractiveness in European professional soccer. Player physical attractiveness was found important for fans, but not in the expected way. That is, fan perception of player physical attractiveness alone was not that important, but the perception of player attractiveness was found to influence the way in which fans rated the importance of other player characteristics. Specifically, fan perceptions of player facial attractiveness related to higher fan scores for the importance of player personality, behavior, and skills. The conclusion is that in some professional sports (as in many other things), physical beauty matters. Tennis appears to be no exception. For example, for some professional tennis stars, such as Maria Sharapova and Fernando Verdasco, glamour and beauty seemed to be more important to fans than tennis performance. Neither of these players has ranked in the top 10, but both have been known for product endorsement and advertising based on physical attractiveness. From this exposure and her tennis success, Sharapova was the highest paid female athlete in 2008 at $26 million (Fink et al., 2012). Verdasco has even posed nude for a magazine centerfold photo (Naden, 2013).

Research Question 2

This question concerned how fan status (player *and* spectator or spectator *only*) would factor in motivations toward favorite professional tennis players and was stated as follows: How does fan avidity as expressed by being a tennis player *and* spectator versus a spectator *only* factor in determining attachment to a favorite tennis player. As previously described, too few respondents identified as spectator *only* (n = 24) to answer the question. There was some suspicion that this number would be relatively small and "snowball" sampling was encouraged among participants, but with little apparent success

in this study (Atkinson & Flint, 2001; Goodman, 1961). It may have been possible to greatly lengthen the sampling time frame to increase the actual number of spectator *only* respondents, but this was not possible. Alternatively, it may have been possible to devise some direct approach to this sub-population, perhaps by going to major tennis events to directly solicit responses from fans who identified as spectators *only*.

At least some use was made of the survey responses by the player *and* spectator group of fans. Means for the different fan motivations for this fan status group were ranked for comparison between favorite male and favorite female professional tennis players. This simple ranking suggested that the same fan motivations were most important for both favorite male and favorite female professional players: (a) player skills, (b) player behavior, (c) player reputation, and (d) player personality. Fans ranked player physical attractiveness the lowest for both male professional players and female professional tennis players in this comparison. The apparent difference between the findings in Question 2 compared to Question 1 may be related to statistical significance. In Question 1, physical attractiveness of the professional tennis player was found to be the only motivation that was statistically significant among tennis fans. However, in Question 2, motivations were simply ranked by magnitude and were not tested for statistical significance. The rankings were interesting in that they showed the same relative importance among fan motivations for male professional tennis players and for female professional tennis players, but the findings could not be tested for statistical significance. In this relative ranking, professional tennis player physical attractiveness was the lowest.

The study by Hoegele et al. (2016) provides a useful comparison in that a soccer player's personality, behavior, experience, and skills were also considered most important to fans. Madrigal (2006) concluded that the unique personality of the athlete may be an important factor in fan appreciation of a skilled performance and may even be considered more important than the appreciation of the performance itself. Athlete reputation is complex and may include the publics' impressions of an athlete's proven ability to excel in his or her chosen sport over time, the consistent high quality of the effort and the result, and the way the athlete conducts himself/herself in the sport and in the broader social context (Agyemang, 2014; Zinko et al., 2012). Thus, the components of athlete reputation may include different impressions of athletic ability, athletic accomplishment, sportsmanship, style of play, and personal behavior. The skills of professional athletes have been found to be an attraction for both male and female spectators at one tennis event and this may be related to the finding that many spectators were also tennis players (Sack et al., 2009; Tokuyama & Greenwell, 2011). Tennis fans who were also players, in contrast to non-players, were better able to appreciate the difficulty of tennis athletic skills. Spectator involvement with the activity of tennis and associated fan attraction were also confirmed in the study by Bee and Havitz (2010) as important in developing psychological commitment and fan loyalty. Similarly, in a study of soccer fans that were both players and spectators, Tokuyama and Greenwell (2011) found that affiliation with the sport predicted commitment among highly-involved individuals, whereas stress reduction was more predictive among lesser-involved individuals. The conclusion was that professional athletes, including tennis players, may

be judged by many different factors, but those involving player skills, player behavior, player reputation, and player personality are important.

