THE ROLE OF HUMAN AND SOCIAL CAPITAL IN EXPLAINING THE LACK OF
FEMALE HEAD COACHES IN WOMEN'S INTERCOLLEGIATE SPORTS

A Senior Honors Thesis

by

KELLY J. STUMPH

Submitted to the Office of Honors Programs
& Academic Scholarships
Texas A&M University
in partial fulfillment of the requirements of the
UNIVERSITY UNDERGRADUATE
RESEARCH FELLOWS

April 2003

Group: Engineering & Physics 3
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ABSTRACT

The Role of Human and Social Capital in Explaining the Lack of Female Head Coaches in Women's Intercollegiate Sports. (April 2003)

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Women of today are experiencing phenomenal growth in collegiate athletic participation. Because of Title IX, funds are being allocated to women's programs more efficiently and effectively. In recent times, the media has made steps in covering more female sporting events and the public is gaining a rising excitement for women's athletics. Despite the heightened number of female college athletes, the number of female head coaches is actually declining.

Specifically, NCAA Division I women's collegiate soccer was analyzed because of its exceptionally large gap in the number of male head coaches versus that of females: 66% males compared to 34% females. Surveys were mailed to every assistant coach competing on the Division I level (N = 575). A total of 155 coaches returned the questionnaire for a response rate of 31%. Items were featured on the survey to gather information regarding human capital (education, employment, experience, etc.), social
capital (networking and social structure of an individual), and career outcomes (promotions, salary, career satisfaction, perceived opportunity, and aspiration to become a head coach). Females perceived greater career opportunity than did the males; however, men demonstrated a stronger desire to become a head coach than did the women. Human and social capital did not mediate the gender effect upon the career outcomes. In essence, gender made the greatest impact upon all five of the career outcomes tested. In the midst of the most recent studies being conducted, it appears that males are head coaches simply because of the advantage that their gender provides them. A focused look at the factors that contribute to females becoming head soccer coaches will provide further understanding and insight as to why the number female head coaches are so scarce.
This work is dedicated to a young soul who never ceases to amaze me. She is an exceptional person that encourages everyone around her simply by her presence. Inside of her beats a heart of gold, and outwardly a smile is always worn. It is an honor to be her big sister. Kara, you are such an inspiration.
Research and the processes associated with it were somewhat vague to me before I embarked upon this academic endeavor. It would not have been possible without the hard work and tremendous patience of my advisor, Dr. Michael Sagas. His diligence and enthusiasm for research was encouraging and motivated me to continue to strive for excellence. The Fellows Program and the individuals that administrate its operations ought to be commended for their hard work and for relentlessly striving to challenge undergraduate students to stretch their abilities to the limit. Research – what an experience!!
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CHAPTER I
INTRODUCTION

Women of today are currently experiencing an all-time high in opportunities to participate in intercollegiate athletics. With the enactment of Title IX throughout our collegiate institutions, women competing in sports at the college level have increased fivefold (Acosta & Carpenter, 2002). Ironically, as women discover the plethora of opportunities to pursue a collegiate athletic career, these female athletes are being lead by fewer and fewer female head coaches. As of 1972, 90% of head coaches presiding over women's teams were female compared to 58% in 1978 (Acosta & Carpenter, 2002). The statistics reveal an all-time low for the percentage of head female coaches in 2002 at 44% (Acosta & Carpenter, 2002). This vast decline in the percentage of female head coaches has continued to plummet during such a tremendous period of rich growth for women in collegiate athletics.

The data related to women's soccer, in particular, is quite alarming with its male to female ratio of current head coaches. Sixty-six percent of all women's soccer programs in the NCAA Division I programs are run by male head coaches. The remaining 34% of female head soccer coaches are 10 percentage points below the reported 44% of female head coaches that make up all of women's collegiate sports combined. Soccer, proving to be a catalyst in helping to aid the decrease in female head coaching numbers, is ironic since women hold a greater percentage of assistant coaching spots. At approximately 51%, females hold more assistant soccer coaching positions than males (Dehass, 2003). In contrast, the most likely group of head-coach candidates are usually discovered and eventually selected primarily from the pool of the most
obvious group of individuals— aspiring assistant coaches. Current female assistant coaches outnumber male assistants, so a sizable pool of prospective female head coaches does in fact exist. However, the transition from this majority of female assistant coaches has not yet succeeded in producing an equally reflective percentage of female head coaches.

