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# The antecedents and consequences of positive organizational behavior: The role of psychological capital for promoting employee well-being in sport organizations

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ABSTRACT

A positive approach to addressing mental health issues in workplaces advocates the examination of an untapped resource—psychological capital—as a potential positive construct in contemporary organizational behavior. The authors tested various antecedents and outcomes of psychological capital, and examined the role of this construct in psychological well-being and job satisfaction among sport employees. To test 11 hypotheses, the researchers recruited 708 employees from the athletic departments of Division I institutions. Results indicate that the meaningful work of employees and a supportive organizational climate positively influenced psychological capital, thereby leading to high levels of job satisfaction and psychological well-being. Psychological capital also functioned either as a partial mediator or as a full mediator. In this study, the authors offer a new perspective on sport employees' mental health outcomes, with particular emphasis on positive organizational behavior in sport settings.


## 1. Introduction

People spend a significant amount of time at work, so much so that individuals' work-lives considerably influence their personal well-being. In today's work environment, where market-based competition has come to increasingly shape social and health outcomes both inside and outside of the workplace, the majority of U.S employees are experiencing high levels of job stress (Podsakoff, LePine, & LePine, 2007). In the sport industry, for instance, head coaches of professional sports teams work under a great deal of pressure to win, and receive criticism from outside sources such as the media, sponsors, and fans (CBS Denver, 2013). As another example, women working in athletic management and coaching positions report difficulties integrating work and a life due to the travel demands and supervision requirements (Inglis, Danylchuk, & Pastore, 2000).

From a labor economics perspective, the sport industry has seen a dramatic shift toward the over-supply of labor, such that employees within this sector are willing to work longer hours, often in an unpaid capacity or for lower wages, to gain a foothold in

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the labor market (Hums, Barr, & Gullion, 1999; Newman, 2014). This stressful working environment in sport organizations can affect health problems with employees and facilitate professional burnout (Karabatsos, Malousaris, & Apostolidis, 2006). However, there is a lack of knowledge on how to attain and improve the well-being of sport employees. We argue that it is imperative to examine how to enhance sport employees' mental health through providing positive work experiences.

From an industrial perspective, the value of sport mainly depends on "the ways that sport is managed" (Chalip, 2006, p. 1). Sport management is important in making sport valuable and meaningful, similar to how companies make their products valuable for customers. However, it is also crucial to understand employees' distinctive motivations in sport organizations. For example, the passion for sport leads devoted fans supporting their favorite team to choose jobs in the sport industry where salaries and earning potential is lower than jobs in the non-sport industry (Parks & Parra, 1994). The sport industry is connected with employees' emotions sociologically, psychologically, and physiologically (Swanson & Kent, 2017), which is another discerning aspect of working in sport organizations. Among affective constructs, sport employees' passion surrounding sport and their pride of being sport employees can bring positive organizational outcomes to workplaces (Swanson & Kent, 2017).

As workplaces, sport organizations are principal sites of ensuring excellent sport as a product or service. The unique nature of sport (e.g., intangibility, heterogeneity, perishability, and simultaneity of production and consumption: Buswell, 2004) creates an exceptional management environment for sport organizations (Taylor, Doherty, & McGraw, 2008). An essential requirement in strengthening current sport organizations is to probe how the work experiences and well-being of sport employees can be improved. Such inquiries are best illuminated from a positive organizational behavior perspective (Luthans, 2002a; Luthans, 2002b), which requires a shift away from weakness-fixing to strength building (Buckingham & Vosburgh, 2001).

Through this lens of positive psychology (Seligman & Csikszentmihalyi, 2000), positive organizational behavior researchers identified "positively oriented human resource strengths and psychological capacities that can be measured, developed, and effectively managed for performance improvement in today's workplace" (Luthans, 2002a, p. 59). This concept of psychological capital exerts a synergistic effect on individual and organizational outcomes (Luthans & Youssef, 2004). In sport management, Kim, Perrewé, Kim, & Kim, 2017) recently developed a conceptual model, identifying various potential predictors and outcomes of sport employees' psychological capital. To achieve a better understanding of psychological capital in the sport industry, it is necessary to test the proposed relationships empirically, and to provide practical ideas for sport employees' mental health.

To value sport employees' wellness rather than just pursuing higher organizational productivity, we focus not only on job satisfaction but also on psychological well-being as potential outcomes of psychological capital. In finding ways to enhance sport employees' psychological capital, we examine the influences of leader's authentic leadership, an employee's meaningful work, and an organization's supportive climate in their psychological capital levels. The two-fold purpose of the present study was to (a) empirically test the role of psychological capital in promoting job satisfaction and psychological well-being, and (b) examine the mediating role of psychological capital on the relationship between antecedent conditions and outcomes in explaining how each psychological capital predictor influences job satisfaction and psychological well-being among employees.

## 2. Theoretical framework and research hypotheses

In many contemporary workplaces, managers seem to have overlooked their responsibilities to ensure that employees flourish in their work and facilitate the building of a good life (Luthans & Youssef, 2004). Organizational scholars have adapted the discipline of positive psychology to contemporary workplaces, where people thrive as they complete their work (Seligman, 1999). Researchers have concluded that the best organizations not only maximize organizational performance but also enhance employees' work experiences and well-being (Lewis, 2011; Mills, Fleck, & Kozikowski, 2013). However, few researchers in sport management have paid attention to factors associated with employees' work experience and well-being in sport organizations.

Sport management scholars recently have started to investigate constructs associated with employee well-being and life satisfaction. For example, Kim, Kim, & Reid, 2017a; Kim, Perrewé et al., 2017) conceptually suggested psychological capital's potential predictors (i.e., authentic leadership, political skill, sport employee identification, meaningful work, supportive climate, and organizational justice) and outcomes (i.e., job satisfaction, organizational citizenship behavior, job performance, and psychological well-being) among sport employees. Empirically, Stebbings, Taylor, Spray, & Ntoumanis, 2012 examined coaches and found that job security, professional development, and low work-life conflict were associated with higher psychological need satisfaction, psychological well-being, and better interpersonal behaviors toward their athletes. As an another example, Kim, Kim et al. (2017) provided empirical evidence on the impact of a head coach's authentic leadership on assistant coaches' psychological capital and job-life satisfaction, with a spill-over approach. Nevertheless, there still is a need for more sport management studies that investigate factors associated with employees' work experience and well-being within sport organizations.

### *2.1. Positive organizational behavior in sport*

As a perspective of positivity in the workplace, positive organizational behavior differs from other contemporary positive approaches to illuminating workplace issues (e.g., positive organizational scholarship: Cameron, Dutton, & Quinn, 2003) in

that it is grounded in specific inclusion criteria. Specifically, positive organizational behavior is (a) based on theory and valid measurement, (b) characterized by a state-like quality, and (c) exhibits performance impact. Fostering a state-like quality or character means that state-like capacities are changeable and developmental, depending on the situation. Rather than emphasizing trait-like or stable personality such as Big Five personality traits (Barrick & Mount, 1993), positive organizational behavior suggests the adoption of developmental positive constructs to improve human and organizational conditions (Luthans & Avolio, 2009).

Within the positive organizational behavior perspective, the growth of one's psychological resources and its influences on mental health can be explained by positive psychologist Barbara Fredrickson's (2001) broaden-and-build theory of positive emotions (Wright, 2003). This theory asserts that people's positive emotions broaden their thought-action repertories, resulting in the development of enduring personal resources, including physical, intellectual, social, and psychological resources (Fredrickson, 2001). This approach also describes how individuals' positive daily experiences compound over time to predict greater psychological well-being through building consequential personal resources (Tugade, Fredrickson, & Barrett, 2004).

With regard to psychological capital, Luthans, Youssef, & Rawski, 2011 used this broaden-and-build theory to explicate the influence of psychological capital on problem solving performance and reported innovation. Especially in developing psychological capital resilience, this approach highlights that it is critical to make individuals consider their leaders for reassurance to think positively and find meanings consistently during times of adversity (Luthans, Vogelgesang, & Lester, 2006). In our context, we propose that positive experiences at work allow sport employees to build psychological capital and become healthy individuals in sport organizations. To consider promoting sport employees' psychological well-being through positive experiences at work, we included five research hypotheses, focusing on predictors and outcomes of psychological capital (see Fig. 1).

Among various sport industries, we targeted U.S. employees in intercollegiate athletics. Intercollegiate sports have become one of the most competitive sport industries in recent history. In 2015, the total revenue of college sports was over $16.2 billion, and the market for college football had about 10 million fans in the United States (SBRnet, 2016). The National Collegiate Athletic Association (NCAA) oversees and prioritizes academics, well-being, and fairness for student-athletes. Under the three divisions (i.e., Division I, II, and III), there are more than 1,200-member institutions, conferences, and affiliate organizations. Most NCAA members are institutions (i.e., colleges and universities), each having an athletic department that manages all activities initiated under a given athletics program. The human resource division of the athletic department consists principally of athletic directors, assistant and associate athletic directors, coaches, graduate assistant coaches, and faculty athletics representatives (Covell & Barr, 2010).

In today's fiercely competitive environment, athletic departments are becoming increasingly ruthless and combative in recruiting athletes with above-average performance. They have frequently failed to address various problems (e.g., abuse and cheating), despite the recognition that amateurism is the original core concept that underlies intercollegiate sport (Hums & MacLean, 2004). Researchers in sport management have deliberated the challenges that confront intercollegiate athletic administrations, including employee diversity (Fink, Pastore, & Riemer, 2003), organizational change (Cunningham, 2006), work-life issues (Bruening et al., 2008), and gender equity (Quarterman, DuPree, & Willis, 2006). In such a setting, recognizing positive organizational behavior as an alternative approach is critical to avoiding adverse consequences and acquiring progressive outcomes through enhancing employees' psychological capacities.

### 2.2. Psychological capital

The central strategy for actualizing human potential in today's workplace is to synergistically integrate human, social, and psychological capital. Human capital is about "what you know," whereas social capital is related to "who you know" (Adler & Kwon, 2002). Psychological capital emphasizes "what you are becoming"— a perspective that focuses on the development of the actual self into the possible self. Psychological capital is empirically demonstrated as a higher-order and core construct in

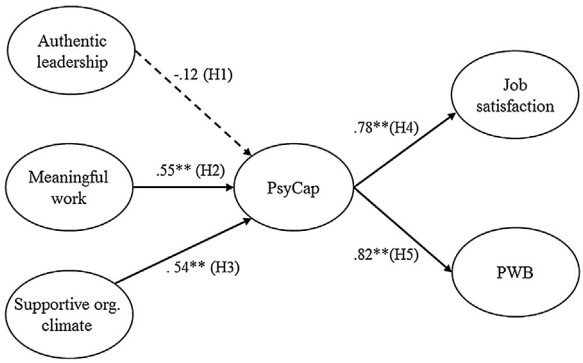


**Fig. 1.** Hypotheses testing for direct effects (Hypotheses 1 through 5).

positive organizational behavior (Luthans, Avolio, Avey, & Norman, 2007). To date, four capacities have been determined as satisfying the inclusion criteria for psychological capital: self-efficacy, optimism, hope, and resilience.

