UNIVERSITY OF OKLAHOMA GRADUATE COLLEGE

THE ROLE OF ATHLETIC IDENTITY FOR CAREER SUCCESS: EXAMINING THE MEDIATING EFFECTS OF TRANSFERABLE SKILLS FOR RETIRED COLLEGIATE ATHLETES IN THE WORKFORCE

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THE ROLE OF ATHLETIC IDENTITY FOR CAREER SUCCESS: EXAMINING THE MEDIATING EFFECTS OF TRANSFERABLE SKILLS FOR RETIRED COLLEGIATE ATHLETES IN THE WORKFORCE

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Abstract

Athletes who join the workforce after their athletic career ends often still identify as an athlete. Though participation in athletics helps develop skills that are applicable to the workforce, such as mentoring abilities and emotional intelligence, most skills have yet to be identified. This study aims to address this issue by comparing retired collegiate athletes with non-athletes in the workforce and assessing potentially transferable skills, specifically emotional intelligence, mentoring ability, mentoring receptiveness, self-efficacy, and goal adjustment. The study hypothesizes that these skills mediate the relationship between athletic identity and objective and subjective career success. In a sample of 313 retired collegiate athletes and non-athletes in the workforce, athletes only reported significantly higher self-efficacy than non-athletes; however, athletic identity was unrelated to career success and the mediation hypotheses were rejected. This research used a cross-sectional survey design, which did not allow the assessment of when levels of athletic identity decreased and how transferable skills were developed. Future research should use a longitudinal design to assess the relationships between athletic identity and skill development during athletes' collegiate career and whether and how they apply after their transition into the workforce.

The Role of Athletic Identity for Career Success:

Examining the Mediating Effects of Transferable Skills for Retired Collegiate Athletes in the Workforce

Each year, roughly 7,300,000 high school athletes compete in various sports at the high school level. While many hope to be recruited by college coaches, only six percent of high school athletes play collegiately as a student athlete. Two percent (e.g., 492,000 athletes) receive an athletic scholarship (NCAA, 2019), and the likelihood of having a professional sports career after college is even lower (i.e., men's basketball: 1.2%, women's basketball: 0.9%, and football: 1.6%; NCAA, 2019). The more athletes identify with their athletic role (Brewer et al., 1993), the more time they spend on training and the better their performance (Chartrand & Lent, 1987); however, high athletic identity can present a challenge when students are approaching the end of their collegiate career and enter the workforce (Murphy et al., 1996).

While some studies suggest that athletic retirement is an opportunity for athletes to redefine themselves and does not hinder their career success (Curtis & Ennis, 1988; Perna et al., 1999), others suggest that their athletic identity is threatened, leading to a weakened sense of self, thus limiting their career (Brewer et al., 1993; Kerr & Dacyshyn, 2000; Murphy et al., 1996). With the graduation rate for collegiate athletes at 88% (NCAA, 2019), helping athletes transition into the workforce becomes increasingly important, especially because retired athletes are more likely to be negatively affected by recruiters' biases, inferences, and assumptions regarding their limited job experience (Tanguay et al., 2012).

In addition, athletes and organizations often fail to recognize how participation in collegiate athletics is applicable to the workforce (Tanguay et al., 2012; Van Raalte et al., 2017). While participating in collegiate athletics can leave student athletes with minimal time to prepare

for their professional careers after sports (Shurts & Shoffner, 2004), research suggests that athletic identity has positive effects for skill and personal development that can be transferred to the workplace (Bauman et al., 2000; Becker, 1964; Long & Caudill, 1991). Specifically, emotional intelligence, mentoring ability, mentoring receptiveness, self-efficacy, and goal adjustment (Kane et al., 1996; Sauer et al., 2013; Weinberg et al., 2003; Wrosch et al., 2003) are skills that collegiate athletes practice and develop during their athletic career. Research shows that these skills can be transferred to the workplace and can have positive effects on career success compared with non-athletes in the workforce (Sauer et al., 2013). Current research, however, has yet to examine the specific relationships between these skills and athletic identity, and whether they explain the conflicting results of athletic identity for career success for retired collegiate athletes in the workforce.

This study aims to investigate an Athletic Skills Model (Figure 1) by examining the relationship between athletic identity and the transference of skills developed through participation in collegiate sports as an antecedent to objective and subjective career success. It is hypothesized that transferable skills (i.e., emotional intelligence, mentoring ability, mentoring receptiveness, self-efficacy, and goal adjustment) will mediate the relationship between athletic identity and career success.

Athletic Identity and Career Success

Athletic identity can influence individuals' thoughts and actions throughout their athletic career and can continue after their career terminates (Hogg, 2000). Athletic identity begins as an individual develops a sense of self in early adolescence and adulthood upon becoming an athlete at any level (Brewer et al., 1993; Houle et al., 2010). It strengthens as participation in sporting

activities increases (Brewer et al., 1993) and can develop to the near exclusivity of other roles (Adler & Adler, 1987).

Benson et al. (2015) found that collegiate athletes report higher levels of athletic identity exclusivity when thinking about ending their athletic career relative to thinking about ending their student career. These findings are consistent with terror management theory, where Greenberg et al. (1990) suggest that the conflict between the sense of self and ultimate mortality creates terror that is managed by embracing cultural beliefs. Accordingly, the goal-discrepant thoughts of ending an athletic career pose a threat compared to non-goal-discrepant thoughts of ending a student career, suggesting that terminating a career in sports indicates failing to accomplish the goal of playing professionally, while ending a student career satisfies the goal of graduation (Benson et al., 2015). This stark contrast poses questions regarding the presence of athletic identity and career planning beyond sports, and researchers have conflicting results on athletic identity and transitioning out of collegiate athletics.

Some studies found a negative relationship between athletic identity, career development, and career maturity (Baillie & Danish, 1992; Brown et al., 2000; Murphy et al., 1996), while others suggest that high levels of athletic identity are associated with increased career-decision-making self-efficacy (e.g., the strong belief in one's ability to choose a career), optimism regarding the future (Cabrita et al., 2014), and career planning (Lally & Kerr, 2005). This suggests that if athletic identity remains present after the career planning process, it may not pose a considerable threat to athletes' career success after sports and can even enhance it. While these studies have examined the effects of athletic identity on the transition process between athletic career and professional career, minimal research has focused on the relationship between athletic identity and career success upon retired collegiate athletes entering the workforce.

Although definitions of career success vary slightly among studies, most agree that it is defined by objective (e.g., salary) and subjective (e.g., career satisfaction) variables; research supports a moderate correlation between the two (Abele & Spurk, 2009; Henderson et al., 2006; Sauer et al., 2013). Research found that participation in collegiate athletics can prepare athletes for life after college (Abele & Spurk, 2009; Gattiker & Larwood, 1988; Sauer et al., 2013), and that athletic identity does not impact their life satisfaction beyond sports (Webb et al., 1998). Sauer et al. (2013) even demonstrated that athletes achieve greater career success than non-athletes, and Henderson et al. (2006) found that athletes received higher objective career success (e.g., higher wage premiums) in specific careers (e.g., business, manual labor and military). Thus, it is hypothesized that:

H1: Athletic identity will be positively related to objective (H1a) and subjective career success (H1b).