Statement of the Problem

Based upon the available literature, it appears that the female assistant coaches in women's intercollegiate soccer are less successful in their careers. However, no empirical research has been conducted to explore the possibilities as to why this is suspected. Ultimately, it is hopeful that through this research it can be determined why the male gender dominates over the female gender in women's collegiate soccer programs. More importantly, we will attempt to determine if human capital and social capital account for the differences in a number of different career outcomes. This issue is extremely mystifying considering that as opportunities for female athletes are climbing to unprecedented levels, female coaches are not abundantly filling the coaching positions for these same female athletes.

Significance of the Study

Women's collegiate soccer exhibits a unique ratio of male to female head and assistant coaches. Even though females barely outnumber male assistant coaches by only two percentage points, male head coaches create an enormous deficit with a 66% to 34% difference between male and female head coaches. Career outcomes such as the following will be analyzed in order to uncover the reasons as to why the number of
female head soccer coaches continues to decline- promotions, salary, career satisfaction, perceived opportunity, and aspiration to head coach.

Purpose of the Study

The purpose of this study is two fold. First, we desire to establish if females are indeed less successful in the coaching profession than their male counterparts. If females truly are less successful, what factors contribute to that lack of success? All five of the career outcomes mentioned previously, social and human capital, and discrimination could each influence the degree to which the female coach succeeds. However, in previous studies it has been found that females may be “satisfied with less” (Jackson, 1989). For example, within the female working world of intercollegiate sports, female administrators were encountering fewer promotions and being placed into lower level administrative positions than other male administrators. The females were likely receiving lower salaries than males, yet the females did not report less career satisfaction (Parks et al., 1995). There are specific factors attributed to the disparity of female head soccer coaches. The intrinsic measure of career success through the eyes of a woman versus a man is only a single factor that feeds into the obvious situation at hand- the number of female head coaches is plummeting.
CHAPTER II
CONCEPTUAL FRAMEWORK

Several career outcomes contribute to the end result of gaining a head coach's position. We will examine career outcomes such as: salary, number of promotions, career satisfaction, aspiration to advance, and perceived opportunity. In today's society, there resides a discrete but definite "glass ceiling" that is felt by employed females in the working world (Dingell & Maloney, 2002). This term "refers to specific attitudinal and organizational barriers that severely limit opportunities for the upward mobility of qualified women candidates" (Dingell & Maloney, 2002, p. 5). Although the "glass ceiling" remains invisible, it succeeds in being an impenetrable barricade to women in their efforts to attain senior or executive status despite their accomplishments and equal merit to that of men. Current functioning business entities ranging from sports to engineering firms, are mostly run by men; thus implying that males receive more promotions than females. In an effort to analyze specific career outcomes, it is hoped that greater knowledge will be gained concerning the coaching deficit between males and females.

Assuming a natural pay increase will coincide with a promotion from an assistant's position to that of a head coach, assistant coaches are not typically thought to make a large salary. Not very many assistant coaches are willing to make their given salary as an assistant for the remainder of his or her career. As an assistant, that individual will either eventually get out of coaching all together or simply use it as a stepping stone to pursue greater opportunities (Sagas, Cunningham, & Ashley, 2000). Because of the greater number of male head soccer coaches, it appears that males truly
are using these assistant positions as a building block for their career. However, it is clear that this salary deficit is simply a result of women earning lower salaries in an array of industries not just that of coaching. For instance, it was reported that in 1995, a full-time female communications manager earned $0.86 for every $1.00 earned by her full-time male manager counterpart (Dingell & Maloney, 2002). Even though it hardly seems reasonable to compensate a male worker with equal qualifications as his female counterpart with a higher salary, this occurrence may be evident simply because females do not reside in the coaching field as long as males. Failure in this single career outcome, which contributes to eventually becoming a head coach, can be attributed to women’s lack of persistence in coaching over an extended period of time (Hart, Hasbrook, & Mathes 1986).

Promotions are absolutely vital in gaining a head coaching position. It is apparent that females in the coaching world might be “pigeon holed” into specific roles (Sagas & Cunningham, in press). They abundantly fill assistant coaching positions, yet there does not appear to be much advancement beyond this level as compared to males. This predicament entangles the female coach and limits her development in other aspects of coaching, which could lead to eventual head coaching positions or even a future administrative position.

In order to pursue any occupational goal, an individual must feel empowered and enabled as well as satisfied with his or her accomplishments. Career satisfaction should be experienced in striving for greater success in a field of work. However, this occupational contentment could be a catalyst in hindering a woman’s advancement in
coaching. Female assistant coaches have more often reported than males that they feel emotionally tied to their current team. This team loyalty and satisfaction discourages the female assistant coach from applying for head coaching spots elsewhere; hence, they would have to abandon their current team (Pastore, 1991).

