THE RELATIONSHIP BETWEEN PERSONALITY TRAITS AND

COACHABILITY IN FEMALE COLLEGE SOFTBALL ATHLETES

BY

Submitted to the graduate degree program in the
Department of Health, Sport, and Exercise Sciences
and the Graduate Faculty of the
University of Kansas
in partial fulfillment of the requirements for the degree of
Doctor of Philosophy

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ABSTRACT

Athletic coaches understand the impact of athletes' personalities on team dynamics and success. As a result, coaches try to select athletes who possess and display specific attributes. One attribute coaches at all levels desire is coachability. The coachability construct is not well understood in the sport psychology or coaching education literature, nor have relationships between personality traits and coachability been examined. This study used survey methodology to investigate the relationships between personality traits from the Agreeableness and Emotional Stability domains and coachability in 190 NCAA Division I and II female softball athletes. Results indicated that Anger and Immoderation were negatively related to coachability and Cooperation was positively related to coachability. Results also suggested that the linear combination of Anger and Immoderation might best predict whether an athlete will be more or less coachable. A better understanding of behaviors that comprise the coachability construct was also gained. Potential methods of using this knowledge to recruit more coachable athletes and enhance team dynamics are discussed.

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ACKNOWLEDGEMENTS

Although the cover page of this dissertation bears only one name, many people have contributed to my academic journey. Several have played a significant role and deserve special recognition.

First and foremost, I thank the college head coaches and athletes who participated in this study. Without their willingness to participate, this study would not have been possible.

Second, I extend my gratitude to Dr. Sarah Price and Dr. Jim LaPoint for their assistance in getting me started on this path. I also thank the members of my committee, Dr. Lisa Wolf-Wendel, Dr. Mary Fry, Dr. Bernie Kish, and Dr. Bruce Frey, for their thoughtful input and suggestions.

I owe a very special thank you to Dr. Angela Lumpkin who became my advisor and mentor quite late in my doctoral program, yet continually went well above and beyond the call of duty to help me complete this journey. I am inspired by her commitment to students and learning and will forever be grateful for all the time, expertise, support, and encouragement she so graciously provided.

Last, but not least, to my inner circle of friends and family, thank you for your patience, friendship, and love. Whether you brought me lunch at the computer, helped prepare survey packets, ran errands so I could write all weekend, encouraged me to take a much-needed break occasionally, or simply remembered to ask how my writing was going, you have each contributed to the completion of this dissertation in your own special ways. I am fortunate to have each of you in my life.

Chapter 1

With the rise in women's intercollegiate sports in the United States and increase in financial commitment from institutions for these teams, coaches face additional pressures to win. At the same time, coaches are expected to keep athletes happy, retain athletes in their programs, and create and maintain a positive atmosphere for all athletes. However, successfully blending the personalities of 15-24 female college athletes into one effective and successful team can be quite a challenge for coaches. Women's basketball coach Pat Summitt (1998), who has won more games than any college basketball coach, male or female, articulates this challenge in this way:

> Bringing together disparate personalities to form a team is like a jigsaw puzzle…We want to make sure our players all fit together properly and complement each other so that we don't have a big piece, a little piece, an oblong piece and a round piece. If personalities work against each other, as a team you'll find yourselves spinning your wheels. (p. 144)

Summitt's puzzle analogy demonstrates the importance of personality compatibility and its contribution to team dynamics and effectiveness in sport teams. In sport teams, compatibility refers to the degree of mesh or fit between each team member's and coach's attitudes, personalities, or abilities (Carron, Hausenblas, & Eys, 2005). How well personalities fit or mesh within a team influences team dynamics, or the way the team develops, interacts, and behaves (Carron et al., 2005) as well as overall team effectiveness.

Team members possess a variety of attributes that affect group dynamics and processes (Carron et al., 2005). One of the most important is personality. Athletic teams are more effective and athletes and coaches are more satisfied when team members' personalities are compatible (Carron et al., 2005). Conversely, as Summitt's statement implies, incompatible personalities usually inhibit team processes and have a detrimental impact on team dynamics and effectiveness.

College coaches know athletes' personalities impact team dynamics and effectiveness and understand the consequences of failing to get compatible personalities on their teams (McClendon, 2009; Solomon & Rhea, 2008; Summitt & Jenkins, 1998). In fact, coaches routinely cite many personality attributes and behaviors they desire in athletes, including positive attitude, integrity, ability to perform under pressure, positive interactions with others, honesty, mental toughness, positive reaction to failure, and low anxiety (National Fastpitch Coaches Association, 2009; Solomon & Rhea, 2008). Additionally, coaches at all levels and in nearly all sports indicate they desire athletes who are coachable (Becker & Solomon, 2005; Giacobbi, 2000; Giacobbi, Roper, Whitney, & Butryn, 2002; Gould, Dieffenbach, & Moffatt, 2002; McClendon, 2009; National Fastpitch Coaches Association, 2009; Solomon & Rhea, 2008; Summit & Jenkins, 1998). While coaches place a high value on coachability and can usually easily identify more coachable and less coachable athletes on their teams, few coaches can clearly articulate how they evaluate coachability during the recruiting process. Most coaches can recall instances where they failed to accurately assess a potential athlete's coachability and maybe even

painfully remember the impact that a recruiting mistake had on team dynamics and effectiveness (McClendon, 2009; Solomon & Rhea, 2008).

Accurately evaluating personality traits that comprise coachability during the recruitment process is very difficult because coaches typically rely on two primary methods of assessing prospective athletes: observing them during competitions and talking to people who know the athletes (McClendon, 2009; Solomon & Rhea, 2008). Unfortunately, these methods do not always provide coaches with a true perspective of an athlete's personality traits and associated behaviors for at least two reasons. First, the National Collegiate Athletic Association (NCAA) has stringent rules regarding the number of observations and face-to-face contacts coaches can have with prospective athletes. The limited time permitted is seldom enough to gain a true perspective of an athlete's core personality traits and behavioral tendencies. As a result, coaches often talk with others who are familiar with the athlete. While these conversations may provide valuable insights in some cases, athletes, parents, and youth coaches have become savvy about the college recruiting process. In essence, athletes know how to behave while college coaches are observing. Likewise, parents, youth coaches, and others who have a vested interest in that athlete receiving a college scholarship know what to say when coaches talk with them. Thus, they often speak quite purposefully and selectively in order to accomplish the primary objective of helping the athlete secure an athletic scholarship. Unfortunately, failing to accurately assess coachability often results in incompatible personalities and unpleasant experiences for everyone -- the athlete, other team members, and the coaching staff.

Statement of the Problem

Even though coaches want athletes who are coachable, sport scholars have failed to adequately examine coachability. In fact, the coachability construct remains a relatively elusive and complex construct in the sport psychology and coaching education literature. Consequently, there is limited practical information coaches can use to enhance the probability of recruiting more coachable athletes for their teams.

Giacobbi (2000) attempted to define and measure coachability and concluded that coachability includes intensity of effort, trust and respect for coaches, openness to learning, coping with criticism, working with teammates, and reaction to feedback. Giacobbi and colleagues (2002) also observed that coachability included being motivated, listening to coaches and being receptive to coaching and change, responding positively to negative reinforcement, being flexible and adapting to the unexpected, and displaying low frustration (Giacobbi et al., 2002). However, the coachability construct is still not clearly understood and specific personality traits that may be linked to being more coachable have not been identified. Consequently, practical methods to help coaches better identify, evaluate, and select more coachable athletes have not been developed.