Emotional Intelligence

Goleman (1995) claims emotional intelligence is as important as the intelligence quotient for performance and career success (Hallett & Hoffman, 2014). Salovey and Mayer (1990) define emotional intelligence by four components: perceiving emotion (i.e., the ability to recognize thoughts and feelings, distinguish the type of the expression used, and adapt accordingly); using emotion to facilitate thought (i.e., the ability to utilize emotions as a cognitive judgement tool for prioritization of which behaviors to address first); understanding emotion in oneself and others (i.e., the ability to comprehend the intent of the emotion in the context of which it is presented); and managing emotion (i.e., the ability to decode emotions to facilitate them into a favorable outcome). Many studies consistently demonstrate emotional intelligence's applicability to the workforce by a positive correlation between emotional

intelligence and leadership (Barling et al., 2000; Gardner & Stough, 2002; George, 2000), and job performance (O'Boyle et al., 2011). Thus, it is hypothesized that:

H2: Emotional intelligence will be positively related to objective (H2a) and subjective career success (H2b).

According to Lane et al. (2009), high levels of emotional intelligence explain how athletes manage their emotions during their athletic career by practicing imagery or self-talk. Additionally, Hallett and Hoffman (2014) show that athletes overcome feelings of anxiety by increasing their self-confidence to trigger positive thoughts that help achieve the expected performance level. These studies suggest that athletes who have developed their emotional intelligence are able to redirect their emotions to assist in achieving desired outcomes. Sauer et al. (2013) explored former high school athletes in the workforce and found that they have higher levels of emotional intelligence and achieve greater career success compared with non-athletes. Collegiate athletes have longer sports' career than former high school athletes thus having additional time to develop their emotional intelligence skills during their collegiate athletic career compared with non-athletes who may not have as many opportunities. Thus, it is hypothesized that:

H2: Athletic identity will be positively related to emotional intelligence (H2c).

Mentoring

Kram and Isabelle (1985) identified mentoring as an effective factor to professional development and performance. It has been found to increase overall career success, defined as the number of promotions received, salary, and career satisfaction (Dreher & Ash, 1990), as well as career mobility, career opportunity, satisfaction, recognition, and number of promotions (Fagenson, 1989). Mentoring occurs between an experienced individual and a less experienced protégé (Hoffman & Longhead, 2016; Ragins & Kram, 2007) where a non-personal relationship

is formed through either formal mentoring (i.e., a structured process to match the mentor and the mentee and often occurs with a shorter duration) or informal mentoring (i.e., naturally occurs between individuals with similar interests, attributes or occupations and often with a longer duration; Wanberg et al., 2003).

Kram (1983) defined mentoring by two components that are needed to achieve career success: psychosocial and career-related outcomes. Research has partially supported the relationship between engagement in formal mentoring and increased psychosocial support (i.e., aspects related to the protégé's self-image and competence such as providing role modeling for the protégé and an atmosphere of overall acceptance and confirmation support; Choa et al., 1992), while informal mentoring has demonstrated a greater effect on career-related outcomes (i.e., actionable career advancement items, such as coaching and assigning challenging tasks to the protégé and providing opportunities for exposure; Ragins & Cotton, 1999). Specifically, Raabe and Beehr (2003) found that during formal mentoring relationships, mentor and mentee often differ in their expectations, and mentoring is not related to career success; on the other hand, informal mentoring has consistently been found to allow more meaningful relationships to emerge (Chao, 2009) and increase career success (i.e., career related support and higher salaries; Chao et al., 1992). Practicing mentoring positively affects individuals' overall ability to mentor (i.e., mentoring ability) and receptiveness to being mentored (i.e., mentoring receptiveness), which suggests that individuals who were previously mentored or who were mentors are better prepared to provide mentoring to others (Sauer et al., 2013). Thus, it is hypothesized that:

H3: Mentoring ability will be positively related to objective (H3a) and subjective career success (H3b).

H4: Mentoring receptiveness will be positively related to objective (H4a) and subjective career success (H4b).

Research shows that informal mentoring naturally occurs within collegiate athletics (Hoffman & Loughead, 2016). According to Watson et al. (2011), athletes who practice mentoring continuously interpret information through mentoring receptiveness and then learn how to provide better mentoring to other team members through their mentoring abilities. Specifically, practicing mentoring helps athletes to become more comfortable with interpersonal relationships and to express their emotions (Perna et al., 1996). Hoffman and Loughead (2016) demonstrated that athletes who are mentored have an increased willingness to utilize mentoring to assist their peers and found that mentoring enhances their athletic performance, confidence, and athletic success. These studies suggest that athletes who have developed their mentoring abilities and receptiveness are able to enhance interpersonal relationships in their respective setting (Rhodes, 2002).

Sauer et al. (2013) found that former high school athletes have higher levels of mentoring ability and mentoring receptiveness and report greater career success compared with non-athletes. These results seem applicable to collegiate athletes where there is more exposure during their collegiate athletic career to develop mentoring ability and mentoring receptiveness skills. Thus, it is hypothesized that:

H3: Athletic identity will be positively related to mentoring ability (H3c).

H4: Athletic identity will be positively related to mentoring receptiveness (H4c).

Self-Efficacy

Many studies support self-efficacy as an important construct to increase performance (Bandura, 1977, 1986; Bandura & Cervone, 1986). Self-efficacy reflects an individual's belief regarding their ability to meet specific expectations or pre-established standards (Bandura, 1986). Self-efficacy has been shown to be the primary determinant of performance (Bandura,

1977; Bandura & Cervone, 1983). Performance increases when individuals believe in their ability to attain a specific achievement (Locke & Latham, 2006). Bandura (1986) identified four sources of self-efficacy: past performance (i.e., one's mastery or accomplishments), vicarious experiences (i.e., observation and comparison of other's performance), verbal persuasion (i.e., commentary or verbiage used by teachers, coaches, leaders, etc., as persuasive techniques), and physiological states (i.e., physical condition of the body). While all sources influence self-efficacy, past performance often emerges as the strongest source of self-efficacy on performance outcomes (Ackerman et al., 1995; Bandura, 1997; Warner et al., 2014). Studies across a variety of situations have consistently demonstrated a positive correlation between self-efficacy and career success (i.e., performance effectiveness and current salary for employees from a southeastern municipality; Day & Allen, 2004), work performance and work engagement (i.e., with high school teachers in Korea; Song et al., 2018), and job satisfaction (i.e., with K-12 teachers in Canada; Klassen & Chui, 2010). Thus, it is hypothesized that:

H5: Self-efficacy will be positively related to objective (H5a) and subjective careers success (H5b).

According to Bandura et al. (2001), "Having achieved success in a particular activity domain can create a more general sense of efficacy to learn in other life situations" (p. 126). He asserts that self-efficacy is a dynamic construct which adapts to the domain where it is applied and can transfer the positive effects from one's mastery and high levels of self-efficacy from one domain to an unrelated domain (Bandura, 1997). Research shows that collegiate athletes who have achieved previous success in their athletic career often report high levels of self-efficacy. Kane et al. (1996) demonstrate that high self-efficacy in wrestlers predicts positive performance outcomes when participating in a competitive environment, and George (1994)

found that baseball players with high self-efficacy increase their overall performance when batting over nine competitive summers.