Women's collegiate soccer has exploded in participation and popularity (Dehass, 2003). As women's soccer has been made familiar with the public sport arena and has been embraced by eager fans, at this point it has occurred that males rapidly began to fill these head coaching spots. Men aspire more intensely than their female counterparts to become a head coach (Sagas et al., 2000). It is apparent that males also realize the sacrifice and time commitment that must be invested into attaining their own program in the future. When asked how many more years of additional assistant coaching would be needed in order to be properly qualified for the head coach's position, 77.56% of female assistant coaches believed that 3 more years of service would be sufficient. In contrast, only 38.78% of the male assistant coaches believed that 3 more years was needed for proper qualification of the position (Sagas et al., 2000). These statistics allude to the possibility that women as compared to men underestimate the time and effort required to be a head coach. It must be recognized that those who diligently pursue a position will most likely be rewarded with that spot.

As a young assistant coach, it could be intimidating to seek out a head coaching position. The applicants' perceptions of the amount of opportunity that is available will proceed to either encourage pursuit of a promotion or discourage and decrease his or her view of what advancement opportunity might be available. It was found in a study
conducted by Sagas et al. (2000), that females perceived significantly greater gender advantages as well as more opportunity when seeking a position in the coaching field than did males. Many male head-coach candidates have claimed that reverse discrimination has negatively affected his career opportunity (Sagas et al., 2000). However, males are being awarded the vast majority of the positions being offered. Females appear to have weaker odds of breaking into the increasingly male saturated women’s soccer programs.

*Human Capital*

Just as a business must invest in quality capital in order to be efficient as well as profitable, an individual must see to it that he provide himself with every opportunity to be a marketable entity to his field. Human capital exhibits the applicant’s “personal portfolio” of all the various accomplishments, training, and priceless experience that has been acquired in preparation to reach his goals. It is vital to an aspiring head coach to accumulate the necessary qualifications in order to press on towards loftier aspirations, such as becoming a head coach of a Division I NCAA program. Human capital theory states that individuals with greater amounts of education, experience, and training are much more likely to enjoy the attainment of greater career success and noticeable advances in their career (Becker, 1993; Nordhaug, 1993). Based upon this theory of gains through an increase of vital capital, it is also said that human capital levels the playing field for job applicants and nullifies discrimination between different people groups. Human capital is completely justified as the standard of judgment as applied to merit, not subjective standards such as people groups (Morrison & Glinow, 1990).
Human capital is commonly categorized into two sub-groups: training and education. In this particular case training refers to conferences or clinics attended that enhance coaching knowledge and learning experience such as “hands on” coaching roles that have prepared an individual to lead his or her own team in the future. Education simply exemplifies the level of schooling or degrees in those institutions that were attained in order to prepare one’s self for coaching. The above resources and the quantity in which they exist in an individual, is extremely important to their employer—greater amounts of productivity and generated performance expected increases with a rise in human capital acquired (Becker, 1975; Maranto & Rodgers, 1984). It is in the best interest of aspiring head coaches to attain a great amount of human capital, for it grants that person a competitive advantage over those with less capital (Forbes & Piercy, 1991) and justifies increases in monetary return instead of hindering further advancement (Becker, 1975).

Female applicants or assistant coaches may possess all of the necessary human capital to receive a head coaching position, yet these positions are predominantly being awarded to their male counterparts. However, studies have identified that female prospects continually are not adequately preparing themselves academically to enter the coaching field (Sagas, 1999). It is also evident that women do not pursue their coaching careers for the length of time as men do (Hart et al., 1986). As a result of a shortened career span, it has also been observed that women do not actively seek head coaching positions (Acosta & Carpenter, 1985; Hart et al., 1986; Lovett & Lowry, 1988). Because of the lack of in depth human capital analyses, the correlation between the number of
female coaches and their level of human capital versus their male counterparts is relatively unknown among the contenders in the world of sports.

Although it was made clear that females are more likely to remain in the coaching field for a shorter time span, it was discovered in at least one study that females possessed greater amounts of human capital than the males, yet they did not advance past being an assistant coach as frequently as did the males (Cunningham & Sagas, 2002). Specifically, Cunningham and Sagas found that female assistant basketball coaches had more playing experience and had received more honors than their male counterparts. However, these same female coaches had shorter occupational tenures, greater occupational turnover intentions, and less desire to become a head coach (Cunningham & Sagas, 2002). Human capital attained by women does not yield the expected corresponding career outcomes. However, Kirchmeyer (1998) did create and empirically verified a model that proposes differential returns on male versus female human capital. A female may possess equal or surpassing amounts of capital in comparison to a male, yet the capital that he does possess is worth far more than hers.

