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The Association Between the Coach-Athlete Relationship and Burnout Among High School Coaches

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Burnout is a term that continues to raise considerable concern among high school coaches and administrators (Raedeke, 1997) and has shown to have negative effects on coaches and athletes alike (Price & Weiss, 2000; Vealey, Armstrong, & Comar, 1998). While burnout has shown to have significant adverse effects, few studies have examined how the coach-athlete relationship may affect a coach's level of perceived burnout. This study sought to understand if the coach-athlete relationship predicted coach burnout. High school coaches (69 males, 62 females) completed the Coach-Athlete Relationship Questionnaire (CART-Q; Jowett & Ntoumanis, 2004), the Coaching Burnout Questionnaire, a modified version of the Athlete Burnout Questionnaire (ABQ; Raedeke & Smith, 2001), as well as demographic and background assessments. Results of a multivariate multiple regression indicated that coaches who perceived themselves as committed and had complementary goals with their athletes, showed significantly lower levels of burnout on all three dimensions. Results indicate that coaches should strive to ensure that they have goals that align with their athletes' goals and develop a sustained and committed relationship with their players.

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High school coaching is a demanding profession (Pease, Zapalac & Lee, 2003). The sport environment is complex, ever-changing, and poses significant psychological and health risks for coaches (Fletcher & Scott, 2010). Additionally, the various personal and situational factors that contribute to this perceived stress include unclear expectations placed upon coaches, long working hours, and a lack of social support (Knight, Reade, Selzer & Rodgers, 2013). Furthermore, high school coaches must be willing to fill a variety of roles that are not in the job description, such as serving as the team's de facto athletic trainer, organizing team fundraisers, running off-season camps, supervising athletes in the weight room, being an amateur sport psychologist, mentoring student-athletes, and teaching life skills. In addition to the various roles coaches are facing, there are increased pressures to win due to the societal change sport has undergone in America (Farrey, 2008). This societal change has shifted the focus of youth sport from positive development to a desire to win at almost any cost. Coaching at the high school level is typically not a high paying career, and, therefore, coaches are most likely involved in sport because they are highly committed to helping their athletes.

The lack of resources and support, long hours, and low pay commonly encountered by coaches (Knight, Reade, Selzer & Rodgers, 2013) may be contributing to talented coaches experiencing burnout, which can result in less effective practice or withdrawal from the environment altogether. It is critical for high school athletic programs to retain seasoned, effective, and talented coaches in order to maintain the educational component of high school sport, while assuring a high-quality athletic program. When the best high school coaches experience productivity and longevity, they will provide their services year-after-year which will, in turn, have a positive impact on their student-athletes. It is possible that high quality coach-athlete relationships may insulate coaches from additional stress and ultimately coach burnout. Due to the possible consequences for coaches and athletes, the burnout phenomenon, and specifically the relationship between burnout and the coach-athlete relationship, deserves further study in the sport realm.

Burnout, which was first investigated in the context of rehabilitation workers (Freudenberger, 1974), has been conceptualized in a number of ways (Maslach, 1976; Smith, 1986). However, even though some variation existed in the initial studies on burnout, recent work in the sporting realm has focused on the definition employed by Raedeke (Raedeke, 1997; Raedeke & Smith, 2001). Raedeke believed burnout was an experiential syndrome comprised of emotional and physical exhaustion, sport devaluation, and a reduced sense of accomplishment. While a majority of studies in the sport realm have investigated the relationship of burnout in athletes (for a review see Eklund & Cresswell, 2007), coaches may experience burnout in many of the same ways as athletes. A coach experiencing exhaustion may feel emotionally exhausted from designing practice and physically fatigued from the

effort required in scheduling, instructing, and executing plans. Coaches who suffer from the sport devaluation dimension of burnout may feel a general lack of interest in coaching and have a general "I don't care anymore" attitude toward their athletes and the sport in general. Lastly, coaches suffering from the burnout dimension of reduced personal accomplishment would feel decreased levels of excitement and joy in comparison to how they used to feel, following a successfully led practice or a big win. The burnout syndrome should not be measured as a dichotomous process but on a continuum with coaches not just being burned-out or not, but rather having various levels of burnout on each of the three dimensions.

A coach who suffers from burnout may experience a reduced sense of accomplishment in their profession, physical and psychological exhaustion, devaluation of sport, and withdrawal from the activity. Additionally, coaches who are suffering from burnout have reported feelings of bitterness, cynicism, and anger with the coaching profession (Lundkvist, Gustafsson, Hjälm, & Hassmén, 2012). However, it is not just the coach who can experience negative consequences from burnout. Research has shown that there are also negative repercussions for athletes who have coaches suffering from burnout. Vealey, Armstrong, and Comar, (1998) concluded that coaches who scored higher in emotional exhaustion and depersonalization were perceived by their athletes as negative and overly critical. Moreover, according to their athletes, these coaches gave less instruction, feedback, and social support (Price & Weiss, 2000). Thus, a student-athlete's experience is, undoubtedly, shaped by the emotional exhaustion and depersonalization their coach experiences. In essence, coaching burnout can affect how players feel they are being treated which in turn contributes to their overall experience as a student-athlete.