The gap in the sport literature is interesting because other organizations have recognized the relationship between personality traits and group dynamics and performance for years. In fact, a significant body of organizational and small group literature links individual and collective team personality traits to group processes and productivity in work teams (Barrick, Stewart, Neubert, & Mount, 1998; Bell, 2007; Peeters, Tuijl, Rutte, & Reymen, 2006). This study will add to the sport literature by

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examining the relationship between personality traits and coachability in sport teams. The outcomes of this study could lead to (1) a better understanding of what personality traits are most closely associated with being coachable and (2) the establishment of a practical method for better identifying and evaluating these personality traits in athletes during the recruiting process.

Rationale for Study

The most widely utilized conceptual framework in personality research in recent years is the Five Factor Model (FFM) of personality (Costa & McCrae, 1992). The FFM conceptualizes personality through five, large global constructs: Extraversion; Conscientiousness; Agreeableness; Neuroticism or Emotional Stability; and Openness to Experience. Each of these global constructs is comprised of several, more specific personality facets. Extraversion is exhibited by being talkative, outgoing, assertive, dominant, and highly social (McCrae & John, 1992; Peeters et. al., 2006). Conscientiousness is demonstrated by being organized, self-disciplined, self-motivated, responsible, achievement- and task-oriented, hard-working, and persevering (Bell, 2007; Van Vianen & De Dreu, 2001). Agreeableness is exhibited by being trusting, compliant, tolerant, honest, sympathetic, and moral (Barrick et al., 1998; Caspi, Roberts, & Shiner, 2005; John & Srivastava, 1999; Van Vianen & De Dreu, 2001). Emotional Stability refers to the degree to which a person is anxious, angry, easily frustrated, moody, and insecure in relationships (Caspi et al., 2005; Van Vianen & De Dreu, 2001). Finally, openness to experience includes such characteristics as being curious, adaptive, creative, and broad-minded (Driskell, Goodwin, Salas, & O'Shea, 2006; Peeters et al., 2006).

Despite its acceptance among personality researchers from various disciplines, the FFM conceptual framework has seldom been used in sport science research. This is intriguing because like many work teams, college athletic teams work together for long periods of time. Unlike work teams, however, athletes on teams also travel together, eat together, live together, and spend inordinate amounts of time in close proximity with each other. Consequently, it seems plausible that personality traits of team members, especially those which influence relationships, would be even more important to team processes and effectiveness in sport teams than in organizational work teams.

Coaches want athletes who work well with their teammates and who are respectful, honest, moral, compliant, and receptive to coaching (Becker & Solomon, 2005; McClendon, 2009; National Fastpitch Coaches Association, 2009). Several of these traits are associated with Agreeableness. Working well with others, showing respect, and being receptive to coaching have been linked to coachability (Giacobbi, 2000; Giacobbi et al., 2002). Thus, it seems reasonable to hypothesize that some components of coachability might be related to personality traits in the Agreeableness domain. Coaches aspire to find team members who are confident, able to perform under pressure, and accept feedback and criticism without getting angry or frustrated, behaviors associated with Emotional Stability and linked with coachability (Giacobbi, 2000; Giacobbi et al., 2002; National Fastpitch Coaches Association, 2009).

Since the FFM framework has seldom been utilized with sport teams and the relationship between personality traits and coachability has not been thoroughly examined, many questions remain unanswered. Perhaps the most fundamental

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question is, which personality traits from the Agreeableness and Emotional Stability domains are the best predictors of coachability? Do athletes who are more coachable possess and display specific personality traits from the Agreeableness and Emotional Stability domains that are statistically different from athletes who are less coachable? If so, which personality traits from those two domains distinguish more coachable from less coachable athletes? Is there a set of questions that could help coaches better assess personality traits most closely associated with coachability?

Purpose of Study and Research Questions

The purpose of this study was to examine the relationship between personality traits from the Agreeableness and Emotional Stability domains and coachability in female college softball teams in order to better understand which personality traits are most closely associated with being coachable and to begin developing a practical method of better identifying and evaluating these personality traits during recruitment. Specifically, this study sought to answer the following research questions:

1) Can personality traits from the Agreeableness and Emotional Stability domains predict whether or not an athlete will be more or less coachable?

2) Do more coachable athletes possess personality traits from the Agreeableness and Emotional Stability domains that are different than those of less coachable athletes?

3) Are there specific questions that could help coaches better assess the personality traits most closely associated with coachability?

Research Hypotheses

- Hypothesis 1: Personality traits from the Agreeableness and Emotional Stability domains can predict Coachability.

- Hypothesis 2: There will be a positive correlation between Trust, Morality, Altruism, Cooperation, and Sympathy from the Agreeableness domain and Coachability for athletes who have been identified by their coaches as more coachable.

- Hypothesis 3: There will be a negative correlation between Anxiety, Anger, Depression, Self-consciousness, Immoderation, and Vulnerability from the Emotional Stability domain and Coachability for athletes who are identified by their coaches as more coachable.

- Hypothesis 4: Athletes who are rated by coaches as being more coachable will display personality traits from the Agreeableness and Emotional Stability domains that are significantly different than those of athletes who are rated as less coachable.

Definition of Terms:

- Agreeableness: Agreeableness refers to the global personality construct comprised of six individual personality traits: Trust; Morality; Altruism; Cooperation; Modesty; and Sympathy. The six facets of Agreeableness identified above will be predictor variables in this study.

- Coachability: Coachability will be operationally conceptualized as a combination of the following factors suggested by Giacobbi (2000): 1) intensity of effort; 2) trust and respect for coaches; 3) willingness to listen, learn, and change;

4) positive interactions with others; and 5) reaction to negative reinforcement, criticism, and feedback. It is important to note that athletic ability, skill, and performance are not included in this definition and will not be examined in this study. Coachability will serve as the criterion variable.

- Emotional Stability or Neuroticism: Emotional Stability refers to the global personality trait comprised of six lower-level traits: Anxiety; Anger; Depression; Self-consciousness; Immoderation; and Vulnerability. This study will use Emotional Stability to describe these traits rather than Neuroticism, which often carries a more negative, clinical connotation. The six facets of Emotional Stability identified above will be predictor variables in this study.

- Personality: Personality refers to a set of traits and characteristics that influence an individual's tendency to behave, think, and feel in certain consistent ways (Roberts, Caspi, & Moffitt, 2001). In this study, personality will be operationally defined according to the FFM personality framework and will focus on two specific personality domains: Agreeableness and Emotional Stability.

Assumptions

1. Each athlete who participates in this study possesses enough self-awareness to evaluate herself accurately and complete the personality survey thoughtfully, honestly, and independently. Directions for completing the Athlete Characteristics Survey specifically stated that coaches would not see athletes' responses and participating athletes were instructed to place their completed personality surveys in an individual envelope and seal the envelope themselves. Items associated with

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specific personality facets were distributed throughout the instrument, and items were phrased both positively and negatively.

2. Participating head coaches have more coachable and less coachable athletes on their teams and identified and evaluated their more coachable and less coachable athletes thoughtfully, honestly, independently, and according to the operationally defined characteristics of coachability identified above. Coaches did not include athletic ability, skill development, or performance in their evaluations.

Significance of Study

Despite the fact that college athletic coaches consistently cite the importance of coachability in athletes, the coachability construct has not been adequately explored in the sport psychology or coaching education literature. Consequently, coachability remains a rather elusive construct, and very little practical knowledge about how to better evaluate coachability exists. The limited research on the coachability construct conducted thus far by Giacobbi and colleagues (2000; 2002) was based primarily on semi-structured interviews with a small group of NCAA Divisions I and II team and individual sport college coaches and athletes. From these interviews, Giacobbi (2000) developed a coachability instrument and administered it to NCAA Divisions I, II, and III athletes. This study builds on Giacobbi and colleagues' (2000; 2002) research on coachability by surveying college coaches from a female team sport to better understand what behaviors those coaches believe distinguish more coachable from less coachable athletes. Thus, this study will provide additional insight about specific behaviors coaches of a female team sport associate with the coachability construct.