**Social Capital**

Social capital is defined by Coleman (1990) as any aspect of social structure that creates value and facilitates the actions of the individuals within that social structure. Along with necessary skills and knowledge, relationships with other individuals within one's field are also needed. This social capital does not merely come into existence through social gatherings or friendly encounters, but is only established when relations facilitate business contacts and are instrumental in gaining resources relative to attaining
greater career success (Coleman, 1990). Social interactions of every day life are important and can prove to be very beneficial: in the world of coaching, networks and socialization are not only important but they are an essential ingredient to the ascent leading to a head coach's position. Social capital was measured by analyzing network size, gender similarity, hierarchical ties, intraorganizational ties, and tie strength.

*Network Size.* In attempting to measure the social factor of career success, researchers start with the most basic element which are relationships or ties to others. A group of people connected through a variation of ties and the pattern of their formation is said to be a network (Siebert, Kramer, & Liden, 2001). Not only are the individual relationships important, but the mere number of people contained within the networks has an impact upon the effectiveness of the network (Siebert et al., 2001). It is to the individual's benefit if one of their contacts is closely tied to someone of great influence, and the network size sets the framework upon which strong ties may be developed.

*Gender Similarity.* Research has revealed that, in general, individuals of similar people groups or who possess like interests prefer to interact and associate themselves with people that belong to a similar people group as opposed to one that is different from their own (Schneider, 1987; Levine & Moreland, 1990). For the above mentioned reason, it is logical that closer relationships are able to be formed with those that a person chooses to surround himself with. In the event that a woman works in an environment that is primarily male, she may experience more difficulty establishing not a sizable network but one with depth because of the gender dissimilarity that exists.
This limitation restricts the growth of a sound network and as a result does not support social capital, which contributes to greater career success (Ibarra, 1993: 1995).

*Hierarchical Ties.* Everyone is probably familiar with the benefits of "knowing people in high places". This idea applies to virtually all avenues of life that involves climbing the career ladder. It is beneficial to foster connections with people who rank higher in seniority because of the instant access to a new level of information, resources, and influence (Siebert et al., 2001). Not only does one strive to have a large network but one that contains the richest resourcefulness per capita.

*Intraorganizational Ties.* Assuming that an individual desired to advance within their current organization and staying along side prior research (Podolny & Baron, 1997), intraorganizational ties in a social network is of great importance. Siebert et al. (2001) states that intraorganizational ties would benefit the individual most in regards to information, resources, and influence. It might also ought to be considered that advancement may not automatically be within one's own organization. If all contacts are only inside the given firm, it may be hard to branch out beyond those boundaries in the future because of the secluded network.

*Tie Strength.* The degree to which an individual is connected with those in their network will greatly impact the influence that his or her network has upon career success. Tie strength is a resource of social capital characterized by the amount of time, emotional investment, and reciprocity involved in a relationship between two or more people (Granovetter, 1973). Strong ties entail closer ties and a much greater time commitment in developing the relationship; whereas, weak ties function more like an
acquaintanceship and demands a lesser time restraint. Strong ties can initiate an exchange of career and psychosocial support (Kram, 1988); and if these strong ties are to higher level individuals, promotions and organizational advancement is more likely to follow (Drcher & Ash, 1990). Weak ties are effective at bringing in "socially distant ideas and information" (Baker, 1994).

Discrimination

Many factors are taken into account when attempting to select the most qualified person for a position. However, many of these factors may be disregarded because of the perceptions or stereotypes instantly placed upon the applicant. Discrimination states that any discrepancies that exist in one's career outcomes are a direct result of minority status (gender) as opposed to the content of one's "personal portfolio" (human capital, social capital, or achievements).

Two types of discrimination exist: access and treatment discrimination (Greenhaus, Parasuraman, & Wormley, 1990). Access discrimination says that an applicant may be automatically rejected because of his or her minority status without any consideration of his or her skills and experience (Ilgen & Youtz, 1986; James, 2000). Treatment discrimination takes place after a person is hired into the organization. This type of discrimination might be identified through few or no promotions, less monetary compensation, or fewer job opportunities (Greenhaus et al., 1990).