*2.2.1. Self-efficacy*

In the workplace setting, self-efficacy is "an individual's confidence about his or her abilities to mobilize the motivation, cognitive resources, and courses of action necessary to successfully execute a specific task within a given context" (Stajkovic & Luthans, 1998, p. 66). Efficacious employees welcome the challenge of difficult tasks as they achieve their goals because they trust their own abilities. In viewing efficacy as a state rather than a trait, leaders and organizations can more exhaustively develop and enhance this attribute in employees (Luthans, 2002a). For instance, when a leader provides positive feedback or when an organization provides many opportunities for skill mastery, employees augment their self-efficacy levels.

*2.2.2. Optimism*

In a broad sense, optimism is to hold positive expectations about the future and a positive outlook toward life events (Scheier, Carver, & Bridges, 1994). As a psychological capital construct, optimism is more realistic and practical (Luthans, 2002a). For example, unrealistic optimists become distracted from designing necessary action plans and potentially misunderstanding current situations (Luthans, Avolio et al., 2007). In today's turbulent environments, realistically and flexibly optimistic employees are preferred because of their inclination toward embracing change and recognizing new possibilities from such change (Luthans, Avolio et al., 2007).

*2.2.3. Hope*

Within the positive psychology approach, hope is neither merely wishful thinking nor merely striving for the best. It is the cognitive state of believing in setting attainable goals, determining pathways to achieving these goals, and developing specific plans to eventually accomplish the goals (Snyder, Rand, & Sigmon, 2002). In the workplace, hopeful employees are likely to be independent thinkers who pursue a high level of autonomy in planning their paths, and exhibit both the willpower and the waypower to realize established goals (Luthans, Avolio et al., 2007).

*2.2.4. Resilience*

Resilience is a unique concept that presents promising potential to increase organizational performance, although it has its roots in clinical research (Masten & Reed, 2002). Resilience within positive organizational behavior is beneficial not only for eliminating or reducing negativity, but also for offering increased opportunities to learn, grow, and thrive. Because resilience pertains to the ability to bounce back from failure by accumulating experiences and overcoming post-traumatic growth (Masten & Reed, 2002; Reivich & Shatte, 2002; Ryff & Singer, 2003), it plays an important role in an individual's endeavor to face and transcend crises, as well as proactively pursue new experiences.

*2.3. Antecedents of psychological capital*

*2.3.1. Authentic leadership*

Whitehead (2009) described the authentic leader as a person "who (1) is self-aware, humble, always seeking improvement, aware of those being led, and looks out for the welfare of others; (2) fosters high degrees of trust by building an ethical and moral framework; and (3) is committed to organizational success within the construct of social values" (p. 850). Leaders in sport organizations are responsible for handling various ethical issues and projecting authenticity. Because they are also involved in legal management, team ownership, and social justice, as well as in personal athletic issues (DeSensi & Rosenberg, 1996), more needs to be done to understand authentic leadership in the sport industry.

In the context of intercollegiate athletics, there have been several studies examining the role of leadership behaviors (e.g., transactional and transformational leadership) on employee attitudes and behavior (Andrew, Kim, Stoll, & Todd, 2011; Burton & Welty Peachey, 2009; Kent & Chelladurai, 2001; Kim, Magnusen, Andrew, & Stoll, 2012; Welty Peachey & Burton, 2011). For example, Kim et al. (2012) showed how athletic directors' transformational leadership influenced sport employees' job satisfaction through commitment to the athletic department and commitment to the athletic director.

Several scholars have provided positive relationships between a leader's authentic leadership and followers' psychological capital at the individual level (Jensen & Luthans, 2006; Rego, Sousa, Marques, & Cunha, 2012; Woolley, Caza, & Levy, 2011) and the group level (Clapp-Smith, Vogelgesang, & Avey, 2009). An athletic director's authenticity can help in overcoming the numerous ethical issues that intercollegiate athletics face (e.g., paying student athletes, gender equity, and improprieties by administrators). Through the athletic director's effective communication skills developed by relationship transparency and balanced information processing, employees can have their voices heard, making them more efficacious. Authentic leaders foster employee resilience by providing sincere feedback and sharing opinions regarding the areas in which employees have shown improvement (Woolley et al., 2011). These arguments lead us to hypothesize the following:

**Hypothesis 1.** The perceived authenticity in an athletic director's leadership will be positively associated with employees' psychological capital.

*2.3.2. Meaningful work*

In considering each sport employee's work experience, for instance, Mahoney and Pastore (2014) proposed the concept of employee sportsphere, which consists of sportscape (e.g., facility), behavior variables (e.g., training), and benefits (e.g., hedonistic pleasure). Scholars in sport management also have studied positive psychological states possibly influencing workplace attitudes and behavior, such as passion, pride, and sport employee identification (Anagnostopoulos, Winand, & Papadimitriou, 2016; Oja, Bass, & Gordon, 2015; Swanson & Kent, 2017). On top of that, we argue that meaningful work can be another construct to motivate sport employees and foster personal loyalty to their work.

As people attempt to give meaning to their lives, they also seek meaning in the career domain (Steger & Dik, 2010). Meaningful work is a positive psychological state wherein people feel their positive and important contributions to a worthwhile purpose (Albrecht, 2013). In our context, athletic department employees' understanding of how their work influences personal growth, institution, and college sport industry can facilitate the development of positive attitudes and behaviors (Van den Heuvel, Demerouti, Bakker, & Schaufeli, 2010). In this process, employees arrive at an improved comprehension of the purposes of work, as well as obtain a clear sense of their self-worth. When facing psychological and physical challenges, employees who have a sense of meaningful work are likely to maintain their resilience by ascribing meaning to their personal tasks (Luthans, Youssef et al., 2007). With reference to the importance of meaningful work in psychological capital, we hypothesized the following:

**Hypothesis 2.** Employees' sense of meaningful work will be positively associated with their psychological capital.

*2.3.3. Supportive organizational climate*

The work environment is a crucial facet to take into consideration in regards to employees' mental health and success (Billett, 2004; Stansfeld & Candy, 2006). In sport management, researchers have examined several types of work environments, such as creative work environments (Cunningham, 2011) and ethical climates (Agarwal & Malloy, 1999). Although few sport management scholars have attempted to examine the effect of organizational support on job-life satisfaction with a target of collegiate coaches (Dixon & Sagas, 2007; Kim & Cunningham, 2005), very little is known about how supportive organizational climates influence sport employees' psychological constructs. A supportive organizational climate refers to the perceived support that employees receive from their immediate peers, supervisors, and other departments as they endeavor to successfully accomplish their assigned work duties (Luthans, Avolio et al., 2007).

In collegiate athletics, managerial competence and consistency depend on the efforts of mid-level employees (e.g., assistant and associate athletic directors). A supportive organizational climate enhances employees' hope and resilience. Under easy access to necessary materials, services, and resources, employees tend to generate alternative paths to achieving their desired goals, see opportunity in failure, and rapidly recover from setbacks (Luthans, Norman, Avolio, & Avey, 2008). Notwithstanding the setbacks that occur because of employees' mistakes, they can derive encouragement from socio-emotional support, and do not fixate on the fear of punishment, thereby enabling themselves to recover from setbacks. These arguments inform the next hypothesis:

**Hypothesis 3.** Perceived supportive organizational climate will positively influence employees' psychological capital.

*2.4. Outcomes of psychological capital*

*2.4.1. Job satisfaction*

In the sport management literature, job satisfaction is one of the most explored organizational outcomes across the different types of sport organizations. Job satisfaction has long been defined as employees' complex emotional reactions to their jobs and workplace experiences (Locke, 1969). Prior to 2000s, about one quarter of the job satisfaction studies in sport management were conducted in the context of intercollegiate athletics (Doherty, 1998). Recent meta-analytic studies and systematic reviews (Avey, Luthans, Smith, & Palmer, 2010; Avey, Luthans, & Youssef, 2010; Dawkins, Martin, Scott, & Sanderson, 2013; Newman, Ucbasaran, Zhu, & Hirst, 2014) have confirmed the significant and positive relationship between employees' psychological capital and job satisfaction (e.g., Cheung, Tang, & Tang, 2011; Larson & Luthans, 2006; Luthans, Avolio et al., 2007).

Self-efficacious and hopeful employees may be more motivated to create a plan for making the best of their circumstances, and in the process, enhance their belief that excellent performance will be achieved (Judge, Thoresen, Bono, & Patton, 2001). Optimistic and resilient employees welcome, rather than become frustrated with, challenging situations and pursuing large-scale goals. Employees with a solidly developed psychological capital are therefore likely to be satisfied and happy with their jobs. The relationship corroborates the applicability of the following hypothesis in the context of intercollegiate athletics:

**Hypothesis 4.** Employees' psychological capital will be positively associated with their job satisfaction.

*2.4.2. Psychological well-being*

Concerned with human development of life, psychological well-being pertains to the overall effectiveness of individuals' psychological functioning based on subjective experience (Wright, Cropanzano, & Bonett, 2007). Previous researchers have demonstrated the impact of psychological capital on employee well-being over time (Avey, Luthans, Smith, et al., 2010; Avey,

Luthans, Youssef et al., 2010; Culbertson, Fullagar, & Mills, 2010). Although psychological well-being is considered by most to be a global construct, Ryff (1989) put forward a multidimensional psychological well-being model, which comprises six dimensions: self-acceptance, positive relationship with others, autonomy, environmental mastery, purpose in life, and personal growth.

First, as a positive attitude toward the self, self-acceptance concerns an affirmative evaluation of oneself and one's life. Second, people who are skilled at establishing positive relationships with others develop and maintain trusting interpersonal ties by exhibiting concern for others' welfare. Third, a fully functioning individual is one who shows autonomous functioning and possesses an internal locus of evaluation. Fourth, environmental mastery refers to people's capacity to effectively manage their lives and surroundings, and thereby satisfy their personal needs (Horn, Taris, Schaufeli, & Schreurs, 2004). Fifth, a determined purpose in life indicates that individuals regard their life as meaningful and purposeful because they have something to live for. Finally, capitalizing on new experiences, a fully functioning person focuses on personal development rather than achieving a fixed state wherein various problems are resolved.

