

WHERE ARE THE WOMEN IN WOMEN'S SPORTS?
PREDICTORS OF FEMALE ATHLETES' INTEREST IN A COACHING CAREER

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By

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WHERE ARE THE WOMEN IN WOMEN'S SPORT?
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ABSTRACT

Although post-Title IX sport participation rates for girls and women have skyrocketed, the percentages of women in sport leadership roles have plummeted. Today, women hold only 44% of head coaching positions in women's intercollegiate athletics, compared with over 90% before the passage of Title IX. Few studies have examined how the perceptions of prospective coaches, and specifically female student-athletes, may impact this downward trend. The purpose of this study is to examine the impact of specific contextual factors (i.e., coach gender, female coaching role models, and perceived barriers) on coaching self-efficacy, outcome expectations, and career interest in coaching using social cognitive career theory as the theoretical framework. Participants were 205 predominantly White, heterosexual female student-athletes. Path analysis indicated that both contextual supports and barriers predicted coaching self-efficacy and that coaching self-efficacy predicted outcome expectations. Additionally, career interest in coaching was predicted by coaching self-efficacy, outcome expectations, and contextual supports and barriers. Post hoc model modifications indicated that a model portraying barriers and supports as both directly and indirectly (through their impact on self-efficacy) linked to career interest in coaching produced a better fit to the data than a model specifying only an indirect link to interest. Practical implications are discussed, as well as suggestions for further research in this relatively unexplored area of inquiry.

Where Are the Women in Women's Sports?

Predictors of Female Athletes' Interest in a Coaching Career

Although sport participation opportunities for girls and women have sky-rocketed since the passage of Title IX, the percentage of women in coaching positions has seen a drastic and continued decline. Today, women occupy only 44% of all head coaching positions in women's intercollegiate athletics (Acosta & Carpenter, 2004) and only 39% at NCAA institutions (Lapchick & Brenden, 2006), representing a striking decrease from pre-Title IX levels where women held more than 90% of the coaching positions in women's sports (Acosta & Carpenter, 2002). Much has been written about the apparent reasons for the initial decline (Hasbrook, 1988; Lopiano, 2001; Messner, 2002; Salter, 1996; Weiss & Stevens, 1993), and numerous authors have suggested causes for the continuing downward trend (Acosta & Carpenter, 2002; Boxill, 2003; Caccese & Mayerberg, 1984; Cunningham, Sagas, & Ashley, 2003; Hasbrook, Hart, Mathes, & True, 1990; Lopiano, 2001; Messner, 2002; Nelson, 2003; Salter, 1996; Thorngren, 1990; Weiss & Stevens, 1993; Women's Sports Foundation, 2002). Surprisingly few studies, however, have actually explored prospective female coaches' perceptions about coaching as a profession. Because current female athletes represent the largest pool of potential female coaches (Everhart & Chelladurai, 1998; Pastore, 1991), it seems especially important to better understand the specific factors that might influence their interest in the coaching profession as a crucial step toward reversing the steady decline of women in leadership positions and bridging the gender gap in sports.

Social Cognitive Career Theory: A Theoretical Framework

Social cognitive career theory (SCCT; Lent, Brown, & Hackett, 1994) is a comprehensive theory of career development that has broad applicability within the field of career research (Gysbers, Heppner, & Johnston, 2003). It also seems particularly relevant for furthering our understanding of predictors of female athletes' career interests in coaching. SCCT builds upon Bandura's (1986) general social cognitive theory to explain career development. It posits that career interests are shaped by self-efficacy beliefs and outcome expectations, which in turn are influenced by both individual and contextual factors (e.g., barriers and supports).

Self-Efficacy

Self-efficacy is defined by Bandura (1986) as "people's judgments of their capabilities to organize and execute courses of action required to attain designated types of performance" (p. 391). In essence, it is a form of task-specific self-confidence. According to SCCT, individuals who believe they possess the requisite skills to be successful in a given occupation are more likely to develop interest in that occupation (Lent et al., 1994). Thus, as it relates specifically to coaching, female athletes' beliefs about their abilities to perform the tasks associated with coaching (i.e., coaching self-efficacy) are likely to be an important predictor of their interest in coaching.

Although this proposed relationship has been supported in the career literature (e.g., Cunningham, Bruening, Sartore, Sagas, & Fink, 2005; Lent et al., 2001; Lent et al., 2003), it has not been thoroughly studied in the sport literature. Moreover, the research that has been done has offered equivocal findings. Coaching self-efficacy predicted interest in pursuing head coaching positions among assistant coaches and predicted turnover intentions for male assistants (Cunningham et al., 2003). Coaching self-efficacy

also is positively correlated with desire to coach interscholastically and intercollegiately (Everhart & Chelladurai, 1998). However, in a sample of male and female basketball players, high coaching self-efficacy did not translate into a strong desire to enter the coaching profession (Everhart & Chelladurai, 2004).

Outcome Expectations

According to SCCT, outcome expectations also influence the development of career interests. Specifically, individuals will be more interested in career paths in which positive consequences are anticipated and will be less interested in career paths in which primarily negative consequences are anticipated. More important than the objective anticipated outcome is the relative value or importance that an individual places on a particular outcome (Lent et al., 1994). Thus, in theory, individuals likely would be more attracted to a given career when there is a match between their desired outcomes and the anticipated outcomes of that particular occupation.

Although the importance of a fit between desired occupational outcomes and anticipated outcomes would seem a logical extension of the influence that outcome expectations are purported to have on career interest, this construct is relatively untested in the literature. Everhart and Chelladurai (1998) examined the attractiveness, or “valence,” of coaching for intercollegiate basketball players. Specifically, they explored the match between what participants desired from an occupation (preferred occupational valence) and what they perceived as being offered by a career in coaching (perceived valence of coaching). Overall, coaching was viewed as a very attractive career by both men and women in the sample. Interestingly, coaching was significantly more attractive

to women (i.e., women reported greater perceived valence of coaching), especially when they were coached by a woman.

Contextual Factors

In addition to internal factors like self-efficacy beliefs and outcome expectations, SCCT posits that various contextual factors, such as barriers and facilitators, also influence career interests (Lent et al., 1994). Previous research in the area of women and coaching has identified specific barriers and facilitators that may be especially important contextual influences to consider.

A number of authors have highlighted the impact of discriminatory hiring practices on women's entry into coaching (Acosta & Carpenter, 2002; Boxill, 2003; Lopiano, 2001). Discrimination also affects job satisfaction through gender inequity in job responsibilities (Weiss & Stevens, 1993), disparate salaries (Women's Sports Foundation, 2002), lack of support (Thorngren, 1990), sexual harassment and homophobia (Heaton, 1992; Lopiano, 2001; Nelson, 1991; Wellman & Blinde, 1997). In addition to perceived discrimination, working hours is another perceived barrier that affects both men and women who pursue careers in coaching (Barber, 1998; Pastore, 1991).

Although these two barriers (i.e, perceived discrimination and working hours) have been thoroughly discussed in the literature, very few studies have explored their influence on the development of career interests in coaching among athletes. Everhart and Chelladurai (1998) found that working hours was negatively correlated with desire to coach. Interestingly, coach gender had a significant effect on female athletes' perception of discrimination in coaching. Specifically, female athletes who were coached by men

were more likely to view discrimination as a greater barrier to entry in the profession than athletes who were coached by women. This finding highlights the potential supportive influence of another important contextual factor, female role models.

Within the sport literature, a number of researchers have emphasized the importance of exposure to positive female role models (Caccese & Mayerberg, 1984; George, 1989; Hilliard, 1996; Nelson, 1991; Thorngren, 1990; Weinberg, Reveles, & Jackson, 1984; Williams & Parkhouse, 1988). Others have expressed concerns about the negative consequences of limited exposure on female athletes (Acosta & Carpenter, 1985; George, 1989; Hart, Hasbrook, & Mathes, 1986; Lirgg, 1992). Despite the plethora of research citing the importance of role models, very few studies have actually examined the impact of female coaching role models, specifically. In a qualitative exploration of female athletes' interest in sport-related careers, coaching role models emerged as an important factor influencing athletes' perception about career possibilities (Lee, 1999).

Other research has investigated the relationship between coaching self-efficacy and coach gender among high school basketball players (Lirgg, Dibrezzo, & Smith, 1994). Although coach gender did not predict coaching self-efficacy, it did predict level of coaching aspiration. Specifically, female athletes who were coached by women were more likely to aspire to head coaching positions. In contrast, female athletes who were coached by men were just as likely to aspire to head coaching positions as they were to assistant coaching positions. Findings from this study suggest that the presence of female coaching role models may be an important facilitator in the development of coaching self-efficacy. Further, Everhart and Chelladurai (1998) suggest that female coaches may

serve as a buffer for female athletes against the potential negative impact of perceived barriers.

While minimal research has been conducted in this area, the few studies that have been done (Everhart & Chelladurai, 1998, 2004; Lirgg et al., 1994) have limited generalizability. These studies looked only at basketball players, and findings have not been compared across sports or division level. Further, different measures of coaching self-efficacy were used. Finally, exposure to female coaching role models was assessed differently across the studies. Specifically, Everhart and Chelladurai (1998) looked at the gender of participants' current coaches to measure exposure to female coaching role models, whereas Lirgg and colleagues (1994) asked participants to indicate the number and gender of previous coaches. Moreover, Williams and Parkhouse (1988) suggest that involvement with female role models, in and of itself, may be insufficient to positively influence female athletes. Rather, other coach variables, such as warmth and nurturance, personality similarity, skill, and attractiveness, may be just as important as gender for having a positive influence. In other words, the *quality* of female coaching role models may be as important as the *quantity*.

The Current Study

Thus, in addition to examining the effects of coaching self-efficacy and perceived occupational outcomes on interest in coaching, this study explores the impact of specific contextual factors, including the exposure to female coaching role models and perceived barriers (i.e., working hours, perceived discrimination). It also seeks to extend these findings across team sports and intercollegiate divisions.

Although in the original SCCT model, it was purported that contextual factors directly affect the relationships between interest, choice goals, and actual behavior (Lent et al., 1994), more recent research has supported a “mediated paths model” (Cunningham et al., 2005; Lent et al., 2001; Lent et al., 2003; Lent et al., 2005) . In this modified model, contextual factors are believed to exert an indirect influence on career interests by directly impacting self-efficacy. Given these recent findings, this study employs a mediated paths model to investigate the impact of contextual factors on career interests in coaching.

This study explores the utility of social cognitive career theory in predicting interest in coaching among female student-athletes. Specifically, it evaluates the degree to which the data fit SCCT’s mediated paths model for career interests. Based on this model, several predictions are made. These predictions are illustrated in Figure 1. First, it is expected that exposure to female coaching role models (see Figure 1, Paths 1 and 2) and perceived barriers (see Figure 1, Paths 3 and 4) will predict coaching self-efficacy. Specifically, it is expected that participants with greater exposure to female coaching role models and fewer perceived barriers will report greater coaching self-efficacy. Second, it also is expected that self-efficacy will predict outcome expectations (see Figure 1, Path 5), so that participants with greater coaching self-efficacy will have greater similarity between occupational valence and valence of coaching. Finally, it is expected that self-efficacy (see Figure 1, Path 6) and outcome expectations (see Figure 1, Path 7) will each predict career interest in coaching. Specifically, it is expected that participants with greater coaching self-efficacy and greater similarity between occupational valence and valence of coaching will be more interested in a coaching career.

Method

This Method section is divided into four subsections. First, characteristics of the sample and how it was obtained are described. Next, the instruments used in this study are described and evidence of their psychometric properties is provided. Third, data collection procedures are presented. Finally, the design and analyses for this study are discussed.

Participants

Participants for this study were 210 female student-athletes actively participating in team sports at four different collegiate institutions, representing the following intercollegiate divisions: (a) NCAA Division I (n = 60, 29%); (b) NCAA Division II (n = 59, 28%); (c) NCAA Division III (n = 45, 21%); and (d) NAIA (N = 46, 22%). All female student-athletes in the four women's team sports that were consistent across the divisions were invited to participate, including basketball (22%), volleyball (25%), soccer (25%), and softball (28%).

In terms of ethnicity, 177 participants (84%) indicated their ethnicity as White/Caucasian, 21 (10%) as Black/African American, 5 (2%) as Asian/Asian American, 2 (1%) as Latina/Hispanic, 1 (.5%) as Native American, and 2 (1%) as biracial/multiethnic. Two participants did not indicate ethnicity. In terms of sexual orientation, 116 participants (55%) indicated heterosexual, 2 (1%) lesbian, and 1 (.5%) bisexual. Ninety-one participants (43%) did not indicate sexual orientation. Regarding year in school, the sample included 95 (45 %) first-year students, 45 (21%) sophomores, 38 (18%) juniors, and 31 (15%) seniors. One person did not indicate her year in school.

Instruments

Participants were asked to complete a series of questionnaires. A copy of these instruments can be found in Appendix B. First, a demographic questionnaire asked participants to indicate their age, race/ethnicity, sexual orientation, year in school, and sport involvement in college (see Appendix B). Next, the Role of Sport Experiences in the Choice of Coaching as an Occupation (Everhart & Chelladurai, 1998) was used to measure (a) desire to coach at five different division levels (see Appendix B, Section I), (b) coaching self-efficacy (see Appendix B, Section II), (c) preferred occupational valence (see Appendix B, Section III), (d) valence of coaching (see Appendix B, Section IV), and (e) perceived barriers (see Appendix B, Section V). Finally, role model influence was measured by asking participants (a) to indicate the number and gender of all head and assistant coaches for each sport they have played since beginning high school and (b) to complete the Inspiration/Modeling subscale of the Influence of Others on Academic and Career Decisions Scale (IOACDS; Nauta & Kokaly, 2001) (see Appendix B, Section VI). The content of and psychometric properties for each of these measures are presented in the following paragraphs.