The manner in which people are discriminated against can be on an individual, group, or organizational level. Individual discrimination is practiced when one is subjected to prejudices or stereotypes which society has created. Social closure practices
(Tamaskovic-Devy, 1993), or more commonly known as group-level discrimination, is evident as a result of a superior status group (male) attempting to exclude a more inferior status group (female) from reaching his or her full potential within the organization. Finally, the organizational-level of discrimination is built into company policies and is not meant to intentionally discourage or hinder a specific group of people. If it is found that our sample contains females with equal or superior levels of human and social capital, yet their career satisfaction is low or their career outcomes yield less than favorable results, discrimination against female collegiate soccer assistant coaches does exist.

**Study Hypotheses**

In order to meet the purposes of this study, we constructed and tested three specific hypotheses:

**H1**: There will be a direct effect on career outcome variables because of gender, such that female coaches will report less of these measures when compared with male coaches.

**H1a**: Human and social capital will mediate the direct effect of gender upon the career outcomes.

**H1b**: In the event that females produce equal to or greater amounts of both capital and thus does not mediate the effects of gender on the career outcomes, discrimination acts as the direct catalyst in yielding less than desirable career outcomes.
CHAPTER III
METHODOLOGY

Procedures and Sample

A questionnaire was developed and sent to NCAA Division I soccer women’s assistant soccer coaches (see Appendix). There are presently 253 NCAA Division I schools in the nation. It was assumed that each of the 253 institutions featured a women’s varsity soccer team and had two assistant coaches on staff. Some schools may not have a large enough budget to hire two assistants, but a total of 575 surveys were sent out. One hundred fifty-five assistants responded to the questionnaire (males = 55, females = 100) totaling a 31% response rate.

It is unknown as to the reason that the number of female respondents are almost double in size as that of the male respondents. The questionnaires were addressed to “Attn.: Women’s Soccer Program, First or Second Assistant”. Considering that 51% of women’s soccer assistants are in fact female, it is expected to have at least a slightly greater number of replies from females than from males. Within the sample, the men were slightly older than their female counterparts (M = 29.69; SD = 4.51; M = 26.64; SD = 3.75 respectively). However, the surveys revealed that men had slightly more experience in coaching on the college level than the women (M = 4.50, SD = 3.16; M = 3.83, SD = 2.82 respectively).

Instrumentation

Descriptive Information

The participants were asked to provide their age, in years, and gender (0 = male, 1 = female).
**Human Capital Predictors**

In order to quantify the respondents' human capital, they were presented questions referring to their education, years of coaching experience (at the high school, college, or professional level), playing experience (in college or professionally), and occupational tenure. The education variable was measured by asking the participants about their highest degree earned (1 = Doctorate, 2 = Master's, 3 = Bachelor's, 4 = Associate, 5 = Other; reverse coded for analysis). They were specifically asked how long they had been an employee in their current athletic department, which was an indicator of organizational tenure.

**Social Capital Predictor**

A *Network Identification Exercise* instrument was used to establish the social capital of the coaches (Seibert, et al., 2001). This exercise conceptualized a network and then asked the respondents to indicate the various persons that make up their network with initials (summed for network size), indicate the gender of each member (*gender similarity* of network), reveal members in positions higher than themselves within the organization (*hierarchical ties*), whether or not the member works in the same athletic department (*intraorganizational tie*), and the degree of closeness that they share (*tie strength*). The participants' own gender was also acquired as a part of the network identification exercise. This particular instrument enabled the analysis of the subjects' internal network content and the type of contacts with which these participants were connected.
Basically, the above variables were calculated and measured by proportional means. Gender similarity was determined by dividing the number of same gender network members by the total number of members. Thus, a one would indicate complete gender similarity and a zero represents a complete variation of gender. The zero to one scale also applies to the remaining variables, in the manner that extremities are illustrated. Hierarchical ties take the number of what is considered to be higher level network participants over the total number of members. Whenever the number of people working within an organization is compared to the total group, intraorganizational ties are found. Finally, to calculate tie strength, a measure that corresponds with Siebert et al. (2001) and James (2000) was used. Any of the ties labeled as “less close” or “distant” were assigned a zero. All others that were labeled as “especially close” were coded with a one and were considered to form the strong ties portion of the group. These strong ties were divided by the number of total ties, and we produced results that indicated the networks’ internal tie strength to its members.