This study also contributes to the sport personality literature. With the exception of intensity of effort, the behaviors Giacobbi and his colleagues identified (trust and respect for coaches; working with teammates; openness to learning new skills; and coping with and reacting to criticism, negative feedback, or reinforcement) appear to be most closely affiliated with the personality domains of Agreeableness and Emotional Stability. Sport scholars have not yet used the FFM framework to examine potential links between coachability and specific personality traits. However, given the emphasis coaches place on attributes like coachability, Giacobbi (2000) encouraged researchers to investigate these potential relationships, and Solomon and Rhea (2008) encouraged researchers and practitioners to better define broad constructs like coachability and establish methods of evaluating those traits in athletes. Thus, perhaps the most important potential implication of this study is to identify which personality traits are most closely associated with coachability.

In addition to contributing to the literature, this study also has practical implications. Since personality traits appear to be primarily stable during the college years (Roberts et al., 2001; Robins, Fraley, Roberts, & Trzensniewski, 2001), better understanding the relationship between personality traits and coachability could result in improving team dynamics and compatibility between athletes and coaches. Coach-athlete compatibility is an important component of satisfaction, cohesion, and team dynamics (Carron & Dennis, 2001), and compatibility between coaches and athletes may be especially important in women's teams. Some scholars believe women tend to view their identities based on relationships and connections they form with others, and recent advancements in neuropsychology have led some researchers to attribute

differences in the way men and women perceive and value relationships to differences in hormones and brain structure (Brizendine, 2006; Gilligan, 1982; Josselson, 2005).

Cohesion, which is based on relationships with others, has a stronger relationship with performance in women's teams than men's teams (Carron, Colman, Wheeler, & Stevens, 2002). Likewise, female athletes' perceptions of degree of compatibility with their coaches influenced how athletes evaluated coaching behaviors (Kenow & Williams, 1997). Specifically, female athletes who believed they were more similar to their coaches in goals, personalities, and beliefs evaluated coaching behaviors more positively than did athletes who perceived they were less compatible with their coaches. Thus, it appears that coach-athlete compatibility may be especially important in female teams.

Coaches are quite astute at evaluating athletic talent. However, when athletic talent is nearly equal among several prospective athletes, coaches often seek additional information on intangible attributes like coachability to select athletes who they believe will be most compatible. Broad constructs like coachability are challenging to evaluate, though, because the specific components of the construct itself have not been clearly identified, it is unclear what core personality traits may be most closely related, and methods of ferreting out those traits during recruitment have not been developed.

Better understanding the coachability construct and specific personality traits most closely related to the coachability construct could provide coaches with practical information they can utilize during the recruiting process to help select more

coachable and more compatible athletes for their teams. Coaches could make a more

concerted effort to observe specific behaviors themselves, and they could also

develop a better recruiting approach, which might include incorporating a specific set

of questions that would provide insight about personality traits closely linked with

coachability. In essence, coaches would have a better understanding of what specific

personality traits to look for and how to better isolate and evaluate those traits during

the recruitment process to enhance their probability of recruiting more coachable

athletes.

Chapter 2

Review of Literature

Opportunities for female athletes to continue their sport participation in

college have increased significantly in the last 33 years. In 1968, only 16,000 female

athletes participated in intercollegiate athletics within institutions holding

membership in the National Collegiate Athletic Association (NCAA); in 2010, that

number has grown to over 180,000 (Acosta & Carpenter, 2010). Not only have

institutions increased the number of sports available to female athletes, but they have

also increased financial support for these programs. Along with increased

opportunities and financing has come an increased expectation to consistently

perform at a high level while creating and maintaining a satisfactory environment for

athletes. Meeting these expectations often creates quite a challenge for college

coaches because in addition to recruiting talented athletes, it requires successfully

blending and managing the individual personalities of 15-24 female athletes.

Coaches understand that personalities of team members and coaches impact

team dynamics, or the way a team develops, interacts, and behaves (Carron et al.,

2005). They also know that when personalities are compatible, athletes and coaches

are more satisfied and the team is more effective (Carron et al., 2005). In fact, when

there is a high degree of coach-athlete compatibility, athletes view coaching

behaviors more positively (Kenow & Williams, 1997). On the other hand,

incompatible personalities leading to conflicts between athletes or between coaches

and athletes can wreak havoc on a team as group dynamics pioneer Shaw (1981)

points out:

…when group members have personality attributes which predispose

them to behave in compatible ways, the group atmosphere is

congenial, the members are relaxed, and group functioning is more

effective. On the other hand, when member attributes lead to

incompatible behaviors, members are anxious, tense, and/or

dissatisfied and group functioning is less effective. (p. 238)

Thus, personality traits of team members influence the overall functioning of

the team, or team dynamics, in either positive or negative ways. Specific personality

traits like dependability, responsibility, and emotional stability, for example, tend to

enhance group effectiveness (Carron et al., 2005). On the other hand, irresponsibility,

dishonesty, and immaturity typically disrupt team dynamics and detract from team

effectiveness.

Since coaches recognize the impact of personalities on team dynamics, they

look for specific attributes and behaviors when selecting athletes for their teams

(Becker & Solomon, 2005; National Fastpitch Coaches Association, 2009; Solomon

& Rhea, 2008). One attribute coaches cite most often is coachability. Coaches at all

levels want athletes who are coachable (Gould et al., 2002; McClendon, 2009;

National Fastpitch Coaches Association, 2009; Solomon & Rhea, 2008). Athletes

who are not coachable disrupt the coaching process and often disrupt team dynamics

and effectiveness, often leading to unpleasant experiences for everyone – the athlete,

other team members, and the coach.

Even though coaches prefer to work with coachable athletes, few can clearly

articulate how they evaluate coachability during the recruiting process. This may be

because coachability has not been thoroughly examined in the sport psychology or coaching education literature. As a result, the construct is not well understood and relationships between specific personality traits and coachability have not yet been identified. Consequently, coaches have little practical knowledge regarding what personality traits may be most closely related to being more coachable or how to better isolate these traits during the recruiting process to gain insights about an athlete's coachability. Better understanding what personality traits are most closely associated with being coachable and having a practical method for better identifying and evaluating these traits during recruitment would potentially be quite valuable to coaches – and, it may be valuable to sport psychologists who work with athletes and teams as well.

The following review of literature will examine personality research in sport. It will begin with a brief historical overview of personality research, in general, which will highlight some of the complexities of personality research as well as the significance of the Five Factor Model (FFM) of personality (Costa & McCrae, 1992). The next section will briefly discuss the five global factors of the FFM and then summarize the research regarding personality stability versus change during the college years. The remainder of the review will focus specifically on personality research in sport that has utilized the FFM or identified the personality attributes coaches value in prospective athletes. One of the most highly valued attributes, coachability will then be examined. This section will include a discussion of the constructs associated with coachability and how these constructs may be associated with specific personality traits within the FFM of personality. The literature review

will conclude with a recommendation for utilizing the Agreeableness and Emotional Stability domains of the FFM to examine the relationship between specific personality traits and coachability in female college softball athletes.

History of Personality Research

For hundreds of years, specific phrases have been used to describe individual differences or traits that distinguish people from other people. For example, coaches might describe an athlete as "hard-working and coachable," or "lazy and stubborn." The individual traits and characteristics that cause people to behave, think, and feel in certain consistent ways are known as *personality* (Roberts et al., 2001). Though scholars have been seriously examining personality since at least the early 1900s, early personality research was stymied by disagreements among scholars regarding the names and definitions of important traits, appropriate methods of accurately measuring these traits, and a general failure to develop meaningful theory (John & Srivastava, 1999; McCrae & John, 1992; Roberts et al., 2001).