Desire to Coach Scale. Participants' interest in coaching was assessed using the Desire to Coach Scale (Everhart & Chelladurai, 1998). This measure (see Appendix B, Section I) asks participants to indicate on a 9-point Likert scale their desire to coach a sport team on a full-time basis at each of five different levels: high school, two-year colleges, NCAA Division III institutions, NCAA Division II institutions, and NCAA Division I universities. Responses range from 1 (not at all interested) to 9 (very interested), with higher scores indicating greater interest in coaching. Because the five

items used to assess participants' desire to coach were treated as a single-item scale, no reliability or validity data are reported.

Given that this study's primary focus is participants' interest in coaching, regardless of level, individual scores on this instrument were determined by taking the highest rating endorsed at any level. The decision was made to retain the original format of the Desire to Coach Scale so that participants would be prompted to think about the full spectrum of full-time coaching opportunities.

Coaching Self-Efficacy Scale. Future coaching self-efficacy was measured using the Coaching Self-Efficacy Scale (CSES) developed by Everhart and Chelladurai (1998). This 10-item measure (see Appendix B, Section II) asks participants to indicate on a 9-point Likert scale their level of confidence in their ability to complete a series of tasks associated with coaching. Sample items include "modify your strategies according to the strengths and weaknesses of your opponent," "select the best players suited for your strategy," and "change coaching strategies if they do not work." Responses range from 1 (no confidence) to 9 (complete confidence), with higher scores indicating greater coaching self-efficacy. Internal consistency for this scale using Cronbach's alpha is .96 (Everhart & Chelladurai, 1998, 2004). Factor loadings for items in this scale range from .50 to .81, indicating good construct validity (Everhart & Chelladurai, 1998). It also is positively and significantly correlated with the Desire to Coach Scale ($r = .18$), indicating evidence of convergent validity (Everhart, 1994).

Occupational Valence and Coaching Valence Scales. Outcome expectations were measured using the Occupational Valence Scale and the Coaching Valence Scale (Everhart & Chelladurai, 1998). These scales assess the level of importance participants

place on fulfilling certain higher order needs (e.g., achievement, altruism, autonomy, growth, security) through their future occupation and their perception of opportunities to fulfill those needs through coaching. Items are identical for both scales, but the prompt is different.

The 20-item Occupational Valence Scale (OVS; see Appendix B, Section III) asks participants to indicate the desirability of different experiences in a job on a 9-point Likert scale. Sample items include “setting goals yourself,” “using your ingenuity and inventiveness,” “a sense of achievement,” “helping others,” and “job security.” Responses range from 1 (least desirable) to 9 (most desirable), with higher scores indicating greater desirability for the different occupational experiences. Internal consistency for this scale using Cronbach’s alpha is .85 (Everhart & Chelladurai, 1998, 2004). Factor loadings for items in the scale range from .45 to .61, indicating adequate construct validity (Everhart & Chelladurai, 1998). The OVS is negatively and significantly correlated with the Desire to Coach Scale ($r = -.17$) and the effect size between the CSES and the OVS is .44, indicating convergent validity (Everhart, 1994).

The Coaching Valence Scale (CVS; see Appendix B, Section IV) asks participants to respond to the same 20 items and to indicate on a 9-point Likert scale the degree to which they believe different experiences can be found in coaching. Responses range from 1 (least prevalent) to 9 (most prevalent), with higher scores indicating greater opportunity to realize higher order needs through coaching. Internal consistency for this scale using Cronbach’s alpha is .93 (Everhart & Chelladurai, 1998, 2004). Factor loadings for items in the scale range from .55 to .79, indicating good construct validity

(Everhart & Chelladurai, 1998). The effect size between the CVS and the CSES and OVS is .08 and .53, respectively (Everhart, 1994).

In this study, the match between what participants want from an occupation (i.e., preferred occupational valence) and what they believe a coaching career will offer (i.e., perceived valence of coaching) was determined by taking the product of scores between corresponding items on the two scales (e.g., score on CVS item 1 multiplied by score on OVS item 1). Thus, scores ranged from 1 to 89, with higher scores indicating a greater attractiveness of certain job experiences and a better match between what participants want from a career and what they believe a career in coaching would offer.

Perceived Hindrance Scale. Perceived barriers was measured using the Perceived Hindrance Scale (Everhart & Chelladurai, 1998). This 18-item measure (see Appendix B, Section V) asks participants to indicate on a 9-point Likert scale the likelihood that certain statements would hinder them from entering coaching basketball as a career. It is comprised of two subscales, Working Hours (6 items) and Perceived Discrimination (12 items). Sample items for the Working Hours subscale include “coaching basketball takes too much time” and “coaching basketball interferes with social life.” Sample items for the Perceived Discrimination subscale include “female basketball coaches are discriminated against,” “perception of homosexuality among female basketball coaches,” and “biases of old boys’ network.” Responses for each item range from 1 (would not hinder at all) to 9 (would completely hinder), with higher scores indicating greater perceived barriers. Internal consistency for the subscales using Cronbach’s alpha is .87 and .94, respectively (Everhart & Chelladurai, 1998, 2004). Factor loadings for items on the Working Hours subscale range from .64 to .87. On the Perceived Discrimination scale, item factor

loadings range from .46 to .75, indicating adequate construct validity for both measures (Everhart & Chelladurai, 1998). This scale is negatively and significantly correlated with the Desire to Coach Scale ($r = -.38$) and the effect sizes between the Perceived Hindrance Scale and the CSES, OVS, and CVS are 1.24, 1.68, and 1.18, respectively, indicating convergent validity (Everhart, 1994).

Because this scale originally was developed for use specifically with basketball players, items were modified slightly to increase its utility across sports. For example, “coaching basketball takes too much time” was changed to “coaching takes too much time.” Similarly, “female basketball coaches are discriminated against” was changed to “female coaches are discriminated against.”

Role Model Influence. Role model influence was assessed using two different measures. First, the *quantity* of female coaching influence was obtained by asking participants to indicate the number and gender of all head and assistant coaches for each sport they have played since beginning high school (see Appendix B, Section VI). A percentage of female coaching role models was then calculated by dividing the number of female coaches by the total number of coaches. This measure of the quantity of female coaching influence is an extension of the method used by Lirgg and colleagues (1994), which asked participants to indicate only the number of head coaches for whom they had played in a single sport, and has been used in previous research (see Moran-Miller & Cox, 2007).

Second, the *quality* of female coaching influence was measured using the Inspiration/Modeling subscale of the Influence of Others on Academic and Career Decisions Scale (IOACDS; Nauta & Kokaly, 2001). This 7-item subscale (see Appendix

B, Section VI) asks participants to indicate on a 5-point Likert scale the degree to which female coaching role models have been influential in their career development.

Responses for each item range from 1 (strongly disagree) to 5 (strongly agree), with higher scores indicating greater role model influence. The IOACDS has been found to correlate in expected directions with measures of vocational identity and career decision, indicating adequate convergent and discriminant validity (Nauta & Kokaly, 2001).

Internal consistency for the Inspiration/Modeling subscale is .87 and test-retest reliability was .78 over a 10-week period. Factor loadings for items in the subscale range from .55 to .82, indicating good construct validity (Nauta & Kokaly, 2001).

Because this scale was developed to assess role model influence broadly, the directions for the scale were modified so that participants would be prompted to think of their female coaches when responding. Specifically, the directions were modified to read as follows: "Please think of the one female coach who has had the greatest impact on your career development and consider her when responding to the following questions."

Procedures

Participants were recruited through the athletic department of each participating university or college. The head coaches for each sport were contacted to solicit their support for the proposed research and their assistance with the recruitment process (see Appendix C for a copy of the solicitation letters). Data was collected during a team meeting or practice.

At the data collection, participants were told that the purpose of this research is to better understand how an athlete's sport experiences impact her perception of coaching as a possible career. They also were told that their participation would help increase

knowledge about how student-athletes think about coaching and that there are no risks or discomforts associated with their participation. They were informed that their participation in the research was strictly voluntary and that they could choose to stop at any time. Prior to completing the demographic questionnaire and the coaching self-efficacy scale, participants were asked to read and sign a consent form approved by the Campus Institutional Review Board at the University of Missouri-Columbia (see Appendix D for a copy of the Consent Form).

Design and Analysis

Data for this study were analyzed using path analysis to determine the significance of paths between variables. Means, standard deviations, and bivariate correlations were calculated for all variables, including perceived barriers, exposure to female coaching role models, coaching self-efficacy, occupational valence, valence of coaching, and career interest in coaching. The hypothesized model posits that exposure to female coaching role models, as measured by the percentage of female coaches (see Figure 1, Path 1) and the Role Model Influence subscale of the IOACDS (see Figure 1, Path 2) and perceived barriers, as measured by the Working Hours and Perceived Discrimination subscales of the Perceived Hindrances Scale (see Figure 1, Paths 3 and 4) will predict coaching self-efficacy. Specifically, it is expected that participants with fewer perceived barriers and greater exposure to female coaching role models will report greater coaching self-efficacy. The model also posits that coaching self-efficacy, as measured by the Coaching Self-Efficacy Scale (see Figure 1, Path 6) and outcome expectations, as measured by the match between scores on the Occupational Valence Scale and the Coaching Valence Scale (see Figure 1, Path 7) will predict career interest in

coaching. Specifically, it is expected that participants with greater coaching self-efficacy and greater similarity between occupational valence and valence of coaching will be more interested in coaching. Finally, the model posits that coaching self-efficacy will predict outcome expectations (see Figure 1, Path 5), so that participants with greater coaching self-efficacy will have greater similarity between occupational valence and valence of coaching.

Results

This Results section summarizes the statistical analyses used to test the fit of the hypothesized model to the data. First, results of the data cleaning and screening process are reported. Then, results from descriptive analyses are detailed. Finally, results from the formal path analysis procedures are presented.

Data Screening

Prior to conducting the formal path analysis procedures, items 2, 4, and 7 of the Role Model Influence Scale were reversed scored. Data also were examined to ensure there were no overly influential observations (i.e., outliers), accuracy of data entry, no missing values, and normality. No multivariate outliers were identified, using Mahalanobis distance with $p < .001$; however, six univariate outliers were identified. Two of these were deleted due to inaccurate reporting (i.e., participants indicated no female coaches when their current head and assistant coach were female). Additionally, two women had extremely low scores on coaching self-efficacy ($z = -6.47$ and -4.92). As suggested by Tabachnick and Fidell (2007), these cases were retained and assigned a value that was one unit closer to the next most extreme score in the distribution.

In terms of missing data, three cases were deleted due to participants not completing two or more of the measures. Additionally, group means were inserted for nine cases with missing values on one of the variables (e.g., coaching self-efficacy, percentage of female coaches, role model influence). As suggested by Tabachnick and Fidell (2007), analyses using only complete cases and with group mean substitutions for cases missing data on one variable were compared and revealed similar results. Path analyses were performed using data from 205 female student-athletes.

Inspection of the study data using histograms and the Shapiro-Wilk tests indicated no violations of the normality assumption. None of the observed variables was significantly skewed or highly kurtotic (i.e., > 3.75) (Tabachnick & Fidell, 2007). The scatterplots for pairs of variables also were examined, and variables appeared to be linearly related, if at all. The determinant of the matrix was larger than zero, indicating no singularity.

Descriptive Analyses

Prior to analysis, Cronbach's alpha was calculated for all of the measures used in this study. All measures displayed reliability greater than the acceptable level suggested by Nunnally (1978) of .70. Table 1 summarizes the results and provides descriptive statistics for each instrument, and Table 2 presents the correlation matrix of all the study variables.

In order to describe the study variables (i.e., percent female coaches, role model influence, working hours, perceived discrimination, coaching self-efficacy, outcome expectations, and interest in coaching) in terms of type of sport (i.e., volleyball, basketball, softball, and soccer) and division (i.e., NCAA Division I, NCAA Division II,

NCAA Division III, or NAIA), two multivariate analysis of data (MANOVA) were performed. For all MANOVAs the Wilks' Lambda criterion was used to determine significance. For each significant MANOVA, post-hoc comparisons of means were conducted using the Tukey HSD approach for the dependent variables.

The type of sport (volleyball, basketball, softball, and soccer) MANOVA examined the 7 DVs and found the combined DVs were significantly different, $F(21, 591) = 2.86, p < .001$, which is a moderate effect ($\eta^2_p = .09$). Table 3 contains the descriptive statistics for the analysis. There also were significant univariate effects of sport on percentage of female coaches ($p < .01$) and coaching self-efficacy ($p < .02$), representing a moderate effect of sport on percentage of female coaches ($\eta^2_p = .11$) and a small effect of sport on coaching self-efficacy ($\eta^2_p = .05$). Comparisons of means were conducted using the Tukey HSD approach for dependent variables. These comparisons indicate that soccer players had significantly fewer female coaches than both volleyball and basketball players. Soccer players also reported significantly lower coaching self-efficacy than volleyball players.