Coaches may also be at a greater risk for burnout because of the variety of roles they are required to fulfill in the position, many of which require an extensive amount of social interactions between helper and recipient. Coaches spend a large amount of time interacting with others in order to achieve team success which may lead to increased stress and burnout (Vealey et al., 1998). Through interviews with coaches, Olusoga, Butt, Hays, and Maynard (2009) found that coaches experienced a number of stressors including conflict with other coaches, their own staff and parents, athlete concerns, pressure and expectation, competition preparation, organizational management, and isolation. Coaches who are not prepared to handle all of these duties may experience high amounts of stress which can often lead to burnout. However, as stress does not necessarily lead to burnout, understanding the key factors coaches cite as causing burnout is critical to helping high quality coaches avoid burnout. With this thought in mind, Lundkvist, Gustafsson, Hjälm and Hassmén (2012) interviewed coaches who had suffered from burnout in the sport environment and found coaches suffering from burnout were not prepared to handle the high stakes context of coaching or did not

have the capability to cope with various aspects associated with the overall coaching environment such as workload, work-life balance, and other life-conflicts. It has also been shown that environmental factors, such as player intrinsic motivation, can influence a coach's vitality, motivation, and likelihood of stress (Alcaraz, Viladrich, Torregrosa & Ramis, 2015). Together, these results indicate that coaches' interpersonal relationships may have a large impact on their levels of burnout. As many of the coaching stressors involve relationships and several sources of burnout are due to the interpersonal nature inherent in coaching, it makes conceptual sense that the coach-athlete relationship be investigated in relation to coach burnout. Therefore, this study investigated if the perceived quality of a coach-athlete relationship impacts the level of burnout in coaches.

Relationships are more than the sums of their constituent interactions; relationships are an ongoing series of interpersonal interactions where each person's behavior affects the other person's subsequent behaviors (Hinde, 1997). In the sport environment, one aspect that may be especially important to investigate, for a variety of outcomes, is the relationship between coaches and their players. There is support that coaches' and athletes' emotions, thoughts, and behaviors may be associated with interpersonal satisfaction. Interpersonal satisfaction within a coach-athlete relationship has been previously studied from the perspective of the athlete through the examination of coaches' behaviors (Barnett, Smoll, & Smith, 1992) and the compatibility of the coach-athlete dyad (Horne & Carron, 1985). While the perspective of the athlete has received attention in the literature, research pertaining to the coach-athlete relationship from the perspective of the coach has seldom been studied.

One of the models of assessing the coach-athlete relationship is through the use of Jowett and colleagues (Jowett & Cockerill, 2003; Jowett & Ntoumanis, 2004) interdependence three C's model (closeness, commitment, and complementarity). Jowett and colleagues conceptualized the coach-athlete relationship as a situation in which people's emotions, thoughts, and behaviors are mutually and causally interconnected. The researchers believed that in the coach-athlete relationship, the three Cs (closeness, commitment and complementarity) were essential because they reflected the coaches' and athletes' thoughts, feelings, and behaviors. The relationship between coaches and athletes is commonly cited as a key component to effective coaching due to coaches and athletes fulfilling practical, emotional, social and psychological needs (Mageau & Vallerand, 2003). Additionally, the coach-athlete relationship has been shown to play a central role in the psychosocial development of young athletes (Jowett & Cockerill, 2003).

In Jowett and colleagues' (Jowett & Cockerill, 2003; Jowett & Ntoumanis, 2004) three C's model, the subcomponents of closeness, commitment and complementarity all play important roles in determining if the coach-athlete relationship is beneficial. Closeness

is defined as the emotional or affective interdependence that is expressed through liking, respecting, trusting, and appreciating one another. In the model, commitment represents the willingness and dedication to maintain the relationship over time. These thoughts of commitment are demonstrated by relationships that are jointly merged and destined for long-term unification. The final aspect of the model, complementarity, assesses whether coaches and athletes are cooperative in their actions and goals. Moreover, interpersonal behaviors of the complementarity sub-theme involve members feeling at ease while being responsive and ready. If coaches and athletes feel as if they are moving toward the same goals and each pair's actions are in conjunction, complementarity will be high.

Previous studies have focused almost exclusively on the effects of the coach-athlete relationship from the athlete's standpoint. In these studies, the coach-athlete relationship has been used to examine the quality of coach-athlete relationship from the perspective of the athlete in regards to an athlete's general happiness (Lafrenière, Jowett, Vallerand & Carbonneau, 2011), and relationship interdependence and satisfaction (Jowett & Nezelek, 2011). One study in particular has investigated the coach-athlete relationship in regards to athlete burnout. Isoard-Gauthier, Trouilloud, Gustafsson, and Guillet-Descas (2016) found that all three dimensions of the coach-athlete relationship were negatively related to burnout. Even though these studies have added to the knowledge of the coach-athlete relationship, they have largely ignored coach outcomes. In fact, Wylleman, (2000) stated that the interpersonal relationship between coaches and athlete was "uncharted territory in sport psychology research" (p. 555). This important topic – both for athletes and coaches – remained largely unexplored and unmeasured for several more years.