Employees in athletic departments function in an environment characterized by stress and dramatic changes. Daily encounters with such high-pressure situations may deter employees' evolution into fully functioning individuals with high levels of psychological well-being. As a motivational driver, enhanced psychological capital increases both positive functioning in the workplace and daily life satisfaction (Culbertson et al., 2010). Specifically, hope helps employees navigate multiple pathways to goal achievement, and optimism allows them to sustain positivity to gain a sense of fulfillment (Avey, Luthans, Smith, et al., 2010; Avey, Luthans, Youssef et al., 2010), which are the most important aspects of psychological well-being. Correspondingly, the next hypothesis is formulated:

**Hypothesis 5.** Employees' psychological capital will be positively associated with their psychological well-being.

### *2.5. Psychological capital as mediator of antecedents - outcomes relationships*

In the previous sections, the direct effects, predictors, and outcomes of psychological capital were proposed, but an equally necessary component of analyzing the sport context is to consider psychological capital as a possible mediator that accounts for how leader, employee, and organizational effects influence employee job satisfaction and psychological well-being. In the review of psychological capital, Newman et al. (2014) viewed the construct as an outcome of various predictors at individual, team, and organizational levels. It is also expected to be a pivotal predictor of numerous outcomes. However, few researchers have considered the mediating role of psychological capital, with the majority of studies examining the relationship between psychological capital and workplace outcomes.

In the current work, we consider each predictor of psychological capital as a predictor of job satisfaction. Under direction from authentic leaders, employees likely develop high levels of job satisfaction given the strong empowerment and active work engagement that are embodied in such an environment (Giallonardo, Wong, & Iwasiw, 2010; Wong & Laschinger, 2013). The capacity to value work (i.e., meaningful work) likewise functions as a chief component of job satisfaction because employees are intrinsically motivated to accomplish their goals and attach importance to their achievements (Knoop, 1994). A supportive organizational climate is another one of the strongest predictors of job satisfaction because strong peer support and trust substantially contribute to happiness in the workplace (Lee, Wong, Der Foo, & Leung, 2011).

However, an important issue for consideration is that understanding the mechanisms that underlie psychological capital's influence on job-related outcomes necessitates a detailed explanation of how these predictors increase job satisfaction through psychological capital. In Newman et al.'s, (2014) synthesized conceptual model, psychological capital is the central mediator between various predictors (e.g., leadership behavior, organizational policy, and supportive organizational environment) and individual job satisfaction. To empirically test the mediating roles of psychological capital in increasing employees' job satisfaction levels, the following hypotheses are proposed:

**Hypothesis 6.** Psychological capital will mediate the relationship between perceived authentic leadership and job satisfaction.

**Hypothesis 7.** Psychological capital will mediate the relationship between meaningful work and job satisfaction.

**Hypothesis 8.** Psychological capital will mediate the relationship between a supportive organizational climate and job satisfaction.

With regard to the mediating role of psychological capital in psychological well-being, Avey, Luthans, Smith, et al. (2010), Avey, Luthans, Youssef et al. (2010) argued that highly developed psychological capital engenders positive consequences in the process of realizing optimal psychological functioning. Although some direct effects of the three predictors and psychological well-being in the current research model are expected, we focus on examining the mediating role of psychological capital in the aforementioned relationships for better understanding. With these ideas in mind, the following hypotheses are formulated:

**Hypothesis 9.** Psychological capital will mediate the relationship between perceived authentic leadership and employee psychological well-being.

**Hypothesis 10.** Psychological capital will mediate the relationship between meaningful work and employee psychological well-being.

**Hypothesis 11.** Psychological capital mediates the relationship between a supportive organizational climate and employee psychological well-being.

## 3. Pilot study

### 3.1. Method

We first conducted a pilot study to examine the reliability and validity evidence of the measures used in the study.

#### 3.1.1. Participants

Employees ($n$ = 289) from NCAA Division II and III athletic departments participated in the study. The sample included a balanced mix of 128 males (44.3%) and 161 females (55.7%), with ages ranging from 22 to 76 years. With regard to current working status, 272 (94.1%) participants were full-time employees, and 17 (5.9%) were part-time staff.

#### 3.1.2. Measures

The first step in creating a reliable and valid scale was to develop a set of questionnaire items for verifying the research hypotheses. On the basis of an in-depth literature review and a thorough assessment of context adequacy by a panel of experts, 81 initial items were generated. We developed the questionnaire to evaluate second-order constructs for inclusion in the hypothesized model. The final instrument contained 14 items measuring authentic leadership (Neider & Schriesheim, 2011), 10 items measuring meaningful work (Steger, Dik, & Duffy, 2012), 10 items measuring supportive organizational climate (Rogg, Schmidt, Shull, & Schmitt, 2001), 24 items measuring psychological capital (Luthans, Avolio et al., 2007), 18 items measuring psychological well-being (Ryff & Keyes, 1995; Ryff & Singer, 2003), and 5 items measuring demographics (e.g., gender, current position, working status, and a period of working at current university). With the exception of the demographic information items, all the other self-report questionnaire items were measured on a seven-point Likert-type scale from 1 (*strongly disagree*) to 7 (*strongly agree*).

#### 3.1.3. Procedures

For the pilot study, we collected data from employees in Divisions II and III collegiate sport institutions to avoid duplicate responses given that the research population in the main study comprises Division I employees. In 2014, Divisions II and III had 320 and 449 affiliate institutions, respectively. A total of 3,187 email addresses were available from the staff inventories on the official athletic websites of these institutions. Using Qualtrics survey software, we sent administrators in the sampling frame a letter of introduction containing a link to the survey, participant consent form, and questionnaire. The link was kept open for four weeks starting on October 20, 2014. The system registered failed deliveries for 642 emails because of incorrect email addresses, retirement of prospective participants, or changes in affiliation. Among the 2545 employees who successfully received the email, 612 (24.0%) accessed the link, and 289 (11.1%) completed the survey.

#### 3.1.4. Data analysis

To evaluate the second-order measurements, we conducted multiple confirmatory factor analyses (CFAs) using Mplus Version 6.0 (Muthén & Muthén, 2010). Given non-normality problems, a robust maximum likelihood approach was used with Satorra and Bentler's (1994) scaling method (mean-adjusted). A robust comparative fit index was used to correct for abnormality in combination with other global fit indices, such as the comparative fit index (CFI), the Tucker-Lewis index (TLI), the root mean square error of approximation (RMSEA), and the standardized root mean square residual (SRMR). Robust CFI and TLI values that are equal to or greater than 0.90 indicate acceptable fit (Hair, Black, Babin, Anderson, & Tatham, 2005), while values greater than 0.95 represent a well-fitted model. RMSEA and SRMR values that are equal to or less than 0.08 indicate acceptable fit, and values less than 0.05 represent good model fit (Tabachnick & Fidell, 2007).

### 3.2. Results and discussion

As shown in Table 1, the measurement models for authentic leadership, meaningful work, supportive organization, and psychological well-being showed good or acceptable model fit. In the measurement model for psychological capital, the factor loadings of two items were below the cutoff point of 0.5, which affected the average variance extracted (AVE) values. After the two items were eliminated, the modified measurement model exhibited good model fit. The internal consistency of each construct was verified using Cronbach's alpha. The results exceeded the minimum recommended criterion (0.70) (Hair et al., 2005), with the values ranging from .86 to .95. The AVE values were calculated, and all the scores exceeded the suggested cutoff point of .05 (Fornell & Larcker, 1981). The scores indicate good convergent and discriminant validity.

A requisite to test research hypotheses was the establishment of a reliable and valid scale, which included three specific processes: (a) to develop a set of questions for each construct, (b) to conduct a series of CFAs for the second-order constructs,

**Table 1**
The Measurement Models for Second-order Measurements (Pilot Study).

| | S-B $\chi^2$ | *df* | *p* | CFI | TLI | RMSEA | SRMR |
|---|---|---|---|---|---|---|---|
| Authentic leadership | 195.06 | 73 | <.001 | .96 | .95 | .08 | .05 |
| Meaningful work | 2007.11 | 45 | <.001 | .98 | .97 | .07 | .06 |
| Supportive organizational climate | 81.65 | 34 | <.001 | .98 | .97 | .07 | .03 |
| Psychological capital | 3574.89 | 231 | <.001 | .94 | .93 | .06 | .05 |
| Psychological well-being | 3012.61 | 153 | <.001 | .95 | .95 | .06 | .06 |

and (c) to modify and finalize the questionnaire. Developing a set of items necessitated defining each sub-construct and modifying the psychology or management questionnaires that are available for the sport context. Because the questionnaire in the pilot study was geared toward employees of Divisions II and III collegiate sport institutions, it provided another piece of reliable and valid evidence. Another issue worth noting is that the results of the pilot study support the findings of previous studies (Luthans, Avolio et al., 2007; Walumbwa, Avolio, Gardner, Wernsing, & Peterson, 2008), maintaining that the constructs presented in this work can be used as higher-order factor models.

## 4. Method

### *4.1. Participants*

Participants were NCAA Division I athletic department employees. The sample included 385 females (54.38%) and 323 males (45.62%), with ages ranging from 22 to 74 years (average age = 38 years old, *SD* = 12.13). The participants self-identified themselves as Caucasians (*n* = 432, 61.02%), African-Americans (*n* = 155, 21.89%), Hispanics (*n* = 56, 7.91%), Americans (*n* = 18, 2.54%), and Native Americans (*n* = 17, 2.4%). The remaining 30 participants (10.73%) indicated their ethnicity as "other." In terms of working status, 549 participants (77.54%) were full-time employees, and 39 (5.51%) were part-time employees. The sample also consists of 36 interns (5.09%), 8 volunteers (1.13%), and others (e.g., graduate assistants).

### *4.2. Measures*

The measures were the same included in the pilot study.

### *4.3. Procedure*

Numerous individuals are employed in athletic departments across the United States, but only employees in Division I institutions were included as the target population for the main study. In the 2014–2015 seasons, there were a total of 351 Division I institutions. From the institutions' official athletic department staff inventories, 4881 email addresses were accessible. After the link to the survey was sent, the Qualtrics software registered failed deliveries or returns for 765 email addresses because of incorrect email addresses, change of institution, change of position, or retirement. Among the 4116 employees who successfully received the survey link, a total of 1612 (39.16%) accessed the link, but only 708 (17.2%) research participants finished the survey.

To demonstrate the representative nature of our data, we followed Lindner, Murphy, & Briers, 2001 procedures of handling nonresponse errors. First of all, respondents were divided into two groups: early (those responses received before first follow-up email) versus late (those received after first follow-up email) responses. Next, we compared early and late respondents on 12 randomly selected Likert-type scale items (two items for each second-order construct) and demographic items. There were no significant differences between the two groups' responses, indicating that there was no threat to external validity.

### *4.4. Data analysis*

The data screening process involved several steps. First, missing values were excluded by a list-wise deletion method. No outliers emerged because the Qualtrics web-based survey software can control for both univariate outliers and coding errors. Second, multivariate skewness and kurtosis were calculated to verify the multivariate normality assumption. The Mardia's coefficients of multivariate skewness ($z = 1238.06$) and kurtosis ($z = 5729.1$) were significant ($p < .001$), implying a violation of the normality assumption. To address the violation, modified maximum likelihood estimation (i.e., Satorra & Bentler salted statistic: Satorra & Bentler, 1994) was conducted in the subsequent data analyses. Third, the correlations among first-order (see Table 2) and second-order (see Table 3) factors were checked, but none of the relationships among the latter reached .85 (Kline, 2005), indicating that no extreme multicollinearity or singularity occurred.