The division level (NCAA I, NCAA II, NCAA III, and NAIA) MANOVA examined the 7 DVs and found the combined DVs were significantly different, $F(21, 560) = 1.69, p < .03$, which is a small effect ($\eta^2_p = .06$). Table 4 contains the descriptive statistics for the analysis. There also was a significant univariate effect of division on perceived discrimination ($p < .01$), representing a small effect of division on perceived discrimination ($\eta^2_p = .07$). Comparisons of means were conducted using the Tukey HSD approach for dependent variables. These comparisons indicate that Division I athletes perceived significantly greater discrimination than NAIA athletes.

Path Analysis

In order to explore the utility of social cognitive career theory in predicting interest in coaching among female student-athletes, the fit of the data to the model shown in Figure 1 was tested using the covariance matrix and maximum likelihood procedures of EQS 6.0 (Bentler, 2006). Consistent with prior research on social cognitive career theory (e.g., Cunningham et al., 2005; Lent et al., 2001; Lent et al., 2003), three primary fit indices were used to test model fit: comparative fit index (CFI), standardized root-mean-square residual (SRMR), and root-mean-square error of approximation (RMSEA). CFI values close to .95, SRMR values close to .08, and RMSEA values close to .06 are indicators of good model fit (Hu & Bentler, 1999).

Results of the path analysis indicate only marginal support for the hypothesized model: CFI = .72, SRMR = .08, RMSEA (90% CI: .10, .18) = .14, $\chi^2(8, N = 205) = 39.48, p < .001$. Post hoc model modifications were performed in an attempt to develop a better fitting model. On the basis of the Lagrange multiplier test and theoretical relevance, two paths were added (see Figure 2): First, a path predicting interest in coaching from working hours was added and produced the following fit indices: CFI = .89, SRMR = .05, RMSEA (90% CI: .05, .14) = .09, $\chi^2(7, N = 205) = 19.518, p < .01$. Next, a path predicting interest in coaching from female coaching role models was added, producing an excellent fit to the data: CFI = .97, SRMR = .04, RMSEA (90% CI: .00, .12) = .05, $\chi^2(6, N = 205) = 9.57, p > .05$. A chi-square difference test indicated a significant improvement in fit between the hypothesized and final model: $\Delta \chi^2(2) = 29.91, p < .001$. Table 5 presents the hypothesized and final models and summarizes the fit indices.

Because post hoc model modifications were performed, a correlation was calculated between the parameter estimates of the hypothesized and the final models, $r(12) = .85, p < .01$. This high correlation indicates that the parameter estimates from the two models are highly related to each other (Tabachnick & Fidell, 2007). Figure 2 displays the correlations between predictor variables and the path coefficients (standardized parameter estimates) of the final model.

As shown in Figure 2, the prediction that supports and barriers would contribute to the prediction of coaching self-efficacy was partially supported. Specifically, quality of female coaches, as measured by female coaching role models, produced a significant path to coaching self-efficacy ($\beta = .15$). Working hours also produced a significant, but negative path to coaching self-efficacy ($\beta = -.17$). Neither the percentage of female coaches ($\beta = -.03, ns$) nor perceived discrimination ($\beta = .03, ns$) produced a significant path to coaching self-efficacy. Collectively, these contextual supports and barriers accounted for 5% of the variance in coaching self-efficacy.

As predicted, coaching self-efficacy produced a significant path to outcome expectations ($\beta = .32$), accounting for 10% of the predictive variance. Additionally, as predicted, coaching self-efficacy produced a significant path to career interest in coaching ($\beta = .14$); however, outcome expectations did not produce a significant path to career interests in coaching ($\beta = -.10, ns$). Moreover, the two paths added to the model as described above were both significant. Specifically, quality of female coaches ($\beta = .21$) and working hours ($\beta = -.29$) significantly predicted career interest in coaching. Collectively, these variables accounted for 18% of the variance in career interest in coaching.

Discussion

This section discusses the implications of study results. First, the findings of the path analysis will be examined in the context of the hypothesized model and their support of, or divergence from, the previous literature. Next, theoretical and practical implications, as well as suggestions for future research will be discussed. Finally, the study's limitations will be reviewed and the significant findings summarized.

Discussion of Results from Path Analysis

In the original social cognitive career theory (SCCT) model (Lent et al., 1994), contextual factors are hypothesized to directly predict the relationships between interest, choice goals, and actual behavior. More recent research, however, has supported a “mediated paths model” (e.g., Cunningham et al., 2005; Lent et al., 2001; Lent et al., 2003), in which self-efficacy fully mediates the relationship between supports and barriers with choice goals. In the current study, the path analysis utilized to test the “mediated paths model” resulted in a model with poor fit to the data. However, the inclusion of two additional paths (e.g., quality of female coaches to career interest in coaching, and working hours to career interest in coaching) resulted in a model with exceptional fit to the data and parameter estimates that were highly correlated with those in the hypothesized model. In this revised model, specific contextual factors (i.e., quality of female role models and working hours as a perceived barrier) produced both a significant *direct* path to career interest in coaching and a significant *indirect* path to career interest through coaching self-efficacy. These results suggest that a “partially mediated model” may have more utility in predicting career interest in coaching among

female athletes. The following paragraphs discuss the specific predictor-criterion relationships between SCCT variables and career interest in coaching.

SCCT Variables & Career Interests. As discussed above, SCCT posits that contextual variables (e.g., supports and barriers) predict career self-efficacy beliefs. Analyzing specific contextual variables separately, rather than as grouped supports and barriers, enables us to understand which factors are most salient (Cunningham et al., 2005; Lent et al., 2003). In the final model produced here, two of the four contextual variables produced significant paths to coaching self-efficacy, accounting for a relatively small portion of the variance. Specifically, the quality of female coaching role models positively predicted coaching self-efficacy, and the perception of working hours as a perceived barrier negatively predicted coaching self-efficacy.

These findings suggest that the specific number of female coaches may be less important than the *quality* of the female coaching role model influence in formulating self-efficacy beliefs. Additionally, consistent with previous research on female athletes (Everhart & Chelladurai, 1998), perceived discrimination may be less critical than working hours as a perceived barrier. Perhaps female athletes in this sample did not have direct experience with discrimination, and thus, did not view it as a strong hindrance to a possible career in coaching. Alternatively, athletes in this sample may have viewed any perceived discrimination as surmountable, and therefore, only minimally hindering one's interest in a coaching career (Everhart & Chelladurai, 1998).

SCCT also defines relations between self-efficacy to outcome expectations, and self-efficacy and outcome expectations to career interests. Consistent with the predictions of SCCT, coaching self-efficacy produced significant paths to outcome expectations and

to career interest in coaching. Specifically, coaching self-efficacy positively predicted the match between what female athletes believe is important in a career and what they believe a coaching career offers. It also positively predicted female athletes' interest in a coaching career.

Interestingly, although SCCT posits that outcome expectations also predict career interests, the data in the current sample did not confirm this relation; outcome expectations did not produce a significant path to career interest in coaching, indicating that outcome expectations did not explain additional variation in career interest beyond coaching self-efficacy. Although this lack of an independent path is inconsistent with most of the research on SCCT, Lent and colleagues (2003) also found no independent path between outcome expectations and career interests in a study of contextual supports and barriers on career choice among engineering students. Additionally, when examining outcome expectations as a multidimensional construct, Cunningham and colleagues (2005) found that expected satisfaction was a significant predictor of career interests but that expected power was not. Collectively, these results suggest that, as with contextual supports and barriers, future research should examine the salience of specific outcome expectations in predicting career interests in coaching (e.g., achievement, altruism, autonomy, security), rather than assessing outcome expectations more generally.

Finally, as discussed above, the original SCCT model (Lent et al., 1994) posits that contextual factors directly predict the relationships between career interests, choice goals, and actual behavior. Given that career goals are viewed more as interests when they do not require commitment or carry real consequences (Lent et al., 1994), this study focused specifically on interest development and found that the quality of female

coaching role models positively predicted interest in coaching and the perception of working hours as a barrier negatively predicted career interest in coaching. Together with coaching self-efficacy and outcome expectations, these variables accounted for a moderate amount of the variance in career interest in coaching.

Implications

Results from the present study suggest that the quality of female coaching role models is more important than the quantity of female coaches for predicting both coaching self-efficacy and interest in coaching. This finding is encouraging, especially given that some sports have significantly fewer female coaches than other sports (e.g., soccer in comparison with basketball and volleyball). Thus, a single positive female coaching role model may positively influence female athletes' perceptions about career possibilities. Prior research also supports the importance of female coaching role models. Career research, for example, has demonstrated that role models positively influence the self-efficacy beliefs of women, especially related to nontraditional careers (see Gysbers et al., 2003); and the sport literature has suggested that female role models may encourage women to pursue careers in sports (Lee, 1999; Nelson, 1991).

Additionally, working hours was a more significant barrier than perceived discrimination for both coaching self-efficacy and interest in a coaching career. The negative impact of working hours on coaching interest is consistent with prior research on both male and female athletes (Everhart & Chelladurai, 1998), and male and female coaches are equally likely to state that time demands and working hours would be potential reasons to withdraw from coaching (Barber, 1998; Pastore, 1991). Much has been written about the impact of coaching burnout and the importance of helping coaches

to find and maintain a balance between their personal and professional lives (Caccese & Mayerberg, 1984; Kelley, 1994; Vernacchia, McGuire, & Cook, 1996). Given that the burnout prevention literature has focused primarily on stress management, female athletes might benefit from receiving education about strategies for achieving and maintaining work/life balance as a coach and for avoiding burnout in their athletic careers. This could take the form of formal career workshops or informal presentations by current and former coaches about their own experiences in this area.

Finally, although research on the experiences of female coaches suggests that discrimination is a reality in the lives of many female coaches (Acosta & Carpenter, 2002; Boxill, 2003; Lopiano, 2001; Messner, 2002; Nelson, 2003; Salter, 1996; Weiss & Stevens, 1993; Women's Sports Foundation, 2002), as discussed above, perceived discrimination was not a significant negative predictor of coaching self-efficacy or career interest in coaching in the present study. This finding is encouraging, because it suggests that female athletes are not being deterred from coaching by the possibility of discrimination. Nevertheless, coaches are very influential in the lives of their athletes and, as Lopiano (2001) suggests, perhaps they could foster athletes' interest in a coaching career by intentionally promoting the positive and rewarding aspects of coaching.

Future Research Directions & Limitations

In addition to the practical implications, findings from the present study also suggest numerous areas for future research. First, given that contextual factors were found to have a direct relationship on career interests, it appears that a “partially mediated model” may have more utility in predicting career interest in coaching among female athletes. However, because paths were added to the hypothesized model in order to

produce a better fit with the data, future research must verify the relationships between variables found in the present study using a separate sample of female athletes. Prior research on the role of contextual variables in SCCT has focused primarily on career choice goals and intentions and has not looked specifically at career interests. Moreover, neither the original SCCT nor the mediated paths model specifies a direct relationship between contextual variables and career interests. Thus, the relationship found in this study between contextual factors and career interests has not been thoroughly examined and also should be a focus of future research.

Additionally, although athletes' interest in coaching likely will influence their intention to actually pursue coaching as a career, this relationship was not explored in the present study. Thus, future research also should examine both the direct influence of contextual variables on career interests in coaching and the relationship between coaching interest and intent to pursue coaching as a career to see if the relationships hypothesized by SCCT are supported. The use of longitudinal designs would enable researchers to track participants' actual behavior and could garner support for the causal ordering of SCCT variables (Cunningham et al., 2005; Lent et al., 2003).

Finally, although it was not the primary focus of this research, interesting group differences emerged across sports and division levels that warrant further research. For example, the percentage of female soccer coaches was significantly lower than the percentage of female volleyball and basketball coaches. Additionally, volleyball players in this sample reported significantly greater coaching self-efficacy than soccer players. In terms of between-division differences, NCAA Division I athletes reported significantly

higher levels of perceived discrimination than NAIA athletes. Future research should examine more closely these between-sport and between-division differences.

A few important limitations also should be considered when interpreting and making generalizations about the findings presented here: First, although participants for this study were representative of the athletic departments from which they were sampled, the sample consisted of predominantly White, heterosexual female athletes. Thus, caution should be used when generalizing findings to female athletes of color and to lesbian and bisexual athletes. Future research also should examine whether the tenets of SCCT would be supported for other racial/ethnic groups.

Additionally, while the majority of athletes in this sample identified as heterosexual, nearly half of all participants did not indicate their sexual orientation. This demographic item was structured as a fill-in-the-blank to enable athletes to self-identify, and a number of athletes indicated “female” as their sexual orientation; thus, it is not clear whether athletes were uncomfortable providing a response or did not understand what was being asked of them. Future studies should ensure that this demographic item is made explicit in order to gather accurate information about the sample’s characteristics.

Finally, this study asked participants to retroactively indicate the number of male and female coaches they have had for all sports played since high school. Although this method has been used in previous research (Lirgg et al., 1994; Moran-Miller & Cox, 2007), participants seemed to have some difficulty completing this measure accurately. For example, some athletes appeared to only count their current coaches (i.e., indicating a total of only 2 coaches when they currently had 2 coaches) and other athletes seemed not to account for their current coaches (i.e., athletes currently being coached by a female

assistant coach indicating that they had zero female assistant coaches). Athletes' responses on other measures did not indicate random or intentionally misleading responding; thus, it appears that the measure used may have been confusing for some participants. Future research might examine alternative ways of assessing the number of female coaches, perhaps by looking at the gender make-up of coaching staffs rather than relying on athletes' self-report. Alternatively, pilot data might be collected in which athletes provide some feedback about the measures used.