Few studies have investigated the coach-athlete relationship with a specific focus on the coach. In two studies that investigated aspects that were related to the quality of the coach-athlete relationship, higher quality of relationship was related to more positive attributes. Specifically, Soheili, Tojari and Amirtash (2013) found that coaches' self-efficacy was positively related to all three dimensions of the coach-athlete relationship. A second study by Jackson, Grove and Beauchamp (2010) found that in a coach-athlete dyad, enhanced commitment was associated with a high degree of other-efficacy, or confidence in the other person's capacities to help. Other studies have investigated the relationship between the coach-athlete relationship and a coach's satisfaction. Lorimer (2009), Davis, Jowett, and Lafrenière (2013), and Jowett and Nezelek (2011) all found that relationship interdependence was positively related to coach satisfaction. Albeit in limited number, these studies all indicate that high quality coach athlete relationships are associated with more positive outcomes. Therefore, even though initial support for the benefit of a high quality coach-athlete

relationship has been found, more research is needed to investigate other common coaching outcomes. One of the outcomes that may be linked to the quality of the coach-athlete relationship is coach burnout.

Due to the void of empirical work examining the coach-athlete relationship in relation to burnout levels, these two constructs were further investigated to see if the coach-athlete relationship impacts a coach's level of burnout. Better understanding the coach-athlete relationship from the coach's perspective, along with the quality of the coach-athlete relationship serving as a potential coaching burnout correlate, will help advance knowledge in the coach-athlete domain. The purpose of this study was to examine coaches' perceived relationships with their student-athletes, and how those relationships influence coach burnout levels. Even though no study has looked at how the coach-athlete relationship influenced coach burnout, because Isoard-Gauthier and colleagues (2016) found a negative relationship between the coach-athlete relationship and burnout in athlete, it was hypothesized that all three aspects of Jowett's 3 C's model would be inversely related to the three dimensions of coach burnout.

Methods

Participant Recruitment and Data Collection Procedures

Coaches were recruited from a pool of coaches who were attending coaching education seminars sponsored by a Midwestern state high school athletic association. These seminars were part of a program that was designed to assist coaches in their growth and development as they advance in the field of educational athletics. Permission to collect data at these clinics was granted by the high school athletic association and took place at four in-person seminars. Coaches completed a set of self-report questionnaires that were selected to measure the relevant study variables. Data collection took place in a classroom or meeting room following the coaching education seminar. The questionnaires took approximately 20 minutes to complete. All procedures were submitted to, and approved by, an institutional human subjects review committee, and all required consent procedures were followed.

Participants

Study participants were 131 high school assistant and head coaches between the ages of 20 and 70 ($M = 38.98$, $SD = 11.20$) who were attending a series of coaching education workshops. The sample contained both male ($n = 69$) and female ($n = 62$) coaches and participants coaching experience ranged from 1 to 40 years, averaging over 11 years ($M = 11.42$, $SD = 8.74$). Participants identified all sports they currently coached, with a majority

reporting that they coached a single sport during the school year ($n = 83$), but others reported coaching multiple sports during the year ($n = 48$). The most frequent sports that participants coached were basketball ($n = 33$), football ($n = 28$), softball ($n = 24$), volleyball ($n = 22$), and track and field ($n = 17$). Coaches reported coaching males ($n = 32$), females ($n = 67$), and both genders ($n = 32$). Participants also identified their winning percentage for the previous year with coaches reported winning more than they had lost ($n = 70$), losing more than they had won ($n = 32$), winning and losing an equal number ($n = 8$), and not applicable ($n = 21$). The majority of these coaches were Caucasian ($n = 121$) with a small number of coaches reporting Hispanic/Latino ($n = 3$), African-American ($n = 2$), Asian-American ($n = 1$), Native American ($n = 1$), and not listed ($n = 3$).

The environment in which participants coached varied significantly in the sample. The average school enrollment where coaches worked ranged from 28 to 2400 ($M = 571.94$, $SD = 397.70$). Coaches worked in a variety of locations including rural ($n = 38$), small towns ($n = 64$), suburban ($n = 21$), urban ($n = 5$), and not listed ($n = 3$). Coaches were also asked to identify the percentage of their school that received free or reduced lunch. Of the coaches in our sample that reported knowing this percentage ($n = 86$), a wide range of school environments were listed including less than 10% ($n = 15$), 11% - 25% ($n = 32$), 26% - 50% ($n = 14$), 51% - 75% ($n = 20$), and greater than 90% ($n = 5$).

Measures

Coach-Athlete Relationship Questionnaire. The Coach-Athlete Relationship Questionnaire (CART-Q; Jowett & Ntoumanis, 2004) was used to assess coaches' perspectives of their relationship with athletes they coach. The 11-item questionnaire is a self-report instrument that measures affective, cognitive, and behavioral aspects of the coach-athlete relationship on three subscales. The three subscales are: closeness (e.g., *I feel close to my athletes*), commitment (e.g., *I feel committed to my athletes*), and complementarity (e.g., *When I coach my athletes, I am ready to do my best*). Of the 11 items, four items measured the construct of closeness, three items measured commitment, and four items measured complementarity. Coaches indicated their perceived relationship with their athletes on a 7-point Likert-type response format with scores ranging from (1) *Strongly disagree* to (7) *Strongly agree*. Reliability for the 11-item scale was demonstrated by Jowett and Ntoumanis (2004).