Research Question 3

Research Question 3 was concerned with how fan avidity, as measured by years of fan experience, may factor in fan motivations toward favorite professional tennis players. Results from the analysis of fan experience and motivations toward favorite male professional tennis players suggest at least some relationships. Significant differences were found for the fan motivations of player skills, player behavior, player reputation, and player philanthropy for favorite male professional tennis players. In addition, examination of estimated margins means (*M*) for these factors suggested some trends. The means for player behavior, player reputation, and player philanthropy/support for social causes each tracked positively with tennis fan experience. That is, the apparent importance of player behavior, player reputation, and player philanthropy increased with increasing fan experience. No such clear trends were evident with male professional player skills although the mean for this motivation was highest among those fans with the greatest experience. When examining the impact of fan experience on motivations toward favorite female professional tennis players, only player as a hero was significant. Comparison of the estimate marginal means for this motivation factor revealed no trend, but the mean value was lowest for fans with the most experience (HEF), suggesting that this motivation was less important to the most experienced fans. One explanation for the findings regarding fan experience and motivations was that fans with more experience may have moved beyond the superficial motivations of professional tennis player physical attractiveness or hero status. More experienced fans would be expected to have

more appreciation for player skill, reputation, behavior, and social engagement, perhaps partially based upon their having watched the development of these traits in their favorite player over the course of the player's career and because of the importance of these factors in the lives of experienced fans.

No prior studies were identified that specifically examined fan experience in years in relation to fan motivations in sports. One recent study by Hoegele et al. (2016), however, examined fan age (and gender) in relation to the importance of some celebrity characteristics of European soccer players. Interestingly, these researchers concluded that as fans become older, the importance of athlete good behavior and athlete experience increase. The length of time spent as a fan (possibly implying more knowledge and experience of the game) has also been shown to account for the most variance in sport attachment in one study (Mahony et al., 2002). The results in the present study suggest a similar conclusion in that more experienced fans seem to place more importance in those professional player characteristics that relate to behavior, reputation, skill, and how socially involved their favorite players are.

Practical Applications of Research Findings

Even the relatively modest findings in the present study may have at least some practical applications. First, the findings suggest that promoters of major tennis events may benefit by promoting professional tennis player physical attractiveness since this motivation seemed important to fans. Although this motivation was common to both male and female fans, male fans seemed to be more focused on the attractiveness of female professional players and female fans more focused on the attractiveness of male professional players. As with many things, beauty sells. Second, promoters of major

tennis events may be advised to focus on the desirable professional tennis player traits of reputation, good behavior, social engagement, player skills, and even athlete as a hero (at least for female professional tennis players) among the top professional players participating in the tournament. However, fan motivation concerning female professional tennis players, as a hero, compared to male professional tennis players, may not have been viewed in the same way by all fans. That is, whereas male athletes have been seen to represent "social ideals and masculine virtues, and as embodying values that learnt on the playing fields will readily transfer to everyday life," female sports stars have been often marginalized, trivialized, and objectified (Lines, 2001, p. 285). For these reasons, it may be difficult to separate the fan motivation of physical attraction from hero status toward female professional tennis players. Regardless, focus on female professional tennis players as a hero may still not only increase fan attendance, but may also increase fan satisfaction, vicarious identity, and the fan experience. This focus may provide positive re-enforcement with increased fan loyalty. Third, more experienced fans may be best influenced by promotion directed toward the less tangible, but important, motivations of professional tennis player personality, reputation, and social engagement. Finally, although only a limited amount can be done to increase physical attractiveness, less-experienced and less-well-known professional tennis players could perhaps enhance their public status by taking notice of those professional tennis player attributes that most appeal to fans. This group of players could also take notice of the exemplary display of these desirable traits by most of the current top professional tennis players. In conclusion, as with many aspects of life based largely on human emotion, it seems that with tennis fan motivations, perception may also be reality.