Summary and Conclusions

Results of this study support many of the hypothesized relationships among SCCT variables and suggest that both the quality of female coaching role models and the perception of working hours as a barrier are important predictors of coaching self-efficacy beliefs and career interest in coaching. With women currently holding only 44% of head coaching positions in women's intercollegiate sports and less than 2% in men's intercollegiate sports (Acosta & Carpenter, 2004), coaching remains a male-dominated field. While much has been written about women in sport, few studies have examined the perceptions of prospective coaches. This study attempted to identify some of the factors that influence female athletes' interest in coaching as a career. By striving to better understand how this interest is formed, we can better create strategies to recruit and retain qualified female coaches for our athletes and are brought one step closer toward bridging the gender gap in coaching.

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Table 1

Descriptive Statistics and Cronbach's Alpha for Instruments

Variable	<i>M</i>	<i>SD</i>	<i>α</i>
Coaching Self-Efficacy Scale	7.50	0.83	.91
Occupational Valence Scale	7.67	0.74	.89
Coaching Valence Scale	7.03	0.67	.94
Perceived Barriers Scale			
Working Hours Subscale	5.14	1.74	.92
Perceived Discrimination Subscale	4.12	1.92	.96
Percentage of Female Coaches	.45	0.21	.91
Role Model Influence Subscale	3.60	0.89	.82

Table 2

Correlation Matrix for Study Variables (n = 205)

Variable	1	2	3	4	5	6	7
1. Percent Female Coaches	1.00						
2. Role Model Influence	-.01	1.00					
3. Working Hours	-.14*	-.12	1.00				
4. Perceived Discrimination	-.15*	-.06	.43**	1.00			
5. Coaching Self-Efficacy	-.01	.17*	-.17*	-.05	1.00		
6. Outcome Expectations	.01	.20**	-.09	-.01	.32**	1.00	
7. Interest in Coaching	-.04	.25**	-.33**	-.04	.19**	.01	1.00

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

Table 3

Descriptive Statistics for Type of Sport MANOVA

Variable	Type of Sport	<i>M</i>	<i>SD</i>	<i>n</i>
Percent Female Coaches	Volleyball	.52 ^a	0.20	53
	Basketball	.51 ^b	0.18	43
	Softball	.40	0.19	58
	Soccer	.36 ^{ab}	0.22	51
	Total	.45	0.21	205
Female Role Model Influence	Volleyball	3.66	1.04	53
	Basketball	3.61	0.91	43
	Softball	3.61	0.80	58
	Soccer	3.51	0.79	51
	Total	3.60	0.89	205
Working Hours	Volleyball	5.45	1.84	53
	Basketball	4.90	1.91	43
	Softball	5.01	1.61	58
	Soccer	5.17	1.60	51
	Total	5.14	1.74	205
Perceived Discrimination	Volleyball	3.65	1.85	53
	Basketball	4.10	1.95	43
	Softball	4.30	2.01	58
	Soccer	4.37	1.83	51
	Total	4.11	1.92	205

Coaching Self-Efficacy	Volleyball	7.75 ^a	0.85	53
	Basketball	7.53	0.80	43
	Softball	7.47	0.72	58
	Soccer	7.24 ^a	0.89	51
	Total	7.50	0.83	205
Outcome Expectations	Volleyball	57.12	13.10	53
	Basketball	54.84	14.39	43
	Softball	54.90	12.95	58
	Soccer	53.11	11.84	51
	Total	55.01	13.03	205
Interest in Coaching	Volleyball	6.19	2.49	53
	Basketball	6.51	2.82	43
	Softball	7.02	2.13	58
	Soccer	5.63	2.52	51
	Total	6.35	2.51	205

Note. Means in the same column sharing same letter superscript differ at $p < .01$

Table 4

Descriptive Statistics for Division Level MANOVA

Variable	Division	<i>M</i>	<i>SD</i>	<i>n</i>
Percent female coach	NCAA I	.42	0.21	57
	NCAA II	.44	0.20	58
	NCAA III	.46	0.22	44
	NAIA	.47	0.20	46
	Total	.45	0.21	205
Female Role Model Influence	NCAA I	3.37	0.93	57
	NCAA II	3.64	0.801	58
	NCAA III	3.55	0.86	44
	NAIA	3.86	0.91	46
	Total	3.60	0.89	205
Working Hours	NCAA I	5.57	1.50	57
	NCAA II	5.20	1.81	58
	NCAA III	4.72	1.72	44
	NAIA	4.95	1.86	46
	Total	5.14	1.74	205
Perceived Discrimination	NCAA I	4.70 ^a	1.83	57
	NCAA II	4.38	1.93	58
	NCAA III	3.62	1.91	44
	NAIA	3.50 ^a	1.78	46
	Total	4.11	1.92	205

Coaching Self-Efficacy	NCAA I	7.38	0.87	57
	NCAA II	7.59	0.74	58
	NCAA III	7.49	0.83	44
	NAIA	7.54	0.88	46
	Total	7.50	0.83	205
Outcome Expectations	NCAA I	52.88	13.98	57
	NCAA II	56.13	13.18	58
	NCAA III	52.69	13.89	44
	NAIA	58.48	9.83	46
	Total	55.01	13.03	205
Interest in Coaching	NCAA I	6.02	2.42	57
	NCAA II	6.47	2.60	58
	NCAA III	5.98	2.70	44
	NAIA	6.98	2.26	46
	Total	6.35	2.51	205

Note. Means in the same column sharing same letter superscript differ at $p < .01$

Table 5

Summary of Model Fit Indices

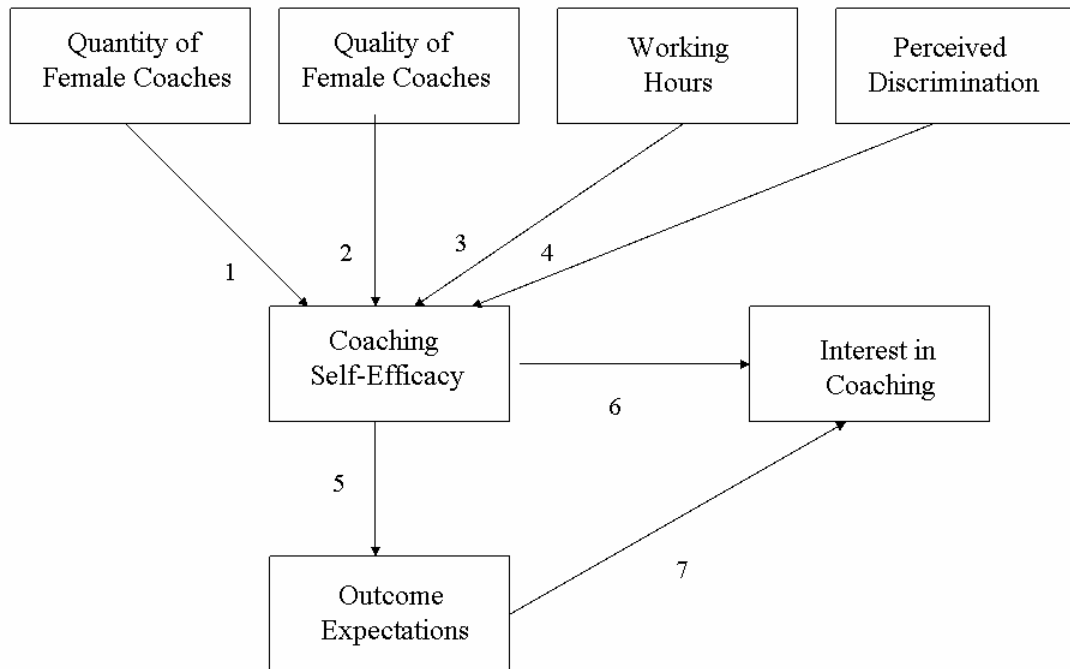
Model	X^2 (df)	CFI	RMSEA	90% CI	SRMR	$\Delta\chi^2$
Hypothesized Model	39.48* (8)	.72	.14	.10, .18	.08	
Final Model	9.57 (6)	.97	.05	.00, .12	.04	
X^2 Difference Test						29.91*

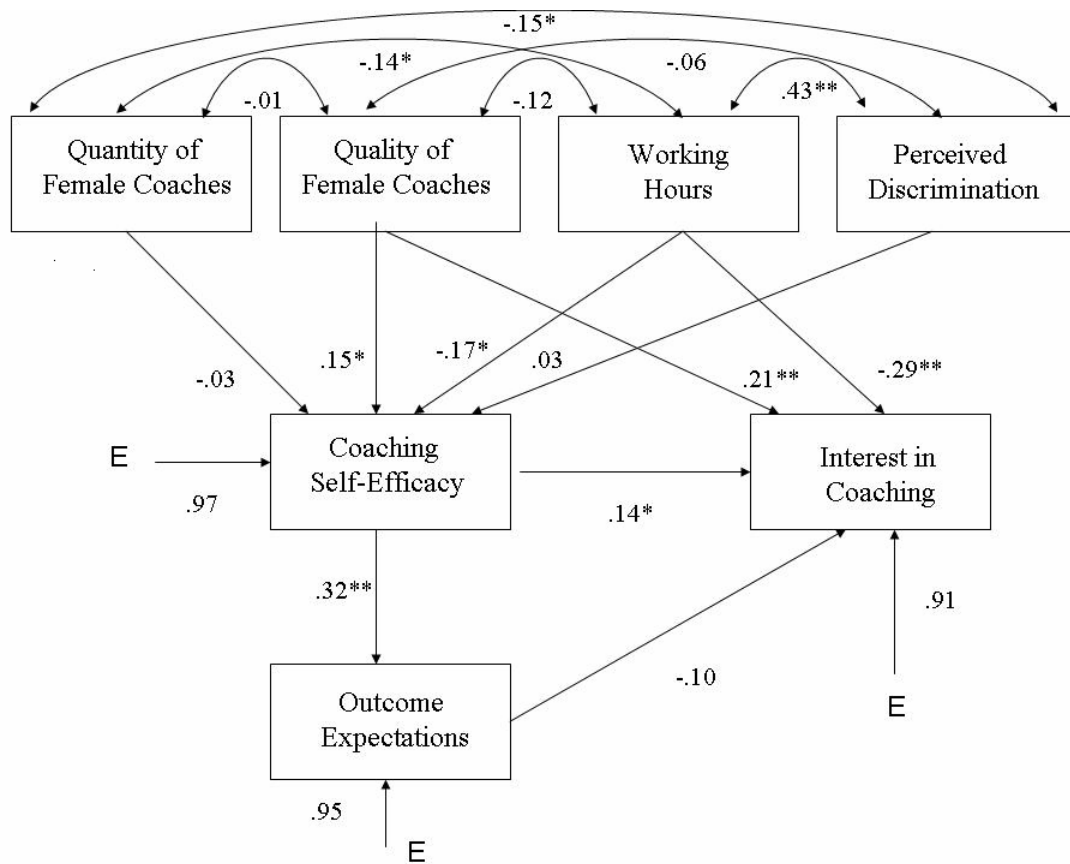
Note. * $p < .001$. CFI $> .95$; RMSEA $< .06$; SRMR $< .08$ are indicators of good model fit.

Figure Captions

Figure 1. Path model depicting social cognitive career theory's predictors of career interests. Variables will be measured using the following scales: (1) Quantity of female coaches = *Percentage of Female Coaches*; (2) Quality of female coaches = *Influence of Others on Academic and Career Decisions Scale (IOACDS)*; (3) Working Hours = Working Hours subscale of the *Perceived Hindrance Scale*; (4) Perceived Discrimination = Perceived Discrimination subscale of the *Perceive Hindrance Scale*; (5) Coaching Self-Efficacy = *Coaching Self-Efficacy Scale*; (6) Outcome Expectations = *Occupational Valence Scale* and *Coaching Valence Scale*; (7) Interest in Coaching = *Desire to Coach Scale*.

Figure 2. Revised path model depicting social cognitive career theory's predictors of career interests and correlations between predictors. * $p < .05$; ** $p < .01$.





APPENDIX A

EXTENDED LITERATURE REVIEW

Where Are the Women in Women's Sports?

Predictors of Female Athletes' Interest in Coaching

No person in the United States shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity receiving Federal financial assistance.

– Title IX of the Education Amendments Act of 1972

The passage of Title IX in 1972 is widely recognized as a seminal piece of federal legislation that prohibits sex discrimination in federally funded educational opportunities. Although Title IX applies to *all* education programs, it is perhaps best known for its application to athletics. In 1971, there were only 294,015 girls participating in high school sports, compared with 3.7 million boys (Messner, 2002). By 1979, the number of girls participating had skyrocketed to more than 2 million (Simon, 2003). Today, basketball and volleyball are the two most popular women's intercollegiate sports, and soccer comes in at a close third with an astonishing 4000% increase in participation opportunities since Title IX was passed (Acosta & Carpenter, 2002). These impressive statistics are a powerful indication of the positive impact Title IX has had on women's sports. As Hunt-Bull (2003) concluded, "Title IX has enormously improved the economic and social status of women's sports in the United States" (p. 263).