In the mid-1930s, Allport proposed that the words and phrases used to characterize people through natural language provided the most socially relevant and salient personality identifiers and compiled a list of 18,000 words describing personality (John, Naumann, & Soto, 2008; John & Srivastava, 1999). Cattell narrowed Allport's extensive list to 4,500 trait terms, used factor analysis to group these terms into 16 broad variables, and created one of the first personality assessment instruments, the 16 Personality Factor (16PF) questionnaire (John & Srivastava, 1999; Vealey, 2002).

By the 1960s, Tupes and Christal (1961) narrowed the list of personality variables to five primary factors (John et al., 2008). Norman (1963) and others replicated this study and identified these factors: Extraversion vs. Surgency; Agreeableness; Conscientiousness; Emotional Stability vs. Neuroticism; and Culture (John & Srivastava, 1999). After decades of controversy and debate in personality research, most scholars agree with the conceptualization of five major, higher order personality constructs (Caspi et al., 2005; John et al., 2008; McCrae & Costa, 2008; Robins et al., 2001). These five global personality constructs, often called the Big Five (Goldberg, 1981) or the Five Factor Model (Costa & McCrae, 1992), have provided a common framework for organizing personality research. Since its inception, researchers have used the FFM in a wide variety of research settings to account for individual differences in emotional, interpersonal, experiential, attitudinal, and motivational styles (McCrae et al., 2000).

The Five Factor Model of Personality

As its name implies, the Big Five (Goldberg, 1981) or FFM (Costa & McCrae, 1992) conceptualizes personality through five global constructs: Extraversion; Conscientiousness; Agreeableness; Neuroticism or Emotional Stability; and Openness to Experience. These five global constructs lie at the very top of the personality trait hierarchy, with each global construct comprised of several, more specific behavioral traits (John et al., 2008; McCrae & John, 1992). The following sections will examine each of the five global factors to provide a better understanding of each broad global construct as well as the facet-level personality traits that comprise each.

Extraversion. The first higher order global trait, Extraversion, is exhibited behaviorally by being talkative, outgoing, dominant, optimistic, energetic, expressive, and highly social (McCrae & John, 1992; Shiner 2006). Extraverts have an energetic approach toward the social and mental world and like to be the center of attention, while introverts tend to be quiet, inhibited, and content to follow others (Caspi et al., 2005; John & Srivastava, 1999). Extraverts are highly socially oriented and typically stand out in a crowd.

Agreeableness. The second global factor, Agreeableness, is the trait most closely related with establishing positive relationships with others. Agreeable people possess a communal orientation and are altruistic, honest, moral, tender-minded, modest, cooperative, trusting, tolerant, and willing to accommodate others' wishes (Barrick et al., 1998; Caspi et al., 2005; John & Srivastava, 1999; Van Vianen & De Dreu, 2001). Agreeable people are also more astute at resolving conflict when conflict does occur (Wood & Bell, 2008). On the other hand, individuals with low levels of Agreeableness are aggressive, rude, spiteful, stubborn, cynical, and manipulative (Shiner, 2006).

Conscientiousness. The most consistently reported personality predictor and trait with the strongest relationship to individual and team job performance is Conscientiousness (Barrick et al., 1998; Bell, 2007; Halfhill, Nielsen, Sundstrom, & Weilbaecher, 2005; Halfhill, Sundstrom, Lahner, & Nielson, 2005). Conscientiousness refers to the ability to control impulses and stay focused on tasks and goals (John & Srivastava, 1999). Highly Conscientious people think before they act, can delay gratification, follow norms and rules, and plan, organize, and prioritize

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tasks (John & Srivastava, 1999). They are responsible, organized, self-disciplined, achievement-oriented, hard working, and exhibit maximum effort and perseverance toward individual and team goals (Van Vianen & De Dreu, 2001). People with low levels of Conscientiousness, however, tend to be irresponsible, unreliable, careless, and less persistent (Shiner, 2006).

Emotional Stability. The fourth global trait, Emotional Stability or Neuroticism, refers to levels of negative emotionality (John & Srivastava, 1999). Like Agreeableness, Emotional Stability is closely related to relationship-oriented team processes. People high in Emotional Stability are calm, poised, self-confident, and secure with decisions (Van Vianen & De Dreu, 2001). On the other hand, individuals low in Emotional Stability are anxious, vulnerable, tense, moody, angry, easily frustrated, and insecure in relationships (Caspi et al., 2005; Shiner, 2006).

Openness to Experience. The final FFM trait, Openness to Experience, is also the least understood and researched of the five traits (John & Srivastava, 1999). Most scholars view Openness to Experience as a combination of intellectual, cultural, and creative interests as well as a general willingness to be open-minded rather than close-minded (Driskell et al., 2006; John & Srivastava, 1999; McCrae & John, 1992). However, Openness to Experience is not in any way directly related to one's actual level of intelligence. Instead, intellect refers to characteristics like curiosity, adaptability, cleverness, and insightfulness (Caspi et al., 2005).

It is important to note that the Big Five (Goldberg, 1981), or FFM (Costa & McCrae, 1992), is not a theory of personality (McCrae & Costa, 2008). Instead, it is a generally accepted conceptual framework of personality structure that has stimulated

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extensive research and led to the development of several new personality theories (John et al., 2008). It has also contributed to the continuing debate among scholars about how personality structure originates and develops. At the core of this debate lie differences in philosophical orientations. For example, some scholars believe personality is a developmental construct influenced by the environment as well as changing life roles (Caspi et al., 2005; Roberts et al., 2001). Generally, these developmentalists believe change occurs progressively toward increased maturity resulting in better or improved ways of functioning (Roberts et al., 2001). Therefore, developmentalists believe life changes like attending college, getting married, or starting a family or new job could influence personality changes, and these changes would reflect improved functioning (Caspi et al., 2005).

Other scholars believe personality is an inherent biological set of traits or basic tendencies that remain relatively stable over one's lifetime and predispose a person to behave in certain ways (McCrae et al., 2000). Costa and McCrae (1992), for example, propose that personality is comprised of biologically based, basic tendencies; thus, any change in personality occurs primarily as the result of the normal biological maturational process (McCrae & Costa, 2008; McCrae et al., 2000). In essence, these scholars believe changes in personality traits result from differences in brain structure due to normal physiological maturation and are not related to environmental conditions or changing roles (Vealey, 2002).

Since this study examined the relationship between personality traits and coachability in female college athletes, it is important to take a closer look at personality from a theoretical and developmental perspective. If personality changes

rapidly during the college years, as developmentalists might suggest, the advantages

of better understanding what personality traits are most closely associated with

coachability along with trying to better identify and evaluate these traits to help

coaches recruit more coachable athletes would be minimized. On the other hand, if

personality traits remain primarily stable during the college years, better identifying

these traits and their relationship to specific behaviors could be advantageous to

coaches during the recruiting process.

Personality Development and College Students

College often represents the first time adolescents have been independent and

had to function as young adults without daily guidance and support from parents. It is

well documented that being thrust into new circumstances in college often initiates

significant cognitive, moral, and psychosocial development in college students

(Chickering & Reisser, 2005; Kohlberg, 2005; Perry, 2005). Thus, it seems plausible

that the college experience might also lead to the same type of development and

change in personality. However, most research suggests this is not the case.