Limitations

As an online survey, the results of this study may be limited by the specific characteristics of the potential respondents who are members of the tennis organizations, clubs, and training facilities to which the survey was sent and to those potential respondents who access popular tennis websites and blogs. This relatively selective approach may eliminate those potential respondents who do not use the Internet to connect with the tennis community. Second, the constraints of time limited access to the survey to only seven weeks. Expansion of the time frame or providing the survey during different times of the year may have expanded the diversity of the sample population. Truthfulness of respondents is a limitation of this and all surveys. Another limitation of the present study relates to the extent to which the proposed motivations (the eight factors) account for fan motivations in life. That is, could there be other fan motivations or combinations of motivations not included in the survey that may also play a role in fan attraction? An additional limitation relates to the extent to which the results of this study involving tennis fans may be extrapolated to other single athlete sports, if at all. Finally, the findings may be limited by the difficulty in locating a large group of those fans who self-identify as spectators *only*, since they may not be formally affiliated with tennis organizations, or may do so only in small numbers. Regardless of these limitations, the results may still have some usefulness and may be at least applicable to the sport of tennis.

Future Research

This study is the first of its kind in that it focused on fan motivations toward individual players in an individual sport and it focused solely on the sport of tennis.

Regardless, the experience gained in conducting the study and the study findings suggest at least some other potential avenues for future research. Additional fan demographic factors (to include fan income, educational level, family status, and nationality) could be examined as factors having some impact on fan motivation, but focused on professional tennis players in general or upon either male professional players or female professional players (but not both). The relatively large percentage of tennis fans who indicated having no favorite professional player were an intriguing group and future research could be directed at examining other possible motivating factors attracting them to tennis. Future research could be directed toward specifically how tennis fans use the current media sources and how these sources may be enhanced to provide a better fan experience. Research could be directed toward the best and most productive use of the important fan motivation factors in marketing and promotion of tennis events featuring top tennis players to both increase attendance and fan satisfaction. Finally, consumer research could be designed to evaluate the most effective ways (if any) by which tennis fan motivations may be used by professional players to either enhance or repair their standing with fans.

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APPENDIX A

MAIN STUDY INSTITUTIOINAL REVIEW BOARD APPROVAL

UNIVERSITY OF
NORTHERN COLORADO

Institutional Review Board

DATE:	May 20, 2016
TO:	Alex Y. Rondon Azcarate, B.B.A, M.S.
FROM:	University of Northern Colorado (UNCO) IRB
PROJECT TITLE:	[907365-2] Fan Motives for Identification with Professional Tennis Players
SUBMISSION TYPE:	Amendment/Modification
ACTION:	APPROVAL/VERIFICATION OF EXEMPT STATUS
DECISION DATE:	May 19, 2016
EXPIRATION DATE:	May 19, 2020

Thank you for your submission of Amendment/Modification materials for this project. The University of Northern Colorado (UNCO) IRB approves this project and verifies its status as EXEMPT according to federal IRB regulations. **Hello Alex,**

Thanks for your quick modifications. Everything looks great and your application is approved. Good luck with your research.

Sincerely,

Nancy White, PhD, IRB Co-Chair
We will retain a copy of this correspondence within our records for a duration of 4 years. If you have any questions, please contact Sherry May at 970-351-1910 or Sherry.May@unco.edu. Please include your project title and reference number in all correspondence with this committee.

This letter has been electronically signed in accordance with all applicable regulations, and a copy is retained within University of Northern Colorado (UNCO) IRB's records.

APPENDIX B

INTRODUCTORY EMAIL FOR MAIN STUDY

INTRODUCTORY EMAIL FOR MAIN STUDY

Subject: Online research study--Fan Motives for Identifying with Professional Tennis Players

Tennis Fans,

I am requesting your help in a graduate school research project examining tennis fan motivations related to favorite professional tennis players. This study will be the subject of my doctoral dissertation in Sport Administration.

The online survey will consist of an initial section with demographic questions and then sections related to specific motivations toward favorite male professional tennis players and/or favorite female professional tennis players. Completion of the survey will take approximately 10 minutes. The survey is completely voluntary and confidential.

Also, please share the survey with family or friends, especially those who may not be tennis players, but who still enjoy watching tennis.

If you consent to participate in this pilot study, then please access the survey though the following link:

Fan Motives For Identifying With Professional Tennis Players

Your participation is greatly appreciated!