Despite its importance for performance and its ability to transfer to an unrelated domain, there is no research on the general self-efficacy of collegiate athletes who have achieved success within the athletic domain compared with non-athletes who may not have had domains where success has been achieved. Given the current research, it appears reasonable for athletes to experience the positive effects of performance from their self-efficacy in their collegiate career to transfer into a new domain (i.e., career or workforce). Thus, it is hypothesized that:

H5: Athletic identity will be positively related to self-efficacy (H5c).

Goal Adjustment

Goals are widely accepted as being an important construct to increase performance (Locke & Latham, 1990). They have been shown to be most effective when they are specific and challenging compared with "do your best goals" where individuals are encouraged to perform but are not challenged to reach a specific goal (Latham & Yukl, 1975). Locke and Latham's (1990) goal setting theory asserts that performance is affected by how a goal is chosen, the level of effort placed on the goal, and the level of goal difficulty.

Many studies across different settings (i.e., field, laboratory, simulation) support the role of goals on performance; thus, the generalizability for goal setting as a predictor for performance is highly supported. Specifically, Kyllo and Landers (1995) examined 36 studies in a meta-analysis and confirmed that setting goals improves performance; however, business goals constantly change and evolve, requiring employees to adapt, disengage, and reengage their efforts to new or different goals (Cohn, 2015).

Wrosch et al. (2003) coined the term *goal adjustment* as having the ability to disengage from one goal (i.e., goal disengagement) and reengage in another (i.e., goal reengagement) to provide individuals with the ability to withdraw from a stressful situation or perceived threat of not accomplishing a goal and to redirect their energy by reengaging in a new goal. Their research demonstrated that high levels of goal disengagement abilities and high levels of goal reengagement abilities increase subjective well-being and are correlated with lower levels of depression in individuals who face important, life changing goals (e.g., setting annual performance goals within organizations, competing to play at the collegiate level, or transitioning out of an athletic career). Thus, it is hypothesized that:

H6: Goal disengagement will be positively related to objective (H6a) and subjective career success (H6b).

H7: Goal reengagement will be positively related to objective (H7a) and subjective career success (H7b).

Athletes place a high level of importance on sports performance beginning before age 12 and continuing throughout their athletic career (NCAA, 2016). Studies have demonstrated that collegiate and Olympic athletes practice goal setting and perceive goals as a means to increase performance and personal growth (Weinberg et al., 2000; Weinberg et al., 2003). It seems likely that collegiate athletes practice goal adjustment and adapt to changing needs during their athletic career to increase their performance. Thus, it is hypothesized that:

H6: Athletic identity will be positively related to goal disengagement (H6c).

H7: Athletic identity will be positively related to goal reengagement (H7c).

Athletic Skills Model

The Athletic Skills Model (Figure 1) describes that athletic identity is hypothesized to motivate the development of skills to enhance career success. Research suggests that positive effects of athletic identity (i.e., development of skills learned from previous experiences;

Bauman et al., 2000; Becker, 1964; Long & Caudill, 1991) are potentially applicable and transferable into a new career (Zulfiqar & Shah, 2013), and may mediate the relationship between athletic identity and career success.

Given the current research on athletic identity and career success, the Athletic Skills

Model aims to demonstrate that emotional intelligence, mentoring ability, mentoring
receptiveness, self-efficacy, goal disengagement, and goal reengagement mediate the relationship
between athletic identity and objective and subjective career success. Thus, it is hypothesized
that:

H8: Emotional intelligence, mentoring ability, mentoring receptiveness, self-efficacy, goal disengagement, and goal reengagement will mediate the relationship between athletic identity and objective career success (H8a) and subjective career success (H8b).

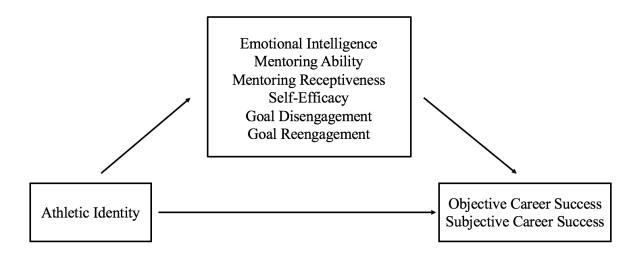


Figure 1. Proposed Athletic Skills Model of the effect of athletic identity on career success.

Methods

Sample and Procedures

Following Institutional Review Board (IRB) approval (see Appendix A), data collection occurred during the Fall Semester of 2018 and the Spring Semester of 2019. Participants were recruited through social media, email, and flyers. In order to increase the sample size, additional

recruiting materials were created, revised, and approved by the IRB (see Appendix A). This additional recruiting material included a business card flyer and a T-shirt with a QR code to the survey. Data were collected through two online surveys created in Qualtrics. The first survey was linked to the research instrument; a separate link was used as a compensation opportunity for participating in the research. Upon completion of the survey, participants could enter their name in a drawing for two tickets to an NBA game. The drawing was tracked separately from the survey responses to protect participant anonymity.

A total of 573 people participated in the study; however, after removing incomplete responses, the effective sample resulted in 313 participants (211 non-athletes and 102 retired collegiate athletes; 218 females and 95 males). The mean ages of respondents were 35.67 years (SD = 10.91) for non-athletes and 30.66 years (SD = 8.25) for retired collegiate athletes.

Measures

Athletic Identity Measurement Scale (AIMS)

The AIMS, developed by Brewer et al. (1993), was used to measure the degree to which an individual identifies as an athlete. Participants used a 7-point scale ranging from I = strongly disagree to 7 = strongly agree (see Appendix B). The 10-item scale assesses the degree to which the participant identifies as an athlete. Sample questions include, "I consider myself an athlete" and "Other people mainly see me as an athlete." Reliability analyses of the AIMS items for the current data set ($\alpha = .93$) were the same as the original scale by Brewer et al. (1993; $\alpha = .93$), indicating good reliability.

Emotional Intelligence Scale (EIS)

The EIS, developed by Sauer et al. (2013) and adapted from Goleman's (1998) five major facets of emotional intelligence, was used to measure the emotional intelligence of the

individual. The five facets include: self-awareness, self-regulation, self-motivation, social awareness, and relationship management. Participants used a 7-point scale ranging from I = strongly disagree to 7 = strongly agree (see Appendix C). The 12-item scale assesses the ability to identify and assess emotions of oneself or others and control emotions appropriately. Sample questions include, "I am good at predicting how someone will feel" and "I often find it difficult to judge if someone is rude or polite." Reliability analyses of the EIS items for the current data set ($\alpha = .69$) were lower than the original scale by Sauer et al. (2013; $\alpha = .86$).

Mentoring Ability Scale (MAS)

The MAS, developed by Sauer et al. (2013) and adapted from Dreher and Ash (1990), was used to measure the individual's ability to provide mentoring and feedback. Participants used a 7-point scale ranging from $I = strongly \ disagree$ to $T = strongly \ agree$ (see Appendix D). The 13-item scale assesses the degree to which the participant is able to serve as a mentor. Sample questions include, "To what extent have you, serving as a mentor, given or recommended a subordinate for challenging assignments that present opportunities to learn new skills" and "To what extent have you, serving as a mentor, served as a role model?" Reliability analyses of the MAS items for the current data set ($\alpha = .90$) were similar to the original scale by Sauer et al. (2013; $\alpha = .97$), indicating good reliability.