Coaching Burnout Questionnaire. A modified version of the Athlete Burnout Questionnaire (ABQ; Raedeke & Smith, 2001) was used to assess the perceived levels of burnout in coaches. The new measure, renamed the Coaching Burnout Questionnaire (CBQ), was comprised of 15 items separated into three subscales, each containing five items. Each item was modified in a manner that "coach" replaced "athlete" and "coaching" replaced "sport

participation.” The three subscales are: reduced sense of accomplishment (e.g., *I am not achieving much in coaching*), emotional and physical exhaustion (e.g., *I feel overly tired from my coaching*), and sport devaluation (e.g., *I have negative feelings toward coaching*). The stem for each item asks coaches to indicate how often they feel this way, and a 5-point Likert-type response format is used with scores ranging from (1) *almost never*, (2) *rarely*, (3) *sometimes*, (4) *frequently*, and (5) *almost always*. A total mean score was calculated for each subscale. The CBQ is based on the ABQ that was initially tested for reliability and validity in an adolescent athlete population. The use of the ABQ with coaches has some support with acceptable internal consistency found in a group of Lithuanian coaches (Malinauskas, Malinauskiene, & Dumciene, 2010), however, the internal consistency was for the scale in total and not for each subscale. Additionally, the ABQ has been used across a range of sport populations (Eklund & Cresswell, 2007). Therefore, as only one study has used the ABQ with coaches with limited reliability and despite the coach being firmly situated in the sport context, caution should be given in regards to the results drawn from the current study until a full validation of the CBQ is completed.

Statistical Analysis

Descriptive statistics for all relevant study variables were computed and screened for linearity and normality. A series of Cronbach’s alpha analyses were used to assess the internal consistency of the subscales used in this study, and univariate correlational analyses were conducted to examine the degree of correlation between all subscales of the CBQ and CART-Q. To test the main study hypotheses regarding the links between coach-athlete relationships and coach burnout, a multivariate multiple regression analysis with canonical correlations was conducted with the three subscales of the CART-Q serving as the predictor variables and the three subscales of the CBQ serving as the outcome variables.

Results

Preliminary Analyses

The internal consistency of the subscales of the CART-Q and CBQ was assessed through use of Cronbach’s alpha analyses. These results (see Table 1) revealed that all subscales scored above the .70 criterion as suggested by Nunnally and Bernstein (1994) except the closeness scale of the CART-Q. For the closeness scale, an alpha value of .62 was observed. Examination of the inter-item correlations revealed that no individual items contributed to the low alpha level. Due to the low alpha level of the closeness scale, the main study analyses were conducted with the scale included as well as excluded. The results of the two

analyses did not differ significantly, and therefore only the regression analysis that excluded the closeness scale is included in the results section. Even though the closeness scale was not included in the main study analysis, descriptive statistics for the scale were included in the current study.

Descriptive Statistics

Descriptive statistics (means and standard deviations) were calculated for all subscales and these subscale scores are provided in Table 1. The mean score for the three subscales from the CBQ revealed that the coaches as a group scored below the midpoint (a “3” on a five-point response scale) on all three of the subscales indicating that the sample on average was low to moderately suffering from burnout. Additionally, the full range of scores was used only for the exhaustion subscale. In fact, the maximum score attained on the reduced accomplishment subscale was 4.20, while the devaluation subscale was 3.40. However, the standard deviations indicated interindividual variability and the data were normally distributed (skewness < 2.00 and kurtosis < 7.00), thus indicating the appropriateness of using linear analysis (e.g., multivariate multiple regression procedures) with this sample. A trend has emerged in using cut-off criteria for low and high experiences of burnout to give a better description of the sample (Hodge, Lonsdale, & Ng, 2008; Martin & Horn, 2013). A frequency distribution indicated that 38 coaches (29.0% of the sample) scored 2.30 or below for reduced accomplishment, 2.30 or below for emotional exhaustion, and 1.60 or below for devaluation, thus indicating low levels of burnout across all three dimensions. Two participants (1.5% of the sample) scored higher than 2.70 for reduced accomplishment, higher than 3.00 for emotional exhaustion and higher than 3.00 for devaluation, thus indicating high levels of burnout across all dimensions. Therefore, it can be concluded that a majority of our sample (nearly 69.5% of the sample) would be considered moderately burned out in relation to the cut-off criteria.

Regarding the CART-Q, the coaches' scores ranged from 3.00 to 7.00 with a group mean of 5.72 on closeness, 4.25 to 7.00 with a group mean of 5.98 on complementarity and 3.67 to 7.00 with a group mean of 5.89 on commitment. Thus, this group of coaches scored well above the midpoint on all the CART-Q subscales signifying that these coaches perceived having strong relationships with their athletes.

Multivariate Analyses

To test the main study hypothesis that coaches relationships with athletes would predict their levels of burnout, a multivariate multiple regression with follow up canonical correlational analysis was conducted. The dependent variables were the three subscale scores

Table 1

Means, Standard Deviations, and Correlations for Coach-Athlete Relationship Subscales and Coach Burnout Subscales

	1	2	3	4	5	6
1. CART-Q – closeness	-					
2. CART-Q – commitment	.65**	-				
3. CART-Q – complementarity	.53**	.44**	-			
4. Burnout – exhaustion	-.09	-.12	-.31**	-		
5. Burnout – devaluation	-.22*	-.39**	-.20*	.40**	-	
6. Burnout - reduced accomplishment	-.44**	-.48**	-.41**	.42**	.64**	-
<i>Mean</i>	5.72	5.89	5.98	2.34	1.73	1.92
<i>SD</i>	.64	.68	.64	.79	.61	.56
<i>α</i>	.62	.70	.72	.91	.83	.74

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

Table 2

Summary of Multivariate Multiple Regression Analyses for Coach-Athlete Relationship Subscales Predicting Coach Burnout Subscales

Variable	Function 1	Function 2
Dependent Variables		
Factor 1: Exhaustion	-.37	.71
Factor 2: Devaluation	-.71	-.34
Factor 3: Reduced Accomplishment	-.99	.11
Predictor Variables		
CART-Q: Commitment	.94	.34
CART-Q: Complementarity	.71	-.70

obtained from the CBQ, and the predictor or independent variables were the two subscales from the CART-Q assessing the coach-athlete relationship that had acceptable reliability coefficients (complementarity and commitment).