Roberts and Del Vecchio's (2000) meta-analysis revealed that personality

traits become increasingly stable across the lifespan with test-retest correlations

increasing from .30 in children to .54 in young adults from age 18 to 21.9 and to

around .70 in adults age 50 to 70. In one of the most comprehensive longitudinal

studies of personality in young adults, Roberts and colleagues (2001) reached the

same conclusion. With data from nearly 1,000 participants of the longitudinal

Dunedin Study, Roberts' team examined personality changes in young adults from

age 18 to 26 in 4 different measurement areas. Rank order consistency, which utilizes

test-retest correlations, indicated that a majority of the sample had primarily stable personality traits with correlation coefficients between .50 - .60 over the 8-year time period. Likewise, mean level changes indicated only small increases in Constraint, Achievement, and Social Potency and small decreases in Negative Emotionality. At the individual level, a few minor changes to personality were noted, but 93% of the sample had relatively stable traits over the 8-year period with correlations between .30 and 1. The authors also discovered that adolescents who displayed more mature personalities at age 18 changed less and demonstrated more personality stability than did adolescents with less mature personality traits at age 18. Thus, even though some people demonstrated a few small changes in personality, Roberts' team concluded most people's personalities are very stable between age 18 to 26, and the likelihood of someone experiencing much personality change during this period is very small (Roberts et al., 2001).

In a study of University of California at Berkeley students, Robins and colleagues (2001) reached similar conclusions. Robins' team determined that as a group, the 270 students in their study exhibited only small-to-medium mean increases in Conscientiousness, Agreeableness, Emotional Stability, and Openness to Experience from their freshman years to senior years of college. More importantly, at the individual level, personality remained primarily stable as 73-90% of the participants exhibited no significant changes in personality traits over 4 years. In fact, during the college years, personality profile correlations on the 5 factors ranged from -.95 to .97 with a mean of .61. Like Roberts and colleagues (2001), Robins and colleagues (2001) concluded that personality traits are primarily stable during the

college years, even though college students often *think* their personalities have

changed in significant and more socially acceptable ways (Robins, Trzensniewski, &

Roberts, 2005).

More recently, Donnellan, Conger, and Burzette (2007) replicated the research

of Roberts and colleagues (2001) on personality development during the transition

from adolescence to adulthood. Participants completed the Multidimensional

Personality Questionnaire (MPQ) during their senior years of high school and again

in their late 20s. Parents also completed an abbreviated MPQ on their children during

each child's senior year. Donnellan's team found moderate to large drops in mean

levels of Negative Emotionality and moderate average increases in traits associated

with Constraint indicating personality changes in the direction of increased functional

maturity. They also found that participants who scored higher at age 17 showed fewer

changes 10 years later; this supports Roberts' (2001) conclusion that more mature

adolescents change less. The fact that Donnellan's team found more significant mean-

level changes in personality than did Roberts et al. (2001) or Robins et al. (2001)

highlights one of the challenges in personality assessment. Most personality research

utilizes self-report data, which may be influenced by social desirability as well as an

inability to critically evaluate one's behavioral tendencies. Few personality studies

have included assessments from parents or others who may be more objective, even

though collecting data from others who are familiar with the individual's behaviors

and personality would clearly add an alternative perspective and improve the validity

of the assessment.

In summary, personality researchers have been interested in examining individual differences for decades. After decades of intense debate and controversy over nomenclature, methodology, and theory, most personality scholars now accept the FFM as a viable framework for personality research. The FFM proposes that five global factors (Extraversion; Agreeableness; Conscientiousness; Emotional Stability; and Openness to Experience) lie at the top of the personality hierarchy, and each global factor is comprised of several, more specific facets. Some scholars believe personality is biologically based and primarily stable. Other scholars propose that personality is developmental and changes according to changes in life roles and experiences. Most research conducted over the last decade suggests that while some people may experience actual changes in personality over the lifespan, most changes are very small and occur over a relatively long period of time (Donnellan et al., 2007; Roberts et al., 2001; Robins et al., 2001). Although college is an intense transitional and developmental period for young people cognitively, morally, and psychosocially, global personality traits appear to remain fairly stable (Caspi et al., 2005; Robins et al., 2001; Roberts & Del Vecchio, 2000). Consequently, coaches who recruit an athlete who is low in Emotional Stability or Agreeableness should not expect to see rapid positive changes in these traits during the college years. Better understanding the personality traits most closely associated with coachability and developing a better method of identifying and assessing these traits during recruitment may be the best ways to help coaches recruit more coachable athletes. The next section will examine the sport literature to gain a better perspective of what conclusions sport

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scholars have reached regarding the relationship between personality traits and coachability.

Personality Research in Sport

Although many early sport scholars were interested in examining personality and predicting performance, interest in general sport personality research has declined in recent years (Beauchamp, Jackson, & Lavallee, 2008). In fact, an examination of sport literature reveals a significant interest in personality research from the 1960s to 1980s, a sharp decline in the 1990s, and limited personality research in the last decade (Vanden Auweele, Nys, Rzewnicki, & Van Mele, 2001).

Like early personality research, in general, nearly all early sport personality research was grounded in trait theory. Trait theory assumes personality is comprised of internal attributes that remain primarily stable and cause specific behaviors across various situations (Vanden Auweele et al., 2001; Vealey, 2002). Trait theory research usually compares one group of athletes to another in an effort to identify the ideal athlete personality profile in order to better predict performance. For example, elite athletes were compared to non-elite athletes, athletes were compared to non-athletes, and individual sport athletes were compared to team sport athletes in an effort to predict future behavior or performance (Vanden Auweele et al., 2001; Vealey, 2002).

Unfortunately, much of the early sport personality research suffered from the same problems that plagued personality research in general — too many poorly defined personality traits, too many different instruments, and weak or poorly defined personality theories (John & Srivastava, 1999; Vanden Auweele et al., 2001; Vealey, 2002). Sport personality research has also encountered other challenges. For example,

most early sport personality research used univariate analysis and a unidimensional

approach rather than a multivariate approach like multiple regression or factor

analysis; and, many studies used small sample sizes, which yield low power and tend

to overestimate the amount of explained variance (Vanden Auweele et al., 2001). As

a result of these methodological and theoretical limitations, most trait theory research

in sport has failed to produce consistent or meaningful results. Consequently, many

sport scholars abandoned trait theory research, instead focusing their efforts on

identifying and measuring state-related constructs like competitive anxiety,

confidence, and mood (Vealey, 2002) or other constructs like attention, goal-

orientations, and motivation (Vanden Auweele et al., 2001).

By the early 1990s, the FFM framework of personality was introduced and

inspired new research in psychology and many other disciplines. Interestingly,

however, the FFM did not have the same impact on sport research. Some sport

scholars, however, have called for additional sport personality research and suggested

the FFM might provide an interesting new framework for examining personality in

sport (Beauchamp et al., 2008; Vanden Auweele et al., 2001; Vealey, 2002). Thus far,

however, only two sport personality research studies used the FFM to examine team

processes in sport (Piedmont, Hill, & Blanco, 1999; Schmidt, 2008).

Piedmont, Hill, and Blanco (1999) investigated personality and performance

in 79 female members of NCAA Division I soccer teams using an 80-item bipolar

adjective personality scale, actual game statistics, and coaches' ratings on

coachability, game performance, athletic ability, team playerness, and work ethic.

Their primary finding was that Neuroticism and Conscientiousness were significant

predictors of athletic performance, accounting for approximately 23% of the variance in coaches' ratings. Only Conscientiousness was a useful predictor for *actual* game performance.

Since the purpose of the Piedmont et al. (1999) study was to predict actual athletic performance, the authors gave limited attention to relationships between other coach-rated performance criteria. For example, their study revealed that Neuroticism (- 0.31) was negatively related to Coachability, while both Conscientiousness (.33) and Agreeableness (.26) were significantly positively related to Coachability. In other words, athletes who scored higher in Neuroticism were perceived by coaches as being less coachable and were rated lower in their ability to get along and mesh well with other athletes. Conversely, athletes who scored higher in Conscientiousness and Agreeableness were perceived as being more coachable.

