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The Influence Of Coach Leadership Behavior And Authenticity On Burnout Among Collegiate Athletes

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THE INFLUENCE OF COACH LEADERSHIP BEHAVIOR AND AUTHENTICITY ON BURNOUT AMONG COLLEGIATE ATHLETES

by

WILLIAM RYAN

(Under the Direction of Dr. Brandonn Harris)

ABSTRACT

The purpose of this study was to determine if coach authenticity and leadership behavior can influence burnout in collegiate athletes. By using congruency rooted in the multi-dimensional model of leadership and the leadership scale for sport, a mediating variable of authenticity, and a criterion variable of burnout, it was hypothesized that coach authenticity and congruence in the coach-athlete dyad, will influence rates of burnout evidenced by their ability to account for a significant proportion of the variance associated with burnout. The data analysis used in this study was a meditational analysis, which examined how coach-authenticity and congruency predict athlete burnout.

INDEX WORDS: Burnout, Multi dimensional model of leadership, Authenticity, Congruency, and Perception

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B.S., Charleston Southern University, 2014

A Thesis Defense Submitted to the Graduate Faculty of Georgia Southern University in Partial
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MASTERS OF SCIENCE

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DEDICATION

I dedicate this thesis to my mother Amy, father Bill, and brother Kevin Ryan. Without their encouragement and unconditional love throughout my schooling I would be lost. I also dedicate a major portion of this thesis to everyone in the Sport and Exercise Psychology program at Georgia Southern. Their consistent praise and motivation helped me stay focused and motivated to do my best work. Thank you.

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I would like to thank and acknowledge Dr. Brandonn Harris for his patience and assistance in putting together this research study. His attention to detail has helped me tremendously in understanding the process of a thesis, and learning along the way. I would also like to acknowledge Dr. Jody Langdon and Dr. Trey Burdette for their guidance throughout the process, and helping me refine my ideas to present in a more academic way.

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Table 1

Descriptive Statistics and skewness values of the LSS and ABQ subscales.

	Mean	SD	Skewness
Reduced Sense of Accomplishment	2.39	.859	1.82
Exhaustion	2.71	.997	1.84
Sport Devaluation	2.09	.994	3.63
Training and Instruction	.391	.931	.320
Democratic Behavior	.015	.737	1.98
Social Support	.399	.749	2.27
Positive Feedback	.679	1.26	.703
Authentic Living	6.36	.526	
Accepting External Influence	3.86	.974	
Self-Alienation	1.39	.441	

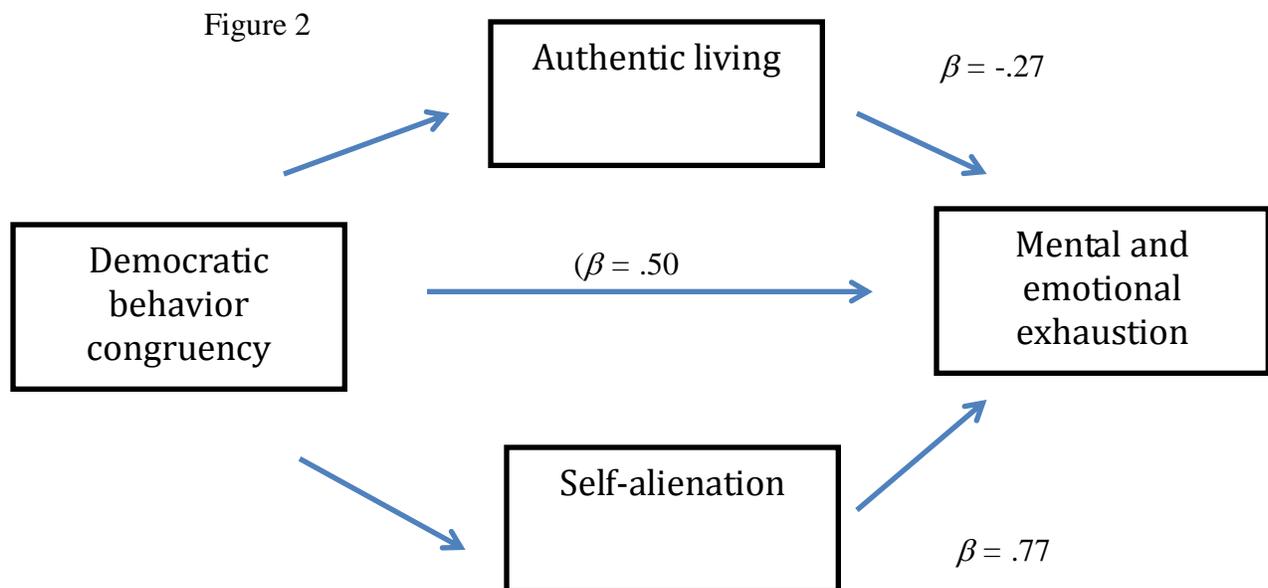
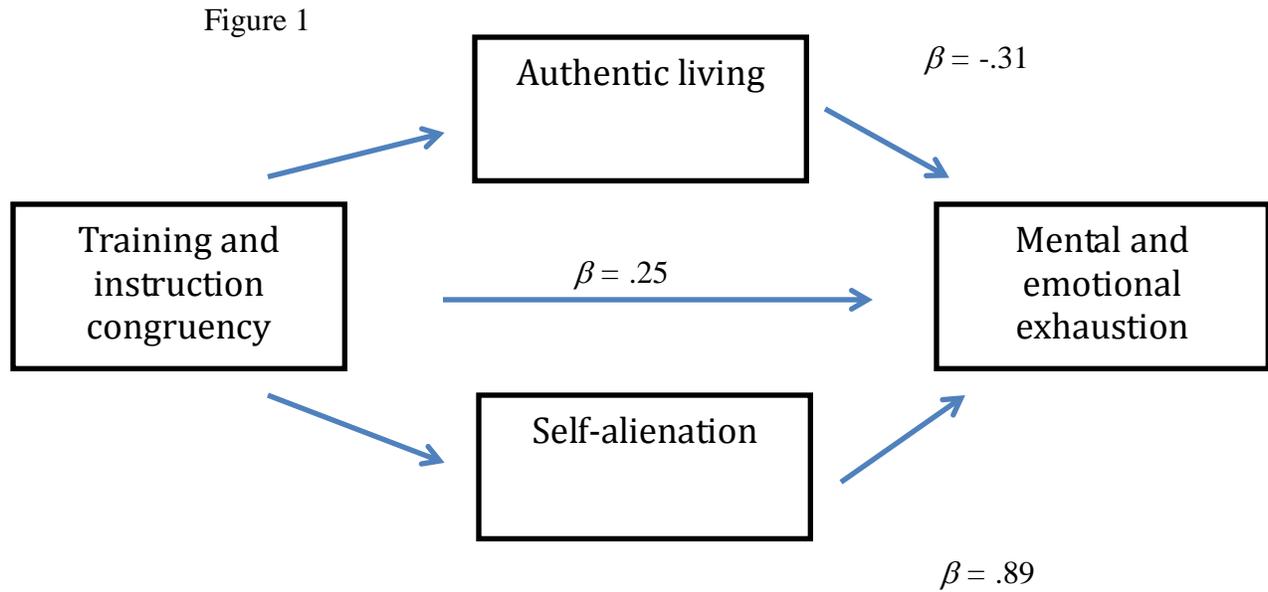
Table 2

Correlations of LSS congruency scores and ABQ subscale scores

	RA	E	SD
Training and Instruction	.244*	.284*	.256*
Democratic Behavior	.354**	.461**	.385**
Social Support	.331**	.426**	.343**
Positive Feedback	.102	.169	.122

Note. RA = Reduced sense of accomplishment; E = Emotional and physical exhaustion; SD = Sport devaluation; * $p < .05$; ** $p < .01$

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CHAPTER 1

Introduction

Burnout is a phenomenon that can impact athletes, and has been associated with many negative experiences across several levels of sport. Estimates have suggested approximately 3-9% of collegiate athletes experience burnout (Gould & Whitley, 2009). Reports of apathy, amotivation, and a loss of interest in the sport are common among athletes who report being burnt-out (Raedeke, 1997). Since its initial examination within sport environments, burnout has been investigated from different theoretical perspectives and with various demographic groups. According to Raedeke (1997), burnout is a multidimensional experience that includes three characteristics: (a) physical and mental exhaustion associated with the sport, (b) a reduced sense of sport-related accomplishment, and (c) sport devaluation. Many researchers have examined correlates of burnout and have revealed several potential factors that influence this experience. In one systematic review, Goodger, Gorely, Lavalle and Harwood (2007) suggested the main themes associated with burnout in the extant literature included amotivation, poor coping abilities with adversity, overtraining, under-recovery, a negative relationship with other important sport stakeholders, and an identity primarily centered on the athlete's sport involvement. This is by no means an exhaustive list as burnout has yet to be fully and consistently understood within sport; yet, it does provide a basis of what is currently known. The role of other significant sport stakeholders has typically been reported to have a negative influence on athletes (Gould, Tuffey, Loehr, & Udry, 1997). It also represents one area of burnout research in need of additional attention given that it has yet to be comprehensively understood.