Sincerely,

Alex Rondon (PhD student in Sport Administration, UNCO)

APPENDIX C

CONSENT FORM FOR SURVEY PARTICIPANTS

CONSENT FORM FOR SURVEY PARTICIPANTS

Fan Motives for Identification with Professional Tennis Players
Research Study

Investigator Contact Information: Alex Y. Rondon, BBA, MS (PhD student in Sport Administration), University of Northern Colorado, Butler Hancock, Office 216G, Greeley, CO 80639; (970) 351-1717. E-mail: alex.rondonazcarate@unco.edu

Advisor Contact Information: Dr. Dianna Gray, University of Northern Colorado, Gunter 2690, Greeley, CO 80639; 970-351-1725. E-mail: dianna.gray@unco.edu

Hello! My name is Alex Rondon, and I am requesting your help in completing this electronic questionnaire as an essential part of my dissertation research project. This study will examine various motivation factors that may attract fans to top professional tennis players. The research findings may be used by marketers of professional tennis events and sports products to better appeal to fans based upon these fan motivations. Completion of this confidential online survey will require approximately 10 to 15 minutes and will consist of demographic data and responses to eight different categories of motivating factors with a total of 24 responses (Scale ranging from strongly disagree to strongly agree). Your participation will be greatly appreciated.

There are no foreseeable risks to survey participants and you may complete this survey at your convenience. No discomfort is anticipated in completing the short confidential survey. You will receive no direct benefits other than my appreciation for helping with the survey. However, the field of tennis may benefit from the findings through better knowledge of fan motivation, which may lead to positive results for fans.

Participation is voluntary. You may decide not to participate in this study and if you begin participation you may still decide to stop and withdraw at any time. Your decision will be respected and will not result in loss of benefits to which you are otherwise entitled. Having read the above and having had an opportunity to ask any questions, please complete the questionnaire if you would like to participate in this research. By completing the questionnaire, you give your permission to be included in this study as a participant. You may keep this form for future reference. If you have any concerns about your selection or treatment as a research participant, please contact Sherry May, IRB Administrator, Office of Sponsored Programs, 25 Kepner Hall, University of Northern Colorado Greeley, CO 80639; 970-351-1910.

APPENDIX D

THE SURVEY INSTRUMENT

TENNIS FAN MOTIVATION SURVEY 2016

DEMOGRAPHIC QUESTIONS:

Please indicate your sex: Male Female

Please provide your age in years: _____

Do you consider yourself primarily a tennis player/spectator or only a spectator?

Tennis Player and Spectator Tennis Spectator Only

How many years have you been a tennis player and spectator? _____

How many years have you been a spectator only? _____

Have your attended a professional tennis tournament other than a Grand Slam event?

Yes No

Have you attended a Grand Slam tournament?

Yes No

MOTIVATION QUESTIONS FOR ATP

Do you have a favorite in the ATP (Men's Professional Tour)? Yes No

What is the actual or approximate current ranking of your favorite male tennis player? _____

How do you follow your favorite ATP player? (Select all that apply.)

Television
Internet
Tennis magazines
Pod-casts
Radio
Newspapers
Other tennis or special publications

I feel like I have won when my favorite male player wins.

Strongly Disagree	Somewhat Disagree	Disagree	Neutral	Agree	Somewhat Agree	Strongly Agree
☐	☐	☐	☐	☐	☐	☐

I feel a personal sense of achievement when my favorite male player wins.

Strongly Disagree	Somewhat Disagree	Disagree	Neutral	Agree	Somewhat Agree	Strongly Agree
☐	☐	☐	☐	☐	☐	☐

I feel proud when my favorite male player wins.

Strongly Disagree	Somewhat Disagree	Disagree	Neutral	Agree	Somewhat Agree	Strongly Agree
☐	☐	☐	☐	☐	☐	☐

I enjoy watching my favorite male player because he is physically attractive.

Strongly Disagree	Somewhat Disagree	Disagree	Neutral	Agree	Somewhat Agree	Strongly Agree
☐	☐	☐	☐	☐	☐	☐

The main reason that I watch my favorite male player is because he is physically attractive.

Strongly Disagree	Somewhat Disagree	Disagree	Neutral	Agree	Somewhat Agree	Strongly Agree
☐	☐	☐	☐	☐	☐	☐

“Sex appeal” is a big reason why I watch my favorite male player.