**Table 2**
Correlations among First-order Factors (Main Study).

| Construct | Mean | SD | 1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|---|---|
| **Authentic leadership** | | | | | | | | |
| 1. Self-Awareness (SA) | 5.01 | 1.28 | 1.00 | | | | | |
| 2. Relational Transparency (RT) | 5.05 | 1.38 | .70** | 1.00 | | | | |
| 3. Internalized Moral Perspective (MP) | 5.32 | 1.20 | .66** | .56** | 1.00 | | | |
| 4. Balanced Processing (BP) | 4.42 | 1.35 | .73** | .71** | .57** | 1.00 | | |
| **Meaningful work** | | | | | | | | |
| 1. Psychological meaningfulness (PM) | 5.81 | .88 | 1.00 | | | | | |
| 2. Meaning Making (MM) | 4.86 | .92 | .63** | 1.00 | | | | |
| 3. Greater Good motivation (GM) | 5.53 | .99 | .58** | .48** | 1.00 | | | |
| **Supportive organizational climate** | | | | | | | | |
| 1. Management Competence (MC) | 4.65 | 1.36 | 1.00 | | | | | |
| 2. Cooperation/ Coordination (CC) | 4.61 | 1.12 | .43** | 1.00 | | | | |
| **Psychological capital** | | | | | | | | |
| 1. Self-efficacy (SE) | 5.62 | .76 | 1.00 | | | | | |
| 2. Hope (HO) | 5.46 | .89 | .76** | 1.00 | | | | |
| 3. Optimism (OP) | 5.13 | .96 | .57** | .68** | 1.00 | | | |
| 4. Resilience (RE) | 5.72 | .74 | .72** | .68** | .51** | 1.00 | | |
| **Psychological well-being** | | | | | | | | |
| 1. Autonomy (AU) | 5.53 | .71 | 1.00 | | | | | |
| 2. Positive Relations (PR) | 5.52 | .91 | .57** | 1.00 | | | | |
| 3. Environmental mastery (EM) | 5.19 | .80 | .41** | .45** | 1.00 | | | |
| 4. Purpose in life (PL) | 5.42 | .81 | .39** | .35** | .46** | 1.00 | | |
| 5. Personal Growth (PG) | 5.83 | .75 | .71** | .57** | .41** | .54** | 1.00 | |
| 6. Self-Acceptance (SC) | 5.52 | .79 | .44** | .51** | .59** | .52** | .56** | 1.00 |

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

**Table 3**
Correlations among Second-order Factors (Main Study).

| | 1. AL | 2. MW | 3. SO | 4. PsyCap | 5. PWB | 6. JS |
|---|---|---|---|---|---|---|
| 1. Authentic leadership | 1.00 | | | | | |
| 2. Meaningful work | .25** | 1.00 | | | | |
| 3. Supportive organizational climate | .72** | .38** | 1.00 | | | |
| 4. Psychological capital | .33** | .65** | .53** | 1.00 | | |
| 5. Psychological well-being | .23** | .65** | .38** | .78** | 1.00 | |
| 6. Job satisfaction | .43** | .60** | .60** | .67** | .58** | 1.00 |

Note. AL = authentic leadership; MW = meaningful work; SO = Supportive organizational climate; PsyCap = psychological capital; PWB = psychological well-being; JS = job satisfaction.
**$p$ <.01.

## 5. Results

### 5.1. Measurement model

In the series of CFAs for each second-order measurement, a total of 12 items were removed because of low factor loading. The remaining items for the succeeding data analyses were 13 for authentic leadership, 10 for meaningful work, 8 for supportive organizational climate, 15 for psychological capital, and 18 for psychological well-being. Table 4 lists the global fit indices used for the CFAs, and Table 5 shows the final survey questionnaire. A full measurement model showed good model fit (robust CFI = .91, TLI = .90, RMSEA = .04, SRMR = .04) along with Satorra-Bentler's scaled chi-square test, which was

**Table 4**
The Measurement Models for Second-order Measurements (Main Study).

| | S-B $\chi^2$ | *df* | *p* | CFI | TLI | RMSEA | SRMR |
|---|---|---|---|---|---|---|---|
| Authentic leadership | 287.15 | 61 | <.001 | .96 | .95 | .07 | .04 |
| Meaningful work | 136.54 | 32 | <.001 | .96 | .95 | .07 | .05 |
| Supportive organizational climate | 61.92 | 19 | <.001 | .98 | .98 | .06 | .03 |
| Psychological capital | 250.60 | 100 | <.001 | .97 | .97 | .05 | .04 |
| Psychological well-being | 3733.72 | 153 | <.001 | .96 | .95 | .04 | .04 |

**Table 5**
The Finalized Survey Questionnaire.

| Constructs | Items |
|---|---|
| **Authentic leadership** | |
| | *My athletic director . . .* |
| *Self-awareness* | (Al1) . . . describes accurately the way that others view his/her abilities |
| | (Al2) . . . shows that he/she understand his/her strengths and weaknesses |
| | (Al3) . . . is clearly aware of the impact he/she has on others |
| *Relational transparency* | (Al4) . . . clearly states what he/she means |
| | (Al5) . . . openly shares information with others |
| | (Al6) . . . expresses his/her ideas and thoughts clearly to others |
| *Internalized moral perspective* | (Al7) . . . shows consistency between his/her beliefs and actions |
| | (Al8) . . . uses his/her core beliefs to make decisions |
| | (Al9) . . . resists pressures on him/her to do things contrary to his/her beliefs |
| *Balanced processing* | (Al0) . . . asks for ideas that challenge his/her core beliefs |
| | (Al1) . . . encourages others to voice opposing points of view |
| | (Al2) . . . objectively analyzes relevant data before making decisions |
| | (Al3) . . . carefully listens to alternative perspectives |
| **Meaningful work** | |
| *Psychological meaningfulness* | (Mw1) I have found a meaningful career |
| | (Mw2) I understand how my work contributes to my life's meaning |
| | (Mw3) I have a good sense of what makes my job meaningful |
| | (Mw4) I have discovered work that has a satisfying purpose |
| *Meaning making* | (Mw5) I view my work as contributing to my personal growth |
| | (Mw6) My work helps me better understand myself |
| | (Mw7) My work helps me make sense of the world around me |
| *Greater good motivation* | (Mw8) My work really makes no difference to sport (R) |
| | (Mw9) I know my work makes a positive difference in sport |
| | (Mw10) The work I do serves a greater purpose |
| **Supportive organizational climate** | |
| *Management* | (So1) My Senior staffs follow through on commitments |
| *competence/* | (So2) My Senior staffs clearly communicate work objectives and responsibilities |
| *consistency* | (So3) My Senior staffs take action on new ideas provided by employees |
| | (So4) My Senior staffs inspire commitment to our organization's missions and goals |
| *Cooperation/ coordination* | (So5) Employees in my department work effectively with other departments |
| | (So6) Departments cooperate to get the job done effectively and efficiently |
| | (So7) Departments communicate key information in a timely manner each other |
| | (So8) Employees have a good working relationship with their senior staffs |
| **Psychological capital** | |
| *Self-efficacy* | (Psy1) I feel confident analyzing a long-term problem to find a solution |
| | (Psy2) I feel confident in representing my work area in meetings with management |
| | (Psy3) I feel confident contributing to discussions about the company's strategy |
| | (Psy4) I feel confident helping to set targets/ goals in my work area |
| *Hope* | (Psy5) At the present time, I am energetically pursuing my work goals |
| | (Psy6) Right now I see myself as being pretty successful at work |
| | (Psy7) I can think of many ways to reach my current work goals |
| | (Psy8) At this time, I am meeting the work goals that I have set for myself |
| *Optimism* | (Psy9) When things are uncertain for me at work, I usually expect the best |
| | (Psy10) I always look on the bright side of thins regarding my job |
| | (Psy11) I'm optimistic about what will happen to me in the future as it pertains to work |
| | (Psy12) In this job, things never work out the way I want them to (R) |
| *Resilience* | (Psy13) I can be "on my own," so to speak, at work if I have to |
| | (Psy14) I can get through difficult times at work because I've experienced difficulty before |
| | (Psy15) I feel I can handle many things at a time at this job |
| **Job satisfaction** | (Js1) All in all, I am satisfied with my job |
| | (Js2) In general, I don't like my job (R) |
| | (Js3) In general, I like working here |
| **Psychological well-being** | |
| *Self-acceptance* | (Pw1) When I look at the story of my life, I am pleased with how things have turned out |
| | (pw2) I like most aspects of my personality |
| | (Pw3) In many ways, I feel disappointed about my achievements in life (R) |
| *Positive relations* | (Pw4) People would describe me as a giving person, willing to share my time with others |
| | (Pw5) Maintaining close relationships has been difficult and frustrating for me (R) |
| | (Pw6) I have not experienced many warm and trusting relationships with others (R) |
| *Autonomy* | (Pw7) I tend to be influenced by people with strong opinions (R) |
| | (Pw8) I have confidence in my opinions, even if they are contrary to the general consensus |
| | (Pw9) I judge myself by what I think is important, not by the values of what others think. |
| *Environmental mastery* | (Pw10) In general, I feel I am in charge of the situation in which I live |
| | (Pw11) The demands of everyday life often get me down (R) |
| | (Pw12) I am quite good at managing the many responsibilities of my daily life |

| | |
|---|---|
| *Purpose in life* | (Pw13) I sometimes feel as if I have done all there is to do in life |
| | (Pw14) I live life one day at a time and do not really think about the future (R) |
| | (Pw15) Some people wander aimlessly through life, but I am not one of them |
| *Personal growth* | (Pw16) I think it is important to have new experiences that challenge how you think about yourself and the world |
| | (Pw17) Life has been a continuous process of learning, changing, and growth |
| | (Pw18) I gave up trying to make big improvements or changes in my life long time ago (R) |

Note. R = reverse-scored item.

significant (S-B $\chi^2$ = 4153.19, *df* = 1952, $p$ <.001). The factor loadings for the items in the final measurement model exceeded the cutoff point (.05). All the Cronbach's alpha values of the first-order constructs were greater than .70, indicating acceptable consistency (Hair et al., 2005). The AVE values of all the sub-constructs also exceeded the cutoff point, indicating construct validity (Hair et al., 2005).

### 5.2. Hypothesized structural model

With the acceptability of the measurement model confirmed, the second step was to test a structural equation model that features hypothesized relationships. Although the measurement model for all the first-order factors showed reasonable model fit, the global indices of the initial hypothesized structural model, which comprises five direct paths among latent constructs, indicated an ill-fitting model (e.g., robust CFI = .89, TLI = .89). To improve the fit of the hypothesized structural model, MIs were examined to individually add parameters. The analysis began from the largest MI value. Incorporating nine parameters to the proposed research model resulted in reasonable model fit (robust S-B $\chi^2$ = 4541.95, *df* = 2106, $p$ <.001, robust CFI = .90, TLI = .90, RMSEA = .04, SRMR = .05).