The role of other sport stakeholders in an athlete's life (e.g., coaches and parents) has the capacity to negatively impact an athlete's sport experiences, in addition to their sport-related decisions (Goodger et al., 2007). Coaches may be of particular importance given the numerous interactions they have with an athlete, and their potential to influence an athlete's experience of burnout (Vealey, Armstrong, Comar, & Greenleaf, 1998). For example, coaches who present their athletes with unrealistic expectations, criticism, and pressure to perform well, have been shown to lead to burnout in their athletes (Gould, Tuffey, Loehr, & Udry, 1996). One important factor associated with coach behavior that can also influence an athlete's susceptibility to burnout is their leadership behavior (Renner, Eklund, Morin, Habeeb, & Morin, 2016). Specifically, within sport settings, the multidimensional model of sport leadership (MML) has long served as an important theoretical framework when examining coaches' leadership behavior and its impacts on athletes (Chelladurai, 1978).

Leadership and Sport Stakeholders

The MML examines how situational, member, and leadership characteristics interact with required, perceived, and preferred leadership behavior to influence athlete satisfaction and performance. The leader has a *required* behavior that either the organization expects or requires, a *perceived* behavior that the athletes see, and a *preferred* behavior that athletes desire. When the required, perceived, and preferred leader behaviors are congruent with one another, there is more satisfaction reported among athletes (Chelladurai, 1978); when these components are incongruent, athletes tend to report less sport satisfaction. Within the MML, areas of leadership styles most often examined are (a) training and instruction, (b) democratic behavior, (c) autocratic behavior, (d) social support, and (e) feedback.

Important sport stakeholders, such as coaches, have been found to have a negative impact on athletes when their behavior does not match the preferences of their athletes (Gould, 1996). A coach who has high controlling leadership tendencies, such as dictating the athlete's individual goals, has been suggested to lead to higher levels of burnout due to lessened autonomy among the athletes (Price & Weiss, 2000). Contrastingly, coaches who encourage their athletes to be active in setting their own goals, contributing to team decisions, and giving input about practice, have been noted to contribute to lower reported levels of burnout (Price & Weiss, 2000). Related to leadership behavior, even the decision-making style of coaches has been shown to influence burnout (Dale & Weinberg, 1989). Such research is indicative of the potential effects certain controlling leadership behavior may have on athlete burnout, mainly due to the lessened autonomy an athlete experiences. Thus, leadership behavior appears to be one factor influencing interactions between coaches and athletes, as well as burnout. How athletes perceive their coach's leadership style likely varies among athletes and would therefore be an important individual difference to account for regarding burnout.

Indeed, perception is an important factor to consider when examining leadership behavior and athlete burnout as "athlete perceptions of coach behavior are vital in determining how coaches influence their athletes" (Smoll & Smith, 1989, p. 1527). A coach who can accurately communicate how they see the athlete from their own perspective would be perceived to be more authentic by their athletes (Slezdak, 2015). As such, authenticity among coaches appears to have an important influence on perception. Contrastingly, when an athlete perceives a coach to behave differently than how the coach thinks he/she coaches, the athlete can become frustrated (Chelladurai, 1980).

Influence of Authenticity

The aspect of authenticity among coaches is an area in sport psychology research that has not been researched extensively as a contributor to burnout, particularly when based on athletes' perceptions of their coaches. Authenticity is defined as an attribute that integrates four related components including awareness, unbiased processing, behavior, and relational orientation (Kernis & Goldman, 2006). In relation to authentic leadership theory (Walumbwa, Avolio, Gardner, Wernsing, & Peterson, 2008), awareness refers to the ability to recognize ones emotions, cognitions, beliefs and motives. Unbiased processing refers to how well one processes the accuracy and objectivity of relevant personal information. Authentic behavior is based on both awareness and unbiased processing, and involves the individual being genuinely self-congruent (Fusco, O'Riordan, & Palmer, 2015). Lastly, relational orientation is defined as being open, honest and sincere in interactions with others. Daily interactions with a coach that an athlete perceives to be inauthentic due to having less awareness and biased decision making can yield inconsistent negative feelings from the athlete (Lee, Chelladurai, & Kim, 2015). Research suggests that authenticity is trait that can be learned, and when a coach is more authentic, they can feel less self-alienated and there is less dissonance in the actual and perceived coaching style (Lee et al., 2015).

As an extension of authentic behavior, authentic leadership has been described as a consistent pattern of leadership that involves being self-aware, having a moral perspective, unbiased processing, and transparency in their interactions with their athletes (Walumbwa et al., 2008). The importance of an authentic leader has also been shown to influence the relationship between subordinate and leader in many aspects, such as trust in leadership (Wong &

Cummings, 2009), productivity within the group (Hannah, Walumbwa, & Fry, 2011), and psychological well-being (Toor & Ofori, 2009). An inauthentic leader can negatively influence the previously listed factors (Walumbwa et al., 2008), and would be said to be more self-alienated and accept more external influence. The importance for this authentic behavior can allow for athletes to have a more genuine relationship with the coach, therefore leading to less frustration, more productivity, more congruence in day to day interactions, and better daily functioning (Szedlak et al., 2015, Walumbwa et al., 2008). Therefore, it seems that athletes who have coaches who exemplify authentic traits, would report being highly satisfied.

This factor of authenticity is best utilized when the coach has an accurate representation of the athlete in their minds, allowing the coach to accurately state the requirements or expectations of the athlete (Szedlak et al., 2015). When a coach focuses on the athlete's requirements, there is reduced perceptual incongruence from the athlete, as well as the preferred, required, and actual coach behavior to be received accurately (Szedlak et al., 2015). This reduction in perceptual incongruence comes from the coach having unbiased processing and objectively evaluating what is required from the athlete. Research has suggested that athletes prefer specific expectations and requirements, matched with corrective instruction and authenticity.

The present study will examine the influence of authenticity and leadership behavior on athlete burnout. Burnout has been identified as a phenomenon that has yet to be fully understood, with many different aspects having an influence on burnout propensity in athletes. Research suggests that specific leadership behaviors influence burnout in athletes. Leadership behaviors are also perceived more accurately when the leader is more authentic, but this has only been shown in a few select studies, and never with burnout, leaving a gap in the literature. The

influence of authenticity on leadership behavior is important because it can present a new idea and awareness for coaches on how to coach effectively, be perceived correctly, and reduce the likelihood of burnout in their athletes. By having a better understanding of the influence of authenticity on leadership behavior, coaches can learn to be their authentic self, and use it to maximize their coaching potential and positive impact on their athlete.

The influence of authenticity in relation to athlete perception and burnout is an area that has not been adequately researched in sport psychology. Thus, the purpose of the present study is to determine if coach authenticity influences athletes' perceptions of their coach, and if that perception influences burnout experienced among collegiate athletes. By using congruency rooted in the MML and the LSS, a mediating variable of authenticity, and a criterion variable of burnout, it is hypothesized that coach authenticity and congruence in the coach-athlete dyad, will influence rates of burnout evidenced by their ability to account for a significant proportion of the variance associated with burnout.

CHAPTER 2

Methods

Participants

The sample in the present study consisted of a sample size of 139 student-athletes between the ages of 18-22 years, and 12 coaches from two different Division I and Division II universities located in the southeast United States. From the original 139 participants, one participant was removed due to being ineligible, and 27 participants were removed due to being currently injured and unable to practice, leaving a total of sample size of 112 student-athletes ($n=112$). Participants were from softball ($n=18$), women's swimming ($n=12$), men's volleyball ($n=14$), and men and women's soccer players ($n=68$) and coaches ($n=12$). The sports selected for the present study were targeted as they are all interactive (Cratty, 1983), which unifies them in that they have more consistent interactions with their coaches than co-active team or individual sports in which athletes primarily receive more coach interaction on an individual basis (i.e. golf, tennis, bowling; Aleksic-Veljkovic et al., 2016). If the athlete was injured for at least one week, their data were excluded in order to eliminate how the variable of injury would influence their data. Additionally, participants who had not played their sport at least one semester under the coach they are evaluating were excluded.

Coaches completed their questionnaires and were also matched with the players that they coach by the "specific position played/coached" on the demographic form for data analyses, as well as how long they have been in the current coaching position, and if they were in or out of their competitive season.

Instrumentation

Demographics. A demographic survey was given to both the athletes and the coaches. For the athletes, age, gender, race, ethnicity, age, year in school, first semester or not, total years devoted to only playing the current sport, injury, time of season, and the specific position that is played was included in the demographics form. For the coaches demographics form, age, gender, race, ethnicity, age, time of season, total years in current coaching position and position coached were included.