Strongly Disagree	Somewhat Disagree	Disagree	Neutral	Agree	Somewhat Agree	Strongly Agree
☐	☐	☐	☐	☐	☐	☐

The physical skills of my favorite male player are something that I appreciate.

Strongly Disagree	Somewhat Disagree	Disagree	Neutral	Agree	Somewhat Agree	Strongly Agree
☐	☐	☐	☐	☐	☐	☐

Watching my favorite male player in a well-executed performance is something that I enjoy.

Strongly Disagree	Somewhat Disagree	Disagree	Neutral	Agree	Somewhat Agree	Strongly Agree
☐	☐	☐	☐	☐	☐	☐

I enjoy a skillful performance by my favorite male player.

Strongly Disagree	Somewhat Disagree	Disagree	Neutral	Agree	Somewhat Agree	Strongly Agree
☐	☐	☐	☐	☐	☐	☐

I feel that my favorite male player is a hero.

Strongly Disagree	Somewhat Disagree	Disagree	Neutral	Agree	Somewhat Agree	Strongly Agree
☐	☐	☐	☐	☐	☐	☐

I feel that my favorite male player is powerful.

Strongly Disagree	Somewhat Disagree	Disagree	Neutral	Agree	Somewhat Agree	Strongly Agree
☐	☐	☐	☐	☐	☐	☐

I feel that my favorite male player is brave and has great soul.

Strongly Disagree	Somewhat Disagree	Disagree	Neutral	Agree	Somewhat Agree	Strongly Agree
☐	☐	☐	☐	☐	☐	☐

My favorite male player’s personality is important to me.

Strongly Disagree	Somewhat Disagree	Disagree	Neutral	Agree	Somewhat Agree	Strongly Agree
☐	☐	☐	☐	☐	☐	☐

My favorite male player shares important personality traits with me.

Strongly Disagree	Somewhat Disagree	Disagree	Neutral	Agree	Somewhat Agree	Strongly Agree
☐	☐	☐	☐	☐	☐	☐

I enjoy my favorite male player’s personality.

Strongly Disagree	Somewhat Disagree	Disagree	Neutral	Agree	Somewhat Agree	Strongly Agree
☐	☐	☐	☐	☐	☐	☐

Good behavior by my favorite male player is important to me.

Strongly Disagree	Somewhat Disagree	Disagree	Neutral	Agree	Somewhat Agree	Strongly Agree
☐	☐	☐	☐	☐	☐	☐

I feel that others should appreciate the good example set by my favorite male player.

Strongly Disagree	Somewhat Disagree	Disagree	Neutral	Agree	Somewhat Agree	Strongly Agree
☐	☐	☐	☐	☐	☐	☐

I look up to my favorite male player because of his good behavior.

Strongly Disagree	Somewhat Disagree	Disagree	Neutral	Agree	Somewhat Agree	Strongly Agree
☐	☐	☐	☐	☐	☐	☐

The reputation of my favorite male player is important to me.

Strongly Disagree	Somewhat Disagree	Disagree	Neutral	Agree	Somewhat Agree	Strongly Agree
☐	☐	☐	☐	☐	☐	☐

The reputation of my favorite male player should be respected by other fans.

Strongly Disagree	Somewhat Disagree	Disagree	Neutral	Agree	Somewhat Agree	Strongly Agree
☐	☐	☐	☐	☐	☐	☐

I respect the reputation of my favorite male player.

Strongly *Somewhat* *Somewhat*

Strongly Disagree	Somewhat Disagree	Disagree	Neutral	Agree	Somewhat Agree	Strongly Agree
☐	☐	☐	☐	☐	☐	☐

I am aware that my favorite male player is involved in philanthropy and social causes.

Strongly *Somewhat* *Somewhat*

Strongly Disagree	Somewhat Disagree	Disagree	Neutral	Agree	Somewhat Agree	Strongly Agree
☐	☐	☐	☐	☐	☐	☐

It is important to me that my favorite male player is involved in philanthropy and social causes.

Strongly Disagree	Somewhat Disagree	Disagree	Neutral	Agree	Somewhat Agree	Strongly Agree
☐	☐	☐	☐	☐	☐	☐

I think that other fans should also appreciate my favorite male player's involvement in philanthropy and social causes.