As previously stated, the hypothesized structural model consists of five direct paths (see Fig. 1 and Table 6). We explored individual standardized path coefficients through path analysis among the latent variables provided in Fig. 1. Specifically, the coefficient of the path from authentic leadership to psychological capital (H1) was negative (standardized γ = -.12, SE = .07) and non-significant ($p$ = .09). The other direct paths were positive and significant. Therefore, Hypothesis 1 was not supported in the hypothesized structural model, whereas Hypotheses 2–5 were supported.

On the basis of the hypothesized structural model, we proposed six indirect effects (see Table 6). However, because of the non-significant relationship between authentic leadership and psychological capital (H1), the indirect path of authentic leadership through psychological capital to job satisfaction (H6) and that of authentic leadership through psychological capital to psychological well-being (H9) were disregarded in the analysis. To assess the mediating role of psychological capital, four direct paths (meaningful work → job satisfaction, supportive organizational climate → job satisfaction, meaningful work → psychological well-being, and supportive organizational climate → psychological well-being) were incorporated into the hypothesized research model, which also exhibited reasonable model fit (S-B $\chi^2$ = 4495.52, *df* = 2102, $p$ <.001, CFI = .91, TLI = .90, RMSEA = .04, SRMR = .05).

With regard to the indirect effects of psychological capital on job satisfaction (see Fig. 2), both relevant direct paths (meaningful work → job satisfaction: standardized γ = .18,

**Table 6**
Parameter Estimators in the Hypothesized Structural Model.

| | Structural relationships | Standardized coefficient | SE | $p$ value | Hypothesis testing(mediation type) |
|---|---|---|---|---|---|
| **H1** | Authentic leadership → PsyCap | −.12 | .07 | .09 | Not supported |
| **H2** | Meaningful work → PsyCap | .55** | .04 | <.01 | Supported |
| **H3** | Supportive org. climate → PsyCap | .54** | .08 | <.01 | Supported |
| **H4** | PsyCap → job satisfaction | .78** | .02 | <.01 | Supported |
| **H5** | PsyCap → PWB | .82** | .02 | <.01 | Supported |
| **H6** | Authentic leadership → PsyCap → job satisfaction | – | – | – | Not supported |
| **H7** | Meaningful work → PsyCap → job satisfaction | .19** | .05 | <.01 | Supported |
| | Meaningful work → job satisfaction | .18** | .06 | <.01 | (partial mediation) |
| **H8** | Supportive org. climate → PsyCap → job satisfaction | .20** | .06 | <.01 | Supported |
| | Supportive org. climate → job satisfaction | .40** | .10 | <.01 | (partial mediation) |
| **H9** | Authentic leadership → PsyCap → PWB | – | – | – | Not supported |
| **H10** | Meaningful work → PsyCap → PWB | .50** | .07 | <.01 | Supported |
| | Meaningful work → PWB | .08 | .08 | .34 | (full mediation) |
| **H11** | Supportive org. climate → PsyCap → PWB | .51** | .14 | <.01 | Supported |
| | Supportive org. climate → PWB | −.22 | .15 | .15 | (full mediation) |

*Note:* PsyCap = psychological capital; PWB = psychological well-being.
** $p$ <.01.

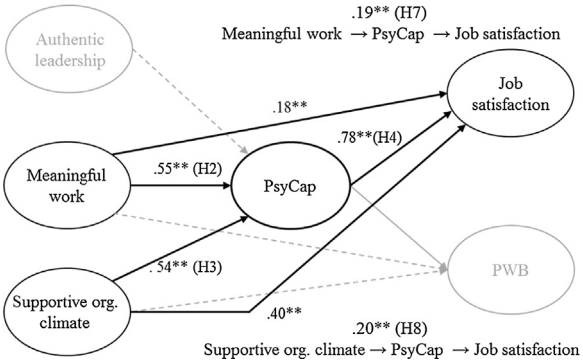


**Fig. 2.** Hypotheses testing for indirect effects (Hypotheses 7 and 8).

SE = .06, $p$ <.01; supportive organizational climate → job satisfaction: standardized γ = .40, SE = .10, $p$ <.01) were positive and significant. The psychological capital-directed paths from meaningful work to job satisfaction (Hypothesis 7: standardized γ = .19, SE = .05, $p$ <.01) and from supportive organizational climate to job satisfaction (Hypothesis 8: standardized γ = .20, SE = .06, $p$ <.01) were positive. In sum, the propositions regarding the mediating role of psychological capital as articulated in Hypotheses 7 and 8 were supported; these indirect paths are categorized as partial mediation.

In the test on the mediating role of psychological capital in psychological well-being (see Fig. 3), both relevant direct paths (meaningful work → psychological well-being: standardized γ = .08, SE = .08, $p$ = .344; supportive organizational climate → psychological well-being: standardized γ = -22, SE = .15, $p$ = .145) were non-significant. The psychological capital-directed paths from meaningful work to psychological well-being (H10) and from supportive organizational climate to psychological well-being (H11) were positive and significant (Meaningful work → psychological capital → psychological well-being: standardized γ = .50, SE = .07, $p$ <.01; Supportive organizational climate → psychological capital → psychological well-being: standardized γ = .51, SE = .14, $p$ <.01). Overall, the assumptions put forward regarding mediation as expressed in Hypotheses 10 and 11 were supported; these indirect paths are categorized as full mediation.

Along with the hypothesized structural model including all direct and indirect paths, post-hoc mediation analyses were conducted by using bootstrapping to ascertain the mediating role of psychological capital. In order to handle not only non-normal distributed data but also multiple predictors and outcomes, Stride, Gardner, Catley, & Thomas, 2015 developed Mplus mediation testing codes based on Hayes (2013) original PROCESS macro analysis. The tests using Stride's codes in Mplus showed corresponding results of full structural model by providing the bootstrapped confidence intervals (CIs) for direct, indirect, and total effects. For instance, the indirect effect of meaningful work on job satisfaction (H7) was statistically significant ($p$ <.001), and the 95% CI [.05, .23] was above zero.

## 6. Discussion

We first proposed that an athletic director's authentic leadership positively influences employees' psychological capital levels in the intercollegiate sport setting. The results did not support this hypothesis. Branch (1990), argument may be helpful to explain the pattern of findings. The author maintained that athletic department employees in Division I schools tend to regard the intentions of their athletic directors with skepticism rather than as authentic aims to exercise good

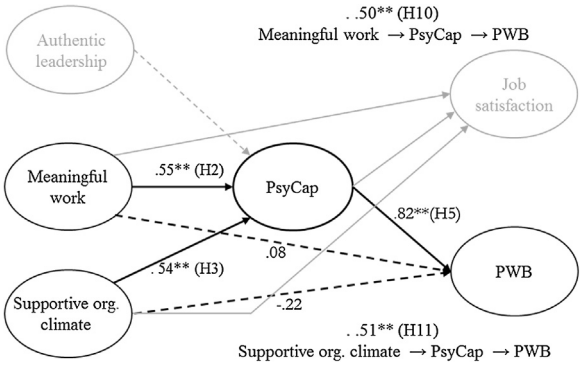


**Fig. 3.** Hypotheses testing for indirect effects (Hypotheses 10 and 11).

leadership. He also argued that building personal relationships with athletic directors is very difficult, especially in major college athletics. Another plausible explanation is that most employees in athletic departments do not directly work with their athletic directors. Therefore, athletic directors' authentic leadership may not be the core positive influence on followers' psychological capital levels. Compared with senior staff, athletic directors are less available for communication and opinion sharing with athletic department employees. A possibility, then, is that athletic directors' authentic leadership does not directly and significantly affect employees' psychological capital levels.

The relationship between meaningful work and psychological capital was significant in the hypothesized direction, as correctly predicted by Hypothesis 2. An essential requirement is for employees to know why and in what manner their work is valuable because these realizations motivate them to achieve their personal work goals (Pratt & Ashforth, 2003). With respect to creating a positive workplace, each employee's self-development process produces motivation and fosters attachment to work (Hackman & Oldham, 1976; Lips-Wiersma & Morris, 2009). May, Gilson, & Harter, 2004 stated that as employees evaluate the correspondence between their values and roles at work, they not only tend to actively engage with their responsibilities but also exhibit greater self-efficacy. Most importantly, meaningful work helps employees recover from failure because they clearly understand the value of their work in the workplace and in the sport industry. The results of the current study provide conclusive evidence that meaningful work positively affects employee psychological capital in intercollegiate athletic departments.

The relationship between a supportive organizational climate and psychological capital was significant as well, supporting Hypothesis 3. A supportive organizational climate is closely related to the encouragement derived from mid-level executives and other employees. Specifically, as sub-constructs of a supportive organizational climate, management competence/consistency and cooperation/coordination reflect the effects of senior staff and coworkers on employees in the work units of athletic departments. The results support Mills and his colleagues' (Mills et al., 2013) conclusion that cooperative working experiences encourage employees to see opportunities in failure. Such encouragement is conveyed through effective communication and solid relationships among coworkers.

The findings also confirm a positive relationship between employees' psychological capital and job satisfaction supporting relevant previous studies (e.g., Avey, Reichard, Luthans, & Mhatre, 2011; Cheung et al., 2011; Larson & Luthans, 2006). An employee's positive psychological state is one of the most necessary preconditions for job satisfaction. For example, hopeful employees who have internalized determination and motivation are likely to be satisfied with their tasks and accomplishments (Luthans, Youssef, & Avolio, 2015). We conclude that athletic department employees who have high psychological capital levels show considerable job satisfaction.

Because athletic department employees face a dramatically changing and potentially stressful environment, full functioning in personal life is critical. The results confirm the prediction of Hypothesis 5 regarding the positive relationship between psychological capital and psychological well-being. Enhancing psychological capital is beneficial for increasing positive functioning in the workplace and daily life satisfaction. According to Bakker and Oerlemans (2012), well-being is shaped by an individual's cognitive and affective evaluations of life in terms of events and circumstances. Because employees with high psychological capital levels hold positive appraisals of their workplaces on the basis of events and circumstances, they tend to achieve personal growth and establish positive relationships with others. In the current context of intercollegiate sport, therefore, the psychological capital levels of employees in athletic departments play a role in the psychological well-being that they achieve in their daily lives.

Illuminating the relationships between the examined predictors and job satisfaction indicates that psychological capital partially mediates the influence of meaningful work (Hypothesis 7) and supportive organizational climate (Hypothesis 8) on job satisfaction (Hypothesis 7). In articulating how meaningful work increases job satisfaction, we found that employees who value their work intrinsically motivate themselves to set realistic and achievable goals. In turn, such behavior enables the employees to accumulate substantial psychological capital and experience high levels of job satisfaction. Perceptions of strong staff or peer support also increase job satisfaction. In this process, employees' psychological capital levels also increase. The work units or sub-departments in athletic departments (e.g., academics, communication, and marketing) share a common goal, which is to develop student-athletes' academic and athletic potential. If many people harmoniously work together and are passionate about their duties, each employee is likely to feel autonomous and respected (Mageau et al., 2009). Because meaningful work and a supportive organizational climate directly and indirectly influence job satisfaction, these predictors are pivotal factors for enhancing the operation of athletic departments.