Nevertheless, while tremendous strides have been made, the struggle for equity in athletics is far from over. Overall participation rates have increased, but women's sports

continue to compete with men's teams for funding, equipment, access to facilities, and media coverage. Moreover, dramatic increases in sports participation rates and the rising status of women's sports have come at a price. Since the passage of Title IX, women have been underrepresented in leadership positions and continue to lack decision-making power within the sport domain.

This chapter seeks to illuminate the relative disappearance of female coaches in sport by striving to understand some of the factors that influence female athletes' interest in pursuing coaching as a career. First, the changing picture of post-Title IX women's sports will be reviewed to highlight some of the causes that have been put forth to explain the initial decline in the numbers of female coaches. Next, suggested causes for the continuing decline, including the presence of real barriers within the organizational climate of sport, will be discussed. Further, research comparing the experiences of male and female coaches, as well as studies focused on some of the unique experiences of current female coaches, will be examined to identify factors that may be impacting this downward trend. Finally, the limited research that has explored female athletes' interest in coaching will be reviewed, and social cognitive career theory (Lent et al., 1994) will be used to suggest a framework for identifying factors that may predict female athletes' interest in pursuing coaching as a career.

A Picture of Women's Sports—Then and Now

Before Title IX was passed, more than 90% of women's intercollegiate sport teams were headed by women and housed in athletic departments run almost entirely by women. By 1978, the year mandatory Title IX compliance took effect, the percentage of female head coaches had decreased to 58.2% (Acosta & Carpenter, 2002). Meanwhile,

the percentage of men heading women's teams had increased by 137% (Hasbrook, 1988). Although female assistant coaches saw a dramatic 174% increase, this relative gain was dwarfed by an astonishing 368% increase in male assistant coaches over that same period. Thus, while post-Title IX opportunities resulted in significant increases in coaching positions within women's programs, these positions were filled primarily by men. Collectively, the numbers of men in both head and assistant coaching positions increased by 182%, whereas the numbers of women increased by a mere 3% (Holmen & Parkhouse, 1981). A similar decline occurred at the interscholastic level, where the percentage of female head coaches decreased from 82% in 1971-72 to only 38% in 1984-85 (Hasbrook, 1988).

Thirty-five years after Title IX, the percentage of women in head coaching positions has dropped to the lowest in history. Today, women occupy only 44% of all head coaching positions in women's intercollegiate athletics (Acosta & Carpenter, 2004) and only 39% at NCAA institutions (Lapchick & Brenden, 2006). Moreover, men were hired for over 90% of the 361 head coaching jobs that were added to NCAA women's sports between 2000 and 2002 (Acosta & Carpenter, 2002).

A similar trend has occurred for women in head administrative positions. Acosta and Carpenter (2004) report that today less than 18% of athletic directors at all division levels are women, and women hold only 8% of athletic director positions at Division I institutions (Lapchick & Brenden, 2006). These statistics are in stark contrast to the pre-Title IX percentages when women held over 90% of administrative positions. Perhaps even more shocking is the fact that 19% of women's intercollegiate athletic programs have no women in any administrative role (Acosta & Carpenter, 2002).

While men have flooded into leadership positions in women's athletics, the percentage of women coaching men's teams has remained steady for the last thirty years at less than 2% (Acosta & Carpenter, 2004). Interestingly, in Lapchick and Brenden's (2006) *2005 Racial and Gender Report Card*, men's teams were "graded" only on race and not on gender, suggesting a perception that men's teams need not be evaluated on their gender diversity.) Women have somewhat better representation in men's sports at the level of assistant coach, where they hold 8.9% of the assistant positions at all division levels. However, less than 1% of the assistant coaching positions for Division I high-profile sports (e.g., basketball, football, and baseball) are held by women (Lapchick & Brenden, 2006). Nelson (1991) argues that this trend is likely to continue until women actively seek positions specifically in men's sports. Drawing from an airline analogy, she suggests, "Women must start applying for jobs coaching and officiating men and boys, and must assert their right to 'fly the planes'—to serve as athletic directors not only in women's departments but in men's and coed departments as well" (p. 172).

Men also dominate coaching positions in women's professional sport leagues. For example, five out of 13 head coaching jobs in the WNBA are held by women (Women's Sports Foundation, 2007), while the WUSA (women's professional soccer) had only one female head coach among its eight teams (Women's Sports Foundation, 2004). These sobering statistics paint a bleak picture of Title IX's impact on women's sport leadership that begs the question, where are the women in women's sports?

Barriers within the Organizational Climate of Sport

Researchers and commentators have suggested a number of factors that have contributed to this downward trend (Boxill, 2003; Hasbrook, 1988; Lopiano, 2001;

Messner, 2002; Salter, 1996; Weiss & Stevens, 1993). One of the most important factors cited was the post-Title IX reorganization of athletic departments (Hasbrook, 1988). Prior to 1972, men's and women's sports often were housed in separate athletic departments. In the years following Title IX's inception, however, the two departments were merged into one. Typically, the men's athletic director took on the head administrative role, while the director of women's sports either became an assistant athletic director or was let go (Salter, 1996). As men moved into the top positions within athletic departments, women lost decision-making power, including decisions about who would be hired, how money would be spent, and how women's programs would develop (Lopiano, 2001).

Title IX also brought with it a greater demand for women's coaches, a significant increase in coaching salaries, and a more favorable status for women's sports. Pre-Title IX women's sports teams at all levels frequently were coached by unpaid volunteers who assumed coaching responsibilities in addition to their full-time teaching responsibilities (Lopiano, 2001). As post-Title IX sports opportunities increased, however, so did the responsibilities of, and the demand for, coaches. Whereas before Title IX coaches of women's teams were little more than "chaperones" who often managed sometimes between seven and eight sports, after 1972, coaching demands increased (Salter, 1996). Women's sports teams now needed more than just a chaperone; they needed *coaches*, who were both willing and able to put in the requisite time. Thus, it became necessary for coaches to scale back the number of sports they coached (from seven or eight to one or two). Some women chose to leave coaching altogether. The combination of these factors left a number of openings that needed to be filled (Weiss & Stevens, 1993).

As women moved out of head coaching positions, men moved in. With greater post-Title IX funding, the salaries of coaches and the prestige of women's sports also increased, making coaching positions for women's teams more attractive to men. Messner (2002) suggests, "When the status and pay of an occupation rises, men tend to be pulled into the occupation, and women are squeezed out, [which]...has the effect of further raising the status of the occupation" (p. 71-72). Thus, when the supply of female coaches could not meet the increased demand, athletic directors often turned to male assistants on men's teams to fill the vacancies. With enhanced prestige and men now dominating the administrative positions responsible for hiring, women have steadily been left out of leadership roles within women's sports, and there has been no reciprocal movement of women into men's sports.

The issue of supply and demand continues to be put forth as an explanation for the low numbers of women in head coaching and administrative positions today (Everhart & Chelladurai, 1998). In addition to the effects on women's athletics, Title IX also brought a range of educational opportunities, which opened doors that once had been closed and paved the way for women to become lawyers, doctors, and corporate executives (Lopiano, 2001). Thus, proponents of this explanation argue that as women left teaching and coaching for new professional opportunities, men were forced to step in and fill the gap. While this argument may seem plausible on the surface, it fails to explain why the number of female coaches continues to decline. Further, it does not account for the reality of discriminatory hiring practices (Acosta & Carpenter, 2002), systemic barriers (Boxill, 2003), and gender inequity (Women's Sports Foundation, 2002) that

fosters an unfriendly climate for women within sports. The following sections will summarize research that examines the potential causes of this continued decline.

Perceived Lack of Qualified Women

In a post Title-IX survey of athletic administrators, Holmen and Parkhouse (1981) identified a significant trend of men being hired for head coaching positions. They suggested a number of possible explanations for this finding, including a shortage of qualified women and an assumption that men are more qualified for coaching in terms of experience and expertise. Similarly, Acosta and Carpenter (1985) found that male administrators, in particular, attributed the decline in female coaches to perceptions that female coaches were less qualified, were unwilling to recruit and travel, and were less likely to apply for openings because of job demands and time constraints associated with family duties. Although female administrators also suggested a lack of qualified women as one possible cause, their perception of the causes placed more emphasis on unconscious discrimination, the success of the old boys' club, and the weakness of the old girls' club.

The perception that women are less qualified than men may be less a reflection of reality and more an example of the sex-biased attitudes about female coaches that are held by both men and women in sport (Hasbrook et al., 1990). Studies comparing the qualifications of male and female coaches have found that female coaches of women's teams are at least as qualified as male coaches of women's teams, and on some indicators women are more qualified. Specifically, female coaches at both the high school and collegiate levels have athletic experience that is equal to or greater than their male counterparts (Anderson & Gill, 1983; Hasbrook et al., 1990; Knoppers, Myer, Ewing, &

Forrest, 1989). They also are more likely to have received awards for their sport participation (Anderson & Gill, 1983), to have served as team captain for multiple sports and at the college level (Anderson & Gill, 1983), to have majored in physical education (Anderson & Gill, 1983; Hasbrook et al., 1990), to have experience teaching physical education, and to have more years of experience coaching women's teams (Hasbrook et al., 1990).

Despite research demonstrating the qualifications of female coaches, the perception remains that women in sport are less qualified than their male counterparts. In a study of male and female coaches of girls' high school teams, Barber (1998) found that women reported greater feelings of competence than men in teaching sport skills to athletes; however, they still were evaluated as less competent than male coaches in the same positions by athletic directors. Research on basketball players, too, has shown that both male and female interscholastic (Weinberg et al., 1984) and intercollegiate athletes (Parkhouse & Williams, 1986; Williams & Parkhouse, 1988) indicate clear preferences for male coaches. Specifically, athletes rated a hypothetical male basketball coach more favorably than a hypothetical female coach on knowledge of the sport, ability to motivate, and future success, regardless of how successful the coaches were. Even when the hypothetical female coach had a far superior win/loss record and had received Coach of the Year awards, male athletes indicated a preference for a male coach. Female athletes also indicated a consistent preference for a male coach, except when a very unsuccessful male coach was paired against an extremely successful female coach (Parkhouse & Williams, 1986).

A few studies have suggested that actual coach gender and success of current coach may play an important role in athletes' preferences for hypothetical coaches. Specifically, swimmers (Medwechuk & Crossman, 1994) and track and field athletes (Frankl & Babbitt, 1998) seem to prefer hypothetical coaches whose gender matches that of their current coach. Further, basketball players coached by a successful male coach or by an unsuccessful female coach demonstrated a strong pro-male bias, whereas athletes coached by successful female coaches had a pro-female bias (Williams & Parkhouse, 1988).

Although athletic administrators and current athletes may assume that women are less qualified applicants for head coaching positions, the research reviewed above casts serious doubt on such claims. Studies suggest that women in coaching positions are at least as qualified as men, and sometimes even more so. Moreover, research suggests that athletes' apparent preferences for male coaches may be moderated, at least in part, by greater exposure to successful, female coaches.

Perceived Lack of Interest

In addition to the perception that women are less qualified applicants, another frequently cited explanation for the decline in female coaches is the perception that women are less interested in pursuing coaching careers, therefore creating an issue of supply and demand. A few studies have examined gender differences in coaches' reasons for entering and leaving the profession. Results from these studies challenge the perception that women are less interested in pursuing coaching as a career. For example, findings from Hasbrook and colleagues (1990) dispute the specific claim put forth by male athletic directors in the Acosta and Carpenter (1985) study that women are less

likely to apply for coaching positions because of time constraints associated with family duties. They found that male coaches were more likely than female coaches to be married (87% vs. 42%) and to view family duties as a reason to withdraw from coaching.

Other research has found minimal gender differences in intentions to leave coaching among coaches of women's teams. Men and women are equally likely to state that time demands, working hours (Barber, 1998; Pastore, 1991), and lack of financial incentives (Pastore, 1991) would be potential reasons to withdraw from coaching. Interestingly, Barber (1998) also found that female coaches were more likely to indicate competence concerns as a reason for leaving coaching, despite reporting greater feelings of competence than male coaches in teaching sport skills to athletes. Given that these coaches were evaluated by athletic administrators as less competent than male coaches in the same positions, external evaluations of coaching competence may be more salient than female coaches' own sense of self-efficacy (Barber, 1998).

Men and women also were equally likely to cite desire to stay involved with competitive athletics as a reason to enter the field of coaching (Pastore, 1991). Women, however, were more likely than men to cite additional reasons for entering coaching that specifically involved interacting with athletes (e.g., desire to work with advanced and motivated athletes, to become role models for athletes, and to help female athletes reach their potential). This difference in reasons for entering coaching suggests that the opportunity to work with athletes may be an important reason that women pursue coaching.

Despite few apparent gender differences in reasons for entering and leaving coaching, Cunningham, Sagas, and Ashley (2003) found some support for the claim that

women are less interested in pursuing coaching. In a study of male and female assistant coaches of women's teams, they found that women had lower coaching self-efficacy and were less interested in seeking head coaching positions than male assistants. Women also expressed greater intent to leave coaching: women were four times more likely to predict being retired by age 45, whereas men were three times more likely to see themselves still coaching at age 65.

Although it may be tempting to conclude that the lower self-efficacy of the women might explain their greater intent to leave coaching, coaching self-efficacy predicted both desire to become a head coach and likelihood of leaving coaching only for the men. For women, coaching self-efficacy was not a predictor of intent to withdraw from coaching, suggesting that other factors likely were influencing the women's greater intention to leave coaching (Cunningham et al., 2003).