Strongly Strongly Disagree	*Somewhat* Somewhat Disagree	Disagree	Neutral	*Somewhat* Agree	Somewhat Agree	Strongly Agree
☐	☐	☐	☐	☐	☐	☐

MOTIVATION QUESTIONS FOR WTA

Do you have a favorite in the WTA (Women's Professional Tour)? Yes No

What is the actual or approximate current ranking of your favorite female tennis player? _____

How do you follow your favorite WTA player? (Select all that apply.)

- Television
- Internet
- Tennis magazines
- Pod-casts
- Radio
- Newspapers
- Other tennis or special publications

I feel like I have won when my favorite female player wins.

Strongly Disagree	Somewhat Disagree	Disagree	Neutral	Agree	Somewhat Agree	Strongly Agree
☐	☐	☐	☐	☐	☐	☐

I feel a personal sense of achievement when my favorite female player wins.

Strongly Disagree	Somewhat Disagree	Disagree	Neutral	Agree	Somewhat Agree	Strongly Agree
☐	☐	☐	☐	☐	☐	☐

I feel proud when my favorite female player wins.

Strongly Disagree	Somewhat Disagree	Disagree	Neutral	Agree	Somewhat Agree	Strongly Agree
☐	☐	☐	☐	☐	☐	☐

I enjoy watching my favorite female player because she is physically attractive.

Strongly Disagree	Somewhat Disagree	Disagree	Neutral	Agree	Somewhat Agree	Strongly Agree
☐	☐	☐	☐	☐	☐	☐

The main reason that I watch my favorite female player is because she is physically attractive.

Strongly Disagree	Somewhat Disagree	Disagree	Neutral	Agree	Somewhat Agree	Strongly Agree
☐	☐	☐	☐	☐	☐	☐

"Sex appeal" is a big reason why I watch my favorite female player.

Strongly Disagree	Somewhat Disagree	Disagree	Neutral	Agree	Somewhat Agree	Strongly Agree
☐	☐	☐	☐	☐	☐	☐

The physical skills of my favorite female player are something that I appreciate.

Strongly Disagree	Somewhat Disagree	Disagree	Neutral	Agree	Somewhat Agree	Strongly Agree
☐	☐	☐	☐	☐	☐	☐

Watching my favorite female player in a well-executed performance is something that I enjoy.

Strongly Disagree	Somewhat Disagree	Disagree	Neutral	Agree	Somewhat Agree	Strongly Agree
☐	☐	☐	☐	☐	☐	☐

I enjoy a skillful performance by my favorite female player.

Strongly Disagree	Somewhat Disagree	Disagree	Neutral	Agree	Somewhat Agree	Strongly Agree
☐	☐	☐	☐	☐	☐	☐

I feel that my favorite female player is a hero.

Strongly Disagree	Somewhat Disagree	Disagree	Neutral	Agree	Somewhat Agree	Strongly Agree
☐	☐	☐	☐	☐	☐	☐

I feel that my favorite female player is powerful.

Strongly Disagree	Somewhat Disagree	Disagree	Neutral	Agree	Somewhat Agree	Strongly Agree
☐	☐	☐	☐	☐	☐	☐

I feel that my favorite female player is brave and has great soul.

Strongly Disagree	Somewhat Disagree	Disagree	Neutral	Agree	Somewhat Agree	Strongly Agree
☐	☐	☐	☐	☐	☐	☐

My favorite female player's personality is important to me.

Strongly Disagree	Somewhat Disagree	Disagree	Neutral	Agree	Somewhat Agree	Strongly Agree
☐	☐	☐	☐	☐	☐	☐

My favorite female player shares important personality traits with me.

Strongly Disagree	Somewhat Disagree	Disagree	Neutral	Agree	Somewhat Agree	Strongly Agree
☐	☐	☐	☐	☐	☐	☐

I enjoy my favorite female player's personality.

Strongly Disagree	Somewhat Disagree	Disagree	Neutral	Agree	Somewhat Agree	Strongly Agree
☐	☐	☐	☐	☐	☐	☐

Good behavior by my favorite female player is important to me.

Strongly Disagree	Somewhat Disagree	Disagree	Neutral	Agree	Somewhat Agree	Strongly Agree
☐	☐	☐	☐	☐	☐	☐

I feel that others should appreciate the good example set by my favorite female player.