Given that full mediation comprehensively explains the relationship between independent and dependent variables, a full mediation effect may be regarded as greater or more important than a partial mediation effect (Rucker, Preacher, Tormala, & Petty, 2011). The results show that meaningful work and a supportive organizational climate influence psychological well-being only through psychological capital; that is, psychological capital fully mediates between the two predictors and psychological well-being. This finding appears inconsistent with the results of Arnold, Turner, Barling, Kelloway, & McKee, 2007, who maintain that a direct and positive relationship exists between meaningful work and psychological well-being.

Nonetheless, our findings extend evidence regarding the relationship because the bridging role of psychological capital substantially explains the process by which meaningful work influences psychological well-being. As a full mediator, employee psychological capital links organizational influence to psychological well-being. In other words, psychological capital fills the gap in the causality between a supportive organizational climate and employees' psychological well-being.

The core finding of the analyses is that employees' psychological capital serves a key function not only in the workplace (e.g., job satisfaction), but also in daily life (e.g., psychological well-being).

### 6.1. Implications

We provide a number of implications for academicians and practitioners. First, from a theoretical standpoint, we broaden the perspective of positive organizational behavior by empirically examining the mediating role of psychological capital. Most scholars have concentrated on providing various predictors (Avey, 2014) and outcomes of psychological capital (Avey, Luthans, Youssef et al., 2010; Avey, Luthans, Smith, et al., 2010). Although there are a few studies highlighting this mediating role of psychological capital (Luthans et al., 2008; Venkatesh & Blaskovich, 2012), those researchers utilized only employee or organization performance as an outcome of psychological capital. However, our work is unique in that it elucidates the mediating role of psychological capital for sport employees' positive psychological aspects beyond job performance. By including job satisfaction and psychological well-being, we disentangle the bridging role of psychological capital in the association between predictors (i.e., meaningful work and supportive organizational climate) and outcomes. Additionally, by treating psychological well-being as an outcome of psychological capital, we support the newly developed positivity paradigm, which argues that the best organizations are those that enhance employees' well-being through positive work experiences (Mills et al., 2013).

Second, by applying the positive organizational behavior framework and the psychological capital concept to the context of intercollegiate athletics, we advance the body of knowledge on sport organizational behavior. The present study is one of the first attempts to examine the psychological capital levels of employees in sport organizations. Previous organizational behavior studies in sport centered on job satisfaction and job performance, regardless of sport level, organizational structure, and career type. By contrast, we focus on a proactive positive perspective with respect to the strength and value of each employee rather than around determining individual weaknesses and dysfunctional behaviors. In adapting the positivity framework to sport organizations, this study provides not only empirical evidence that expands our understanding of sport organizations' operations and employees' potential strengths, but also evidence that positive organizational behavior and psychological capital are suitable concepts for investigating the work issues that confront sport organizations.

Third, a methodological contribution of this work is a newly developed positive organizational behavior-based questionnaire for sport organizations. Particularly useful components are the second-order constructs (i.e., authentic leadership, meaningful work, supportive organizational climate, psychological capital, and psychological well-being) included in the instrument. Ensuring the reliability and validity of the final questionnaire was made possible by the series of CFAs conducted, the targeting of Divisions II and III organizations for the pilot study, and the recruitment of Division I employees for the main research. Before the full measurement model was tested, conducting multiple CFAs to evaluate the second-order constructs proved useful in finding an adequate model for each variable. In addition, by modifying original organizational behavior items into those specific to sport organizations, this study provides a more reliable and valid questionnaire for future research on organizational behavior in the sport setting.

With regard to implications for practitioners in the sport industry, we attempt to change the long-held but erroneous views of sport organization managers regarding employee motivation, satisfaction, and performance. Rather than focusing only on individual and organizational performance, we also underscore the importance of employee psychological capital, which was confirmed as ultimately leading to high levels of job satisfaction and psychological well-being. For example, because meaningful work is a strong predictor of psychological capital levels, managers should frequently remind employees that their work is critical to the future of the sport industry. In the intercollegiate sport context, communication and cooperation among departments are also important aspects in elevating the quality of employees' work experiences. Therefore, managers should consider different means of fostering a cooperative working environment within and across work units.

The findings of this work are also expected to help managers build internal management strategies for increasing employees' psychological capital levels, with the simultaneous consideration of leader, employee, and organizational effects. For instance, managers can establish a system of mentoring between senior staff and followers to foster a supportive organizational climate. A mentoring system is also beneficial as an avenue from which both mentors and apprentices can engage in meaningful work. In turn, long-term mutual development occurs (Schulz, 1995). Furthermore, both formal training programs and informal mentoring systems effectively increase followers' self-efficacy levels (Luthans & Youssef, 2007). In serving as a repository of ideas for such schemes, this study functions as a roadmap for managers to build management strategies that enhance employee psychological capital and consequently boost morale, job satisfaction, and ultimately, psychological well-being in the sport organizations of today and tomorrow.

This study is directly beneficial for athletic departments of Division I institutions because the questions were modified for applicability to the collegiate sport context, and data were collected from current employees of these athletic departments. Any sport institution can measure its employees' psychological capital and psychological well-being levels by using the developed questionnaire, and managers can explore employees' perceptions of leadership and organizational effects. Because the final survey questionnaire is short and specific to employees in athletic departments, it can be used by all division athletic departments.

### 6.2. Limitations and directions for future research

We also note limitations of the research, the first of which is related to the questionnaire developed for cross-sectional self-report surveys. The most appropriate survey questionnaire was selected and modified for the context of sport on the basis of the literature and panel suggestions. However, the presence of numerous second-order constructs in the instrument complicated the development of the hypotheses and presented difficulties in acquiring good model fit during the data analyses. Although multiple CFAs were carried out for each second-order construct in both the pilot and main studies, removing some items or specifying several residual covariances was required as the hypothesized model was tested with structural equation modeling in the main study. Using a full set of the original items with a larger sample size may alleviate the statistical problems encountered in this work.

The second limitation is also related to measurement. Although a higher-order factor represents the sub-constructs, an equally important requirement is to identify the relationships among the sub-constructs. Correlations among the sub-constructs were calculated, but researchers should note that examining causal relationships is essential. For example, meaningful work more strongly influences employee self-efficacy and resilience than hope and optimism (Rosso, Dekas, & Wrzesniewski, 2010). Although the sub-constructs synergistically interact, scholars should examine which specific construct is influenced by meaningful work in the sport setting (Luthans et al., 2015). Post-hoc analyses are therefore required to more comprehensively explain the significant direct paths identified in the current study (i.e., meaningful work → psychological capital, supportive organizational climate → psychological capital, psychological capital → job satisfaction, and psychological capital → psychological well-being).

A possible direction for future research is to conduct in-depth interviews with employees to acquire a description of how their leaders' attitudes and behaviors influence their psychological capital levels. Another possible direction is to examine the effects of others' leadership styles on psychological capital levels. For example, Harrison, Jones and Reiter-Palmon (2005) concluded that transformational leadership is positively related to followers' resilience. Conducting qualitative research through in-depth interviews or testing different leadership styles and followers' resultant psychological capital levels can enhance explanations of the relationship between leadership influence and psychological capital level.

In regard to survey-based research, the low response rate in our data collection (11.1%) could threaten external validity in this study. Jordan, Walker, Kent, and Inoue (2011) argued that it is imperative to utilize non-response error management techniques in order to strengthen the sport management research. Following Lindner et al. (2001) suggestion, this current study conducted non-response analyses by comparing early and late respondents to generalize our data analysis results to the overall population of NCAA Division I athletic department employees. However, for future survey-based studies in sport management, it is required not only controlling non-response errors, but also using appropriate ways to maximize study participation (Jordan et al., 2011).

Lastly, with regard to the development of psychological capital among sport employees, advanced multi-level analysis (i.e., hierarchical linear modeling) is needed in order to understand its application at different levels of influence. Newman et al. (2014) found that most psychological capital studies have been conducted at the individual level to test its antecedents and outcomes. Searle and Barbuto (2013) proposed a multilevel positive behavior framework by including seven levels: individual, dyadic, team/group, organizational, community, societal, and environmental levels. In sport management, Kim, Kim, et al. (2017) and Kim, Perrewé et al. (2017) recently provided a conceptual framework of sport employees' psychological capital, including six factors within three levels of influences on employee psychological capital (i.e., individual, leader, and organization). In the context of intercollegiate athletics, employees in athletic departments are nested within team/group (e.g., equipment, student-athlete development), institutions, and conferences (e.g., Southeastern Conference). Thus, using a statistical test of multilevel modeling is encouraged in future studies to fully delineate the development of sport employee psychological capital.

### 6.3. Conclusion

Amid the growing shift to a positive approach in investigating workplace issues, positive organizational behavior and its key concept, psychological capital, are regarded as some of the most suitable concepts for delving into the issues that confront contemporary organizations. Given the competitive nature of the sport industry, positive organizational behavior can be applied to examinations of sport organizations by considering leader, employee, and organizational effects on psychological capital, as well as job satisfaction and psychological well-being.

We developed and tested the hypothesized research model specifically for employees in collegiate athletic departments. Employees' meaningful work and a supportive organizational climate served as predictors of psychological capital, and job satisfaction and psychological well-being outcomes of psychological capital. Whereas psychological capital partially mediated between antecedents and job satisfaction, it fully mediated the paths from antecedents to psychological well-being. This study is expected to serve as a point of departure from which to explore the promising potential of positivity as a framework for research in sport settings, and as ultimately contributory to a better understanding of positive organizational behavior in the context of sport.

## References

Adler, P. S., & Kwon, S.-W. (2002). Social capital: Prospects for a new concept. *Academy of Management Review*, *27*(1), 17–40.
Agarwal, J., & Malloy, D. C. (1999). Ethical work climate dimensions in a not-for-profit organization: An empirical study. *Journal of Business Ethics*, *20*(1), 1–14.