Perceived leadership. To measure the athlete's perception of their coach, the perceived version of the Leadership Scale for Sport (LSS) was taken by the athletes. The Leadership Scale for Sport (Chelladurai & Saleh, 1980) is a five factor, 40-item, Likert-type scale developed to measure different perceived, preferred, and self perceived leadership styles through (a) training and instruction ("Sees to it that athletes work to capacity"), (b) democratic behavior ("Asks for the opinion of the athletes on strategies for specific competitions"), (c) autocratic behavior ("Plans relatively independent of the athletes"), (d) social support ("Helps athletes with their personal problems"), and (e) feedback ("Compliments an athlete for good performance in front of others"). The coaches took the self-perceived version of the LSS to rate how they believe they coach, so that these results could be compared with how the athlete perceived their coaching style. Congruency scores were derived by calculating the differences from the athlete perceived version of the LSS and their coach's self-perception score. Cronbach's alpha coefficient on the athlete perception scale of the LSS has been found to be generally adequate to good in more recent studies; for example, alpha values have been noted to range from .66 to .91 (Hollembek & Amorose, 2005). Cronbach's alpha coefficients, when measuring how coaches perceive themselves using the LSS ranged from .34 to .83 (Sullivan & Kent, 2003). For the current study,

Cronbach's alpha within the LSS subscales for training and instruction was $\alpha = .93$, $\alpha = .85$ for democratic behavior, $\alpha = .43$ for autocratic behavior, $\alpha = .79$ for social support, and $\alpha = .90$ for positive feedback. Due to the reliability score generated by the autocratic subscale being under $.60$ (Hollembek & Amorose, 2005), it was removed in order to conduct proper data analyses. The low reliability of the autocratic subscale is consistent with the literature when the LSS has been utilized (Chelladurai & Riemer, 1998).

Coach authenticity. The coaches also completed the Authenticity Scale (Wood et al., 2008) to measure their authenticity as a coach. The Authenticity Scale consists of three subscales, which assess authentic living ("I think it is better to be yourself, than to be popular"), accepting external influence ("I am strongly influenced by the opinion of others"), and self-alienation ("I don't know how I really feel inside") measured on a Likert-type scale, scored 1 (does not describe me at all) to a 7 (describes me very well). Cronbach's alpha was measured at $.69$ for authentic living, $.78$ for accepting external influences, and $.78$ for self-alienation (Wood et al., 2008). The test-retest reliability ranged from $.78$ to $.91$. According to Susing (2011), the Authenticity Scale is valid in an athletic setting when examining coaches, especially in executive coaching when evaluating themselves.

Athlete burnout. To assess burnout, athletes completed the Athlete Burnout Questionnaire (ABQ; Raedeke & Smith, 2001). This scale utilizes a 5-point Likert-type scale. The ABQ assesses the multidimensional nature of burnout including emotional and physical exhaustion, reduced sport accomplishment, and sport devaluation. A sample questions for emotional and physical exhaustion is "I feel so tired from my training that I have trouble finding energy to do other things", a reduced sport accomplishment sample question is "I am not achieving much in my sport", lastly an example of a sport devaluation question is "I don't care as

much about my sport performance as I used to". Cronbach's alpha was .91 for physical/emotional exhaustion, .85 for reduced sense of accomplishment, and .90 for sport devaluation (Raedeke & Smith, 2001). The three subscales were cross validated for construct validity and were determined to be psychometrically sound (Raedeke & Smith, 2001). For the current study, Cronbach's alpha for the subscales were $\alpha = .88$ for reduced sense of accomplishment, $\alpha = .85$ for emotional and physical exhaustion, and $\alpha = .89$ for sport devaluation.

Procedures

Prior to receiving IRB approval, letters of cooperation were sent collected from the athletic directors of each desired university. After IRB approval, the head coaches of each team were sent an email requesting their participation in the study. Following head coach approval, teams were administered the surveys by the researcher during their offseason or competitive season. The meeting times were dependent on when was most convenient for the team and the coaches. The researcher went to each school and presented the scales to the coaches and athletes in separate rooms, during the same times in the same day. The demographics form, the Leadership Scale for Sport (coach self perception), and the Authenticity scale were given to the coaches. The demographics form, the Leadership Scale for Sport (athlete perception) and the Athlete Burnout Questionnaire were given to the athletes. The measures were counterbalanced and given to each participant. Each athlete's data was matched with their coach's data based on what position they play in order to have accurate representations of the coach with which they spend the most time.

Data Analysis

Descriptive statistics were run on all scales to determine means and standard deviations (see Table 1). Chelladurai (1990) advises that researchers be aware of other mediating variables that could influence leadership behaviors when using the LSS. For the present study, authenticity was used as a mediating variable. In accordance with Hayes' (2012) model of mediation, a Pearson correlational analysis was run to determine which authenticity subscales correlated with congruency scores on each subscale of the LSS. Congruency scores were calculated by comparing the differences from the athlete perceived version of the LSS and the coaches self perceived results. Only subscales that were correlated were used in the mediational analysis.

According to Renner and colleagues (2016) data collection done in-season versus out-of-season in collegiate athletes revealed no significant differences in results. In-season versus out-of-season has not been well understood longitudinally, and out of season has not been compared or evaluated to mid-season versus mid out-of-season. Although, a study done by Lai and Wiggins (2003) revealed that athletes report higher rates of burnout at the end of the season, as compared to the beginning. Thus, following the Pearson correlation, a Spearman's rho correlation was used to determine if in- or out-of-season should be used as a covariate in the mediational regression analysis, and it was found to be associated with burnout.

A total of 12 mediation regression analyses were run using in- or out-of- season as a covariate (Hayes, 2012) Within the regressions, each authenticity subscale that was correlated with the congruency scores were used as mediating variables (See Table 2). One of the three subscales of burnout was used as the criterion variable in each regression. Coach authenticity and the LSS congruency scores served as the variables predicting the athlete's burnout score. For the data analysis being used, a $p < .05$ significance level was employed to determine statistical significance. Assumptions for data analysis were that the data were normally distributed, there

was a linear relationship between the independent and dependent variables, variables were reliably measured, and homoscedasticity across all of the independent variables. For the current study, by using correlations, only variables that had linear relationships were used. To measure the variables, reliability was determined and only subscales that provided good reliability scores were utilized. Homoscedasticity was determined by examining fitted values on a scatter plot, and it revealed that the variables were determined to have similar variance.

CHAPTER 3

Results

To begin the data analyses, box plots were used to check for skewness and kurtosis in the data set. Only one participant was removed due to being considered an outlier. Data from the LSS and ABQ were recoded in SPSS, and then reliability and skewness was run on each subscale of the LSS and ABQ (see Table 1). The higher skewness level for sport devaluation was considered adequate, as these results are consistent with reported results amongst the ABQ.

Burnout: Reduced Sense of Accomplishment

Congruency scores were calculated by comparing the athlete perceived version of the LSS and the coaches self perceived results. The larger the discrepancy was, the less congruency there was between the coach and athlete in the particular subscale. There were no significant mediation effects from the authenticity subscales found in regard to training and instruction congruency being able to predict reduced sense of accomplishment when controlling for time of season [$F(4,107)=4.21, p = .003, R^2=.13$]. However, the model was significant as congruency in the training and instruction subscale of the LSS predicted reduced sense of accomplishment (see Table 2).

There were no significant mediation effects from the authenticity subscales found in regard to democratic behavior congruency being able to predict reduced sense of accomplishment when controlling for time of season [$F(4,107)=5.09, p < .001, R^2=.40$]. The overall model was significant as democratic congruency scores predicted reduced sense of accomplishment.

There were no significant mediation effects from the authenticity subscales found in regard to social support congruency being able to predict reduced sense of accomplishment when controlling for time of season [$F(3,109)=7.81, p < .001, R^2=.17$]. The model was significant because the social support congruency scores predicted reduced sense of accomplishment. There were no significant mediation effects from the authenticity subscales found in regard to positive feedback congruency being able to predict reduced sense of accomplishment when controlling for time of season, [$F(4,107)=2.96, p = .023, R^2=.10$].

Burnout: Emotional and Physical Exhaustion

The relationship between training and instruction congruency scores and exhaustion was mediated by the authentic living ($\beta = -.31$) and self-alienation ($\beta = .89$) subscales while controlling for time of season [$F(4,107)=7.88, p < .05, R^2=.23$]. Congruency in democratic behavior showed a significant correlation with emotional and physical exhaustion, $r = .461, p < .001$. The relationship between democratic behavior congruency scores and exhaustion was mediated by the authentic living ($\beta = -.27$) and self-alienation ($\beta = .77$) subscales while controlling for time of season [$F(4,107)=11.22, p < .05, R^2=.29$]., $r = .426, p < .001$. The negative beta values represent the negative relationship between low authentic living scores and high burnout scores. The positive beta values represent the positive relationship between high self-alienation scores and high burnout scores.

There were no significant mediation effects from the authenticity subscales found in regard to social support congruency being able to predict exhaustion when controlling for time of season [$F(3,108)=12.31, p < .001, R^2=.25$]. The model was significant due to congruency in social support predicted emotional and physical exhaustion.

Burnout: Sport Devaluation

There were no significant mediation effects from the authenticity subscales found in regard to training and instruction congruency being able to predict sport devaluation when controlling for time of season [$F(4,107)=4.92, p =.001, R^2=.15$]. The model was significant due to congruency in the training and instruction predicting sport devaluation, There were no significant mediation effects from the authenticity subscales found in regard to democratic behavior congruency being able to predict sport devaluation when controlling for time of season [$F(4,107)=6.36, p < .001, R^2=.19$]. The model was significant as congruency in democratic behavior significantly predicted sport devaluation. There were no significant mediation effects from the authenticity subscales found in regard to social support congruency being able to predict sport devaluation when controlling for time of season [$F(3,108)=7.87, p < .001, R^2=.18$]. The overall model was significant as congruency in social support predicted sport devaluation, There were no significant mediation effects from the authenticity subscales found in regard to social support congruency being able to predict sport devaluation when controlling for time of season [$F(4,107)=3.38, p = .012, R^2=.11$].