Perceived Discrimination

Although identifying the specific factors that may be influencing women's greater intent to leave coaching was beyond the scope of the study by Cunningham and colleagues (2003), a number of authors have highlighted one possible cause—namely, the subtle, and sometimes overt, discrimination that women in coaching and administrative positions experience in both the hiring process and in the job itself (Acosta & Carpenter, 2002; Boxill, 2003; Lopiano, 2001; Messner, 2002; Nelson, 2003; Salter, 1996; Weiss & Stevens, 1993; Women's Sports Foundation, 2002). The experience of this discrimination may help to explain, at least in part, why some female coaches express greater intent to leave coaching.

When women's athletic programs were taken over by male-run athletic departments, the "old boy networks" took hold, and women are still fighting to break into the club (Boxill, 2003). Women are more likely to become president of their college or university than they are to become the head athletic director (Salter, 1996). In 1992 Merrily Dean Baker became only the second woman to serve as athletic director of a Division I program with both football and basketball. She explains the lack of women in administrative positions as follows: "It is flat out the effects of the old boys' club. It is an area of change that has been very slow to come, and it is almost the last...old-fashioned male bastion.... It is a different kind of club and they haven't wanted to admit women" (as quoted in Salter, 1996, p. 68). Incidentally, Baker resigned in 1995 after a male associate athletic director was given control over football, men's basketball, and men's ice hockey, allegedly "to free her for other duties" (Salter, 1996).

Because men dominate the administrative positions, they hold the power to hire and fire. All too often, hiring practices differ for men's and women's teams. For example, Anderson and Gill (1983) found that, in general, coaches of men's basketball teams were slightly more qualified than coaches of women's teams, as indicated by their greater playing experience. Specifically, coaches of men's teams were more likely to have participated in intercollegiate sports at the Division I or Division II levels and to have earned awards for their participation. Moreover, athletic directors seeking to fill coaching positions on men's teams typically conduct a wide search for the best candidate. They may offer the position to candidates who have not even applied and often are willing to pay whatever is necessary to recruit them. When the position is for a women's team,

however, athletic directors tend to stick to “paper hires” and frequently offer potential candidates less than the market value (Acosta & Carpenter, 2002; Lopiano, 2001).

Boxill (2003) reported an illustrative example: Two candidates applied for the head coaching position of a women’s basketball team. The first, a woman, was the head coach at her current school; the second, a man, was an assistant coach at his. The female candidate was made an offer that was considerably lower than her current salary and included an expectation that she would also coach tennis. When she countered with an offer that was still lower than her present salary, but with which she would be satisfied, the administration refused. The administration then offered the male candidate even more than the female candidate had requested. Further, the male candidate was told that he would be expected to coach only basketball. This example suggests that while athletic directors complain about a lack of qualified female applicants, they take few steps to attract female candidates (Acosta & Carpenter, 2002).

For those women who do manage to break into the traditionally male profession of coaching, gender inequity and job discrimination often follow. Whereas male head coaches typically coach a single sport full time, women often must balance teaching responsibilities on top of their coaching duties (Weiss & Stevens, 1993). Meanwhile, with an average salary of \$38,191, women receive only 61% of the \$61,534 their male counterparts in men’s programs receive (Women's Sports Foundation, 2002). Sanya Tyler’s story is a case in point: Tyler, the head coach of the Howard University women’s basketball team, coached at Howard University for 10 years and led her team to six Mideastern Athletic Conference championships. In addition to her coaching responsibilities, Tyler also was the senior women’s athletic administrator. In 1990, when

Butch Beard was hired as the head coach of the Howard men's basketball program, he received a starting salary of \$78,000, and Tyler was asked to take a pay cut to \$40,000 (Salter, 1996). In a 1993 landmark sex discrimination lawsuit, Tyler was awarded \$1.11 million (Nelson, 2003). Six years later, however, Marianne Stanley would lose a similar lawsuit brought against the University of Southern California. Stanley's overall winning percentage was above .700 (347-146), whereas that of the men's coach was just slightly above .500 (326-292). Despite evidence to the contrary, the 9th U.S. Circuit Court of Appeals ruled in 1999 that Stanley was less experienced and less qualified than the USC men's head coach, illustrating the gender inequity that continues (Messner, 2002).

Research exploring gender differences in the perceptions and experiences of current coaches have highlighted the negative impact that gender inequity and job discrimination can have on female coaches. In a qualitative study of past and present coaches, athletic directors, and other sport leaders, Thorngren (1990) identified a number of stressors that are unique to the experiences of women in coaching. These include (a) the devaluation of women's sports, which results in an increased work load in an effort to boost its status closer to that of men's sports; (b) feelings of greater isolation within athletic departments due to the limited number of women and their often differing viewpoints; (c) the lack of a personal support system, which can make it difficult to find and maintain a work/life balance; (d) fewer coaching opportunities in light of women's virtual absence from men's sports; (e) the perceived need to overcompensate for the assumption that men are more qualified to be coaches, which increases the pressure on women to be viewed as extremely competent, heightens their fear of failure, and may

lead some women to limit their advancement within the field; and (f) the expectation placed on married female coaches that they would leave coaching to raise children.

The presence of these stressors may help to explain, in part, research findings which suggest women have lower expectations for success in coaching, are more likely to view having children as negatively impacting their coaching careers (Pease & Drabelle, 1988), experience greater emotional exhaustion, and report fewer feelings of personal accomplishment than male coaches (Caccese & Mayerberg, 1984).

Homophobia is yet another form of discrimination that affects all women in coaching, regardless of their sexual orientation (Heaton, 1992). It can have a broad impact on both the hiring process and on-the-job experiences. For example, female applicants for head coaching positions in women's basketball often were asked in initial interviews about their marital status and their relationship with their husbands (Wellman & Blinde, 1997). Similarly, Lopiano (2001) reported that while checking references for female applicants, athletic directors commonly hear concerns about a female applicant's "homosexual inclinations" or about her "masculine" appearance. Single female coaches may be less likely to be hired (Heaton, 1992), and reportedly, some athletic directors are so concerned about lesbians that they will hire only males to avoid the whole issue (Wellman & Blinde, 1997).

Once hired, homophobia continues to impact female coaches. Specifically, when recruiting young athletes, female coaches frequently have to field questions about the presence of lesbians on the team and within the coaching staff (Heaton, 1992; Wellman & Blinde, 1997). Some coaches will even suggest to recruits that female coaches of rival teams are lesbian (Wellman & Blinde, 1997). As head coach of women's basketball at the

University of Iowa, Vivian Stringer reported that she was asked about lesbians in sport on approximately one in three visits to the homes of new recruits (Nelson, 1991).

Finally, homophobia may serve to deter female athletes from pursuing careers in coaching (Wellman & Blinde, 1997). Heaton (1992) suggested that heterosexual women may choose to leave athletics to avoid being labeled as a lesbian. Further, female athletes considering sports careers suggested that homophobia was a significant barrier, especially for single female coaches and female athletes in “certain sports” (Lee, 1999).

Summary and Conclusions. Although sport participation opportunities for girls and women have sky-rocketed since the passage of Title IX, the percentage of women in coaching positions has seen a drastic and continued decline. Much of the initial decline has been attributed to the post-Title IX reorganization of women’s athletics departments, the increased time demands and need for technical expertise among existing coaches, and the influx of men to help fill the myriad coaching opportunities that emerged for women’s sports after the passage of Title IX (Hasbrook, 1988; Lopiano, 2001; Messner, 2002; Salter, 1996; Weiss & Stevens, 1993).

Although much has been written about the organizational structure, political landscape, and the status of women in leadership positions within women’s sports, only a few studies have examined how the attitudes of athletic administrators and the experiences of current coaches may be impacting the continuing downward trend. This research has challenged the claim by some athletic administrators (see Acosta & Carpenter, 1985) that women are less qualified than men to be coaches (see Anderson & Gill, 1983; Hasbrook et al., 1990). It also has presented equivocal findings about the perceptions of current coaches. While some studies have suggested that female coaches

may be less likely to apply for coaching positions (Cunningham et al., 2003), still other research has demonstrated that men and women are similar in their reasons for entering and leaving the coaching profession (e.g., Barber, 1998; Pastore, 1991). Similarly, a number of studies have highlighted the gender inequity and discriminatory hiring practices that exist in women's sports (Acosta & Carpenter, 2002; Boxill, 2003; Lopiano, 2001; Messner, 2002; Nelson, 2003; Salter, 1996; Weiss & Stevens, 1993; Women's Sports Foundation, 2002) and have suggested that female coaches may experience unique sources of stress (Caccese & Mayerberg, 1984; Thorngren, 1990).

Nevertheless, despite the apparent presence of significant discrimination facing women in intercollegiate coaching, female coaches continue to report feeling satisfied in their careers. In fact, Cunningham and Sagas (2003) found that female assistant coaches had greater work satisfaction than male assistants. Further, although female coaches strongly endorsed numerous barriers in a study of perceived barriers for women in intercollegiate athletics conducted by the National Collegiate Athletic Association (1991), 95% of the female coaches surveyed indicated they would choose coaching again. More than 90% reported that relationships with student-athletes and other coaches were sources of satisfaction. Eighty-eight percent also reported feeling satisfied with the support they received from family and friends, and 85% expressed satisfaction with their on-the-job performance (National Collegiate Athletic Association, 1991).

These results indicate that although women may face a variety of struggles getting into and staying in the coaching profession, women are likely to view coaching as a viable and satisfying career. And yet, surprisingly few studies have actually explored prospective female coaches' perceptions about coaching as a profession. Much of the

research in this area, gathered primarily in the 1980s and early 1990s, has focused on athletic administrators and current coaches. Although, it is somewhat dated, and significant gaps remain in understanding the experiences of women coaching in the 2000s, it has been pivotal for shedding light on the status and experiences of female leaders within sport. Nevertheless, the perspective of current female athletes, who represent the largest pool of potential coaches (Everhart & Chelladurai, 1998; Pastore, 1991), has been largely ignored. This perspective is especially important for challenging the claim that women are less interested in pursuing coaching. Further, a thorough understanding of factors that influence female athletes' interest in coaching has important implications for efforts to reverse the steady decline of women in leadership positions and for bridging the gender gap in sports.

In the following section, social cognitive career theory (Lent et al., 1994) will be used to present a framework for understanding female athletes' interest in pursuing coaching as a career. Further, the limited research on female athletes' interest in coaching will be reviewed, and potential influences on their interest will be posited.

A Theoretical Framework

Social cognitive career theory (SCCT; Lent et al., 1994) is a comprehensive theory of career development that has broad applicability within the field of career research (Gysbers et al., 2003). SCCT builds upon Bandura's (1986) general social cognitive theory to explain career development through three interrelated models. Each model explains a different aspect of career goals, including (a) the development of career interests, (b) the expression of specific career choice goals, and (c) the performance and pursuit of career choices. These models are intricately linked so that career interests

directly foster career choice goals, or “the intentions, plans, or aspirations to engage in a particular career direction” (Lent et al., 1994, p. 95). Career choice goals, in turn, influence the performance and pursuit of those goals.

Given that career goals are viewed more as interests “when they are assessed remotely in time from actual career entry [and] do not demand commitment or carry real consequences” (Lent et al., 1994, p. 85), this paper will focus specifically on the SCCT model of *interest development*. While it is likely that athletes’ interest in coaching will have formed in adolescence or early adulthood (Sage, 1989), it is assumed that the athletes’ proximity to actual career entry remains somewhat remote. Thus, although it is recognized that athletes’ interest in coaching likely will influence their intention to actually pursue coaching as a career, this paper will not examine the actual expression of career choices. Rather, it will focus specifically on understanding the development of career interests in coaching. SCCT posits that career interests are shaped by self-efficacy beliefs and outcome expectations, which in turn are influenced by both individual and contextual factors (e.g., barriers and supports). Each of these key constructs is discussed more thoroughly below.

Self-Efficacy

Bandura (1986) defines self-efficacy as “people’s judgments of their capabilities to organize and execute courses of action required to attain designated types of performance” (p. 391). Self-efficacy is a form of task-specific self-confidence. People are less likely to be interested in certain tasks if they believe they lack the ability to effectively perform them. Similarly, people who have greater confidence in their abilities to perform specific tasks are more likely to pursue those tasks. Self-efficacy is an

important predictor of motivation in a sport context (Cox, 2007). Within a career context, individuals who believe they possess the requisite skills to be successful in a given occupation are more likely to develop interests in that occupation (Lent et al., 1994). Thus, as it relates specifically to coaching, female athletes' beliefs about their abilities to perform the tasks associated with coaching (i.e., coaching self-efficacy) are likely to be an important predictor of their interest in coaching.

This proposed relationship has not been thoroughly studied in the sport literature, and the research that has been done has offered equivocal findings. Coaching self-efficacy predicted interest in pursuing head coaching positions among assistant coaches and predicted turnover intentions for male assistants (Cunningham et al., 2003). It also is positively correlated with desire to coach interscholastically and intercollegiately (Everhart & Chelladurai, 1998) However, in a sample of male and female basketball players, high coaching self-efficacy did not translate into a strong desire to enter the coaching profession (Everhart & Chelladurai, 2004). Thus, one purpose of the present study is to better understand the relationship between self-efficacy and interest in coaching.