Schmidt (2008) examined organizational citizenship behavior (volunteering for tasks; helping others; and defending the organization) and counterproductive behavior (violation of organizational norms; not working hard; and inappropriate actions) in Canadian football teams. Schmidt utilized Goldberg's (1999) International Personality Item Pool and the HEXACO personality inventory as well as ability indicators (height; weight; 40-yard time; and vertical jump), ratings from coaches in each of Piedmont et al. (1999) areas (coachability; game performance; athletic ability; team playerness; and work ethic), and group level variables (ethical leadership style of position coach; group cohesion; and likelihood of reward or punishment for participating in specific behaviors).

Two interesting findings in Schmidt's (2008) research were (1) teams with higher mean levels of Conscientiousness were rated higher in performance and organizational citizenship behavior than were teams with lower levels of Conscientiousness, and (2) variance in Agreeableness was a negative predictor of performance. This suggests the higher the team level Conscientiousness, the better the team performs and the more positively athletes on the team behave. Schmidt's findings also suggests that having a large range in Agreeableness among athletes inhibits group processes and reduces team performance.

Conclusions from Piedmont and colleagues' (1999) and Schmidt's (2008) studies with sport teams are similar to those from organizational and industrial psychology, where the FFM has been widely utilized. Conscientiousness, for example, has been linked to performance and processes in a variety of work teams. For example, work teams with a low range of Conscientiousness scores among team members performed better than teams with a larger range of scores, and teams with higher mean levels of Conscientiousness experienced less conflict, more communication, and more workload sharing (Barrick et al., 1998; Halfhill et al., 2005; Peeters et al., 2006). These results are similar to the finding that Conscientiousness was related to performance, coachability, and organizational citizenship behavior in sport teams (Piedmont et al., 1999; Schmidt, 2008).

Like Conscientiousness, levels of Agreeableness appear to affect team processes and performance in work teams. In fact, research suggests high levels of Agreeableness and similarity in Agreeableness among team members appear to be especially important to performance in teams requiring personal interaction,

teamwork, or functioning together over long periods of time (Mount, Barrick, & Stewart, 1998; Peeters et al., 2006). In military teams, those with higher mean levels of Agreeableness received the highest supervisor performance ratings (Halfhill et al., 2005). A meta-analysis of several work teams indicated teams with higher mean levels of Agreeableness and a smaller range of scores performed best (Peeters et al., 2006). Thus, Piedmont et al.'s (1999) finding that Agreeableness was positively related to coachability and Schmidt's (2008) conclusion that variability in Agreeableness among team members was negatively related to performance appears to align with some results from organizational psychology.

Emotional Stability, or Neuroticism, has also been linked to team processes in organizational teams. In general, work teams with higher mean levels of Emotional Stability are likely to display more positive interactions, be more socially cohesive, and stay together longer (Barrick et al., 1998; Mount et al., 1998; Van Vianen & De Dreu, 2001). In fact, Van Vianen and De Dreu (2001) found teams with high mean levels of Emotional Stability were more socially cohesive, while teams with a wider variance in Emotional Stability among team members were more likely to exhibit lower levels of task cohesion. These process-related conclusions are similar to Piedmont et al.'s (1999) finding that Neuroticism was negatively related to coachability and the ability to get along with other athletes.

Thus, even though the FFM has not been widely utilized in sport personality research, the limited empirical evidence appears to support some conclusions from organizational and industrial psychology. The implication from these nearly parallel

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findings is that the FFM may be a useful model for examining future personality

research in sport.

FFM Measurement

One of the fundamental challenges in personality research is measurement.

Most current personality inventories, including Costa and McCrae's widely used

NEO PI-R, are proprietary and, thus, only available commercially (Srivastava, 2009).

In 1999, Goldberg developed the IPIP with the goal of stimulating the development of

new personality instruments by offering a non-commercial alternative to personality

researchers (Goldberg, Johnson, Eber, Hogan, Ashton, Cloninger, & Gough, 2006)

The IPIP is a web-based, public domain collaboratory containing 50-item and 100-

item sample questionnaires assessing the 5 broad factors in the FFM, scoring keys for

sample scales, and over 2,000 potential descriptive phrase items that personality

researchers can use to create their own scales.

In addition to the sample questionnaires assessing the five broad factors, the

IPIP also includes facet-level scales created specifically to measure constructs similar

to those measured with several proprietary personality inventories. For example, the

IPIP includes 10-item facet-level scales designed to measure constructs similar to the

constructs measured with Costa and McCrae's (1992) NEO PI-R instrument (IPIP,

2009).

The 10-item, facet-level IPIP-NEO scales are proposed to be closely aligned

with the NEO PI-R and report the following reliability coefficients based on a sample

of over 800 adults who completed both the NEO PI-R and the comparable IPIP

scales: Trust (.82); Morality (.75); Altruism (.77); Cooperation (.73); Modesty (.77);

Sympathy (.75); Anxiety (.83); Anger (.83); Depression (.88); Self-Consciousness (.80); Immoderation (.77); and Vulnerability (.82) (see http://ipip.ori.org/newNEOFacetsKey.htm). Costa and McCrae (1992) report reliability coefficients ranging from .56 - .81 for their 8-item facet-level scales.

There is evidence the IPIP scales and items provide a viable alternative to other established, commercial personality inventories (Goldberg et al., 2006). Ehrhart, Roesch, Ehrhart, and Kilian (2008) evaluated the factor structure of the IPIP 50-item questionnaire across gender and culture with 1,727 university students. These authors reported reliability coefficients of .89 for Extraversion, .78 for Agreeableness, .81 for Conscientiousness, .86 for Emotional Stability, and .78 for Openness to Experience and encouraged researchers to use the 50-item survey as a viable and cost-effective alternative to commercial personality instruments. Donnellan, Oswald, Baird, and Lucas (2006) created a 20-item short version of the 50-item FFM scale and found acceptable reliability and convergent, discriminate, and criterion-related validity. In a his study with football athletes, Schmidt (2008) used IPIP Agreeableness and Emotional Stability scales and reported reliability coefficients of .75 for a 10-item Agreeableness scale and .85 for a 10-item Emotional Stability scale.

According to Weiner and Greene (2008), the general standard for internal reliability of personality instruments is a Cronbach's correlation coefficient of .75, although when heterogeneous constructs are being assessed, a .70 reliability coefficient may be acceptable. Thus, the IPIP appears to offer a viable non-proprietary alternative for the development of personality instruments for sport research.

Attributes Coaches Desire

Despite the measurement challenges and limited research utilizing the FFM to examine personality in sport, there is evidence that specific personality-related attributes are important to coaches. In fact, most coaches rely on both physical and personality information as they evaluate athletes for their teams. Some NCAA Division I basketball coaches reported weighing psychological attributes like work ethic, receptiveness to coaching, willingness to listen, willingness to learn, competitiveness, honesty, respect, self-discipline, integrity, and trust more than physical attributes when evaluating athletes for their teams (Becker & Solomon, 2005).

Interviews with 18 NCAA Division I coaches, including 8 team sport coaches, revealed 55 different sources of information coaches use to evaluate athletes (Solomon & Rhea, 2008). These sources of information were categorized into six higher order themes: coachability; work ethic; team qualities; mental strategies; character; and confidence. Coachability included being confident, receptive to coaching, and willing to listen and learn. Work ethic included being disciplined and competitive, working hard, and having high aspirations. Team qualities included role acceptance, leadership, team chemistry, and team fit. Mental strategies included handling pressure, demeanor, and mental maturity. Character was comprised of integrity, courage, trust, honesty, and respect (Solomon & Rhea, 2008).

NCAA Division I college softball coaches also report specific attributes they desire in prospective recruits. The top attributes desired were hard work, positive attitude, respect, coachable, and the ability to perform well under pressure, interact

positively with others, and respond well to adversity and failure (McClendon, 2009; National Fastpitch Coaches Association, 2009).