CHAPTER 4

Discussion

The purpose of this study was to determine if coach authenticity had a mediating influence on how leadership behavior can influence burnout in collegiate athletes. It was hypothesized that coach authenticity and congruence in the coach-athlete dyad would influence rates of burnout, as evidenced by their ability to account for a significant proportion of the variance associated with burnout. The results partially supported the hypothesis, as certain aspects of the coach's authentic personality influenced the relationship between leadership behavior and burnout experienced amongst collegiate athletes.

Influence of Time of Season

Time of season was a significant covariate within the mediation regression models. In the present study, time of season was correlated to burnout as burnout scores decreased from in to out of season. In-season versus out-of-season has not been well understood in the literature when comparing the same teams. Lai and Wiggins (2003) found that burnout significantly increased across the timeline of a season from one team. The potential influence of coaching behaviors and authenticity on burnout across in and out of season with the same teams could provide a better understanding of how coach authenticity influences athletes longitudinally.

Associations Between Leadership Behavior Congruency and Burnout

The present results revealed that greater discrepancies between athletes' perception and their coach's perception of coach behavior were associated with higher levels of athlete burnout. More specifically, these congruency scores among training and instruction, democratic behavior, and social support were all significantly, positively correlated with each burnout subscale of the ABQ. This suggests that as the difference between how athletes perceive their coaches to lead

compared to how the coaches perceive themselves to lead increases, burnout scores also increase. The impact of the difference in perceived leadership has consistently shown to influence burnout in the literature (Horn, Bloom, Berglund, & Packard, 2011; Price & Weiss, 2000). Coach's behavior styles such as the type of training and instruction and democratic behavior were revealed to have the ability to directly influence an athlete's sport experience in regard to burnout. This is important to know when examining how, when, and why athletes experience feelings of burnout. By knowing which coaching styles influence burnout, coaches be taught, or learn how to correctly present their own coaching styles in a way that doesn't negatively impact their athletes.

It was interesting that in the present study, positive feedback congruency scores were among the leadership behaviors that did not correlate with any subscale of the ABQ. Collegiate athletes have been suggested to prefer their coaches to give positive feedback, and athletes who receive appropriate amounts of positive feedback have been reported to be more motivated (Amorose & Horn, 2000). Contrastingly, Andrew (2009) found positive feedback congruency scores had no significant correlation with athlete satisfaction. Thus, the influence of positive feedback congruency on the athlete seems to be unclear in the literature. The fact that positive feedback congruency scores did not significantly correlate with burnout in the present could be indicative of positive feedback congruency score's lack of ability to negatively impact the athlete. More specifically, perhaps that although the discrepancy between athletes and coaches was high, the ability for this particular coaching style to negatively impact the athlete was low, therefore not being a significant predictor of burnout.

Results of the present study also underscore the negative influence the lack of congruence between coach and athlete perceptions of leadership behavior can have on burnout. Individual

leadership is a complex combination of personality and different characteristics that influence the five subscales of the LSS (Chelladurai, 1980). A combination of athlete perception, preference, personality, and the type of coach are what makes coach athlete interactions so complex. Within the context of the present study, it is possible the incongruent perceptions among leadership behaviors may lead athletes to experience the multidimensional facets of burnout. Additionally, it is important to examine what features of leadership and what features the individual leader has, and the potential influence these features can have on athletes. In regard to coach leadership and its influence on athletes, Chelladurai (1990) advises researchers to be aware of other mediating variables that may influence the interactions among coaches and athletes.

The Mediating Influence of Authenticity on Burnout

It was expected that coach authenticity and leadership behavior congruence among coaches and athletes would be associated with athlete burnout. Although not all subscales of the LSS and authenticity scale had a significant influence on each of the three subscales of the ABQ, certain mediating associations did emerge as statistically significant.

In particular, the mediating influence of authenticity on leadership behavior and burnout was evident as it pertains to the exhaustion subscale of the ABQ. Coaches' scores, which were lower in the authentic living and higher in the self-alienation subscales of the authenticity scale, were associated with increases in athlete burnout. Additionally, the authentic living and self-alienation subscales mediated the relationship between training and instruction and exhaustion. This suggests that in regard to training and instruction, a coach who behaves less authentically and one who feels more self-alienated may be more likely to have athletes who feel emotionally and physically exhausted. These feelings of exhaustion from the athlete are partly from the coach feeling self-alienated and being generally less authentic, therefore influencing their leadership

behavior. This is important because it suggests that athletes are highly aware of the quality of interaction they are having with their coaches even when being instructed, and when that interaction is consistently felt as inauthentic, it can lead an athlete to feel exhausted.

The authentic living and self-alienation subscales also mediated democratic behavior congruency scores' influence on athlete's feelings of exhaustion. The greater the difference between how the athlete perceived their coaches' democratic behavior, and how democratic the coach thinks they were, the higher the burnout scores among athletes were, particularly regarding the mediating influence of authenticity on exhaustion. The current results of the impact democratic behavior has on athletes have been consistent in previous literature (Harris & Ostrow, 2008), and evidences the important influence that sport stakeholders play in an athlete's life. This means coaches have the ability to negatively influence their athletes based on how authentic they are, when paired with certain aspects of their coaching style.

These results have not yet been observed within the extant research, but are consistent with research involving the potential negative impact of an inauthentic leader on employees (Lee et. al, 2015). In a coaching model created by Lee and colleagues, "emotional labor", which includes psychological effort, emotional dissonance, and feelings of authenticity in leaders, can impact job burnout and lower job satisfaction. The less emotional labor a leader is experiencing, the less they have to act disingenuous, and the more they can lead genuinely and authentically. Leaders or coaches who have difficulty bridging the gap between who they are and how they lead, experience increased psychological dissonance, making them feel more self-alienated and presenting a less authentic view for their group (Lee et. al, 2015). This may be a reason why the self-alienation subscale of the authenticity scale consistently had such an influence on exhaustion. According to the present results, the impact of authenticity supports a component of

the model introduced by Lee and colleagues, specifically in regard to the impact of overall authentic living and self-alienation on burnout. This means individual aspects of a coach's authenticity when matched with their leadership style have the ability to impact the overall experience of an athlete. Helping coaches present their coaching styles in an authentic way could help reduce the amount of burnout in their athletes, and potentially reduce the discrepancy in how the athlete perceives their coach.

Limitations

A few important limitations in this study are worth acknowledging. First, the autocratic subscale of the LSS was not used, as its reliability scores were not adequate. This suggests the potential influence of autocratic leadership and authenticity on burnout was unable to be revealed. The low reliability of the autocratic subscale has been consistent with the literature when the LSS has been utilized (Chelladurai & Riemer, 1998). Autocratic coaching styles have been correlated with athlete burnout, mainly due to the lack of autonomy the athlete has (Dale & Weinberg, 1989), and an overall lack of enjoyment (Price & Weiss, 2000). Addressing the relationship between authenticity and autocratic behavior on burnout could provide more information on the complexities of the coach athlete interaction.

Another limitation was the amount of coach's authenticity scores that were used for the athletes. Gathering a sample from teams such as American football, who incorporate more position coaches, could have provided a more comprehensive understanding of the influence of authentic behavior. By having more specific position coaches, the impact of authenticity could be described by athletes who have more familiar relationship with the coach, and also would have increased the amount of coach athlete relationships that could have been examined.

Utilizing more head coaches may limit the amount of meaningful contact athletes may have with this coach, as those coaches may have substantially more athletes to interact with.

Another limitation regards how the sample was obtained. A random sample of multiple interactive team sports was not used, limiting the generalizability of the current results. The sample also only included softball, swimming, volleyball, and soccer, which again limits how generalizable the results are to all interactive collegiate sports. And lastly, another limitation in regard to the sample was this sample reported low levels of burnout. This is important because the influence of leadership and authenticity may not have been expressed to its full ability in regard to the subscales of burnout that were influenced.

Implications and Future Directions

Results from the present study have several important implications on the impact that authenticity has on coaches' ability to influence their athletes. For coaches, there are techniques and models created to assist coaches in becoming more authentic. For example, the Authentic Leadership Existential Coaching model is based on understanding the self, and how an authentic understanding can permeate through present and future interactions (Fusco, O'Riordan, & Palmer, 2015). The model places importance on heightening awareness for coaches and helping them develop a deep understanding of issues that authentic individuals deal with. Athletic departments can highlight the importance of authenticity in their coaches when implementing leadership development courses. The positive benefits of developing authentic coaches are not only beneficial to the athletes, but to the coach's well being (Lee et. al, 2015), and it is known that coach well being when paired with leadership styles can directly influence athletes (Price & Weiss, 2000). Coaches who can work towards developing feelings of authenticity and genuineness in their interactions can provide a more enjoyable sport experience for their athletes.

Future burnout research could examine at the influence of injury, and if their perceptions of their coaches leadership changes. This study controlled for injury in order to eliminate the possible influence it may have on burnout. Examining burnout and perceived leadership behavior among injured athletes can provide a better understanding of an athlete's experience while not performing in their sport, and the potential influence coaches have while an athlete is injured. Additionally, regarding use of the LSS for measurement, researchers might consider using the autocratic subscale with three questions ("Does not take into account athletes' suggestions when making decisions," "Controls what athletes can and can not do," and "Makes decisions regardless of what the athlete thinks") added to improve the reliability of that particular subscale (Price & Weiss, 2000). Future research involving coach authenticity and leadership could chose to measure other aspects of the athlete experience. Since it is known how much of an integral part the coach plays in an athlete's life, it is important to continue to work towards understanding why these interactions consistently yield significant results in research.