Outcome Expectations

According to SCCT, outcome expectations also influence the development of career interests. Outcome expectations refer to “the imagined consequences of performing particular behaviors” (Lent et al., 1994, p. 83). From a career perspective, individuals will be more interested in certain career paths if they anticipate positive consequences arising from specific career choices. However, if people anticipate primarily negative consequences, they may be less likely to pursue those particular career

choices. More important than the objective anticipated outcome is the relative value or importance that an individual places on a particular outcome (Lent et al., 1994). Thus, in theory, individuals likely would be more interested in a given career when there is a match between their desired outcomes and the anticipated outcomes of that particular occupation.

Everhart and Chelladurai (1998) examined the attractiveness, or “valence” of coaching for intercollegiate basketball players by exploring the match between what participants desired from an occupation (preferred occupational valence) and what they perceived as being offered by a career in coaching (perceived valence of coaching). Specifically, they assessed the desirability of fulfilling certain higher order needs in an occupation (i.e., achievement and recognition, altruism, autonomy and challenge, growth, and security), and participants’ perceptions of the extent to which these outcomes could be achieved through coaching. Overall, coaching was viewed as a very attractive career by both male and female basketball players in the sample. However, coaching was significantly more attractive to women (i.e., women reported greater perceived valence of coaching), especially when they were coached by a woman. Interestingly, preferred occupational valence was negatively correlated with desire to coach at both Division II and Division III schools, suggesting that individuals who indicated greater preference for fulfilling those higher order needs viewed coaching at those levels as incompatible with fulfilling those needs.

Other research has explored the influence of two aspects of outcome expectations on interest in careers within the sport and leisure industry (Cunningham et al., 2005). Results indicated that anticipated satisfaction with the sport and leisure industry predicted

occupational interest in that area. However, expectations for power and authority were not significant predictors of occupational interest, suggesting that opportunities for these outcome expectations may be less important for developing interests in pursuing careers within sport and leisure (Cunningham et al., 2005).

The importance of a fit between desired occupational outcomes and anticipated occupational outcomes (i.e., occupational valence) would seem a logical extension of the influence that outcome expectations are purported to have on career interest. However, this construct is relatively untested in the literature. Everhart and Chelladurai (1998; 2004) found limited support for the predictive utility of occupational valence in understanding interest in coaching, but their samples cannot be generalized to multiple sports or division levels. Thus, another purpose of the present study is to explore the relationship between specific outcome expectations (i.e., perceived and preferred occupational valence) and interest in coaching.

Contextual Factors

According to SCCT, occupational interests are largely determined by self-efficacy beliefs and outcome expectations (Lent et al., 1994). In addition to these internal factors, SCCT posits that various contextual factors, such as barriers and facilitators, also influence career interests. Previous research in the area of women and coaching has identified specific barriers and facilitators that may be especially important contextual factors to consider.

As reviewed above, a number of authors have highlighted the various forms of discrimination facing women in leadership positions within sport (Acosta & Carpenter, 2002; Boxill, 2003; Lopiano, 2001; Messner, 2002; Nelson, 2003; Salter, 1996; Weiss &

Stevens, 1993; Women's Sports Foundation, 2002). Discrimination impacts women's entry into coaching through biased practices in the hiring process (Acosta & Carpenter, 2002; Boxill, 2003; Lopiano, 2001). It also affects job satisfaction through gender inequity in job responsibilities (Weiss & Stevens, 1993), disparate salaries (Women's Sports Foundation, 2002), lack of support (Thorngren, 1990), sexual harassment and homophobia (Heaton, 1992; Lopiano, 2001; Nelson, 1991; Wellman & Blinde, 1997). In addition to perceived discrimination, a few studies have pointed to working hours as a perceived barrier that affects both men and women who pursue careers in coaching (Barber, 1998; Pastore, 1991).

Although these two barriers (i.e., perceived discrimination and working hours) have been thoroughly discussed in the literature, very few studies have explored their influence on the development of career interests in coaching among athletes. Everhart and Chelladurai (1998) found that working hours was negatively correlated with desire to coach at every level (e.g., high school, 2-year college, Division III, Division II, and Division I). Although the impact of perceived discrimination on interest in coaching was not analyzed, coach gender had a significant effect on female athletes' perception of discrimination in coaching. Specifically, female athletes who were coached by men were more likely to view discrimination as a greater barrier to entry in the profession than athletes who were coached by women.

This finding highlights the potential supportive influence of another important contextual factor, female role models. Drawing from Bandura's (1986) sources of self-efficacy and outcome expectations, SCCT specifies the relationship between self-efficacy and role models. Specifically, self-efficacy beliefs are shaped, in part, by vicarious

learning; that is, “observing similar others succeed or fail at a particular activity” (Lent et al., 1994, p. 102). According to SCCT, this relationship is particularly strong when an individual has minimal first-hand experience by which to gauge personal competence. Thus, in theory, exposure to successful role models facilitates the development of positive self-efficacy beliefs. Further, in the absence of opportunities to observe similar others’ successes, self-efficacy may be hindered, especially when an individual lacks direct personal experiences with successful performances. A similar relationship is proposed for the development of outcome expectations, with the presence of successful models facilitating the development of positive outcome expectations (Lent et al., 1994).

The positive impact of role models has been widely discussed in the career literature. For example, research has demonstrated that role models positively influence women’s perceived self-efficacy, especially in nontraditional careers (see Gysbers et al., 2003). Within the sport literature, too, a number of researchers have emphasized the importance of exposure to positive female role models and have expressed concerns about the negative consequences of limited exposure on female athletes (Acosta & Carpenter, 1985; George, 1989; Hart et al., 1986; Lirgg, 1992). It has been suggested that female role models in sport enhance the perception that sport participation for women is not just acceptable, but also desirable (Hilliard, 1996; Weinberg et al., 1984). They help socialize girls and women into sport, give female athletes someone to emulate, and may encourage women to pursue sports as a career (Nelson, 1991). They also may minimize gender bias among athletes (Thorngren, 1990; Williams & Parkhouse, 1988) and help prevent perceived burnout among female coaches (Caccese & Mayerberg, 1984). In the

absence of positive female leaders in sport, however, female athletes may perceive that opportunities for coaching and leadership within sport are limited (George, 1989).

Research on current coaches has demonstrated the importance that they place on coaching role models. Female coaches, in particular, report that serving as a role model for young athletes and helping female athletes reach their potential were especially important reasons for entering the coaching profession (Pastore, 1991). Further, in his qualitative look at the career paths of current interscholastic coaches, Sage (1989) found that participants frequently cited the availability of coach contact and the nature of the coach-athlete relationship as critical for facilitating their ability to identify with coaching as a viable career option. He also noted that previous experiences with athletics and, specifically, exposure to coaching through their own coaches provided prospective coaches with an essential “informal apprenticeship” that helped to train and socialize them into the profession. Although Sage’s study included only male participants, his findings highlight just how essential athletes’ experiences with their own coaches are for shaping career interests in coaching.

Despite the plethora of research citing the importance of role models, very few studies have actually examined the impact of female coaching role models, specifically. In a qualitative exploration of female athletes’ interest in sport-related careers, coaching role models emerged as an important factor influencing athletes’ perception about career possibilities (Lee, 1999). Other research has investigated the relationship between coaching self-efficacy and coach gender among high school basketball players (Lirgg et al., 1994). Although coach gender did not predict coaching self-efficacy, it did predict level of coaching aspiration. Specifically, female athletes who were coached by women

were more likely to aspire to head coaching positions. In contrast, female athletes who were coached by men were just as likely to aspire to head coaching positions as they were to assistant coaching positions. Findings from this study suggest that the presence of female coaching role models may be an important facilitator in the development of coaching self-efficacy. Further, they may serve as a buffer against the potential negative impact of perceived barriers (Everhart & Chelladurai, 1998).

Unfortunately, while minimal research has been conducted in this area, the few studies that have been done (Everhart & Chelladurai, 1998; Lirgg et al., 1994) have limited generalizability. Both of the studies by Everhart and Chelladurai (1998) and Lirgg and her colleagues (1994) looked only at basketball players. Findings have not been compared across sports or across division. Further, no standard measure of coaching self-efficacy was used. Finally, the presence of female coaching role models was differentially assessed across the studies. In the Everhart and Chelladurai (1998) study, exposure to female coaching role models was determined by the gender of participants' current coaches. In the Lirgg et al. (1994) study, participants were asked to indicate the number and gender of previous coaches. Unfortunately, as Williams and Parkhouse (1988) suggest, involvement with female role models, in and of itself, may be insufficient to positively influence female athletes. Rather, that involvement must occur within a positive environment (e.g., while on a successful team). They also suggest that other coach variables, such as warmth and nurturance, personality similarity, skill, and attractiveness, may be just as important as gender for having a positive influence.

Thus, in addition to examining the effects of coaching self-efficacy and perceived occupational outcomes on interest in coaching, this study will explore the impact of

specific contextual factors, including exposure to female coaching role models and perceived barriers.

Although in the original SCCT model it was hypothesized that contextual factors directly affected the relationships between interest, choice goals, and actual behavior (Lent et al., 1994), more recently, a “mediated paths model” has been posited. In this modified model, contextual factors are believed to exert an indirect influence on choice goals and behavior by directly impacting self-efficacy, which in turn influences interests. Research on the career choices of math and science majors (Lent et al., 2001), engineering majors (Lent et al., 2003), and students in sport and leisure courses (Cunningham et al., 2005) have garnered support for the mediated paths model. Given these recent findings, this study will use a mediated paths model to investigate the impact of contextual factors on career interests in coaching.

Summary and Proposed Project

Social cognitive career theory (SCCT; Lent et al., 1994) is a comprehensive theory of career development that seems particularly relevant for understanding some of the predictors of female athletes’ career interests in coaching. Although the impact of self-efficacy and outcome expectations on career interests has been supported in the career literature (e.g., Cunningham et al., 2005; Lent et al., 2001; Lent et al., 2003), it has not been widely researched within a sport context. Only two known studies have examined specifically the relationship between coaching self-efficacy and interest in coaching (Everhart & Chelladurai, 1998; Lirgg et al., 1994). Moreover, neither of these studies fully explored the influence of contextual factors (i.e., perceived barriers and

supports) on the development of interest in coaching, and samples in both studies were limited to basketball players.

The purpose of the proposed study is to explore female athletes' interests in coaching as a career using SCCT (Lent et al., 1994). In addition to the investigating the influence of self-efficacy and outcome expectations on interest, it seeks to examine the impact of contextual factors, such as perceived barriers and exposure to female coaching role models, using a mediated paths model (Lent et al., 2001; Lent et al., 2003).

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APPENDIX B

**The Role of Sport Experiences in the Choice of Coaching as an Occupation:
Coaching Self-Efficacy, Valence, and Perceived Barriers**

In this study, perspectives on occupational choice are used to examine the perceptions of collegiate athletes regarding a coaching career. First, occupational self-efficacy suggests that individuals estimate their talents in terms of the job requirements. Second, occupational valence is used to examine the attractiveness of the coaching job to the individual. And, third, perceived barriers in regard to entering an occupation are examined.

You are requested to respond to questions relating to these perspectives and to your own sport experience. Please be assured that your responses will be kept in strict confidence. No individual responses will be identified in reporting results.

Please feel free to omit any information that you feel would be overly identifying or that you do not wish to provide.

Age _____ Race/Ethnicity _____ Sexual Orientation _____

Rank in school _____ Fr. _____ So. _____ Jr. _____ Sr.

Sport(s) in which you participate at your college _____

Section I: Desire to Coach

The following question is designed to identify your preference to be a paid, full-time coach at various levels. Some people prefer to be a coach and others may not. There are no right or wrong answers. Please circle the response which indicates your desire to coach a sport on a full-time basis.

How much would you like to coach a sport team on a full-time basis?

	Not at all									Very Much
	1	2	3	4	5	6	7	8	9	
In high schools	1	2	3	4	5	6	7	8	9	
In two-year colleges	1	2	3	4	5	6	7	8	9	
In Division III institutions	1	2	3	4	5	6	7	8	9	
In Division II institutions	1	2	3	4	5	6	7	8	9	
In Division I institutions	1	2	3	4	5	6	7	8	9	

Please continue to the next page.

Section II: Coaching Self-Efficacy

Instructions

The following section contains a list of 10 tasks associated with coaching a sport team at a college or university. Please read each item carefully and indicate how much confidence you have that you could accomplish each of these tasks by circling the appropriate number on the right side. There are no right or wrong answers. Please remember to focus on coaching a sport at a college or university when responding to each item.

EXAMPLE:

Confidence that you could:

	No Confidence									Complete Confidence
Develop a new offensive strategy	1	2	3	4	5	6	7	8	9	

If you feel that you have “no confidence” in developing a new offensive strategy you would circle the number 1 or 2 on the scale to the right. If you feel that you have a great deal of confidence, you would circle 7, 8, or 9.

For each statement below, circle only one number.

Confidence that you could:

		No Confidence								Complete Confidence
1	Make intelligent choices	1	2	3	4	5	6	7	8	9
2	Determine your coaching strengths	1	2	3	4	5	6	7	8	9
3	Resist interference by parents, alumni and other groups	1	2	3	4	5	6	7	8	9
4	Accurately assess the abilities of your players	1	2	3	4	5	6	7	8	9
5	Select an effective staff	1	2	3	4	5	6	7	8	9
6	Change coaching strategies if they do not work	1	2	3	4	5	6	7	8	9
7	Select the players best suited for your strategies	1	2	3	4	5	6	7	8	9
8	Identify individuals and groups who could help your program/team	1	2	3	4	5	6	7	8	9
9	Be self-assured in dealing with problems	1	2	3	4	5	6	7	8	9
10	Modify your strategies according to the strengths and weaknesses of your opponent	1	2	3	4	5	6	7	8	9

Section III: Occupational Valence

Instructions

When a person is employed in any job, she may have several experiences from that employment. Some of the experiences may be desirable while other may be undesirable. Below is a list of some of those experiences. Using the scale provided, please indicate the extent of your desire for each outcome by circling the appropriate number on the right hand side. There are no right or wrong answers.