Albrecht, S. L. (2013). Work engagement and the positive power of meaningful work. *Advances in Positive Organizational Psychology*, *1*, 237–260.
Anagnostopoulos, C., Winand, M., & Papadimitriou, D. (2016). Passion in the workplace: Empirical insights from team sport organisations. *European Sport Management Quarterly*, *16*(4), 385–412.
Andrew, D. P. S., Kim, S., Stoll, J. A., & Todd, S. Y. (2011). To what extent does transformational leadership affect employees? An exploratory analysis of a collegiate athletic department. *Applied Research in Coaching and Athletics Annual*, *26*, 178–207.
Arnold, K. A., Turner, N., Barling, J., Kelloway, E. K., & McKee, M. C. (2007). Transformational leadership and psychological well-being: The mediating role of meaningful work. *Journal of Occupational Health Psychology*, *12*(3), 193–203.
Avey, J. B. (2014). The left side of psychological capital: New evidence on the antecedents of psycap. *Journal of Leadership & Organizational Studies*, *21*(2), 141–149.
Avey, J. B., Luthans, F., Smith, R. M., & Palmer, N. F. (2010). Impact of positive psychological capital on employee well-being over time. *Journal of Occupational Health Psychology*, *15*(1), 17–28.
Avey, J. B., Luthans, F., & Youssef, C. M. (2010). The additive value of positive psychological capital in predicting work attitudes and behaviors. *Journal of Management*, *36*(2), 430–452.
Avey, J. B., Reichard, R. J., Luthans, F., & Mhatre, K. H. (2011). Meta-analysis of the impact of positive psychological capital on employee attitudes, behaviors, and performance. *Human Resource Development Quarterly*, *22*(2), 127–152.
Bakker, A. B., & Oerlemans, W. G. M. (2012). Subjective well-being in organizations. In K. Cameron, & G. M. Spreitzer (Eds.), *The Oxford handbook of positive organizational scholarship* (pp. 178–189). New York, NY: Oxford University Press.
Barrick, M. R., & Mount, M. K. (1993). Autonomy as a moderator of the relationships between the Big Five personality dimensions and job performance. *Journal of Applied Psychology*, *78*(1), 111–118.
Billett, S. (2004). Workplace participatory practices: Conceptualising workplaces as learning environments. *Journal of Workplace Learning*, *16*(6), 312–324.
Branch, D. (1990). Athletic director leader behavior as a predictor of intercollegiate athletic organizational effectiveness. *Journal of Sport Management*, *4*(2), 161–173.
Bruening, J. E., Dixon, M. A., Tiell, B., Osborne, B., Lough, N., & Sweeney, K. (2008). Work-life culture of collegiate athletics: Perceptions of supervisors. *International Journal of Sport Management*, *9*(3), 250–272.
Buckingham, M., & Vosburgh, R. M. (2001). The 21st century human resources function: It's the talent. *Stupid! Human Resource Planning*, *24*(4), 17–23.
Buswell, J. (2004). Sport and leisure service encounter. In U. McMahon-Beattie, & I. Yeoman (Eds.), *Sport and leisure operations management*, London: Thomson.
Burton, L. J., & Welty Peachey, J. (2009). Transactional or transformational? Leadership preferences of Division III athletic administrators. *Journal of Intercollegiate Sport*, *2*(2), 245–259.
Cameron, K., Dutton, J., & Quinn, R. E. (2003). *Positive organizational scholarship: Foundations of a new discipline*. San Francisco, CA: Berrett-Koehler Publishers.
Chalip, L. (2006). Toward a distinctive sport management discipline. *Journal of Sport Management*, *20*(1), 1–21.
Cheung, F., Tang, C. S. K., & Tang, S. (2011). Psychological capital as a moderator between emotional labor, burnout, and job satisfaction among school teachers in China. *International Journal of Stress Management*, *18*(4), 348.
Clapp-Smith, R., Vogelgesang, G. R., & Avey, J. B. (2009). Authentic leadership and positive psychological capital: The mediating role of trust at the group level of analysis. *Journal of Leadership & Organizational Studies*, *15*(3), 227–240.
Covell, D., & Barr, C. A. (2010). *Managing intercollegiate athletics*. Scottsdale, AZ: Holcomb Hathaway.
Culbertson, S. S., Fullagar, C. J., & Mills, M. J. (2010). Feeling good and doing great: The relationship between psychological capital and well-being. *Journal of Occupational Health Psychology*, *15*(4), 421–433.
Cunningham, G. B. (2006). The relationships among commitment to change, coping with change, and turnover intentions. *European Journal of Work and Organizational Psychology*, *15*(1), 29–45.
Cunningham, G. B. (2011). Creative work environments in sport organizations: The influence of sexual orientation diversity and commitment to diversity. *Journal of Homosexuality*, *58*(8), 1041–1057.
Dawkins, S., Martin, A., Scott, J., & Sanderson, K. (2013). Building on the positives: A psychometric review and critical analysis of the construct of psychological capital. *Journal of Occupational and Organizational Psychology*, *86*(3), 348–370.
Denver CBS (2013). *(November 10). Stress of coaching big time sports can be unhealthy*. Retrieved from. http://denver.cbslocal.com/2013/11/10/stress-of-coaching-big-time-sports-can-be-unhealthy/.
DeSensi, J. T., & Rosenberg, D. (1996). *Ethics in sport management*. Morgantown, WV: Fitness Information Technology.
Dixon, M. A., & Sagas, M. (2007). The relationship between organizational support, work-family conflict, and the job-life satisfaction of university coaches. *Research Quarterly for Exercise and Sport*, *78*(3), 236–247.
Doherty, A. J. (1998). Managing our human resources: A review of organisational behaviour in sport. *Sport Management Review*, *1*(1), 1–24.
Fink, J. S., Pastore, D. L., & Riemer, H. A. (2003). Managing employee diversity: Perceived practices and organisational outcomes in NCAA Division III athletic departments. *Sport Management Review*, *6*(2), 147–168.
Fornell, C., & Larcker, D. F. (1981). Structural equation models with unobservable variables and measurement error: Algebra and statistics. *Journal of Marketing Research*382–388.
Fredrickson, B. L. (2001). The role of positive emotions in positive psychology: The broaden-and-build theory of positive emotions. *American Psychologist*, *56*(3), 218–226.
Giallonardo, L. M., Wong, C. A., & Iwasiw, C. L. (2010). Authentic leadership of preceptors: Predictor of new graduate nurses' work engagement and job satisfaction. *Journal of Nursing Management*, *18*(8), 993–1003.
Hackman, J. R., & Oldham, G. R. (1976). Motivation through the design of work: Test of a theory. *Organizational Behavior and Human Performance*, *16*(2), 250–279.
Hair, J. F., Black, B., Babin, B., Anderson, R. E., & Tatham, R. L. (2005). *Multivariate data analysis*. Saddle River, NJ: Prentice-Hall.
Harland, L., Harrison, W., Jones, J. R., & Reiter-Palmon, R. (2005). Leadership behaviors and subordinate resilience. *Journal of Leadership & Organizational Studies*, *11*(2), 2–14.
Hayes, A. F. (2013). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. New York, NY: The Guilford Press.
Horn, J. E., Taris, T. W., Schaufeli, W. B., & Schreurs, P. J. (2004). The structure of occupational well-being: A study among Dutch teachers. *Journal of Occupational and Organizational Psychology*, *77*(3), 365–375.
Hums, M. A., Barr, C. A., & Gullion, L. (1999). The ethical issues confronting managers in the sport industry. *Journal of Business Ethics*, *20*(1), 51–66.
Hums, M. A., & MacLean, J. (2004). *Governance and policy in sport organizations*. Scottsdale, AZ: Holcomb Hathaway Publisher.
Inglis, S., Danylchuk, K. E., & Pastore, D. L. (2000). Multiple realities of women's work experiences in coaching and athletic management. *Women in Sport and Physical Activity Journal*, *9*(2), 1–26.
Jensen, S. M., & Luthans, F. (2006). Relationships between entrepreneurs' psychological capital and their authentic leadership. *Journal of Managerial Issues*, *18*(2), 254–273.
Jordan, J. S., Walker, M., Kent, A., & Inoue, Y. (2011). The frequency of nonresponse analyses in the Journal of Sport Management. *Journal of Sport Management*, *25*(3), 229–239.
Judge, T. A., Thoresen, C. J., Bono, J. E., & Patton, G. K. (2001). The job satisfaction–job performance relationship: A qualitative and quantitative review. *Psychological Bulletin*, *127*(3), 376–407.
Karabatsos, G., Malousaris, G., & Apostolidis, N. (2006). Evaluation and comparison of burnout levels in basketball, volleyball and track and field coaches. *Studies in Physical Culture and Tourism*, *13*(1), 79–83.