**Dependent Variables**

Promotions, defined as “any increases in level and/or significant increases in job responsibilities or job scope”, were analyzed by using a one-item question which followed Siebert et al. (2001, p. 227). The participants were simply asked how many promotions they had received; a 7-point scale with responses ranging from none to more than 11 was provided. Like promotions, salary used a single question to measure the monetary compensation of the assistants. The respondents were asked what current
salary range they were categorized within (1 = < $20,000; 2 = $20,001-$30,000; 3 = $30,001-$40,000; 4 = $40,001-$50,000; 5 = $50,001-$60,000; 6 = > $60,000)

Career satisfaction was measured by presenting five questions created by Greenhaus et al. (1990). A 7-point Likert type scale, with 1 (strongly disagree) to 7 (strongly agree), was the scaling system used in responding to the career satisfaction statement inquiry. For example, sample questions read as follows – “I am satisfied with the progress I have made toward meeting my goals for income” or “I am satisfied with the success I have achieved in my career”.

Both perceived opportunity and the intent to apply or desire to become a head coach utilized two items each to collect the data needed for adequate measurement. The 7-point Likert scale from 1 (none) to 7 (a lot) was applied to a single perceived opportunity item as compared to the other: 1 (not likely) to 7 (very likely) was used on the second opportunity survey question as well as on the first desire to head coach item. A 7-point Likert type scale with 1 (strongly disagree) to 7 (strongly agree) was used in asking the participants if becoming a head coach was one of their career goals. Finally, respondents were asked if they had ever applied for a head coach’s position and if so, how many.

Data Analysis

The descriptive statistics (means, standard deviations, and bivariate correlations) needed to support the study variables were computed. Due to a multi-item instrument used to analyze career satisfaction, an internal consistency (Cronbach’s alpha) reliability estimate was obtained for this career outcome measure. Because of the apparent gender
differences in age, we controlled for age in the resulting analytical techniques.

Hypothesis 1 speculated that a gender difference would be evident in career success. This hypothesis was tested using a series of analysis of covariance (ANCOVA) procedures, which controlled for the age of the coaches. Hypothesis 2a and 2b were instrumental in attempting to discover if the relationship between career success and gender was mediated by human and social capital. According to Baron and Kenny (1986), mediation is supported if (a) the independent variable is significantly related to the dependent variable, (b) the independent variable is significantly related to the mediator, (c) the mediator is significantly related to the dependent variable, and (d) after accounting for the mediator, the independent variable is not significantly related to the dependent variable. Hypothesis 1 tested the relationship between the independent variable (gender) and the dependent variables (career outcomes). In the test of the second condition, yet another ANCOVA analysis was conducted to test for gender differences in the social and human capital variables while still controlling for the difference in age. Separate hierarchical regressions were calculated to test the third as well as the fourth condition of mediation.
CHAPTER IV
RESULTS

Table 1 contains the means, standard deviations, and bivariate correlation values of all 16 study variables used throughout this research. Additional descriptive data that display means and standard deviation scores compared between male and female assistant coaches can be found in Table 2.

Results from the ANCOVA tests on Hypothesis 1 unveiled a gender difference on two of the five career outcomes. For instance, after controlling for age, the male assistant coaches expressed a more intense degree of aspiration to become a head coach than did their female counterparts (M = 6.22; SD = 1.20; M = 4.95; SD = 1.89 respectively). (F(1, 146) = 14.25, p < .001). However, despite a greater male aspiration, female assistants perceived more opportunity for advancement in the coaching arena than did the male assistants (M = 5.18; SD = 1.13; M = 4.50; SD = 1.50 respectively), (F(1, 146) = 9.59, p = .002). Therefore, Hypothesis 1 received support only in regards to the aspiration to head coach variable.

As made evident through the testing of H1, only aspiration to head coach proved to be a supportive variable. In order to test the second condition, another ANCOVA procedure was executed. Results uncovered a gender difference on three human or social capital components.
### Table 1. Means, standard deviations, and bivariate correlations of study variables

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<td>.041</td>
<td>.038</td>
<td>.046</td>
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</table>

*Note:* All values greater than .240 are significant at the p < .001 level.
Table 2

Descriptive Data

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<tr>
<th>Variable</th>
<th>Male Coaches</th>
<th>Female Coaches</th>
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</thead>
<tbody>
<tr>
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<td>M</td>
<td>SD</td>
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<tr>
<td>Education</td>
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<td>Coaching Experience</td>
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<tr>
<td>Played College</td>
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<tr>
<td>Played Professionally</td>
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<td>Network Size</td>
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<td>Gender Similarity</td>
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<td>.18</td>
</tr>
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<td>Hierarchical Ties</td>
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<td>.25</td>
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<td>Intraorganizational Ties</td>
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<td>Promotions</td>
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<td>1.03</td>
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<td>Salary</td>
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<tr>
<td>Career Satisfaction</td>
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<td>.92</td>
</tr>
<tr>
<td>Opportunity</td>
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<td>1.50</td>
</tr>
<tr>
<td>Desire to head coach</td>
<td>6.22</td>
<td>1.20</td>
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</table>
Particularly, college coaching experience (M = 4.50; SD = 3.16; M = 3.83; SD = 2.82), $F(1, 146) = 14.25, p = .002$), professional playing experience (M = 0.48; SD = 0.50; M = 0.26; SD = 0.44), $(F(1, 146) = 4.91, p = .03$), and gender similarity (M = 0.72; SD = 0.18; M = 0.43; SD = 0.26), $F(1, 146) = 36.57, p < .001$) were all affected by a gender difference with males indicating higher amounts on each variable.