The results of this analysis revealed a significant relationship between the predictor and outcome variables, Wilks' $\lambda = .51$; $F(6, 240) = 10.18, p < .001$. These results indicated that the coach athlete relationship aspects of commitment and complementarity did explain a significant amount of the variability in coaches' levels of burnout. The results of the canonical correlational analysis revealed two significant canonical functions ($R_1 = .53, R_1^2 = .29, p < .001$; $R_2 = .31, R_2^2 = .10, p < .01$). To determine which variables within each function contributed to the relationship between the sets of predictor and outcome variables, the structure coefficients were examined (Courville & Thompson, 2001). A criterion value of .40 was used to interpret the structure coefficients (at least 16% or higher of shared variance, Tabatchnick & Fidell, 2007). For the first function, high scores on the commitment and complementarity aspects of the coach athlete relationship (commitment .94, and complementarity .71, respectively) were predictive of low scores on devaluation and reduced personal accomplishment. The second function indicated that low scores on the complementarity subscale (-.70) was predictive of high scores on the exhaustion subscale (.71). The redundancy indices for the two canonical functions indicated that 15.5% of the variance in the dependent variable set was explained by the first function, with an additional 1.95% of the variance explained by the second function. In total, 17.6 of the variance of the burnout scores were explained by the commitment and complementarity aspects of the coach athlete relationship.

Discussion

Due to societal changes, the coaching role has changed (Farrey, 2008). Whereas, in the past, coaches were mostly involved with team duties, now with the advent of eliminating athletic directors, coaches are not only responsible for coaching duties but must also handle game and practice scheduling, fundraising, media interactions, and dealing with unruly parents (Caccese & Mayerberg, 1984; Olusoga et al., 2009). The more roles that coaches have to juggle, in conjunction with the typical coaching roles, the more likely they are to feel overwhelmed and stressed which may lead to mental and physical exhaustion, a key component of burnout (Fletcher & Scott, 2010). Therefore, with the added job responsibilities of coaching, in addition to the fact that coaching is primarily a helping profession, it is no surprise that coaches may be candidates for burnout (Price & Weiss, 2000; Knight, Reade, Selzer & Rodgers, 2013). One factor that may play a role in decreasing these feelings of burnout could be the quality of the coach-athlete relationships. However, the relationship

between coaches and athletes has not yet been investigated in relation to coach burnout. Therefore, the purpose of this study was to examine coaches' perceived relationships with their student-athletes, and how those perceptions of their relationships influenced coaches' self-reported feelings of burnout.

When examining the current sample for potential burnout, our participants typically scored low on all three subscales. This trend is similar to past studies that have investigated coach burnout. In fact, even when coaches have been considered high in burnout, typically only one of the three dimensions has been elevated. For example, Raedeke (2004) found coaches were high on emotional exhaustion but relatively low-to moderate on the other burnout subscales. When investigating the cut-off criteria used in past studies (Hodge, Lonsdale, & Ng, 2008), a majority of coaches in this sample suffered from moderate levels of burnout. Additionally, only a small percentage of the sample was considered highly burned out. As few studies involving coaches have used these classifications to indicate coach burnout, it may be beneficial to compare these rates to the athletes these coaches are leading. The current sample of coaches reflects similar rates of burnout that have been shown to occur in junior-elite athletes (e.g., Hodge et al., 2008; Martin & Horn, 2013). Additionally, the low levels of burnout for this sample of coaches is not surprising considering a large majority of them were attending coaching advancement programs that would indicate they were highly invested in their coaching profession. However, even though the total number of coaches in the sample who were suffering from high levels of burnout was low, there was significant interindividual variability and, thus, the results of the current study are still noteworthy.

One possible reason for the low level of burnout in our sample could be the age and experience level of the coaches in the study. The mean age of our sample was nearly 39 years old, and the coaching experience averaged 11.5 years. Previous studies have shown that older and more experienced coaches were more likely to have lower levels of perceived burnout than younger and less experienced coaches (Malinauskas et al., 2010). One possible reason for veteran coaches having lower levels of burnout is that the coaches who suffered from high levels of burnout in their initial stages of coaching have withdrawn from the coaching profession. Another possibility for younger coaches suffering from higher levels of burnout is that these coaches may have higher levels of role-conflict, which may lead to burnout. Ryan (2008) found that teacher-coaches who were younger were more likely to experience role conflict, because they were more likely to have young families at home and were unable to devote the necessary time to teaching, coaching, and family domains. Additionally, Ryan believed that these younger teacher-coaches experience greater likelihood of stress from the rigors of a new job and the possibility of trying to blend their own coaching philosophy and values with a more experienced colleague who often is the head coach. As

coaches advance in their profession, they may develop the coping and time management skills necessary to combat these multiple roles, remain because they are the coaches who are naturally resilient, or, if they never develop these skills, leave the profession.