Mentoring Receptiveness Scale (MRS)

The MRS, developed by Sauer et al. (2013) and adapted from Dreher and Ash (1990), was used to measure the individual's ability to receive mentoring and feedback. Participants used a 7-point scale ranging from I = strongly disagree to T = strongly agree (see Appendix E). The 9-item scale assesses the degree to which participants are able to receive mentoring. Sample questions include, "To what extent has your mentor gone out of his/her way to promote your

career interests" and "To what extent has your mentor shared personal experiences as an alternative perspective to your problems?" Reliability analyses of the MRS items for the current data set (α = .91) were similar to the original scale by Sauer et al. (2013; α = .94), indicating good reliability.

General Self-Efficacy Scale (GSES)

The GSES, developed by Bosscher and Smit (1998), was used to measure the individual's belief regarding their ability to meet expectations. Participants used a 4-point scale ranging from I = not at all to 4 = exactly true (see Appendix F). The 12-item scale assesses the degree to which the participant had belief in their abilities to attain specific expectations through three dimensions: initiative, effort, and persistence. Sample questions include, "If something looks too complicated, I will not even bother to try it" (initiative), "When I decide to do something, I go right to work on it" (effort), and "When I set important goals for myself, I rarely achieve them" (persistence). Reliability analyses of the GSES items for the current data set ($\alpha = 0.79$) were greater than the original scale by Bosscher and Smit (1998; $\alpha = 0.69$), indicating good reliability.

Goal Adjustment Scale (GAS)

The GAS, developed by Wrosch et al. (2003), was used to measure the pursuit of personal goals. Participants used a 5-point scale ranging from I = never true to 5 = always true (see Appendix G). The 10-item scale assesses two dimensions of goals: goal disengagement and goal reengagement. Both scales presented the scenario, "If I have to stop pursuing an important goal in my life..." Sample statements for goal disengagement include, "It's easy for me to reduce my effort towards the goal" and "I convince myself that I have other meaningful goals to pursue." Sample statements for goal reengagement include, "I put effort toward other meaningful

goals" and "I start on other new goals." Reliability analyses of the GAS items for goal reengagement (α = .85) were similar to the original scale (α = .86) by Wrosch et al. (2003); whereas Cronbach's alpha for goal disengagement was lower (α = .48) than the original scale (α = .84) and not acceptable. Thus, the goal disengagement scale was removed from this study.

Subjective Career Success: Career Satisfaction Measure (CSM)

The CSM, developed by Sauer et al. (2013) and adapted from Greenhaus et al. (1990), was used to measure how satisfied an individual felt with their career success. Participants used a 5-point scale ranging from $I = never\ true$ to $5 = always\ true$ (see Appendix H). The 5-item scale assesses the participants' perceived measure of career success. Sample questions include, "I am satisfied with the success I have achieved in my career" and "I am satisfied with the progress I have made toward my goals for income." Reliability analyses of the CSM items for the current data set ($\alpha = .89$) were similar to the original scale by Greenhaus et al. (1990; $\alpha = .94$), indicating good reliability.

Objective Career Success Measurement (OCSM)

Following Sauer et al. (2013), objective career success was assessed with participants self-reporting their salary the first year out of college, then every five years after that. The self-reported salary question was as follows: "To your best recollection, estimate your pre-tax earnings in the first year after undergraduate college and every five years thereafter (Example, pre-tax earnings for the first year after undergraduate college are \$27,000)" (see Appendix I).

Data Analyses

To describe the relationships between variables, descriptive statistics, and correlations were examined and reliability coefficients (Cronbach's alpha) were calculated for each scale.

Regression analyses were conducted using Baron and Kenny's (1986) method to test for

mediation between athletic identity, emotional intelligence, mentoring ability, mentoring receptiveness, self-efficacy, goal reengagement, objective career success, and subjective career success in the overall sample but did not include goal disengagement as the scale was not reliable. This method involves four steps in order to obtain complete mediation, described as (1) the predictor variable significantly affects the criterion variable to establish an effect which may be mediated, (2) the predictor variable significantly affects the mediator variable, (3) the mediator variable significantly affects the criterion, (4) the mediator variable remains significant when the predictor variable and criterion variable are added to the equation, and the presence of the mediator variable completely removes the effect of the predictor variable. If the predictor variable continues to significantly affect the criterion variable, only partial mediation occurs (Baron & Kenny, 1986).

Results

Descriptive Statistics, Reliabilities and Correlations

Table 1 shows the descriptive statistics for age, gender, ethnicity, education, athletic identity, emotional intelligence, mentoring ability, mentoring receptiveness, self-efficacy, goal reengagement, subjective career success, and objective career success by comparing retired collegiate athletes with non-athletes. Retired collegiate athletes (M = 30.66, SD = 8.25) were significantly younger than non-athletes (M = 35.67, SD = 10.91), $F_{(1,313)} = 16.448$, p < .001, and had significantly higher levels of education (M = 4.12, SD = 1.17) than non-athletes (M = 3.79, SD = 1.31), $F_{(1,313)} = 4.766$, p < .05. They also reported significantly higher levels of athletic identity (M = 4.60, SD = 1.17) than non-athletes (M = 2.99, SD = 1.37), $F_{(1,313)} = 103.975$, p < .001, as well as significantly higher self-efficacy skills (M = 3.50, SD = .39) than non-athletes (M = 3.38, SD = .41), $F_{(1,313)} = 6.423$, p < .05.

Table 2 describes the correlations and reliabilities for demographics and all other variables except goal disengagement. Athletic identity was negatively correlated with age (r = -.272, p < .01) and gender (r = -.178, p < .01), suggesting that high levels of athletic identity were associated with younger individuals who identified as male. Subjective career success was positively correlated with education (r = .197, p < .01), mentoring ability (r = .264, p < .01), mentoring receptiveness (r = .196, p < .01), and self-efficacy (r = .258, p < .01). This indicates that high levels of subjective career success were associated with higher levels of education, mentoring ability, and mentoring receptiveness. Objective career success was positively correlated with age (r = .206, p < .01), ethnicity (r = .164, p < .01), and education (r = .139, p < .05), but negatively correlated with gender (r = -.240, p < .01). High levels of objective career success were associated with individuals who were older, had higher levels of education, and who identified as being white. There was also a small, although not significant, positive correlation between objective career success and subjective career success (r = .084, p = .182).

Hypotheses Testing

Athletic Identity and Career Success

In the first step, two linear regression analyses were conducted to test Hypotheses 1a and 1b with athletic identity as the predictor variable and objective and subjective career success as the criterion variables. Examination of the standardized beta weights demonstrated that athletic identity did not significantly predict neither objective (β = -.006, t = -.099, p = .921) nor subjective career success (β = -.024, t = -.421, p = .674). Therefore, Hypotheses 1a and 1b were not supported.

Transferable Skills and Objective Career Success

The second step examined the relationships between each transferable skill, excluding goal disengagement, and objective career success. Objective career success was not significantly predicted by emotional intelligence ($\beta = -.055$, t = -.868, p = .386), mentoring ability ($\beta = .079$, t = 1.259, p = .209), mentoring receptiveness ($\beta = .049$, t = .785, p = .433), self-efficacy ($\beta = .061$, t = .972, p = .332), or goal reengagement ($\beta = .006$, t = .091, p = .928). Therefore, Hypotheses 2a, 3a, 4a, 5a, 6a, and 7a were not supported.