Although coaches have identified many different attributes they value in prospective athletes, one is cited almost universally, regardless of coaching level or sport - coachability (Becker & Solomon, 2005; Giacobbi, 2000; Giacobbi et al., 2002; Gould et al., 2002; McClendon, 2009; National Fastpitch Coaches Association, 2009; Solomon & Rhea, 2008; Summit & Jenkins, 1998). Coaches place a high value on coachability and can usually easily identify coachable and less coachable athletes on their teams. However, few coaches can clearly articulate how they evaluate coachability or other desired attributes during the recruiting process. Yet, most coaches can easily recall instances where they failed to adequately assess an athlete's coachability and can vividly describe the impact a recruiting mistake had on team dynamics and effectiveness (McClendon, 2009).

The attributes desired by coaches in the studies above represent one of the challenges plaguing personality research since the early 1900s - distinguishing between innate personality *traits* and the *behaviors* associated with these traits. Personality refers to the individual traits and characteristics that cause individuals to behave, think, and feel in certain consistent ways (Roberts et al., 2001). From this perspective, personality traits *cause* specific behaviors. In essence, personality traits are reflected through primarily consistent ways of acting or reacting (McCrae & Costa, 2008). Hard work and integrity, for example, are not personality traits. Hard work and integrity are *behaviors* resulting from possessing specific personality *traits* like achievement motivation and morality. Achievement motivation and morality,

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according to the literature, are personality traits from the Conscientious and

Agreeableness domains, respectively.

Coaches often refer to broad behavioral constructs like coachability, positive

attitude, or character as personality traits when in fact these constructs are groups of

behaviors resulting from possessing certain personality traits. This confusion between

core personality traits, behaviors, and broad constructs that are likely a combination

of several personality traits is one reason Solomon and Rhea (2008) have called on

researchers to help delineate the personality traits that comprise these broad

constructs and develop methods of better measuring these traits.

Coachability in Sport

Despite the fact coaches routinely cite the importance of coachability, sport

scholars have failed to adequately examine this construct. In fact, coachability is a

relatively elusive construct in the sport psychology and coaching education literature.

Only a few sport scholars have attempted to examine or measure coachability, and

those who have examined it have assumed it was a narrowly defined construct. For

instance, Smith, Smoll, Schutz, and Ptacek (1995) created the Athlete Coping Skills

Inventory-28 to measure seven sport-specific characteristics: coping with adversity;

peaking under pressure; goal setting/mental preparation; concentration; freedom from

worry; confidence and achievement motivation; and coachability. However, the four

questions measuring coachability only include how an athlete handles feedback and

criticism from coaches. Piedmont et al. (1999) included coachability in their study but

defined it simply as "a player's ability to listen, learn and apply coaches' instructions"

(p. 772). Schmidt (2008) replicated Piedmont et al.'s (1999) definition of coachability in his study with football teams.

Most college coaches would argue coachability encompasses more than merely listening, learning, and applying coaches' instructions. Giacobbi and colleagues (2000; 2002) agree and suggest that coachability is a more complex construct than previously theorized. Giacobbi's (2000) research suggested that coachability is comprised of six constructs: intensity of effort; trust and respect for coaches; openness to learning; coping with criticism; working with teammates; and reaction to feedback. A latter analysis of interview data suggested that coachability also includes being motivated, listening and being receptive to coaching and change, responding positively to negative reinforcement, displaying low frustration, and being flexible and able to adapt to the unexpected (Giacobbi et al., 2002).

Research by other scholars appears to support Giacobbi's team's claim. Solomon's (2008) factor analysis suggests coachability includes more than just being receptive to coaching and willing to listen and learn. Though examining coachability was not the purpose of her research, Solomon's factor analysis suggested that handling pressure, concentration, mental maturity, competitive demeanor, integrity, trust, honesty, and respect also may be components of the coachability construct (Solomon, 2008). Thus, coachability appears to be significantly more complex than originally theorized.

Although Giacobbi and colleagues (2000; 2002) and Solomon (2008) have made progress in identifying the behavioral *characteristics* of coachable athletes, the relationships between an athlete's core *personality traits* and coachability have not

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been examined. Giacobbi (2000) suggested coachability is likely related to

Agreeableness and Conscientiousness and Trust and Achievement Motivation are

likely to be especially important traits; however, he called on other researchers to

examine the relationship between coachability and an athlete's core personality

structure. Thus far, scholars have not examined this relationship. However, the

behavioral constructs thought to be associated with coachability appear to fit into the

FFM and may be related to specific personality traits within each global construct as

the following section will demonstrate. Consequently, specific personality traits from

the Emotional Stability and Agreeableness domains may help predict whether or not

an athlete will be coachable. Figure 1 provides a graphic representation of this

hypothesis.

Figure 1

Conceptualized Relationships between Personality Traits and Coachability
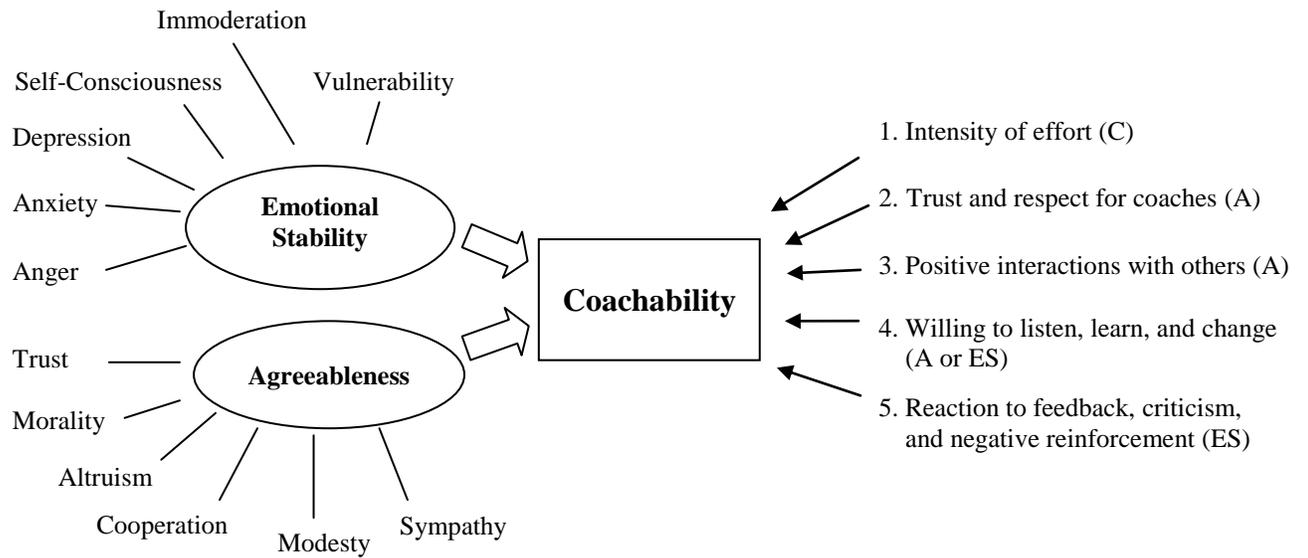
Figure 1. Facet-level personality traits that may predict coachability are depicted on left. Giacobbi's

(2000) components of coachability and the hypothesized relationship to Conscientiousness (C),

Agreeableness (A), and Emotional Stability (ES) are depicted on the right.

Intensity of effort. Intensity of effort or work ethic is perhaps the behavior most desired by college coaches (Becker & Solomon, 2005; Giacobbi et al., 2002; McClendon, 2009; National Fastpitch Coaches Association, 2009). College coaches expect athletes to work hard every day. Intensity of effort is directly related to the Achievement Motivation personality trait from the Conscientiousness domain, so it is not surprising Piedmont et al. (1999) found that female college athletes who scored higher in Conscientiousness were rated by their coaches as more coachable.