In summary, the present study provided a foundation for research regarding the importance of authentic coach leadership and its influence on athletes' experience of burnout. A large portion of the MML in regard to congruency was also was further supported from this study, as well as the influence congruency has on athlete burnout. Given the complexity and nature of the coach athlete relationship, taking into consideration other individual leadership qualities and their possible influence on athlete well being, could be an important way to increase the quality of every coach athlete interaction.

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APPENDIX A Literature Review

Burnout is a phenomenon that can have an impact on any athlete, resulting in many negative behaviors to occur at all levels of sport. The overall feeling of blandness, amotivation, and a loss of interest in the sport are common in athletes who report being burnt-out. Burnout has been investigated from different theoretical perspectives and with various demographic groups ever since the construct was introduced. According to Raedeke (1997), burnout has 3 main components, the first one being feelings of physical and mental exhaustion associated with the sport. Secondly, there is a reduced sense of accomplishment and viewing those accomplishments negatively. Thirdly, sport devaluation occurs, which is when there is lack of interest in the sport, reported by the athlete. Several factors influence perception, and how those factors interact influence the rate and occurrence of burnout.

Burnout is looked at through different theoretical frameworks that all work differently, and often can be more beneficial to choose one depending on the research. Smith in 1986 introduced the cognitive-affective stress model as a way to conceptualize burnout and remove any speculation about burnout being measurable. He used the social exchange theory as a framework to his development of the model. The cognitive-affective stress model consists of four components, situational, cognitive, physiological, and behavioral. The first component is the stress that is caused from an imbalance of demands and resources. When the demands that are placed on the athlete are not met, common feelings that lead to burnout arise, such as anxiety, guilt, anger, and self-derogation (Smith, 1986). Not only can an overload of stress negatively affect an athlete, but also when athlete's resources outweigh the demands, feelings of stagnation and boredom occur (Smith, 1986). The second component in the model is based on cognitive

appraisals based on social exchange; appraisals based on demands and resources, consequences if the demands are not met, and the personal meaning behind of these consequences. The third component is how predisposed an athlete is to misinterpreting or not being able to cope with stress. An athlete with lower self-confidence or an athlete who bases their identity on success and social approval, will have a greater likelihood of having inappropriate stress reactions (Smith, 1986). The fourth and last component of the model is the output from the athlete. The output that is looked at is the ability to cope with the stress that has been derived in the athlete based on their appraisals of different causes of stress. The goal of Smith's model was to provide a much-needed theoretical framework to evaluate the phenomenon of burnout empirically.

The next researcher to attempt to conceptualize burnout from a different perspective was by Silva in 1990, who developed the Negative Training Stress Model. Similar to Smith in 1986, Silva concluded that burnout is related to stress and how overtime that stress can lead to burnout. The basis of Silva's model is how an athlete responds to training stress. Negative training stress arises when an imbalance of demands and coping abilities are present (Silva, 1990). A positive reaction to training stress is recognizing that the stress is essential for athletic improvement, pointing out that not all training stress has a negative influence on an athlete. Negative training stress is placed on a continuum, ranging from staleness, to overtraining, then leading to burnout (Silva, 1990). The cycle of overtraining and under recovery is what can lead to the staleness and monotony that an athlete may experience.

Jay Coakley in 1992 introduced the Unidimensional Identity Model from a sociological perspective. Coakley's model is based on viewing burnout as a social problem from social organization. The social environment that the young athlete is placed in can limit their ability to develop their complete identity and prevent these young athletes from developing autonomy,

which is crucial in predicting burnout (Coakley, 1992). The goal of the Unidimensional Identity Model is to provide strategies on which areas to focus on during a child's development to reduce the likelihood for burnout. The strategies are to improve the structure and organization of sport programs, improve the social relations associated with training and competition in high performance sports, and not limit the range of life experiences in young athletes (Coakley, 1992). A young athlete that has a constrained amount of life experiences and has most of their life spent on their sport, are more likely to develop a unidimensional self-concept. Secondly, the power that coaches and parents have over young athletes reduces their autonomy, leaving the athlete feeling out of control when it comes to their sport. Coakley's model focuses on youth athletes who specialize in a sport, and provides factors as to why these athletes burnout and leave their sport. Identity development is limited to a one-path road (Unidimensional) when an athlete competes in 1 sport and power figures (coaches and parents) limit their autonomy. The reason that this Unidimensional self-concept is so detrimental to youth athletes is because it sets them up to not handle stress as well, frequent depressed states and mood swings, which leads to burnout. According to the model, athletes need to be able to develop their own identity and be in control of the decisions they make in order to reduce chances of burnout.

Schmidt and Stein in 1991 developed the Sport Commitment Model based on Kelley's (1959) social exchange theory, as well as Kelley's (1981) research on love and commitment. Schmidt and Stein's model integrates factors of enjoyment, dropout, and burnout and uses the factors to build a model on commitment and how commitment levels can predict burnout. In developing their model they examined previous theories about burnout and used what they thought would work best with the definition of commitment. They clearly define the differences in burnout and dropout, and how athletes how continue to play a sport with lack of enjoyment are

more vulnerable to burnout (Schmidt & Stein, 1991). The Sport Commitment Model proposes five factors on an increasing/decreasing continuum. The five factors relate to commitment (enjoyment-based), commitment (burnout), and dropout. The five factors are rewards, costs, satisfaction, alternatives, and investments, and each factor has a different influence on enjoyment-based commitment, burnout, and dropout. In regard to rewards, as enjoyment-based commitments increases or is high, burnout decreases, as does dropout. When looking at costs, if enjoyment-based commitment is low, burnout increases, as does dropout. In regard to satisfaction, when enjoyment-based commitment is high, burnout and dropout both decrease. The alternatives factor is where burnout and dropout differ in influence. When enjoyment-based commitment is high in regard to alternatives (options other than participating in the sport), burnout is lower, but dropout actually increases. Lastly, in regard to investments in the sport, when enjoyment is high, so is burnout, and dropout decreases in propensity. Their model brought many social psychological factors together and linked them to sport psychology, and provided a much needed model based on deeper psychological factors that have previously been theorized.

Raedeke in 2000 proposed an idea that burnout can stem from feelings of entrapment in sport. This study was originally designed to examine burnout in coaches based on commitment, and how feelings of entrapment influenced burnout as well. Raedeke states that entrapment in coaches occurs when coaches become less attracted to coaching but they feel that they have to continue based on 3 main factors. The first factor is that the coach perceives a lack of attractive alternatives to coaching. So this means that the coach feels they may not be qualified to do another job besides coaching, or other opportunities seem undesirable. The second factor is that the coach believes they have too much invested already to quit coaching. The third factor is that the feelings of other expectations on them to continue coaching keep them from getting out of

coaching. These feelings can also be linked to athletes, and how they may feel entrapped by the sport and not able to dropout, leading to feels of burnout. Raedeke was predicting that these feelings of entrapment would lead to burnout, but due to convenience, he only accounted for the influence of entrapment on emotional exhaustion. He found that coaches with characteristics of entrapment reported higher exhaustion scores. Although there were many factors influencing how the results may be explained, the main idea that was gained from this study was that commitment is an important factor when examining burnout. The commitment perspective can identify underlying causes of burnout, rather than just being a reaction to stress.

The commonly used operational definition of burnout introduced by Raedeke in 1997 was developed when he and Smith were creating the Athlete Burnout Questionnaire. Previous researchers have been mentioning the need for a psychometrically sound measure of burnout in their future research sections, so Raedeke and Smith began work on the ABQ, based on Smith's cognitive-affective model. While working on the ABQ Raedeke and Smith found it important to provide a more detailed operational definition to burnout, one that provided reasons as to why athletes left the sport. For the 2001 study Raedeke and Smith used the operational definition that Raedeke introduced in 1997, involving the three main components of burnout (physical and emotional exhaustion, reduced sense of accomplishment, and sport devaluation).

In this study, the researchers used 3 different samples in order to increase the generalizability and use of the ABQ. By using youth, adolescent and collegiate athletes, they were able to provide a reliable and valid measure to be used regarding burnout. In order to increase the burnout subscales validity, they gave the ABQ to one of their samples, along with scales regarding stress, coping, social support, sport enjoyment (stemming from Scanlan in 1993), and motivation. After a confirmatory factor analysis, the constructs were related back to

the burnout subscales, resulting in the ABQ being developed further. Lastly, Raedeke and Smith used the same construct scales along with ABQ with a different group of athletes besides swimmers in order to show that the ABQ can be used across different sport settings. They were able to cross-validate the scale, leading to increased reliability and validity. The main goal of creating the ABQ was to spark more research on burnout, since it wasn't studied to the extent that it should be in the field of sport psychology.