Transferable Skills and Subjective Career Success

The next step examined the relationship between each transferable skill, excluding goal disengagement, and subjective career success. Subjective career success was positively predicted by mentoring ability (β = .264, t = 4.830, p < .001, adjusted R^2 = .067), mentoring receptiveness (β = .196, t = 3.523, p < .001, adjusted R^2 = .035), and self-efficacy (β = .258, t = 4.700, p < .001, adjusted R^2 = .063) supporting Hypotheses 3b, 4b, and 5b, whereas emotional intelligence (β = .090, t = 1.592, p = .112) and goal reengagement (β = .099, t = 1.749, p = .081) did not predict subjective career success. Therefore, Hypotheses 2b, 6b and 7b were not supported.

Athletic Identity and Transferable Skills

To investigate the relationships between athletic identity and transferable skills, each transferable skill, excluding goal disengagement, was regressed onto athletic identity. Athletic identity did not predict emotional intelligence (β = -.020, t = -.349, p = .727), mentoring ability (β = -.027, t = -.482, p = .630), mentoring receptiveness (β = -.035, t = -.621, p = .535), self-efficacy (β = .084, t = 1.487, p = .138), or goal reengagement (β = -.094, t = -1.663, p = .097). Therefore, Hypotheses 2c, 3c, 4c, 5c, 6c, and 7c were not supported.

Athletic Skills Model

To control for demographic variables and to consider the potential effect of transferable skills simultaneously, two stepwise hierarchical linear regression analyses were conducted to test each model for Hypotheses 8a and 8b. Tables 3 and 4 show the results for the full Athletic Skills Model, which stated that all transferable skills would collectively mediate the relationships between athletic identity and objective and subjective career success.

For objective career success, age ($\beta = .159$, t = 2.642, p < .01; see table 3), gender ($\beta = -$.274, t = -4.536, p < .01), ethnicity ($\beta = .144$, t = 2.375, p < .05), and education ($\beta = .175$, t = .05) 2.903, p < .01) were included in the first step and explained 13% of variance (adjusted $R^2 =$.133). Older, male, Caucasians with higher education reported more objective career success than respondents who were younger, female, non-Caucasian and less educated. In the second step, athletic identity was included in the regression model but did not significantly predict objective career success ($\beta = -.002$, t = -.028, p = .978), whereas all demographic variables remained significant (age: $\beta = .158$, t = 2.514, p < .05; gender: $\beta = -.274$, t = -4.389, p < .01; ethnicity: $\beta = -.274$.144, t = 2.370, p < .05; education: $\beta = .175$, t = 2.894, p < .01); the model explained 13% of variance (adjusted $R^2 = .129$). In the third step, emotional intelligence ($\beta = -.067$, t = -1.016, p =.311), mentoring ability ($\beta = .046$, t = .672, p = .502), mentoring receptiveness ($\beta = .061$, t = .061.915, p = .361), self-efficacy ($\beta = .035, t = .556, p = .579$), and goal reengagement ($\beta = .008, t = .008$) .122, p = .903) were included but did not significantly predict objective career success. The demographic variables remained significant and the final model explained 12% of variance (adjusted $R^2 = .121$). Thus, Hypothesis 8a was not supported.

For subjective career success, age (β = .037, t = .643, p = .520; see table 4), gender (β = .016, t = .271, p = .787), ethnicity (β = .056, t = .957, p = .340), and education (β = .186, t =

3.217, p < .01) were included in the first step and explained 3% of variance (adjusted $R^2 = .030$). Higher educated respondents reported more subjective career success than respondents with less education. In the second step, athletic identity was included in the regression model but did not significantly predict subjective career success ($\beta = .021$, t = .350, p = .726), whereas education remained significant ($\beta = .188$, t = 3.228, p < .01; adjusted $R^2 = .027$). In the third step, emotional intelligence ($\beta = .087$, t = -1.435, p = .152), mentoring receptiveness ($\beta = .069$, t = 1.116, p = .265), and goal reengagement ($\beta = .017$, t = .298, p = .766) were included but did not significantly predict subjective career success, while mentoring ability ($\beta = .193$, t = 3.071, p < .01) and self-efficacy ($\beta = .219$, t = 3.857, p < .01) were positively related to subjective career success. Education remained significant and the final model explained 12% of the outcome variance (adjusted $R^2 = .116$). Thus, Hypothesis 8b was not supported.

Discussion

The present study sought to demonstrate the relationships between athletic identity, transferable skills, and career success for collegiate athletes and non-athletes in the workforce. Specifically, it was hypothesized that transferable skills mediate the relationship between athletic identity and career success as shown in the Athletic Skills Model.

This research was based on two studies: Benson et al. (2015) found that athletes report higher levels of athletic identity exclusivity when thinking about ending their athletic career, while Sauer et al. (2013) demonstrated that former high school athletes report higher levels of mentoring ability, mentoring receptiveness, emotional intelligence, and objective and subjective career success compared to non-athletes. However, Benson et al.'s (2015) research did not examine athletic identity levels for retired collegiate athletes in the workforce, and Sauer et al.'s (2013) study did not establish links between skills and career success. These findings suggest

additional investigation on retired collegiate athletes in the workforce is needed that specifically examines the relationships between athletic identity, transferable skills, and overall career success. It was hypothesized that retired collegiate athletes would have additional time to practice transferable skills during their athletic career, which would predict success in their professional careers.

Overall, results provided no evidence to support the hypotheses that high levels of athletic identity predict either objective or subjective career success. Although one study has found athletic identity to be unrelated to career maturity for male collegiate athletes from five different universities (Brown & Harley, 1998), a study by Murphy et al. (1996) found an inverse relationship between athletic identity and career maturity for male and female collegiate athletes. More recently, Cabrita et al. (2014) demonstrated that athletes with higher levels of athletic identity also have higher levels of optimism regarding the future, while Henderson et al. (2006) found that former collegiate athletes are paid higher wages in business, manual labor, and military careers than non-athletes. A review of the literature demonstrates that results of athletic identity and career success are inconclusive due to a lack of consistency in measurement instruments.

The second part of this study was twofold. It aimed to expand Sauer et al.'s (2013) research by examining if mentoring ability, mentoring receptiveness, and emotional intelligence would be positively related to objective and subjective career success for retired collegiate athletes and non-athletes in the workforce. Results found no evidence to support mentoring ability, mentoring receptiveness, or emotional intelligence as predictors of objective career success, while only mentoring ability and mentoring receptiveness positively related to subjective career success. Perhaps high levels of mentoring ability and mentoring receptiveness

positively relate to career success when individuals have more experience with informal mentoring than formal mentoring.

Results also showed that emotional intelligence did not significantly predict objective and subjective career success. Support for emotional intelligence as a predictor of job performance has been widely accepted based on a meta-analysis of 1163 studies (O'Boyle et al., 2011). Only one study has linked emotional intelligence to subjective and objective career success; Sultana et al. (2016) found that high levels of emotional intelligence positively correlate with objective and subjective career success for mid-level managers. Subjective and objective career success, however, are different constructs than job performance, and while it was anticipated that emotional intelligence would positively relate to career success, perhaps job performance would have been better related to emotional intelligence as it is more consistently demonstrated in the literature.