Kent, A., & Chelladurai, P. (2001). Perceived transformational leadership, organizational commitment, and citizenship behavior: A case study in intercollegiate athletics. *Journal of Sport Management*, *15*(2), 135–159.
Kim, M., Kim, A. C. H., & Reid, C. (2017). Positive organisational behaviour in NCAA division i football: A head coach's authentic leadership and assistant coaches' psychological constructs. *International Journal of Sport Management and Marketing*, *17*(1-2), 121–143.
Kim, M., Perrewé, P. L., Kim, Y. K., & Kim, A. C. H. (2017). Psychological capital in sport organizations: Hope, efficacy, resilience, and optimism among employees in sport (HEROES). *European Sport Management Quarterly*, *17*(5), 659–680.
Kim, S., Magnusen, M., Andrew, D. P. S., & Stoll, J. (2012). Are transformational leaders a double-edged sword? Impact of transformational leadership in sport employee commitment and job satisfaction. *International Journal of Sports Science and Coaching*, *7*(4), 661–676.
Kline, R. B. (2005). *Structural equation modeling*. New York, NY: Guilford Press.
Knoop, R. (1994). Work values and job satisfaction. *The Journal of Psychology*, *128*(6), 683–690.
Larson, M., & Luthans, F. (2006). Potential added value of psychological capital in predicting work attitudes. *Journal of Leadership & Organizational Studies*, *13*(2), 75–92.
Lee, L., Wong, P. K., Der Foo, M., & Leung, A. (2011). Entrepreneurial intentions: The influence of organizational and individual factors. *Journal of Business Venturing*, *26*(1), 124–136.
Lewis, S. (2011). *Positive psychology at work: How positive leadership and appreciative inquiry create inspiring organizations*. Malden, MA: Wiley-Blackwell.
Lips-Wiersma, M., & Morris, L. (2009). Discriminating between 'meaningful work'and the 'management of meaning'. *Journal of Business Ethics*, *88*(3), 491–511.
Lindner, J. R., Murphy, T. H., & Briers, G. E. (2001). Handling nonresponse in social science research. *Journal of Agricultural Education*, *42*(4), 43–53.
Locke, E. A. (1969). What is job satisfaction? *Organizational Behavior and Human Performance*, *4*(4), 309–336.
Luthans, F. (2002a). Positive organizational behavior: Developing and managing psychological strengths. *The Academy of Management Executive*, *16*(1), 57–72.
Luthans, F. (2002b). The need for and meaning of positive organizational behavior. *Journal of Organizational Behavior*, *23*(6), 695–706.
Luthans, F., & Avolio, B. J. (2009). The "point" of positive organizational behavior. *Journal of Organizational Behavior*, *30*(2), 291–307.
Luthans, F., Avolio, B. J., Avey, J. B., & Norman, S. M. (2007). Positive psychological capital: Measurement and relationship with performance and satisfaction. *Personnel Psychology*, *60*(3), 541–572.
Luthans, F., Youssef, C. M., & Avolio, B. J. (2007). *Psychological capital*. New York, NY: Oxford University Press.
Luthans, F., Norman, S. M., Avolio, B. J., & Avey, J. B. (2008). The mediating role of psychological capital in the supportive organizational climate—Employee performance relationship. *Journal of Organizational Behavior*, *29*(2), 219–238.
Luthans, F., & Youssef, C. M. (2004). Human, social, and now positive psychological capital management:: Investing in people for competitive advantage. *Organizational Dynamics*, *33*(2), 143–160.
Luthans, F., & Youssef, C. M. (2007). Emerging positive organizational behavior. *Journal of Management*, *33*(3), 321–349.
Luthans, F., Vogelgesang, G. R., & Lester, P. B. (2006). Developing the psychological capital of resiliency. *Human Resource Development Review*, *5*(1), 25–44.
Luthans, F., Youssef, C. M., & Avolio, B. J. (2015). *Psychological capital and beyond*. New York, NY: Oxford University Press.
Luthans, F., Youssef, C. M., & Rawski, S. L. (2011). A tale of two paradigms: The impact of psychological capital and reinforcing feedback on problem solving and innovation. *Journal of Organizational Behavior Management*, *31*(4), 333–350.
Mageau, G. A., Vallerand, R. J., Charest, J., Salvy, S. J., Lacaille, N., Bouffard, T., et al. (2009). On the development of harmonious and obsessive passion: The role of autonomy support, activity specialization, and identification with the activity. *Journal of Personality*, *77*(3), 601–646.
Mahoney, K. L., & Pastore, D. L. (2014). The sportsphere: A comprehensive approach to examining the work environment in public assembly facilities. *Journal of Facility Planning, Design, and Management*, *2*(2), 104–123.
Masten, A. S., & Reed, M.-G. J. (2002). Resilience in development. *Handbook of Positive Psychology*74–88.
May, D. R., Gilson, R. L., & Harter, L. M. (2004). The psychological conditions of meaningfulness, safety and availability and the engagement of the human spirit at work. *Journal of Occupational and Organizational Psychology*, *77*(1), 11–37.
Mills, M. J., Fleck, C. R., & Kozikowski, A. (2013). Positive psychology at work: A conceptual review, state-of-practice assessment, and a look ahead. *The Journal of Positive Psychology*, *8*(2), 153–164.
Muthén, L. K., & Muthén, B. O. (2010). *Mplus version 6.0*. Los Angeles, CA: Muthen & Muthen.
Neider, L. L., & Schriesheim, C. A. (2011). The authentic leadership inventory (ALI): Development and empirical tests. *The Leadership Quarterly*, *22*(6), 1146–1164.
Newman, A., Ucbasaran, D., Zhu, F., & Hirst, G. (2014). Psychological capital: A review and synthesis. *Journal of Organizational Behavior*, *35*(1), S120–S138.
Newman, J. I. (2014). Sport without management. *Journal of Sport Management*, *28*(6), 603–615.
Oja, B. D., Bass, J. R., & Gordon, B. S. (2015). Conceptualizing employee identification with sport organizations: Sport employee identification (SEI). *Sport Management Review*, *18*(4), 583–595.
Parks, J. B., & Parra, L. F. (1994). Job satisfaction of sport management alumnae/i. *Journal of Sport Management*, *8*(1), 49–56.
Podsakoff, N. P., LePine, J. A., & LePine, M. A. (2007). Differential challenge stressor-hindrance stressor relationships with job attitudes, turnover intentions, turnover, and withdrawal behavior: A meta-analysis. *Journal of Applied Psychology*, *92*(2), 438–454.
Pratt, M. G., & Ashforth, B. E. (2003). Fostering meaningfulness in working and at work. In K. S. Cameron, J. E. Dutton, & R. E. Quinn (Eds.), *Positive organizational scholarship: Foundations of a new discipline* (pp. 309–327). San Francisco: Berrett-Koehler Publishers, Inc.
Quarterman, J., DuPree, A. D., & Willis, K. P. (2006). Challenges confronting female intercollegiate athletic directors of NCAA member institutions by division. *College Student Journal*, *40*(3), 528–546.
Rego, A., Sousa, F., Marques, C., & Cunha, M. P. (2012). Authentic leadership promoting employees' psychological capital and creativity. *Journal of Business Research*, *65*, 429–437.
Reivich, K., & Shatte, A. (2002). *The resilience factor*. New York: NY: Broadway Books.
Rogg, K. L., Schmidt, D. B., Shull, C., & Schmitt, N. (2001). Human resource practices, organizational climate, and customer satisfaction. *Journal of Management*, *27*(4), 431–449.
Rosso, B. D., Dekas, K. H., & Wrzesniewski, A. (2010). On the meaning of work: A theoretical integration and review. *Research in Organizational Behavior*, *30*, 91–127.
Rucker, D. D., Preacher, K. J., Tormala, Z. L., & Petty, R. E. (2011). Mediation analysis in social psychology: Current practices and new recommendations. *Social and Personality Psychology Compass*, *5*(6), 359–371.
Ryff, C. D. (1989). Happiness is everything, or is it? Explorations on the meaning of psychological well-being. *Journal of Personality and Social Psychology*, *57*(6), 1069–1081.
Ryff, C. D., & Keyes, C. L. M. (1995). The structure of psychological well-being revisited. *Journal of Personality and Social Psychology*, *69*(4), 719–727.
Ryff, C. D., & Singer, B. (2003). Flourishing under fire: Resilience as a prototype of challenged thriving. In C. L. M. Keyes, & J. Haidt (Eds.), *Flourishing: Positive psychology and the life well-lived* (pp. 15–36). Washington, DC: American Psychological Association.
Satorra, A., & Bentler, E. M. (1994). Corrections to test statistics and standard enors in covariance structure analysis. In A. von Eye, & C. C. Clogg (Eds.), *Latent variables analysis: Applications for developmental research* (pp. 399–419). Sage: Thousand Oaks, CA.
SBRnet (2016). *College sports market size: Revenues & expenditures: By division*. Retrieved from. http://www.sbrnet.com/research.aspx?subrid=799.
Scheier, M. F., Carver, C. S., & Bridges, M. W. (1994). Distinguishing optimism from neuroticism (and trait anxiety, self-mastery, and self-esteem): A reevaluation of the life orientation test. *Journal of Personality and Social Psychology*, *67*(6), 1063–1078.
Schulz, S. E. (1995). The benefits of mentoring. *New Directions for Adult and Continuing Education*, *66*, 57–67.

Searle, T. P., & Barbuto, J. E. Jr (2013). A multilevel framework: Expanding and bridging micro and macro levels of positive behavior with leadership. *Journal of Leadership & Organizational Studies*, *20*(3), 274–286.
Seligman, M. E. (1999). The president's address. *American Psychologist*, *54*(8), 559–562.
Seligman, M. E., & Csikszentmihalyi, M. (2000). Positive psychology: An introduction. *American Psychologist*, *55*(1), 5–14.
Snyder, C. R., Rand, K. L., & Sigmon, D. R. (2002). Hope theory. In C. R. Snyder, & S. J. Lopez (Eds.), *Handbook of positive psychology* (pp. 257–276). New York, NY: Oxford University Press.
Stajkovic, A. D., & Luthans, F. (1998). Social cognitive theory and self-efficacy: Going beyond traditional motivational and behavioral approaches. *Organizational Dynamic*62–74.
Stansfeld, S., & Candy, B. (2006). Psychosocial work environment and mental health—a meta-analytic review. *Scandinavian Journal of Work, Environment & Health*443–462.
Stebbings, J., Taylor, I. M., Spray, C. M., & Ntoumanis, N. (2012). Antecedents of perceived coach interpersonal behaviors: The coaching environment and coach psychological well-and ill-being. *Journal of Sport and Exercise Psychology*, *34*(4), 481–502.
Steger, M. F., & Dik, B. J. (2010). Work as meaning. In P. A. Linley, S. Harrington, & N. Page (Eds.), *Oxford handbook of positive psychology and work* (pp. 131–142). Oxford, England: Oxford University Press.
Steger, M. F., Dik, B. J., & Duffy, R. D. (2012). Measuring meaningful work: The work and meaning inventory (WAMI). *Journal of Career Assessment*1–16.
Stride, C. B., Gardner, S., Catley, N., & Thomas, F. (2015). *Mplus code for mediation, moderation, and moderated mediation models*. Retrieved from. http://www.offbeat.group.shef.ac.uk/FIO/mplusmedmod.htm.
Swanson, S., & Kent, A. (2017). Passion and pride in professional sports: Investigating the role of workplace emotion. *Sport Management Review*, *20*(4), 352–364.
Tabachnick, B. G., & Fidell, L. S. (2007). *Using multivariate statistics*. Boston: Allyn & Bacon.
Taylor, T., Doherty, A., & McGraw, P. (2008). *Managing people in sport organizations: A strategic human resource management perspective*. Oxford, UK: Butterworth-Heinemann.
Tugade, M. M., Fredrickson, B. L., & Barrett, L. F. (2004). Psychological resilience and positive emotional granularity: Examining the benefits of positive emotions on coping and health. *Journal of Personality*, *72*(6), 1161–1190.
Van den Heuvel, M., Demerouti, E., Bakker, A. B., & Schaufeli, W. B. (2010). Personal resources and work engagement in the face of change. *Contemporary Occupational Health Psychology: Global Perspectives on Research andPractice*124–150.
Venkatesh, R., & Blaskovich, J. (2012). The mediating effect of psychological capital on the budget participation-job performance relationship. *Journal of Management Accounting Research*, *24*(1), 159–175.
Walumbwa, F. O., Avolio, B. J., Gardner, W. L., Wernsing, T. S., & Peterson, S. J. (2008). Authentic leadership: Development and validation of a theory-based measure. *Journal of Management*, *34*(1), 89–126.
Welty Peachey, J. W., & Burton, L. J. (2011). Male or female athletic director? Exploring perceptions of leader effectiveness and a (potential) female leadership advantage with intercollegiate athletic directors. *Sex Roles*, *64*(5-6), 416–425.
Whitehead, G. (2009). Adolescent leadership development building a case for an authenticity framework. *Educational Management Administration & Leadership*, *37*(6), 847–872.
Wong, C. A., & Laschinger, H. K. (2013). Authentic leadership, performance, and job satisfaction: The mediating role of empowerment. *Journal of Advanced Nursing*, *69*(4), 947–959.
Woolley, L., Caza, A., & Levy, L. (2011). Authentic leadership and follower development psychological capital, positive work climate, and gender. *Journal of Leadership & Organizational Studies*, *18*(4), 438–448.
Wright, T. A. (2003). Positive organizational behavior: An idea whose time has truly come. *Journal of Organizational Behavior*, *24*(4), 437–442.
Wright, T. A., Cropanzano, R., & Bonett, D. G. (2007). The moderating role of employee positive well-being on the relation between job satisfaction and job performance. *Journal of Occupational Health Psychology*, *12*(2), 93–104.