The current sample of coaches viewed their relationship with their players as high in all three of the dimensions of Jowett and colleagues' 3C's model (Jowett & Cockerill, 2003; Jowett & Ntoumanis, 2004). The high perceptions of the coach-athlete relationship is similar to other past studies in the literature (Jackson, Grove & Beauchamp, 2010; Jowett & Nezlek, 2011; Lorimer, 2009) and indicates that coaches rate themselves as committed to their athletes, feel close to their athletes, and feel as if their goals are complementary to their athletes' goals. As coaching is a helping profession with high levels of interpersonal contact, these results are not a surprise. Several previous researchers have found that forming interdependent relationships is a key feature of sports' coaching (Jowett & Cockerill, 2003; Jowett & Ntoumanis, 2004). The fact that coaches were high in all three aspects of Jowett's model is not surprising, as coaches in our sample were seeking opportunities to improve as coaches, which may be associated with a commitment to their players.

The main study analysis showed that the coach-athlete relationship did predict the level of coach burnout in our sample of high school coaches. Specifically, the multivariate multiple regression indicated that high scores on commitment and complementarity were related to lower scores on the devaluation and reduced accomplishment aspects of burnout. Coaches who were committed to their athletes and have goals that aligned with their athletes' goals were less likely to experience decreased levels of personal accomplishment and were more likely to value the sport. In addition to the first canonical correlation that explained the largest percentage of variance, a second function indicated that when coaches and athletes had congruent goals, coaches perceived lower levels of exhaustion. If coaches are not forced to use their energy to convince athletes to change their mindset and align with the coaches' own goals, then coaches are able to devote their energy to other aspects that may be critical to coaching success. Shared goals may not only decrease coaches' levels of burnout but may also impact team success. In a study with a coach who had won multiple previous national championships, Yukelson (1997) emphasized the critical nature of a shared team vision and unity of purpose as a core component of building successful teams. Overall, the results of the current study mirror the results that Isoard-Gauthier and colleagues (Isoard-Gauthier, et al., 2016) found in a sample of athletes. These results indicate that the coach-athletes relationship is negatively related to burnout from both the coaches and athletes perspectives.

In total, the current study indicates that those coaches who develop strong interdependence with their athletes are insulated from high levels of burnout. Even though coaches may face a variety of obstacles including unclear expectations, long working hours, and a

lack of social support (Knight, Reade, Selzer, & Rodgers, 2013), if they have strong relationships with their athletes it may be enough to prevent their own burnout. These findings make conceptual sense. Because the pay for high school coaches is relatively low, one of the main reasons for coaching is the interaction with athletes and the opportunity to help them develop and grow as individuals. If coaches feel close to, committed to, and have goals that align with their athletes, this main purpose is fulfilled which will leave a coach feeling energized, fulfilled by the coaching environment, and valuing their participation. Coaches should strive to build relationships with their players and ensure that the goals for the coach and athletes are in alignment in hopes of avoiding coach burnout.

The current study is the first to investigate the coach-athlete relationship and burnout in sport, and although it may add to the current knowledge base on these constructs, it was not without its limitations. One main limitation with the current study is the composition of the sample of coaches. Coaches in this study were attending advancement seminars to develop their coaching abilities. It is possible that this group of coaches may not represent the general population of high school coaches and caution should be considered when interpreting the results. Additionally, the coaches in the study were from a wide-range of levels in terms of experience and timing of season (i.e., in-season vs. out of season). A second concern with the current study is the correlational design which did not allow us to determine whether a better coach-athlete relationship leads to lower coach burnout or whether lower burnout causes a more favorable view of the coach athlete relationship. Even though the coach-athlete relationship leading to lower burnout has some support in an athlete population (Isoard-Gauthier, 2016), more longitudinal research is needed to be sure this is in fact the case. A final potential limitation is the use of the Coach Burnout Questionnaire. The CBQ is a modified version of the Athlete Burnout Questionnaire (Raedeke & Smith, 2001), which has been widely used and validated with athletes. This measure was not designed with coaches in mind, and even though the internal reliability was acceptable, further validation studies would be beneficial in informing other studies. However, even though the use of the CBQ may have limitations, the authors believe the sport-specific context of the questionnaire is a strength of the study. In fact, past studies that have used other non-sport scales to measure coach burnout (i.e., Vealey, Udgrý, Zimmerman, & Soliday, 1992), have insisted that a sport specific burnout measure is needed.

A number of future research directions exist that could help us better understand the variables that may lead to high levels of coach burnout. Recently, in the popular literature, the increased role that parents play in the high school sport experience has been explored. However, even though it is generally acknowledged that the parent's role in sport has increased, the influence of parents on the coach has been somewhat unexplored. A study by