Burnout has been extensively studied before Raedeke provided an operational definition, as well as afterwards. The 3 main components can be broken down and influenced by different constructs, as well as all being influenced at once. Choosing the correct theoretical framework to use to present data is crucial in the research process, which is why researchers have to carefully choose which one best fits into their research. In regard to burnout, the Multidimensional Model of Leadership (Chelladurai, 1980) has been used extensively as a lens to evaluate results. Many motivations theories have also been used when analyzing burnout such as the sport entrapment model (Raedeke, 1997), self-determination theory (Deci & Ryan, 2000), and the engagement approach (Lonsdale et al, 2007). Several studies have used self-determination theory to conceptualize burnout, as its three components of autonomy, connectedness, and relatedness, work well with the three components of burnout (Harris and Watson, 2014). Many of the theories involving burnout are rooted from motivation and control, which are very similar to SDT.

A review conducted by Gould and Whitley (2009), on collegiate athletics, is consistent with the current literature review. Gould and Whitley introduced each theory behind burnout, and that the theories can be applied to collegiate settings. This information is vital in the current study, as the sample is collegiate student-athletes, and will be examined through previously

introduced theory. There are two main categories behind burnout theory, theories that are motivationally focused, and those that are not. Recently, the motivational theories have been most used when examining burnout. A researcher may not want to be limited by a singular theory, as Gould and Whitley (2009) stated, proposing that burnout is best viewed through a multivariate perspective.

Raedeke's and Smith's goal in 2001 to popularize the ABQ was realized, and research began using the ABQ, and their operational definition. Researchers have concluded several different causes to burnout and how they influence different aspects of burnout. In Division 1 collegiate athletes, Lai and Wiggins (2003) suggested that burnout rates increase from the beginning of the season to the end, although the athlete may not be experiencing burnout, the rates do increase, leading to believe a culmination of time can influence burnout. Athletes, coaches, and trainers need to be aware of the symptoms of burnout and be able to identify ways to combat burnout and communicate well with the athlete, especially towards the end of a season (Lai & Wiggins, 2003). Knowing that time has an influence on burnout in just one season, predictions can be made that as these cycles of seasons build up over an athlete's career; the amount of time involved in the sport can be a cause of burnout. Therefore, conducting research during the offseason of a sport can give the athlete a better understanding of how the season went and how they feel overall, rather than a state level of burnout.

Similar to Lai and Wiggins, Lemrye (2006) examined burnout throughout the course of elite swimmers entire season. Lemrye's research implies that an athlete, who has a negative affect, and who is reporting low levels of self-determination is more likely to experience burnout. The combination of negative affect and low self-determination leads to the athlete feeling less autonomous, resulting in a lower ability to cope with physical and emotional exhaustion, leading

to burnout (Lemrye, 2006). A lack of ability to cope with physical and emotional demands is detrimental to any athlete and a coach can also increase stress in an athlete (Price and Weiss, 2000), and could stem from a lack of self-concept development according to Coakley's model (1992). A coach who has a high level of burnout in his or herself and is more controlling in their style, leads to higher burnout rates in their athletes (Price & Weiss, 2000). On the other hand, coaches who let their athletes be active in setting their own goals, contributing to team decisions, and giving input about practice, resulted in lower reported levels of burnout (Price & Weiss, 2000). Price and Weiss's research in 2000 is indicative of the negative effects of controlling coaches and lack of autonomy placed on the athlete, resulting in a unidimensional self-concept. This self-concept limits the athlete's ability to cope with stressors, and their ability to healthily balance their demands and resources. The timing of conducting research is crucial in these studies as the researchers were able to gain knowledge on the athletes and how they felt at the beginning, middle, and end of the season. Knowing that athletes do report higher rates of burnout towards the end of the season, it is important to conduct research at a time that reveals athlete's true feeling of burnout, rather than a temporary feeling based on cycles of time.

Many researchers have found significance with different factors influencing burnout. These results must be looked at cautiously, though, as burnout is estimated to only affect 3% to 9% percent of athletes (Gould & Whitley, 2009). Through all of the past research on burnout, its antecedents and predictors have been gathered together by Goodger et al (2007). The research has identified 5 main factors preceding burnout, those being motivation; coping with adversity; responses to training and recovery; the role of significant others; and athlete identity (Goodger et al., 2007). Each one of these major influences is tied to different and similar burnout theories.

Motivation is clearly related to the self-determination theory, and is examined based on autonomy, relatedness, and connectedness. The second correlate of burnout involving coping with adversity is in line with Coakley's (1997) model, in regards to not being able to cope correctly due to a less developed self-concept. Thirdly, responses to training and recovery can be linked back to Smiths (1986) cognitive-affective stress model in relation to improper balance of demands and resources, and Silva's (1990) Negative Training Syndrome in relation to overtraining with lack of proper recovery time. Fourth, the role of significant others can fall into Coakley's (1997) model in regards to involvement in sport, whether that be parents encouragement, or interest in others pulling an athlete away from sport. Lastly, athlete identity is also identified as a major part of Coakley's (1997) model, due to development of a unidimensional self-concept. Each one of these correlates to burnout can be looked at through similar theories, and pull from different viewpoints. Examining each factor influencing burnout in detail is extremely important in gaining a true understanding of the phenomenon of burnout. Several factors have been shown to influence physical and mental exhaustion, reduced sense of accomplishment, and sport devaluation, whether it be all 3 components at once, or factors having influence on specific components of burnout. The root causes of burnout have been identified, as well as influencing factors, but what can be done to reduce burnout propensity in athletes? This is not an easy task, and most of the preventive methods are instilled in the athlete before burnout has a chance to develop. An athlete who possesses a harmonious passion for their sport, is less likely to experience burnout. (Martin and Horn, 2013). Measuring harmonious passion levels in early involvement in sport can be helpful in predicting burnout. Healthy early involvement in sport has been shown to be crucial in the development of athlete's coping skills and self-concept (Coakley, 1992). Fostering the attributes and factors that have been laid out in previous burnout

theory seems to be the best way to mitigate the propensity for burnout. Many specific things can be done to reduce the five main causes of burnout, but each cause can be attacked from a different approach. More importantly, is what factors are influencing how athletes respond to these root predictors of burnout and how athletes perceive these threats to burnout.

Leadership

Burnout can be influenced by many different specific events, factors, or even timelines. One of the most important factors that influences athlete's propensity of burnout is the leadership involved in their respective sports. For the current study, the multi dimensional model of leadership will be the theoretical framework used to examine coach behavior, perception, authenticity, and compatibility (Chelladurai, 1978). The MML examines leadership through 5 main components, training and instruction, democratic behavior, autocratic behavior, social support, and feedback. Within each one of these components, the leader has a prescribed behavior that either the organization expects or requires, a preferred behavior that the athletes want, and the actual behavior that the leader does. Congruency is a major factor in why the MML was chosen because when prescribed, preferred and actual behaviors are congruent there is more satisfaction within the group. When these components are incongruent, the group is less satisfied; when expectations are not met, frustration occurs. The main reasoning behind using the MML is because its theory is grounded in the LSS, which is the scale that will be used. The subscales within the LSS are the same as the MML, making the results and discussion easier to explain based on the leadership theory being used. The LSS was chosen over the RLSS because there has been no statistical comparison between the two, and the RLSS would be unnecessarily long for the current study (Tenenbaum & Eklund, 2007). The MML examines leadership through congruency with preferences of the athletes and coaches, and leadership effectiveness is

determined based on how congruent these factors are (Chelladurai, 1978). Other theories of leadership cannot compare to the effectiveness of the MML in relation to the measurements that are being used, but are worth mentioning.

The original leadership model was introduced by (Smith, Smoll, & Hunt, 1978), and was named the Mediation Model of Leadership. This model focuses on 3 main components, coaching behaviors, player's perceptions and recollections of these behaviors, and lastly, player's evaluative reactions. Later, in 1989, Smoll and Smith added situational and individual differences as influencers to the three main components of the model. Coaching behavior is examined through their personal goals, motives, intentions, predictive intentions, norms of coaches, measurement of player motivation, self-monitoring, and gender (Tenenbaum & Eklund, 2007). The players' perspective is examined through multiple constructs as well, those being age, gender, perception of coaching norms, the valence attached to coaching behavior, achievement motivation in regard to sport, competition anxiety, self esteem, and athletic self esteem (Tenenbaum & Eklund, 2007).

Just as the multidimensional model of leadership is measured with the LSS, the Mediation Model of Leadership is measured by a few surveys and questionnaires. The Coaching Behavior Assessment System (CBAS), is used to measure the coaches qualities and the Coaching Behavior Assessment System Perceived Behavior Scale (CBAS-PBS) is used to measure the athletes qualities in relation to the Mediation Model. The reason that this theory, as well as the corresponding scales is not being used is because many of the factors and components are irrelevant to the current study, and because according to a review done by Chelladurai and Riemer (1998), the mediation model does not address important issues such as coach responses, and training and instruction as well as the MML does.

In 2002, Horn developed the Model of Coaching Effectiveness, which states that many factors propagate behaviors in coaches and athletes, which then influences the athlete's motivation levels. Since this study is focused more on stress related theories in burnout and leadership, Horn's model will be acknowledged as relevant, but not being utilized for the current study. Along with Horn's model, the model of pursuit of excellence in sport has been used especially with elite performers, and contains many components such as creating a vision, intellectual stimulation, inspirational communication, individualized and supportive leadership, and ego and cognitive training (Tenenbaum & Eklund, 2007). Executive coaching and leadership, which is designed to build life skills and provide foundational leadership for athletes, can be seen as similar to the pursuit of excellence model.