This study also sought to identify if self-efficacy, goal disengagement and goal reengagement predict objective and subjective career success and found that self-efficacy is positively related to subjective career success. Findings from this study demonstrate that self-efficacy positively relates to career satisfaction, while a strong belief in oneself does not relate to salary. Ballout (2009) linked self-efficacy to objective and subjective career success by demonstrating that self-efficacy mediates the relationship between career commitment and career success for Lebanese bank employees, while other research demonstrates high self-efficacy in athletes predicts athletic performance (George, 1994; Kane et al., 1996). Perhaps athletes who have already achieved success by overcoming the low probability of playing at the collegiate level are able to recall their past experiences of achievement to help transfer their self-efficacy

from the athletic domain to the professional career domain, but having strong belief in oneself based on previous performance does not always have positive effects on salary.

Results also found no evidence to indicate that goal reengagement positively relates to objective and subjective career success. Wrosch et al.'s (2003) research demonstrated that goal disengagement and goal reengagement are linked to subjective well-being for undergraduates; however, they did not examine the long-term effects of having high levels of goal disengagement and goal reengagement on career success beyond college. This study had to exclude goal disengagement from the results due to the scale's low reliability, and results did not support goal reengagement as a predictor for objective and subjective career success. Perhaps subjective and objective career success are not only dependent on individuals' ability to disengage and reengage in goals, but also depend on how the new goal is chosen, the level of commitment to the goal, and the level of difficulty of the goal as explained in goal setting theory (Locke & Latham,

The third part of this study expected to support positive relationships between each transferable skill and athletic identity. Results indicated that athletic identity did not relate to each transferable skill, which may be similar to earlier findings in Hypotheses 1a and 1b.

Research suggests that athletic identity heightens as a defense mechanism to cope with ending a sports career (Benson et al., 2015), while Houle et al. (2010) found that athletic identity decreases after an athletic career by measuring retrospective levels of athletic identity at 10 years, 15 years, and the current age for former high school athletes and non-athletes in the workforce. Perhaps if high levels of athletic identity do not remain salient throughout an athlete's life, it cannot be positively related to transferable skills when in the workforce.

The final objective of this study was to demonstrate that transferable skills mediate the relationship between athletic identity and career success to support the Athletic Skills Model. While research suggests that athletic identity positively correlates to performance and participation in collegiate athletics is an opportunity to practice transferable skills (Bauman et al., 2000; Becker, 1964; Chartrand & Lent, 1987; Long & Caudill, 1991), results found that athletic identity did not predict objective or subjective career success, whereas mentoring ability and self-efficacy predicted subjective career success. Perhaps high athletic identity is only needed when increasing athletic performance, but it may not serve as an advantage or disadvantage on transferable skills and career success in the workforce. Baron and Kenny's (1986) method asserts that if there is not a significant relationship between the predictor variable and the criterion variable, then mediation does not occur. Contrary to anticipated results, athletic identity did not positively relate to career success, and the full Athletic Skills Model was not supported.

Implications

Colleges take a vested interest in creating programs and resources for athletes to prepare for life beyond their collegiate athletic careers (Brown et al., 2000). They connect student athletes with counselors to enable athletes to better navigate identity foreclosures when they transition into a professional career (Shurts & Shoffner 2004). Exploring and committing to other identities positively correlates with career maturity, and even lowers athletes' identity crises upon retiring from their athletic career (Lally & Kerr, 2005). Although career development programs are created to assist athletes, Tanguay et al. (2012) found recruiters and organizations often have negative biases towards retired collegiate athletes because of their perceived limited work experience compared to non-athletes. The current study, however, found retired collegiate athletes did not differ significantly from non-athletes in terms of career success. Previous

research has also emphasized that athletes might develop skills through participation in athletics that are transferable to the workforce (Bauman et al., 2000; Becker, 1964; Long & Caudill, 1991; Sauer et al., 2013). However, this study found only higher levels of self-efficacy in athletes than non-athletes, and athletic identity was unrelated to each skill; thus, this claim was not supported.

Limitations and Directions for Future Research

Like all research, this study is not without limitations. The study used a convenience sample, limiting the generalizability of results, and employed a cross-sectional design that does not allow the inference of cause and effect relationships between variables. The current study also did not control for individuals' attendance of career development programs to help with transitioning into the workforce. Future research should include this indicator to help demonstrate how career development programs relate to the overall long-term professional career success in athletes instead of only examining the initial transition into the workforce. Additionally, future research should examine the relationship between career commitment and athletic identity to determine which variable is a stronger predictor of athletic performance and career success, as it has been demonstrated that career commitment is one of the strongest predictors of objective and subjective career success (Sultana et al., 2016).

Other limitations include the assumption that transferable skills were developed prior to individuals joining the workforce. The average age for participants was 31 years for athletes and 36 years for non-athletes, which could suggest that the transferable skills were developed as they progressed through their careers. Future research could conduct pre-post assessments of transferable skills and athletic identity at the beginning and the end of collegiate athletic careers to examine changes in skill levels and their potential relationship to athletic identity. While goal adjustment was included in this study by suggesting that individuals who have the ability to

disengage in one goal and reengage in another would perform better and have greater career success, investigating the relationships between athletic identity, goal setting, and career success may be a better indicator of predicting career success.

This study utilized a convenience sample primarily through email and social media recruitment; however, universities could distribute surveys directly to their athletes nationally to increase sample size and generalizability. Future research could include former high school athletes and professional athletes to investigate the effects of other athletic levels. This study specifically was designed to only include retired collegiate athletes; thus, no additional data were collected on other levels of athletes limiting any additional exploration.

Conclusion

While high levels of athletic identity are often needed to increase performance for athletes, athletic identity has not been shown to have considerable effects on professional career success beyond collegiate athletics. Previous research suggests conflicting results for the role of athletic identity on the transition period for retired collegiate athletes when entering the workforce. Research also indicates that the benefits of participating in collegiate athletics serves as an opportunity for athletes to develop skills that are applicable to the workforce. Studies have shown that athletes are often negatively impacted by recruiters' biases, as they are ill-informed regarding how previous collegiate athletic competition relates to the workforce (Tanguay et al., 2012).

This study investigated the relationship between athletic identity, transferable skills developed in collegiate athletics (i.e., emotional intelligence, mentoring ability, mentoring receptiveness, self-efficacy, and goal reengagement), and objective and subjective career success, hypothesizing that the transferable skills would act as mediator variables. While

mentoring ability, mentoring receptiveness, and self-efficacy were positively related to subjective career success, results showed that athletic identity did not predict career success, thus indicating that transferable skills were not mediator variables. Future research should focus on longitudinally investigating levels of athletic identity during and beyond an individual's athletic career.