Gould, Lauer, Rolo, Jannes, and Pennisi (2006) found that a majority of coaches saw parents as positive in their child's development, however, 36% of parents were seen as negatively influencing youth development. Even though this is a beneficial start in understanding how parents influence the youth environment, the coach-parent relationship should be investigated to see if these same relationships exist. It may be that coach-parent relationships are more critical to understanding coach stress levels and burnout than the coach-athlete relationships. This relationship may be especially vital, because where the coach-athlete relationship is considered central to the coaching profession, the coach-parent relationship may be perceived as external to the normal coaching duties. Additionally, in-depth interventions to assist in burnout prevention and/or recovery would be beneficial to investigate. These interventions should include multi-modal interventions that aim for a well-balanced life that includes proper nutrition, healthy sleep patterns, regular exercise, and healthy detachment from the sport. Meanwhile, another aspect to study could be how the person-job match influences coaching outcomes, with those individuals who are appropriately matched to the job likely better understanding the stressors of the position and having personal characteristics that best match the demands of the job. An additional direction for future research could be the role conflict within the coaching profession. This may include the various "hats" that coaches must wear including; coaching the team, maintaining public relations by communicating with boosters and members of the media (Kelley, 1994), supplementing the role of a player's mother or father, serving as team psychologist, and even as a disciplinarian (Caccese & Mayerberg, 1984). Recent anecdotal reports from coaches have included the need to attend several off-season team camps to stay competitive with other teams, disparity in financial resources, forcing many coaches to fundraise every year, and even the obligation of communicating with and maintaining friendly relationships with club coaches. All of these extra duties, compounded with the increasing pressures to win (Kelley, 1994; Pease, Zapalac & Lee 2003; Farrey, 2008) may be contributing to coach burnout and may be topics for exploration in future studies.

Implications from this study are intended to help coaches, athletic directors, and school personnel identify relationship factors that may put coaches at risk to burn out. The current study indicates that coaches who show high levels of closeness, commitment, and complementarity to their athletes may be somewhat insulated from perceived levels of burnout. Coaches should be advised to build strong relationships through affective interdependence, respect, and trust. Additionally, coaches should demonstrate their commitment through a sustained and dedicated relationship over time, and reflecting upon, 'why he or she was initially attracted to the coaching profession.' These consistent actions will reinforce and renew the coach's commitment to his/her athletes. Finally, coaches need to ensure that their

goals are in alignment with those of their athletes and teams. Team goal setting or establishing a strong team culture may help ensure that coaches' goals align with their players' goals. Understanding how to develop and maintain the coach-athlete relationship in a healthy manner will be essential to minimizing coach burnout in the future.

References

- Alcaraz, S., Viladrich, C., Torregrosa, M., Ramis, Y., & Gillham, A. (2015). Club and players' pressures on the motivation, vitality and stress of development coaches. *International Journal of Sports Science and Coaching*, 10(2-3), 365-378.
- Barnett, N. P., Smoll, F. L., & Smith, R. E. (1992). Effects of enhancing coach-athlete relationships on youth sport attrition. *The Sport Psychologist*, 6, 111-127.
- Caccese, T.M., & Mayerberg, C.K. (1984). Gender differences in perceived burnout of college coaches. *Journal of Sport Psychology*, 6, 279-288.
- Courville, T., & Thompson, B. (2001). Use of structure coefficients in published multiple regression articles: β is not enough. *Educational and Psychological Measurement*, 61(2), 229-248.
- Davis, L., Jowett, S. & Lafrenière, M. A. (2013). An attachment theory perspective in the examination of relational processes associated with coach-athlete dyads. *Journal of Sport and Exercise Psychology*, 35(2), 156-67.
- Eklund, R.C., & Cresswell, S.L. (2007). Athlete burnout. In G. Tenenbaum & R.C. Eklund (Eds.), *Handbook of sport psychology* (3rd ed., pp. 621-641). Hoboken, NJ: Wiley.
- Ellis, K. (2000). Perceived teacher confirmation: The development and validation of an instrument and two studies of the relationship to cognitive and affective learning. *Human Communication Research*, 26, 264-291.
- Farrey, T. (2008). *Game on: The All-American race to make champions of our children*. ESPN Books.
- Fletcher, D., & Scott, M. (2010). Psychological stress in sports coaches: A review of concepts, research, and practice. *Journal of Sports Sciences*, 28(2), 127-137.
- Freudenberger, H.J. (1974). Staff burn-out. *Journal of Social Issues*, 30(1), 159-165.
- Gould, D., Lauer, L., Rolo, C., Jannes, C., & Pennisi, N. (2008). The role of parents in tennis success: Focus group interviews with junior coaches. *The Sport Psychologist*, 22(1), 18-37.
- Hinde, R.A. (1997). *Relationships: A dialectical perspective*. London: Psychology Press.
- Hodge, K., Lonsdale, C., & Ng, J. (2008). Burnout in elite rugby: Relationships with basic psychological needs fulfillment. *Journal of Sports Sciences*, 26(8), 835-844.