EXAMPLE:

	Least Desirable								Most Desirable
A challenge	1	2	3	4	5	6	7	8	9

If you do not desire a challenging job at all you would mark 1 on the scale on the right hand side. If you desire a little challenge in the job, you would circle 2 and so on. If a challenging job is desirable, you would mark 6, 7, or 8, and if the challenge is most desirable, you would mark 9 on the right hand side.

How desirable are the following experiences in a job?

		Least Desirable								Most Desirable
1	Advancement to higher positions	1	2	3	4	5	6	7	8	9
2	Respect from others	1	2	3	4	5	6	7	8	9
3	Setting goals yourself	1	2	3	4	5	6	7	8	9
4	Using your ingenuity and inventiveness	1	2	3	4	5	6	7	8	9
5	Making the best of available talent	1	2	3	4	5	6	7	8	9
6	Overcoming odds	1	2	3	4	5	6	7	8	9
7	Personal growth and development	1	2	3	4	5	6	7	8	9
8	A sense of achievement	1	2	3	4	5	6	7	8	9
9	Making athletes attain their potential	1	2	3	4	5	6	7	8	9
10	Helping others	1	2	3	4	5	6	7	8	9
11	Recognition from the profession	1	2	3	4	5	6	7	8	9
12	Prestige among peers	1	2	3	4	5	6	7	8	9
13	Job security	1	2	3	4	5	6	7	8	9
14	Good fringe benefits	1	2	3	4	5	6	7	8	9
15	Being important in the organization	1	2	3	4	5	6	7	8	9
16	Being able to work alone	1	2	3	4	5	6	7	8	9
17	Being independent in thought and action	1	2	3	4	5	6	7	8	9
18	Directing others	1	2	3	4	5	6	7	8	9
19	Supervising others	1	2	3	4	5	6	7	8	9
20	Being honest	1	2	3	4	5	6	7	8	9

Section IV: Valence of Coaching

Instructions

Below is list of some experiences that may result from a person's work. Please indicate the extent to which you believe that the experiences are prevalent in coaching at a college or university. Please circle the appropriate number on the right hand side. There are no right or wrong answers. Please note that the items in this section are the same as in the previous section, but in this section you are asked to indicate the extent to which these experiences are prevalent in coaching.

EXAMPLE:

	Least Prevalent								Most Prevalent
A challenge	1	2	3	4	5	6	7	8	9

If you think that coaching is not challenging at all, you would mark 1 on the scale on the right. If you think it is a little challenging, you would circle 2 and so on. If you think it is very challenging you would mark 6, 7, or 8, and if it is most challenging you would mark 9. Circle one number for each statement.

How prevalent is each of the following in coaching?

		Least Prevalent								Most Prevalent
1	Advancement to higher positions	1	2	3	4	5	6	7	8	9
2	Respect from others	1	2	3	4	5	6	7	8	9
3	Setting goals yourself	1	2	3	4	5	6	7	8	9
4	Using your ingenuity and inventiveness	1	2	3	4	5	6	7	8	9
5	Making the best of available talent	1	2	3	4	5	6	7	8	9
6	Overcoming odds	1	2	3	4	5	6	7	8	9
7	Personal growth and development	1	2	3	4	5	6	7	8	9
8	A sense of achievement	1	2	3	4	5	6	7	8	9
9	Making athletes attain their potential	1	2	3	4	5	6	7	8	9
10	Helping others	1	2	3	4	5	6	7	8	9
11	Recognition from the profession	1	2	3	4	5	6	7	8	9
12	Prestige among peers	1	2	3	4	5	6	7	8	9
13	Job security	1	2	3	4	5	6	7	8	9
14	Good fringe benefits	1	2	3	4	5	6	7	8	9
15	Being important in the organization	1	2	3	4	5	6	7	8	9
16	Being able to work alone	1	2	3	4	5	6	7	8	9
17	Being independent in thought and action	1	2	3	4	5	6	7	8	9
18	Directing others	1	2	3	4	5	6	7	8	9
19	Supervising others	1	2	3	4	5	6	7	8	9
20	Being honest	1	2	3	4	5	6	7	8	9

Section V: Perceived Hindrance

Instructions

The following statements refer to some possible drawbacks to coaching at a college or university. Indicate the extent to which each of the following statement would hinder you from entering a coaching career. Please mark your answers according to the following 9-point continuum. There are no right or wrong answers.

Example:

		Would not Hinder at all					Would Hinder Completely			
		1	2	3	4	5	6	7	8	9
	Lack of social life									

If you think that lack of social life would hinder you completely, you would circle 9 in the right hand column, and if you feel it would hinder you somewhat, you would circle number 5 and so on. Circle one number for each statement.

		Would not Hinder at all					Would Hinder Completely			
		1	2	3	4	5	6	7	8	9
1	Coaching takes too much time									
2	Having to do a lot of traveling									
3	Coaching means working evenings and weekends									
4	Coaching interferes with social life									
5	Unfavorable working hours									
6	Coaching conflicts with family commitments									
7	Female coaches are discriminated against									
8	Female coaches are perceived to be unattractive									
9	Lack of support systems for female coaches									
10	Lack of support for female coaches from superiors									
11	Perception of homosexuality among female coaches									
12	Lack of training programs for female coaches									
13	Female players prefer male coaches									
14	Biases of old boys' network									
15	Male coaches do not accept female coaches									
16	Perceptions female coaches as unfeminine									
17	Lack of role models among female coaches									
18	Female coaches are treated unfairly									

Section VI: Role Model Influence

Please list any sport in which you have participated **since 9th grade AND** indicate the number and gender of each coach (include both head and assistant coaches) for whom you have played:

EXAMPLE:

Sport <u>Basketball</u>	Number & gender of all head coaches	<u>0</u>	female	<u>2</u>	male
	Number & gender of all assistant coaches	<u>2</u>	female	<u>1</u>	male
Sport <u>Softball</u>	Number & gender of all head coaches	<u>1</u>	female	<u>1</u>	male
	Number & gender of all assistant coaches	<u>0</u>	female	<u>1</u>	male
Sport _____	Number & gender of all head coaches	___	female	___	male
	Number & gender of all assistant coaches	___	female	___	male
Sport _____	Number & gender of all head coaches	___	female	___	male
	Number & gender of all assistant coaches	___	female	___	male
Sport _____	Number & gender of all head coaches	___	female	___	male
	Number & gender of all assistant coaches	___	female	___	male
Sport _____	Number & gender of all head coaches	___	female	___	male
	Number & gender of all assistant coaches	___	female	___	male

Next, please think about the one **FEMALE** coach that has had the greatest impact on your career development and consider her when responding to the following questions:

		Strongly Disagree			Strongly Agree	
1	There is someone I am trying to be like in my academic and career pursuits.	1	2	3	4	5
2	There is no one particularly inspirational to me in the academic or career path I am pursuing.	1	2	3	4	5
3	In the academic or career path I am pursuing, there is someone I admire.	1	2	3	4	5
4	There is no one I am trying to be like in my academic and career pursuits.	1	2	3	4	5
5	I have a mentor in my academic or career field.	1	2	3	4	5
6	I know of someone who has a career I would like to pursue.	1	2	3	4	5
7	In the academic or career path I am pursuing, there is no one who inspires me.	1	2	3	4	5

APPENDIX C

Insert Date

Name
Director of Athletics
College
Address
City, State Zip

Dear Name:

I am a PhD candidate at the University of Missouri—Columbia in Counseling and Sport Psychology, and my faculty advisor is Dr. Richard Cox. I am writing to request your permission to recruit female student-athletes at [your college] to participate in my dissertation research. My project is entitled, “Where are the Women in Women’s Sports?: Predictors of Female Athletes’ Interest in Coaching.” It explores the role of self-efficacy, outcome expectations, perceived barriers, and female coaching role models on interest in coaching as an occupation. This research has been approved by the Campus Institutional Review Board at the University of Missouri-Columbia and will help increase our knowledge about how female student-athletes think about coaching. By better understanding some of the predictors of interest in coaching among women, we will be better prepared to recruit and retain qualified female coaches for our student-athletes.

Student-athletes who choose to participate will be asked to complete a short questionnaire that should take approximately 15-20 minutes to complete (see attached). There are no risks or discomforts associated with participation in this project greater than would be experienced in daily life. Prospective participants will be told that their participation in the research is strictly voluntary, that they can choose to stop at any time, and that their consent or refusal to participate will not affect their standing with either the team or the College.

With your permission, I will contact the head coaches of the women’s volleyball, basketball, softball, and soccer teams to solicit their support for this project and to arrange a time for me to attend a team meeting or practice to collect data. I will contact you in a few days to see if you have any questions or need any additional information. If you need to contact me in the meantime, you may do so at 573.256.4786 or at kem5z2@mizzou.edu.

Thank you for your assistance with this project.

Sincerely,

Kelli Moran-Miller
Doctoral Candidate
Counseling Psychology & Sport Psychology
University of Missouri-Columbia

Insert Date

Name
Head Coach of Sport
College
Address
City, State Zip

Dear Head Coach:

I am a PhD candidate at the University of Missouri—Columbia in Counseling and Sport Psychology, and my faculty advisor is Dr. Richard Cox. I am writing to request your permission to recruit the student-athletes on your team to participate in my dissertation research. My project is entitled, “Where are the Women in Women’s Sports?: Predictors of Female Athletes’ Interest in Coaching.” It explores the role of self-efficacy, outcome expectations, perceived barriers, and female coaching role models on interest in coaching as an occupation. This research has been approved by the Campus Institutional Review Board at the University of Missouri-Columbia. The results will help increase our knowledge about how female student-athletes think about coaching. By better understanding some of the predictors of interest in coaching among women, we will be better prepared to recruit and retain qualified female coaches for our student-athletes.

With your permission, I would like to arrange a time to meet with your team to recruit participants, perhaps during a team meeting or practice. Student-athletes who choose to participate will be asked to complete a short questionnaire that should take no more than 20 minutes to complete (see attached). There are no risks or discomforts associated with their participation in this project greater than would be experienced in daily life. Prospective participants will be told that their participation in the research is strictly voluntary, that they can choose to stop at any time, and that their consent or refusal to participate will not affect their standing with either the team or the College.

I will contact you in a few days to see if you have any questions or need any additional information. If you need to contact me in the meantime, you may do so at 573.256.4786 or at kem5z2@mizzou.edu.

Thank you for your assistance with this project.

Sincerely,

Kelli Moran-Miller
Doctoral Candidate
Counseling Psychology & Sport Psychology
University of Missouri-Columbia

APPENDIX D
Youth Assent/Consent Form

You are invited to participate in a research study. As a potential participant in this study, you need to understand the following information...

1. The Goal of the Project:

- The goal of this project is to learn more about how a person's sport experiences can affect the choices she makes about a future career in coaching.

2. Participation Procedures and Guidelines:

- First, read this form carefully, indicate whether or not you agree to participate in the study, and sign it at the bottom.
- After completing this form, you will fill out a survey packet, which will take you approximately 15 to 30 minutes to complete. You may choose to skip any items you do not wish to answer.
- When we are finished with this study, we will write a report on what we found. Your name will not be included anywhere in this report.

3. Participation Benefits and Risks:

- By participating in this study, you will be helping increase knowledge about how collegiate athletes perceive coaching as a career choice.
- This study does not involve any risks (or discomforts) that are greater than those you experience in your daily life.

4. Rights to Refuse or Withdraw:

- Your participation in this study is completely VOLUNTARY.
- Your consent or refusal to participate will not affect your standing with either your team or the College/University, and there is no penalty if you decide you do not wish to participate.
- You are free to stop at any point and can choose not to answer any particular questions.
- If you are under 18, please note that a waiver of parental consent has been approved by the University of Missouri-Columbia Campus Institutional Review Board.

5. Rights as a Participant:

- You have the right to ask questions about this research project. Please direct any questions to:

Kelli Moran-Miller
Doctoral Candidate at University of Missouri—Columbia
(573) 256-4786
kem5z2@mizzou.edu

For more information regarding participation in this research, please feel free to contact the University of Missouri-Columbia Campus Institutional Review Board office at (573)882-9585.

6. Agreement to Participate:

- Please indicate whether or not you are willing to participate in this research project by checking whether or not you agree to participate, printing your full name, and signing this form.

_____ I AGREE to participate in this research project.

_____ I DO NOT AGREE to participate in this research project.

Print full name: _____

Signature: _____

VITA

Kelli Moran-Miller was born October 19, 1977 in Knoxville, Tennessee and grew up in Oklahoma City, Oklahoma. She graduated in 2000 from the University of Notre Dame with a Bachelor of Arts in the Program of Liberal Studies. She earned a Master's degree in Counseling Psychology with an emphasis in Sport Psychology from the University of Missouri-Columbia in 2006 and, in 2009, will complete her Ph.D., which also is in Counseling Psychology with an emphasis in Sport Psychology. Kelli will complete her predoctoral internship at Colorado State University's Counseling Center in 2009 and plans to pursue a career in clinical practice.