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Tables

Table 1Descriptive Statistics: Mean, Standard Deviation, and N

\$7 1.1.		Athlete			Non Athlete				
Variable	N	M	SD	N	M	SD	\boldsymbol{F}	df	p value
Age	99	30.66	8.25	209	35.67	10.91	16.448	1	.000**
Gender	100	1.63	.49	208	1.72	.45	2.636	1	.105
Ethnicity	102	1.69	.47	211	1.71	.46	.129	1	.720
Education	100	4.12	1.17	209	3.79	1.31	4.766	1	.030*
Athletic Identity	102	4.60	1.17	211	2.99	1.37	103.975	1	.000**
Emotional Intelligence	102	5.50	.67	211	5.50	.60	.000	1	.987
Mentoring Ability	102	5.52	.72	211	5.51	.79	.025	1	.874
Mentoring Receptiveness	102	5.23	.99	211	5.30	.94	.276	1	.600
Self-Efficacy	102	3.50	.39	211	3.38	.41	6.423	1	.012*
Goal Reengagement	102	3.18	.85	211	3.20	.84	.023	1	.880
Subjective Career Success	102	3.54	.85	211	3.57	.87	.095	1	.758
Objective Career Success	87	48,487	28,380	168	47,800	18,878	.053	1	.818

 $p \le .05, **p \le .01$

Table 2 Variable Correlations 2 3 10 11 Variable 6 8 1. Age 2. Gender -.102 3. Ethnicity .159** .117* 4. Education -.094 .130* .148** 5. Athletic Identity -.272** -.178** -.073 -.058 (.93) 6. Emotional Intelligence -.059 (.69).161** .064 .113* -.020 7. Mentoring Ability .017 -.022 .083 .185** -.027 .359** (.90)8. Mentoring Receptiveness -.154** .066 .067 .142* -.035 .312** .427** (.91)9. Self-Efficacy .042 -.109 .022 .005 .084 .199** .171** .155** (.79)-.183** -.010 .133* .228** 10. Goal Reengagement -.042 .124* -.094 .152** .155** (.85)11. Subjective Career Success .026 .046 .101 .197** -.024 .090 .264** .196** .258** .099 (.89).206** -.240** .139* -.055 .079 12. Objective Career Success .164** -.006 .049 .061 .006 .084

Table 3
Results of Regression with Objective Career Success as Dependent Variable

Variable		Model 1		Model 2			Model 3			R^2	ΔR^2	
v ariable	В	SE	t	В	SE	t	В	SE	t	K	ΔK	
Age	.159	133.072	2.642**	.158	139.404	2.514*	.159	144.862	2.434*			
Gender	274	2921.954	-4.536**	274	3025.081	-4.389**	265	3080.354	-4.163**	147	147 122	
Ethnicity	.144	3124.821	2.375*	.144	3131.307	2.370*	.142	3170.016	2.320*	.147 .133		
Education	.175	1282.751	2.903**	.175	1286.510	2.894**	.164	1310.208	2.669**			
Athletic Identity				002	929.782	028	001	959.822	016	.147	.129	
Emotional Intelligence							067	2354.676	-1.016			
Mentoring Ability							.046	2069.490	.672			
Mentoring Receptiveness							.061	1593.333	.915	.156	.121	
Self-Efficacy							.035	3657.451	.556			
Goal Reengagement							.008	1698.378	.122			

^{*} $p \le .05$, ** $p \le .01$; Objective Career Success

 Table 4

 Results of Regression with Subjective Career Success as Dependent Variable

Variable	Model 1			Model 2			Model 3			R^2	ΔR^2	
Variable	В	SE	t	В	SE	t	В	SE	t	K	ΔK	
Age	.037	.005	.643	.044	.005	.717	.041	.005	.678			
Gender	.016	.107	.271	.020	.109	.338	.063	.107	1.092	042	020	
Ethnicity	.056	.111	.957	.056	.111	.950	.045	.107	.810	.043	.030	
Education	.186	.039	3.217**	.188	.039	3.228**	.144	.038	2.543**			
Athletic Identity				.021	.034	.350	.010	.033	.176	.043	.027	
Emotional Intelligence							087	.084	-1.435			
Mentoring Ability							.193	.071	3.071**			
Mentoring Receptiveness							.069	.056	1.116	.145	.116	
Self-Efficacy .219 .122 3.857**												
Goal Reengagement							.017	.059	.298			

^{*} $p \le .05$, ** $p \le .01$; Subjective Career Success

Appendix A

Original IRB Approval



Institutional Review Board for the Protection of Human Subjects

Approval of Study Modification – Expedited Review – AP0

Date: July 24, 2018 IRB#: 9272

Principal Reference No: 681543

Investigator: Ashley Facio

Study Title: The Role of Athletic Identity on Athletic Mindset Fundamentals: Examining the Mediating

Effects on Career Success in the Workforce for Retired Collegiate Athletes

Approval Date: 07/24/2018

Modification Description:

Some questions and answer choices on the questionnaire were reworded to make it easier for the participant to understand the question.

The recruitment description in the application was updated to includes specifics about social medial postings (web postings), via email and recruitment flyers.

The review and approval of this submission is based on the determination that the study, as amended, will continue to be conducted in a manner consistent with the requirements of 45 CFR 46.

To view the approved documents for this submission, open this study from the My Studies option, go to Submission History, go to Completed Submissions tab and then click the Details icon.

If the consent form(s) were revised as a part of this modification, discontinue use of all previous versions of the consent form.

If you have questions about this notification or using iRIS, contact the HRPP office at (405) 325-8110 or irb@ou.edu. The HRPP Administrator assigned for this submission: Nicole A Cunningham.

Cordially,

Fred Beard, Ph.D.

Vice Chair, Institutional Review Board

IRB Approval Modification



Institutional Review Board for the Protection of Human Subjects

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Cordially,

Fred Beard, Ph.D.

Vice Chair, Institutional Review Board

Appendix B

Athletic Identity Measurement Scale (AIMS)

To what extent do you agree or disagree with each of these statements?

Response Scale:

```
1 = \text{strongly disagree} 2 = \text{somewhat disagree} 3 = \text{disagree} 4 = \text{neither agree nor disagree} 5 = \text{somewhat agree} 6 = \text{agree} 7 = \text{strongly agree}
```

- 1. I consider myself an athlete.
- 2. I have many goals related to sports.
- 3. Most of my friends are athletes.
- 4. Sport is the most important part of my life.
- 5. I spend more time thinking about sport than anything else.
- 6. I need to participate in sport to feel good about myself.
- 7. Other people see me mainly as an athlete.
- 8. I feel bad about myself when I do poorly in sports.
- 9. Sport is the only important thing in my life.
- 10. I would be very depressed if I were injured and could not compete in sport.

Appendix C

Emotional Intelligence Scale (EIS)

To what extent do you agree or disagree with each of these statements?

Response Scale:

```
1 = \text{strongly disagree} 2 = \text{somewhat disagree} 3 = \text{disagree} 4 = \text{neither agree nor disagree} 5 = \text{somewhat agree} 6 = \text{agree} 7 = \text{strongly agree}
```

- 1. I am good at predicting how someone will feel.
- 2. I am quick to spot when someone in a group is feeling awkward or uncomfortable.
- 3. I can sense if I am intruding, even if the other person does not tell me.
- 4. I can tune into how someone else feels rapidly and intuitively.
- 5. I can easily work out what another person might want to talk about.
- 6. Friendships and relationships are just too difficult, so I tend not to bother with them.
- 7. I often find it difficult to judge if something is rude or polite.
- 8. I do not tend to find social situations confusing.
- 9. I really enjoy caring for other people.
- 10. If I say something that someone else is offended by, I think that is their problem, not mine.
- 11. Seeing people cry does not really upset me.
- 12. I usually stay emotionally detached when watching a film.