- Horne, T., & Carron, A. V. (1985). Compatibility in coach-athlete relationships. *Journal of Sport Psychology*, 7(2), 137-149.
- Isoard-Gauthier, S., Trouilloud, D., Gustafsson, H., & Guillet-Descas, E. (2016). Associations between the perceived quality of the coach-athlete relationship and athlete burnout: An examination of the mediating role of achievement goals. *Psychology of Sport and Exercise*, 22, 210-217.
- Jackson, B., Grove, J. R., & Beauchamp, M. R. (2010). Relational efficacy beliefs and relationship quality within coach-athlete dyads. *Journal of Social and Personal Relationships*, 27(8), 1035-1050.
- Jowett, S. & Cockerill, I.M., (2003). Olympic medalists' perspective of the athlete-coach relationship. *Psychology of Sport and Exercise*, 4, 313-331.
- Jowett, S., & Nezelek, J. (2011). Relationship interdependence and satisfaction with important outcomes in coach-athlete dyads. *Journal of Social and Personal Relationships* 29(3), 287-301.
- Jowett, S., & Ntoumanis, N. (2004). The Coach – Athlete Relationship Questionnaire (CART-Q): Development and initial validation. *Scandinavian Journal of Medicine and Science in Sports*. 14, 245-257.
- Kelley, B.C. (1994). A model of stress and burnout in collegiate athletes: Effects of gender and time of season. *Research Quarterly for Exercise and Sport*, 65(1), 48-58.
- Knight, C. J., Reade, I. L., Selzler, A. M., & Rodgers, W. M. (2013). Personal and situational factors influencing coaches' perceptions of stress. *Journal of sports sciences*, 31(10), 1054-1063.
- Lafrenière, M.A.K., Jowett, S., Vallerand, R.J., & Carbonneau, N. (2011). Passion for coaching and the quality of the coach-athlete relationship: The mediating role of coaching behaviors. *Psychology of Sport and Exercise*, 12, 144-152.
- Lorimer, R. (2009). Coaches' satisfaction with their athletic partnerships. *International Journal of Coaching Science*, 3, 55-64.
- Loewenthal, K.M. (2001). *An introduction to psychological tests and scales* (2nd ed.). London: UCL Press.
- Lundkvist, E., Gustafsson, H., Hjälms, S., & Hassmén, P. (2012). An interpretative phenomenological analysis of burnout and recovery in elite soccer coaches. *Qualitative Research in Sport, Exercise and Health*, 4(3), 400-419.
- Mageau, G. A., & Vallerand, R. J. (2003). The coach-athlete relationship: A motivational model. *Journal of Sports Science*, 21(11), 883-904.
- Malinauskas, R., Malinauskiene, V., & Dumciene, A. (2010). Burnout and perceived stress among university coaches in Lithuania. *Journal of Occupational Health*, 52(5), 302-307.

- Martin, E. M., & Horn, T. S. (2013). The role of athletic identity and passion in predicting burnout in adolescent female athletes. *The Sport Psychologist*, 27(4), 338 - 348.
- Maslach, C. (1976). Burned-out. *Human Behavior*, 5, 16-22.
- Nunnally, J.C., & Bernstein, I.H. (1994). *Psychometric theory* (3rd ed.). New York, NY: McGraw-Hill.
- Olusoga, P., Butt, J., Hays, K., & Maynard, I. (2009). Stress in elite sports coaching: Identifying stressors. *Journal of Applied Sport Psychology*, 21(4), 442-459.
- Pease, D.G., Zapalac, R.K., & Lee, J. (2003). Role of selected variables in the burnout of high school varsity basketball coaches. *Research Quarterly for Exercise and Sport*, 74(1), A-66.
- Price, M., & Weiss, M.R. (2000). Relationships among coach burnout, coach behaviors, and athletes' psychological responses. *The Sport Psychologist*, 14, 391-409.
- Quigley, T.A., Slack, T., & Smith, G.J. (1987). Burnout in secondary school teacher coaches. *Alberta Journal of Educational Research*, 33, 260-274.
- Raedeke, T.D. (1997). Is athlete burnout more than just stress? A sport commitment perspective. *Journal of Sport and Exercise Psychology*, 19, 396-417.
- Raedeke, T. D. (2004). Coach commitment and burnout: A one-year follow-up. *Journal of Applied Sport Psychology*, 16(4), 333-349.
- Raedeke, T.D., & Smith, A.L., (2001). Development and preliminary validation of an athlete burnout measure. *Journal of Sport and Exercise Psychology*, 23, 281-306.
- Raedeke, T.D. & Kentta, G. (2013). Coach burnout. In P. Potrac, W. Gilbert, & J. Denison (Eds.), *Routledge handbook of sports coaching* (pp. 424-435). London: Routledge.
- Raykov, T. (2008). Alpha if item deleted: A note on loss of criterion validity in scale development if maximizing coefficient alpha. *The British Journal of Mathematical and Statistical Psychology*, 61, 275-285.
- Ryan, T. D. (2008). Antecedents for interrole conflict in the high school teacher/coach. *Physical Educator*, 65(2), 58-67.
- Schmitt, N. (1996). Uses and abuses of coefficient alpha. *Psychological Assessment*, 8(4), 350-353.
- Smith, R.E. (1986). Toward a cognitive-affective model of athletic burnout. *Journal of Sport Psychology*, 8, 36-50.
- Soheili, B., Tojari, F., & Amirtash, A. (2013). The impact of coaches self efficacy on relationship between the coach-athlete in sports leagues of Iran. *European Journal of Experimental Biology*, 3(1), 52-56.
- Tabachnick, B.G., & Fidell, L.S. (2007). *Using multivariate statistics* (5th ed). Northridge, CA: Harper Collins.

- Vealey, R.S., Armstrong, L., & Comar, W. (1998). Influence of perceived coaching behaviors on burnout and competitive anxiety in female college athletes. *Journal of Applied Sport Psychology*, 10, 297-318.
- Vealey, R. S., Udry, E. M., Zimmerman, V., & Soliday, J. (1992). Intrapersonal and situational predictors of coaching burnout. *Journal of Sport and Exercise Psychology*, 14(1), 40-58.
- Wylleman, P. (2000). Interpersonal relationship in sport: Uncharted territory in sport psychology research. *International Journal of Sport Psychology*, 31, 555-572.
- Yukelson, D. (1997). Principles of effective team building interventions in sport: A direct services approach at Penn State University. *Journal of Applied Sport Psychology*, 9(1), 73-96.