In order to test the third condition, we computed one hierarchical regression and proceeded to regress the single career outcome measure through the three gender-affected human and social capital variables in which they were all controlled for age.

The results found indicated that this block of three variables did not contribute unique variance beyond the age variable ($\Delta R^2 = .04, p = .10$). This discovery is informative by proving that mediation was not supported for the career outcomes variables. Thus, hypothesis 2a was not supported, and Hypothesis 2b received only partial support for the aspiration variable.
CHAPTER V
CONCLUSION

The decline in female head soccer coaches is a phenomenon that is evident in the majority of sports in NCAA Division I women’s sports but is intensified in soccer specifically. Based upon previous research and the alarming number of female head coaches that progressively declines, it was hypothesized that accordingly, females would report lower than males on career outcomes (number of promotions, salary, career satisfaction, perceived opportunity, and aspiration to head coach) which seeks to reveal an individual’s level of career success. However, this first hypothesis proved to be true only concerning the degree of aspiration to head coach; and furthermore, females reported greater perceived opportunity to head coach than did their male counterparts. Included within the level of aspiration to head coach variable was whether or not he or she had applied for a head coach’s position and if so, how many times. It can be determined that the females did not apply as many times as the male candidates, yet females perceive more availability in the area of head coaching positions. Females possibly envision greater opportunity simply because they have applied fewer times, thus not realizing to the same degree as the males the stiff competition for a given number of positions to be filled.

Hypothesis 2a predicted that human and social capital would mediate the direct effect of gender upon the career outcomes. It was found that this hypothesis was not supported. Of the human and social capital components, a gender difference was found in college coaching experience, professional playing experience, and gender similarity. However, when the regression was conducted with aspiration (the only supportive career
outcome variable to be tested) being run through the mediator, the human and social capital components did not mediate this direct effect upon the career outcome. Therefore, the gender effect was not eliminated and is not accounted for through mediation. In essence, the gender of an individual (in this study) proves to be a greater predictor of his or her career outcomes as opposed to the credentials in which he or she possesses as well as the social networks that make up their group of contacts. This conclusion conflicts with the human capital theory which credits career success to greater amounts of education, experience, and training (Becker, 1993; Nordhaug, 1993).

In light of the fact that gender has the greatest direct effect upon career outcomes, the door is left wide open for discrimination to be considered as the culprit in this equation. This discrimination may not be blatant, but it can still manifest influence without intentional motives present. Access discrimination is most likely the first to discriminate simply because males have an advantage over females in that they experience greater gender similarity within their social structure. This institutes the development of closer relationships amongst persons of the same people group, gender being the common factor within this study. In effect, simply breaking into an organization could be more difficult for a female versus a male because access discrimination occurs on account of the affinity to individuals similar to oneself. Males already occupy the majority of positions holding the power to hire, resulting in unconsciously hiring another male.

Organizational discrimination must not be discounted or overlooked. Females have found their way into coaching organizations – fifty one percent of women’s
assistant soccer coaches are female. However, inadvertently the numbers trail off as the percentage of females are compared to male head coaches. Further research on organizational discrimination is needed and could explore further the extent to which it truly exists. Females were found to aspire less to become a head coach, so discrimination cannot inhibit one who does not even pursue a goal. However, it must be made clear if discrimination inherent within the organization contributes to that decreased aspiration to pursue a head coaching position.

Limitations do exist within this study. The time restraint placed upon the process of receiving an adequate sample must be considered. Time only permitted a single mailing of the survey and a reminder as opposed to a second mailing of the survey following the reminder. The budget given also prevented a second printing and mailing of the survey. The scope of this study was finely focused solely upon NCAA Division I women's soccer, and a different understanding of discrimination and human and social capital may apply to different levels or divisions.