Appendix D

Mentoring Ability Scale (MAS)

To what extent do you agree or disagree with each of these statements?

Response Scale:

```
1 = \text{strongly disagree} 2 = \text{somewhat disagree} 3 = \text{disagree} 4 = \text{neither agree nor disagree} 5 = \text{somewhat agree} 6 = \text{agree} 7 = \text{strongly agree}
```

Serving as a mentor, to what extent have you...

- 1. Given or recommended a subordinate (or protégé) for challenging assignments that present opportunities to learn new skills?
- 2. Given or recommended a subordinate (or protégé) for assignments that increased their contact with higher level managers?
- 3. Given or recommended a subordinate (or protégé) for assignments that helped him or her meet new colleagues?
- 4. Protected a subordinate (or protégé) from working with other managers or work units before he or she knew about their likes/dislikes, opinions on controversial topics, and the nature of the political environment?
- 5. Gone out of your way to promote a subordinate's (or protégé's) career interests?
- 6. Kept a subordinate (or protégé) informed about what is going on at higher levels in the company or how external conditions are influencing the company?
- 7. Conveyed feelings of respect for a subordinate (or protégé) as an individual?
- 8. Conveyed empathy for the concerns and feelings a subordinate (or protégé) has discussed with you?
- 9. Encouraged a subordinate (or protégé) to talk openly about anxiety and fears?
- 10. Shared personal experiences as an alternative perspective to a subordinate's (or protégé's) problems?
- 11. Shared history of your career with a subordinate (or protégé)?
- 12. Served as a role model?
- 13. Encouraged a subordinate (or protégée) to prepare for advancement?

Appendix E

Mentoring Receptiveness Scale (MRS)

To what extent do you agree or disagree with each of these statements?

Response Scale:

```
1 = \text{strongly disagree} 2 = \text{somewhat disagree} 3 = \text{disagree} 4 = \text{neither agree nor disagree} 5 = \text{somewhat agree} 6 = \text{agree} 7 = \text{strongly agree}
```

To what extent has your mentor...

- 1. Gone out of his/her way to promote your career interests?
- 2. Conveyed feelings of respect for you as an individual?
- 3. Conveyed empathy for the concerns and feelings you have discussed with him/her?
- 4. Encouraged you to talk openly about anxiety and fears?
- 5. Shared personal experiences as an alternative perspective to your problems?
- 6. Discussed your questions or concerns regarding feelings of competence, commitment to advancement, relationships with peers and supervisors or work/family conflicts?
- 7. Shared history of his/her career with you?
- 8. Served as a role model?
- 9. Displayed attitudes and values similar to your own?

Appendix F

General Self-Efficacy Scale (GSES)

To what extent do you agree or disagree with each of these statements?

Response Scale:

 $1 = \text{not at all } 2 = \text{barely true} \quad 3 = \text{moderately true} \quad 4 = \text{exactly true}$

- 1. If something looks too complicated, I will not even bother to try it.
- 2. I avoid trying to learn new things when they look too difficult.
- 3. When trying to learn something new, I soon give up if I am not initially successful.
- 4. When I make plans, I am certain I can make them work.
- 5. If I can't do a job the first time, I keep trying until I can.
- 6. When I have something unpleasant to do, I stick to it until I finish it.
- 7. When I decide to do something, I go right to work on it.
- 8. Failure just makes me try harder.
- 9. When I set important goals for myself, I rarely achieve them.
- 10. I do not seem capable of dealing with most problems that come up in my life.
- 11. When unexpected problems occur, I don't handle them very well.
- 12. I feel insecure about my ability to do things.

Appendix G

Goal Adjustment Scale (GAS)

To what extent do you agree or disagree with each of these statements?

Response Scale:

1 = never true 2 = sometimes true 3 = Neutral 4 = almost always true 5 = always true

- 1. It's easy for me to reduce my effort towards the goal.
- 2. I convince myself that I have other meaningful goals to pursue.
- 3. I stay committed to the goal for a long time; I can't let it go.
- 4. I start working on other new goals.
- 5. I think about other new goals to pursue.
- 6. I find it difficult to stop trying to achieve the goal.
- 7. I seek other meaningful goals.
- 8. It's easy for me to stop thinking about the goal and let it go.
- 9. I tell myself that I have a number of other new goals to draw upon.
- 10. I put effort toward other meaningful goals.

Appendix H

Subjective Career Success: Career Satisfaction Measure (CSM)

To what extent do you agree or disagree with each of these statements?

Response Scale:

1 = never true 2 = sometimes true 3 = Neutral 4 = almost always true 5 = always true

- 1. I am satisfied with the success I have achieved in my career.
- 2. I am satisfied with the progress I have made toward meeting my overall career goals.
- 3. I am satisfied with the progress I have made toward meeting my goals for income.
- 4. I am satisfied with the progress I have made toward meeting my goals for advancement.
- 5. I am satisfied with the progress I have made toward meeting my goals for the development of new skills.

Appendix I

Objective Career Success Measurement (OCSM)

To your best recollection, estimate your pre-tax earnings in the first year after undergraduate college and every 5 years thereafter. (Example, pre-tax earnings for the first year after undergraduate college are \$27,000)

•	5 years after undergraduate college
•	10 years after undergraduate college
•	15 years after undergraduate college
•	20 years after undergraduate college

Appendix J

Demographic Questions

	participate in varsity level collegiate sports as a Student Athlete in College? Yes, I received a scholarship to play a varsity level collegiate sport as a Student
	Athlete.
b)	Yes, but I did not receive a scholarship to play a varsity level collegiate sport as a Student Athlete.
c)	No, I did not play a varsity level collegiate sport as a Student Athlete.
	ou a Student Athlete in college?
,	Yes
b)	No
	you previously played or are you currently playing a sport in a professional league?
	Yes, I am currently playing a sport professionally in the United States.
/	Yes, I am currently playing a sport professionally overseas.
	Yes, I have previously played a sport professionally in the United States.
	Yes, I have previously played a sport professionally overseas.
e)	No, I have not ever played a sport professionally.
4. What is	your gender?
a)	Male
b)	Female
5. What is	your age?
6. Are you	currently employed?
a)	Yes
b)	No
7. What is	your ethnicity?
a)	American Indian
b)	Asian
c)	Black
d)	Hispanic
	Pacific Islander
f)	White
g)	Other
8. What is	the highest level of education you have received?

a) Associatesb) Bachelorsc) Mastersd) Doctorate

e)	None
	Other
,	
9. What w	as your major for your highest degree?
	Business
b)	Engineering
c)	Math/Science
d)	Social Science/Humanities/Arts
e)	Other
10. What i	s your position classified as? (Exempt employees are paid a set salary and do not
qualify to	earn overtime pay. Non-exempt employees are paid by the hour and qualify for
overtime p	bay. Commission employees are paid an amount based on their quota, typically a sales
position.)	
a)	Exempt (salary, no overtime)
b)	Non-Exempt (hourly, can receive overtime pay)
c)	Commission (based on quota)
d)	Other
	ndustry do you currently work in?
	Manufacturing
b)	Finance
	Sports
,	Sales
	Education
,	Retail
٠,	Oil & Gas
,	Healthcare
,	Food/Restaurant
	Municipality/Government
k)	Insurance
1)	Other