The debate between choosing the right leadership theory and scale to use is shown when comparing the LSS to the CBAS, and other related leadership scales. The main reasoning behind choosing one over the other is the theory rooted behind each scale, as well as the constructs that are being examined. When determining which theory and scale to use, it is important to be aware of the majority of the possible sample size, as well as what outcome variables are being measured. With a sample size consisting mainly of football players, the multidimensional model of leadership fits best, due to its ability to recognize perceived, preferred, and actual coaching behaviors, as well as being linked to the LSS. The multidimensional model provides a great balance of coaching influence, as well as athlete perception, which is crucial when examining the influence of coaching authenticity on the five subscales of the LSS, as well as on burnout rate in the participating athletes. Foundationally, the MML, allows for flexibility and consistency in the process of data collection.

Perception

An athlete's perception of his or her coach is an area that has been heavily researched, especially in the field of sport and exercise psychology. Athlete perception can be defined as the way that the athlete sees an event, coach, or behavior from his or her own perspective (Isoard-Gauthier, 2012). This perception is what truly matters in the athlete's eyes, because what they see and experience is their reality. Because the current study is strictly looking at interactive sports only, it is important to identify how these athletes perceive their coaches behavior. Aleksic-Veljkovic et al (2016) chose to use the perception version of the leadership scale for sport when comparing team sports to individual sports. Individual sport athletes (or coactive sport athletes) showed to have statistically higher rating on 3 subscales of the LSS; training and instruction, social support, and positive feedback (Aleksic-Veljkovic et al, 2016). The interactive sport athletes were said to have a more "one-on-one" relationship with their athletes, which facilitated the 3 subscales being statistically higher than interactive sports (Aleksic-Veljkovic et al, 2016). Democratic and authoritarian styles of coaching show to be rated the same among coactive and interactive sports (Aleksic-Veljkovic et al, 2016).

Perception is important because "athlete perceptions of coach behavior are vital in determining how coaches influence their athletes" (Smith & Stoll, 2009, p. 1527). Not only do coaches care about how their athlete perceives them, but also, the athlete can be influenced by their perception of that coach. A coach who can accurately speak to their mental representation of their athletes, would be perceived to be more authentic to their athletes (Slezdak, 2015). A key point in perception is also coaches' abilities to accurately speak of themselves, which will be measured using the LSS for self-perception.

Recent research indicates that athletes who hold certain extraverted and positive qualities are more likely to perceive their coach through a positive lens (Hulyaasci, 2015). Contrary to

positivity and extraversion, neuroticism is related to athletes perceiving a less supportive relationship with the coach (Hulyaasci, 2015). These personality differences are worth noting due to some responses not lining up with previous literature, and possibly representing athletes who will never be able to perceive authentic coaching due to individual differences. Athletes who perceive their coaches in a positive way, according to the 5 subscales of the LSS, will be said to be influenced by the coaches' level of authenticity.

Authenticity

Coach authenticity is an area in sport psychology research that hasn't been researched heavily as a main influencer to burnout, based on athlete perceptions of their coaches. The idea of having a truly authentic coach is an attribute that many onlookers expect, therefore it seems as if researching something that is the bare minimum in coaching may not be necessary. Daily interactions with a coach that an athlete perceives as inauthentic can be said to become frustrating then, as the athletes expectations of experiencing an authentic coach is consistently not met. Authenticity is defined as having four separate but related components, awareness, unbiased processing, behavior, and relational orientation (Kernis & Goldman, 2006). In relation to Authentic Leadership theory, awareness refers to recognize him or her self's emotions, cognitions, beliefs and motives. Unbiased processing refers to how well one processes the accuracy and objectivity of relevant personal information. Authentic behavior is based on both awareness and unbiased processing, and involves the individual being genuinely self congruent (Fusco, O'Riordan & Palmer, 2015). And lastly, relational orientation is defined as being open, honest and sincere in interactions with others. This extensive definition will be used when speaking of authenticity in relation to coaching and leadership.

Authenticity applied to leadership has the same qualities, but is described and defined in action by multiple researchers. Walumbwa et al. 2008 describes authentic leadership as a consistent pattern of leadership that involves being self-aware, having a moral perspective, unbiased processing, and transparency in their interactions with their athletes. The importance of an authentic leader has also been shown to positively influence the relationship between subordinate and leader in many aspects such as trust in leadership (Wong & Cummings, 2009), productivity within the group (Hannah, Walumbwa & Fry, 2011), and psychological well-being (Toor & Ofori, 2009) as well as many more, (Fusco, O’Riordan & Palmer, 2015). The importance for this authentic behavior can allow for athletes to have a more genuine relationship with the coach, therefore leading to less frustration, more productivity, and better daily functioning, as shown by the research. A coach who can develop authentic tendencies and have a more congruent relationship with the athlete, will have a more productive and positive group (Fusco, O’Riordan & Palmer)

Coach authenticity has also been shown to be a factor in effective coaching. This factor of authenticity is best utilized for when the coach has an accurate representation of the athlete in their minds, allowing the coach to accurately state the requirements or expectations of the athlete (Szedlak et al., 2015). When a coach focuses on the athlete's requirements, then there is reduced perceptual incongruence from the athlete, as well as the preferred, required, and actual coach behavior to shine though accurately, based on Chelladurai’s Multidimensional Model of Leadership (Szedlak et al, 2015). Athletes feel more motivated and competent when "explicit performance expectations and corrective instruction" were given, "specifically after a performance attempt" (Buning & Thompson, 2015). Research shows that athletes prefer these specific expectations and requirements, matched with corrective instruction and authenticity. The

level of coach authenticity could be a very likely contributor to burnout in their athletes because there is less congruence in how the coach thinks he/she instructs and how the athlete perceives that style. The Authenticity Scale developed by Wood et al in 2008 will measure coach authenticity. This scale can be used in a sport setting, especially with leaders and within executive coaching (Susing et al, 2011). Making a coach self aware of their authenticity allows them to be more mindful of how their athletes will perceive them. "If the athletes goals, personality, and beliefs are consistent with those of their coach, the interaction of the individuals will likely be satisfactory to both parties producing a positive interpersonal atmosphere" (Kenow & Williams, 1999 p 257). When these psychological needs are not met, self-confidence, anxiety, and evaluation of communication effectiveness are influenced and the athlete can become frustrated (Kenow & Williams, 1999). Authenticity will be used as the mediating variable when comparing each coach-athlete dyad.

APPENDIX B

Demographic Information Athlete

Please circle or print the correct answer.

Age: _____

Please circle your gender identity:

Male

Non-Binary/ Genderfluid/ Genderqueer

Female

Not Sure

Transgender MTF (Male to Female)

Prefer to self-describe (please specify):

Transgender FTM (Female to Male)

Prefer not to say

Race:

Hispanic, Latino, or Spanish Origin

Not of Hispanic, Latino, or Spanish origin

Ethnicity:

African American

Caucasian

Hispanic

Native American

Asian/Pacific Islander Other: _____

Year in School: Freshman

Sophomore

Junior

Senior

Current position played: _____

Total years devoted to solely playing current sport: _____

Have you been injured for 1 week and/or are you currently injured and unable to play for at least 1 week? Yes No

Time of season: In season

Out of season

APPENDIX C

Demographic Information Coach

Please circle or print the correct answer.

Age: _____

Please circle your gender identity:

Male

Female

Transgender MTF (Male to Female)

Transgender FTM (Female to Male)

Non-Binary/ Genderfluid/ Genderqueer

Not Sure

Prefer to self-describe (please specify):

Prefer not to say

Race:

Hispanic, Latino, or Spanish Origin

Not of Hispanic, Latino, or Spanish origin

Ethnicity:

African American

Caucasian

Hispanic

Native American

Asian/Pacific Islander Other: _____

Current position coach: _____

Total years in current coaching position: _____

Time of season: In season

Out of season

APPENDIX D

Athlete Burnout Questionnaire

Please read each statement carefully and decide if you ever feel this way about your current sport participation. Your current sport participation includes all the training you have completed during this season. Please indicate how often you have had this feeling or thought this season by circling a number 1 to 5, where 1 means "I almost never feel this way" and 5 means "I feel that way most of the time." There are no right or wrong answers, so please answer each question as honestly as you can. Please make sure you answer all items. If you have any questions, feel free to ask.

	Almost never	Rarely	Some- times	Fre- quently	Almost always
1. I'm accomplishing many worthwhile things in my sport.	1	2	3	4	5
2. I feel so tired from my training that I have trouble finding energy to do other things.	1	2	3	4	5
3. The effort I spend in my sport would be better spent doing other things.	1	2	3	4	5
4. I feel overly tired from my sport participation.	1	2	3	4	5
5. I am not achieving much in my sport.	1	2	3	4	5
6. I don't care as much about my sport performance as much as I used to.	1	2	3	4	5
7. I am not performing up to my ability in	1	2	3	4	5

my sport.

8. I feel “wiped out” from my sport. 1 2 3 4 5

9. I’m not into my sport like I used to be. 1 2 3 4 5

10. I feel physically worn out from my sport. 1 2 3 4 5

11. I feel less concerned about being successful 1 2 3 4 5

in my sport than I used to.