Strongly Disagree	Somewhat Disagree	Disagree	Neutral	Agree	Somewhat Agree	Strongly Agree
☐	☐	☐	☐	☐	☐	☐

I look up to my favorite female tennis player because of her good behavior.

Strongly Disagree	Somewhat Disagree	Disagree	Neutral	Agree	Somewhat Agree	Strongly Agree
☐	☐	☐	☐	☐	☐	☐

The reputation of my favorite female player is important to me.

Strongly Disagree	Somewhat Disagree	Disagree	Neutral	Agree	Somewhat Agree	Strongly Agree
☐	☐	☐	☐	☐	☐	☐

The reputation of my favorite female player should be respected by other fans.

Strongly Disagree	Somewhat Disagree	Disagree	Neutral	Agree	Somewhat Agree	Strongly Agree
☐	☐	☐	☐	☐	☐	☐

I respect the reputation of my favorite female player.

Strongly Disagree	Somewhat Disagree	Disagree	Neutral	Agree	Somewhat Agree	Strongly Agree
☐	☐	☐	☐	☐	☐	☐

I am aware that my favorite female player is involved in philanthropy and social causes.

Strongly Disagree	Somewhat Disagree	Disagree	Neutral	Agree	Somewhat Agree	Strongly Agree
☐	☐	☐	☐	☐	☐	☐

It is important to me that my favorite female player is involved in philanthropy and social causes.

Strongly Disagree	Somewhat Disagree	Disagree	Neutral	Agree	Somewhat Agree	Strongly Agree
☐	☐	☐	☐	☐	☐	☐

I think that other fans should also appreciate my favorite female player’s involvement in philanthropy and social causes.

Strongly Disagree	Somewhat Disagree	Disagree	Neutral	Agree	Somewhat Agree	Strongly Agree
☐	☐	☐	☐	☐	☐	☐

APPENDIX E

PILOT STUDY INSTITUTIONAL REVIEW BOARD EXEMPTION

Research Involving Human Participants
Coversheet for UNC IRB Application

UNC Bringing education to life.

*Important note: **You must use Adobe Acrobat to complete this form**. Do not use Preview (the default Mac OS X application for displaying PDF documents). There is a compatibility problem, and PDF forms filled out in Preview do not display the form data when opened in Acrobat. If you do not have Acrobat Reader, you may download a free copy on the Adobe Website. If you choose not to use Acrobat, you will encounter a delay in processing of your IRB application.*

Project Title: Determinants of Fan Attraction to Top-Ranked Professional Tennis Players

Contact Information (reviewers will communicate via IRBNet)

Principal Investigator: Alex Y. Rondon — Phone #: (970) 351-1717

School/Department: CNHS/SES — UNC email: rond8031@bears.unco.edu

Research Advisor (*Required for students*): Dr. Randy Larkins — UNC email: randy.larkins@unco.edu

CERTIFICATION OF PRINCIPAL INVESTIGATOR (PI)

As Principal Investigator, I certify to the following:

- This application accurately reflects the proposed research;
- I and all researchers who will have contact with the participants or access to the data have reviewed this application and the Guidelines of the UNC IRB and will comply with the letter and spirit of these policies;
- I have examined UNC's Data Security Policy for Research Projects, and determined by level to be: Select:
- If my security level is at 3, 4, or 5, or if my research is subject to a data use agreement, I will submit a data security clearance form to Information Management and Technology, and will advise the IRB when that application is approved;
- I will adhere to all requirements of the Data Security Policy for Research Projects that are relevant for protection of my research information;
- I understand that any changes in procedure that affect participants must be submitted to the IRB (using an ***Amendment/Modification*** in IRBNet) for written approval prior to their implementation; and
- I further understand that any adverse events and significant changes in risk for participants must be immediately reported in writing to the UNC IRB.

The signature of the PI must be completed in IRBNet.

CERTIFICATION OF RESEARCH ADVISOR (if applicable)

As the applicant's Research Advisor, I certify to the following:

I have thoroughly reviewed this application, confirm its accuracy, and accept responsibility for monitoring the conduct of this research, the maintenance of any consent documents as required by the IRB; and, in the case of expedited reviews, the continuation review of this project in approximately one year;

The signature of the Research Advisor (if applicable) must be completed in IRBNet.