In summary, this study was conducted in order to explore components that take effect in the midst of a decline in female head soccer coaches of women's teams. Gender ultimately influenced career outcomes of assistant coaches, overshadowing the possible mediating effects of human and social capital. Discrimination remains as an explanation because of these circumstances. It would be in the best interest of coaches and administrators, for further research upon these concepts and possibilities to be conducted. The greater the comprehension attained concerning the disparity between the numbers of male and female head coaches, the more likely the sport world will
successfully “level the playing field” between two groups in order that the most qualified individual will rightfully gain what is deserved.
REFERENCES


APPENDIX
Thank you very much for completing the questionnaire. Please return it in the self-addressed postage paid envelope. Thank you again!

Soccer Coach Questionnaire

Thank you for participating in this study. Participation is voluntary and will take about 5-10 minutes of your time. Completion of this questionnaire indicates your express consent to participate in the study. Please respond to the following items to the best of your knowledge. Again, thank you for participating.

Please tell us a bit about yourself:

1. What is your age? ___

2. What is your sex? ___ Male ___ Female

3. What is your highest degree earned?
   ___ Doctorate ___ Master's ___ Bachelor's ___ Associate ___ Other

4. How many years have you/did you coach:
   a. College soccer _____ yrs
   b. Professional soccer _____ yrs
   c. High school soccer _____ yrs

5. Did you ever play college soccer? ___ Yes ___ No

6. Did you ever play professional soccer? ___ Yes ___ No

7. How many years have you been an employee in your current athletic department? _____ years

7. Promotions can be defined as:
   "Any increases in level and/or significant increases in job responsibilities or job scope."
   How many promotions have you experienced over your career as an intercollegiate soccer coach?
   ___ None ___ 1-2 ___ 3-4 ___ 5-6 ___ 7-8 ___ 9-10 ___ 11+

8. What is your current salary?
   ___ < $20,000 ___ $20,001-$30,000 ___ $30,001-$40,000 ___ $40,001-$50,000 ___ $50,001-$60,000 ___ $60,000+

Gender

0 Male
0 Female

Initials

Level

Same or Diff.

Closeness

O Higher Level
O Same or Lower
O Same Org.
O Dif. Org.
O Especially Close
O Less Close
O Distant

O Higher Level
O Same or Lower
O Same Org.
O Dif. Org.
O Especially Close
O Less Close
O Distant

O Higher Level
O Same or Lower
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O Same Org.
O Dif. Org.
O Especially Close
O Less Close
O Distant

O Higher Level
O Same or Lower
O Same Org.
O Dif. Org.
O Especially Close
O Less Close
O Distant
1. I am satisfied with the success I have achieved in my career.  
2. I am satisfied with the progress I have made toward meeting my overall career goals.  
3. I am satisfied with the progress I have made toward meeting my goals for advancement.  
4. I am satisfied with the progress I have made toward meeting my goals for the development of new skills.  
5. I am satisfied with the progress I have made toward meeting my goals for income.  
6. How much opportunity is there in the field for you to become a head soccer coach (assuming you desired/pursued such a position)?  
7. How likely is it you will be promoted to a higher position in your profession (assuming you desired/pursued a promotion)?  
8. How likely is it that you will search and apply for a head coaching position during your remaining coach career?  
9. Becoming a head coach is one of my career goals.  
10. Have you ever applied for a head coaching position in the past?  
10b. If yes, how many?

<table>
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<th>Strongly Agree</th>
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</thead>
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<td>1 2 3 4 5 6 7</td>
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</table>

**Based on the criteria in the following statement:**
"The people who have acted to help your career by speaking on your behalf, providing you with information, career opportunities, advice, or psychological support or whom you have regularly spoken regarding difficulties at work, alternative job opportunities, or long-term goals."

**Please list with initials as many people as possible that meet this criteria:**

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<th>Is this person in a higher organizational level than you?</th>
<th>Does this person work in the same athletic department as you?</th>
<th>How close do you feel to this person?</th>
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**Please continue on back if necessary**
VITA

Kelly J. Stumph

1021 Oak Ridge Dr.

Azle, TX 76020

I attended Azle High School from 1996 - 1999. That fall I began my first semester at Texas A&M University. I have been inducted into Phi Eta Sigma, the National Society for Collegiate Scholars, and the Golden Key Honors Society. This past year, I was also named as a nominee for the Jane A. Stallings Student Service Award, an honor presented on behalf of the College of Education Development Council.

Because I am an undergraduate student, professional experiences have been few. However, I am currently employed at the Texas A&M Student Recreational Center. I began as simply officiating sports, but I have progressed to positions with greater responsibilities such as working in the office performing data entry, supervising and training officials, and supervising facilities while intramural matches are being played.