12. I am exhausted by the mental and physical 1 2 3 4 5

demands of my sport.

13. It seems that no matter what I do, 1 2 3 4 5

I don’t perform as well as I should.

14. I feel successful at my sport. 1 2 3 4 5

15. I have negative feelings towards my sport. 1 2 3 4 5

APPENDIX E

Authenticity Scale

Below are 12 statements, which may or may not describe you. Using the 7-point scale ranging from “does not describe me at all” to “describes me very well”, please circle the number which best describes you for each of the following statements.

	Does not describe me at all			Describes me very well			
1. I think it is better to be yourself, than to be popular.	1	2	3	4	5	6	7
2. I don't know how I really feel inside.	1	2	3	4	5	6	7
3. I am strongly influenced by the opinions of others.	1	2	3	4	5	6	7
4. I usually do what other people tell me to do.	1	2	3	4	5	6	7
5. I always feel I need to do what others expect me to do.	1	2	3	4	5	6	7
6. Other people influence me greatly.	1	2	3	4	5	6	7

7. I feel as if I don't know myself very well. 1 2 3 4 5 6 7
8. I always stand by what I believe in. 1 2 3 4 5 6 7
9. I am true to myself in most situations. 1 2 3 4 5 6 7
10. I feel out of touch with the 'real me. 1 2 3 4 5 6 7
11. I live in accordance with my values and beliefs. 1 2 3 4 5 6 7
12. I feel alienated from myself. 1 2 3 4 5 6 7

APPENDIX F

Leadership Scale For Sports

(Athlete's Perception of Coach's Behaviour)

Each of the following statements describe a specific behaviour that a coach may exhibit. For each statement there are five alternatives:

1. ALWAYS; 2. OFTEN (about 75% of the time); **3. OCCASIONALLY** (50% of the time); **4. SELDOM** (about 25% of the time); **5. NEVER**

Please indicate your coach's actual behavior by placing an "X" in the appropriate space. Answer all items even if you are unsure of any. Please note that you are rating your present coach.

	1	2	3	4	5	
My coach:						
1. Sees to it that athletes work to capacity.	—	—	—	—	—	1
2. Asks for the opinion of the athletes on strategies for specific competitions.	—	—	—	—	—	2
3. Helps athletes with their personal problems.	—	—	—	—	—	3
4. Compliments an athlete for good performance in front of others.	—	—	—	—	—	4
5. Explains to each athlete the techniques and tactics of the sport.	—	—	—	—	—	5

6.	Plans relatively independent of the athletes.	—	—	—	—	—	6
7.	Helps members of the group settle their conflicts.	—	—	—	—	—	7
8.	Pays special attention to correcting athletes' mistakes.	—	—	—	—	—	8
9.	Gets group approval on important matters before going ahead.	—	—	—	—	—	9
10.	Tells an athlete when the athlete does a particularly good job.	—	—	—	—	—	10
11.	Makes sure that the coach's function in the team is understood by all athletes.	—	—	—	—	—	11
12.	Does not explain his/her actions.	—	—	—	—	—	12
13.	Looks out for the personal welfare of the athletes.	—	—	—	—	—	13
14.	Instructs every athlete individually in the skills of the sport.	—	—	—	—	—	14
15.	Lets the athletes share in decision making.	—	—	—	—	—	15
16.	Sees that an athlete is rewarded for a good performance.	—	—	—	—	—	16
17.	Figures ahead on what should be done.	—	—	—	—	—	17

18.	Encourages athletes to make suggestions for ways to conduct practices.	—	—	—	—	—	18
19.	Does personal favours for the athletes.	—	—	—	—	—	19
20.	Explains to every athlete what should be done and what should not be done.	—	—	—	—	—	20
21.	Lets the athletes set their own goals.	—	—	—	—	—	21
22.	Expresses any affection felt for the athletes.	—	—	—	—	—	22
23.	Expects every athlete to carry out one's assignment to the last detail.	—	—	—	—	—	23
24.	Lets the athletes try their own way even if they make mistakes.	—	—	—	—	—	24
25.	Encourages the athlete to confide in the coach.	—	—	—	—	—	25
26.	Points out each athlete's strengths and weaknesses.	—	—	—	—	—	26
27.	Refuses to compromise on a point.	—	—	—	—	—	27
28.	Expresses appreciation when an athlete performs well.	—	—	—	—	—	28

29.	Gives specific instructions to each athlete on what should be done in every situation.	—	—	—	—	—	29
30.	Asks for the opinion of the athletes on important coaching matters.	—	—	—	—	—	30
31.	Encourages close and informal relations with athletes.	—	—	—	—	—	31
32.	Sees to it that the athletes' efforts are coordinated.	—	—	—	—	—	32
33.	Lets the athletes work at their own speed.	—	—	—	—	—	33
34.	Keeps aloof from the athletes.	—	—	—	—	—	34
35.	Explains how each athlete's contribution fits into the total picture.	—	—	—	—	—	35
36.	Invites the athletes home.	—	—	—	—	—	36
37.	Gives credit when it is due.	—	—	—	—	—	37
38.	Specifies in detail what is expected of athletes.	—	—	—	—	—	38
39.	Lets the athletes decide on plays to be used in a game.	—	—	—	—	—	39

40. Speaks in a manner which discourages questions.

— — — — — 40

- | | | | | | | | |
|-----|--|---|---|---|---|---|----|
| 6. | Plan relatively independent of the athletes. | — | — | — | — | — | 6 |
| 7. | Help members of the group settle their conflicts. | — | — | — | — | — | 7 |
| 8. | Pay special attention to correcting athletes' mistakes. | — | — | — | — | — | 8 |
| 9. | Get group approval on important matters before going ahead. | — | — | — | — | — | 9 |
| 10. | Tell an athlete when the athlete does a particularly good job. | — | — | — | — | — | 10 |
| 11. | Make sure that the coach's function in the team is understood by all athletes. | — | — | — | — | — | 11 |
| 12. | Do not explain my actions. | — | — | — | — | — | 12 |
| 13. | Look out for the personal welfare of the athletes. | — | — | — | — | — | 13 |
| 14. | Instruct every athlete individually in the skills of the sport. | — | — | — | — | — | 14 |
| 15. | Let the athletes share in decision making. | — | — | — | — | — | 15 |
| 16. | See that an athlete is rewarded for a good performance. | — | — | — | — | — | 16 |
| 17. | Figure ahead on what should be done. | — | — | — | — | — | 17 |

- | | | | | | | | |
|-----|---|---|---|---|---|---|----|
| 18. | Encourage athletes to make suggestions for ways to conduct practices. | — | — | — | — | — | 18 |
| 19. | Do personal favours for the athletes. | — | — | — | — | — | 19 |
| 20. | Explain to every athlete what should be done and what should not be done. | — | — | — | — | — | 20 |
| 21. | Let the athletes set their own goals. | — | — | — | — | — | 21 |
| 22. | Express any affection felt for the athletes. | — | — | — | — | — | 22 |
| 23. | Expect every athlete to carry out one's assignment to the last detail. | — | — | — | — | — | 23 |
| 24. | Let the athletes try their own way even if they make mistakes. | — | — | — | — | — | 24 |
| 25. | Encourage the athlete to confide in the coach. | — | — | — | — | — | 25 |
| 26. | Point out each athlete's strengths and weaknesses. | — | — | — | — | — | 26 |
| 27. | Refuse to compromise on a point. | — | — | — | — | — | 27 |
| 28. | Express appreciation when an athlete performs well. | — | — | — | — | — | 28 |

29.	Give specific instructions to each athlete on what should be done in every situation.	— — — — —	29
30.	Ask for the opinion of the athletes on important coaching matters.	— — — — —	30
31.	Encourage close and informal relations with athletes.	— — — — —	31
32.	See to it that the athletes' efforts are coordinated.	— — — — —	32
33.	Let the athletes work at their own speed.	— — — — —	33
34.	Keep aloof from the athletes.	— — — — —	34
35.	Explain how each athlete's contribution fits into the total picture.	— — — — —	35
36.	Invite the athletes home.	— — — — —	36
37.	Give credit when it is due.	— — — — —	37
38.	Specify in detail what is expected of athletes.	— — — — —	38
39.	Let the athletes decide on plays to be used in a game.	— — — — —	39

40. Speak in a manner which discourages questions.

— — — — —

LIST OF TABLES

Table 1

Descriptive Statistics and skewness values of the LSS and ABQ subscales.

	Mean	SD	Skewness
Reduced Sense of Accomplishment	2.39	.859	1.82
Exhaustion	2.71	.997	1.84
Sport Devaluation	2.09	.994	3.63
Training and Instruction	.391	.931	.320
Democratic Behavior	.015	.737	1.98
Social Support	.399	.749	2.27
Positive Feedback	.679	1.26	.703
Authentic Living	6.36	.526	
Accepting External Influence	3.86	.974	
Self-Alienation	1.39	.441	

Table 2

Correlations of LSS congruency scores and ABQ subscale scores

	RA	E	SD
Training and Instruction	.244*	.284*	.256*
Democratic Behavior	.354**	.461**	.385**
Social Support	.331**	.426**	.343**
Positive Feedback	.102	.169	.122

Note. RA = Reduced sense of accomplishment; E = Emotional and physical exhaustion; SD = Sport devaluation; * $p < .05$; ** $p < .01$