Summary Information (to be completed by the Lead Investigator)

Review Category: ☑ Exempt (2-3 weeks) ☐ Expedited (3-4 weeks) ☐ Full-Board (4-6 weeks)

(NOTE: During winter, spring, and summer breaks the review will take significantly longer.)

Research participants will be: (e.g., adults, elderly, children, healthy, unhealthy, etc.)

Research participants will will adults (18 years of age and older) tennis players

Type of data collected will be: (e.g., survey responses, interviews, blood samples, existing data, etc.)

Type of data collected will be survey responses

Location of collected data:

Location of collected data will be tennis clubs.

Is standard consent documentation used?	☑ YES	☐ NO	If NO, it must be addressed within the application.
Is permission required (e.g., school district)?	☐ YES	☑ NO	If YES, include a letter (this is not consent).
Is this a funded research project?	☐ YES	☑ NO	If YES, identify the funding source within the application.

3.11.14

Clear the Form

APPENDIX F

INTRODUCTORY EMAIL TO SURVEY: PARTICIPANTS

PILOT STUDY INTRODUCTORY EMAIL

Subject: Pilot Study-Fan Motivations for Identifying with Professional Tennis Players
Tennis Fans,

I am requesting your help in a pilot study concerning tennis fan motivations related to favorite professional tennis players. The online survey will consist of an initial section with demographic questions and then sections related to specific motivations toward favorite male professional tennis players and/or favorite female professional tennis players. Completion of the survey will take approximately 10 minutes. The survey is completely voluntary and confidential.

If you chose to take the survey, I would appreciate any comments concerning difficulties or ambiguities. Also, please share the survey with family or friends, especially those who may not be tennis players, but who still enjoy watching tennis.

This pilot study is class project for me at UNCO, but this pilot study will help me with the finalization of the methods to be used in my dissertation project.

If you consent to participate in this pilot study, then please access the survey though the following link:

Fan Motives For Identifying With Professional Tennis Players

Your participation and your comments are greatly appreciated!

Sincerely,

Alex Rondon (PhD student in Sport Administration, UNCO)

APPENDIX G

CONSENT EMAIL FOR PILOT STUDY

CONSENT EMAIL FOR PILOT STUDY

Determinants of Fan Attraction to Top-Ranked Professional Tennis Players
Research Study

Investigator Contact Information: Alex Y. Rondon, BBA, MS (PhD student in Sport Administration), University of Northern Colorado, Butler Hancock, Office 216G, Greeley, CO 80639; (970) 351-1717

Advisor Contact Information: Dr. Randy Larkins, University of Northern Colorado, Applied Statistics & Research McKee Hall 526 Campus Box 124 Greeley, CO 80639-0001; (970)351-2416.

Hello! My name is Alex Rondon, and I am requesting your help in completing this electronic questionnaire. This study will examine various motivation factors that may attract fans to top professional tennis players. The research findings may be used by marketers of professional tennis events and sports products to better appeal to fans based upon these fan motivations. Completion of this confidential online survey will require approximately 10 to 15 minutes and will consist of demographic data and responses to eight different categories of motivating factors (total of 24 questions in Likert-style format).

There are no foreseeable risks to survey participants. You can complete this survey at your convenience on or before April 9, 2016. No discomfort is anticipated in completing the short confidential survey. You will receive no direct benefits other than my appreciation for helping with the survey, although the field of tennis may benefit from the findings through better knowledge of fan motivation, which may lead to positive results for fans.

Participation is voluntary. You may decide not to participate in this study and if you begin participation you may still decide to stop and withdraw at any time. Your decision will be respected and will not result in loss of benefits to which you are otherwise entitled. Having read the above and having had an opportunity to ask any questions, please complete the questionnaire if you would like to participate in this research. By completing the questionnaire, you give your permission to be included in this study as a participant. You may keep this form for future reference. If you have any concerns about your selection or treatment as a research participant, please contact Sherry May, IRB Administrator, Office of Sponsored Programs, 25 Kepner Hall, University of Northern Colorado Greeley, CO 80639; 970-351-1910.