An athlete's intensity of effort or work ethic can typically be assessed fairly accurately through repeated observations of games or talking with others who are familiar with an athlete. In fact, consistently delineating different levels of intensity of effort from any type of personality assessment would likely be quite challenging. Long-term participation in sport demands a certain level of self-discipline, achievement-striving, orderliness, dutifulness, competence, and deliberation, each of which are facet-level personality traits within the Conscientiousness domain. Athletes who do not possess these traits typically drop out of sport long before they have an opportunity to compete in college. Thus, it is reasonable to expect that all college athletes would perform reasonably well on any self-report personality measure of Conscientiousness.

Trust and respect for coaches. Trust and respect for coaches appear to be critical components of coachability (Giacobbi et al., 2002; Solomon, 2008); and, other studies and interviews with coaches indicate that coaches want athletes who trust and respect others (Becker & Solomon, 2005; National Fastpitch Coaches Association, 2009; Solomon & Rhea, 2008).

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Trust is a personality trait within the Agreeableness domain and undoubtedly important to building solid relationships in sport teams (Janssen, 1999). Respect, on the other hand, is not a personality trait. Respect is most likely the behavioral result of possessing personality traits like trust, altruism, cooperation, and sympathy, core traits within the Agreeableness domain. For example, athletes who are trusting, concerned about others' welfare, cooperative, and sympathetic toward others are likely to display these traits through respectful behaviors toward coaches and teammates. Thus, it is seems reasonable to expect that respect may be the result of possessing a combination of personality traits from the Agreeableness domain.

Trust and respect are likely linked to coachability in several ways. Athletes who trust and respect their coaches are more likely to listen and pay close attention to their coaches' feedback and instructions. These athletes are more likely to do what coaches ask them to do, and they are more likely to engage in honest communication with coaches, which may include making an effort to get to know coaches off the field.

An important aspect of team membership is the willingness to sacrifice personal goals for the good of the team. Sacrificing personal goals for the good of the team almost always enhances team processes and effectiveness in sport teams (Summitt & Jenkins, 1998). Athletes who trust and respect their coaches are more likely to sacrifice their own goals for the team's goals.

In addition to sacrificing personal goals, coachable athletes accept their roles. Coaches have to make decisions regarding which team members start games or are substitutes. In other words, coaches prescribe roles; and, an athlete's willingness to

accept her role is critical in building successful teams (Summit & Jenkins, 1998).

Athletes who trust and respect their coaches are more likely to accept roles in the best

interest of the team.

Positive interactions with others. Closely related to trust and respect for

coaches is the ability to maintain positive interactions with others. Softball coaches,

in particular, have indicated that positive interactions with others and being a team

player are important (McClendon, 2009; National Fastpitch Coaches Association,

2009). College athletic teams spend a tremendous amount of time together. Not only

do team members practice and play games together for approximately six to eight

months each year, but they also travel, eat, and often live together. Consequently, the

ability to build and sustain positive relationships with coaches and teammates is

critical to team dynamics and effectiveness.

In addition to trust and respect, the ability to maintain positive interactions

with others is probably related to morality, altruism, cooperation, modesty, and

sympathy from the Agreeableness domain. Agreeable people possess a communal

orientation and are altruistic, honest, moral, tender-minded, modest, cooperative,

trusting, tolerant, and willing to accommodate others' wishes (Barrick et al., 1998;

Caspi et al., 2005; John & Srivastava, 1999; Van Vianen & De Dreu, 2001). Athletes

who are guided by strong moral principles are usually honest, and honesty contributes

positively to interactions with others. Likewise, altruism, cooperation, and sympathy

denote a general concern for others, which nearly always fosters positive interactions

with others.

Willingness to listen, learn, and change. Since coaches are responsible for developing athletes, being willing to listen, learn, and change are critical to an athlete's continued athletic development. In fact, being willing to listen, learn, and change are possibly cited by coaches more often than any other descriptor of coachability (Becker & Solomon, 2005; Giacobbi 2000; Giacobbi et al., 2002; Solomon & Rhea, 2008). These behaviors could be associated with Openness to Experience. However, Openness to Experience is generally more closely associated with intellectual, cultural, and creative interests (John & Srivastava, 1999). Furthermore, it seems intuitive that without trust and respect for coaches, athletes would not be receptive to coaching or willing to listen, learn, and change. Thus, it seems plausible that an athlete's willingness to listen, learn, and change might be more closely related to personality traits from the Agreeableness or Emotional Stability domain than to Openness to Experience.

Reaction to feedback, criticism, and negative reinforcement. An important part of coaching and developing athletes is providing feedback and instruction. Unfortunately, there are times when feedback is not always positive. In fact, instructional feedback to athletes during competition is often short, blunt, and corrective; it is not designed to protect feelings (Janssen, 1999). The way an athlete reacts to feedback, criticism, or negative reinforcement is an important component of coachability (Giacobbi, 2000; Giacobbi et al., 2002). Athletes who are anxious, easily angered, or self-conscious tend to take feedback and criticism personally, rather than constructively, and may respond with anger or other negative behaviors that inhibit the coaching process and often impact relationships as well (Yukelson, 2001).

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Anxiety, anger, self-consciousness, and vulnerability are traits within the Emotional Stability domain.

Evaluating Coachability

Accurately evaluating coachability during recruitment is challenging. A few coaches use personality assessments to assist in evaluating recruits (Giacobbi et al., 2002; Summitt & Jenkins, 1998), but the vast majority rely on two methods: direct observation of games and talking with the athlete and people who know the athlete. While coaches can often gain some insight about intensity of effort, respect, and the way an athlete interacts with others or reacts to coaching feedback through repeated observations, coaches at the NCAA Division I and II levels are limited in the number of times they can observe and have face-to-face contact with prospective athletes. In addition to the challenges imposed by these recruiting limitations, personality traits that may be associated with coachability often do not surface during observations because most prospective athletes and their coaches are well educated about how to act while coaches are observing. It is no secret that college coaches are closely observing their behaviors during competition. Consequently, athletes, parents, and youth coaches may simply be displaying their best behavior.

Since it is difficult to make an accurate assessment of an athlete's personality through observation, college coaches often solicit input from youth and interscholastic coaches and others who are familiar with the athlete. While some youth coaches may provide reliable insights about athletes' coachability, they also have vested interests in seeing *their athletes* make it to the next level (McClendon,

2009). Thus, relying on youth coaches or others who have a vested interest in the athlete receiving an athletic scholarship may not always yield a forthright evaluation.

Summary of Literature Review

After decades of debate and controversy in personality research, the FFM has provided a common framework for organizing empirical investigations and stimulated personality research in many disciplines. The FFM proposes five fundamental global traits at the top of the personality hierarchy: Extraversion; Conscientiousness; Agreeableness; Emotional Stability or Neuroticism; and Openness to Experience. Each of these global traits is comprised of several, more specific behavioral traits.

Extraversion is displayed by being talkative, outgoing, highly sociable, and energetic. People high in Conscientiousness are usually organized, achievement-oriented, and dutiful. Agreeableness refers to one's level of trust, sympathy, and morality. Emotional Stability or Neuroticism reflects a person's level of negative emotionality and includes traits like anxiety, anger, and vulnerability. Openness to Experience generally refers to one's creative, cultural, and intellectual orientation.

The acceptance of the FFM by scholars led to a significant increase in personality research in organizational and industrial psychology. However, the FFM has not generated the same level of interest in sport, even though coaches consistently report desiring specific attributes and personality traits in prospective athletes. Coachability, one of the most frequently cited desirable attributes, has received very little empirical inquiry in sport, and early scholars who did include coachability in measures perceived it as a narrowly defined construct. More recently, scholars have

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suggested coachability is actually a much more complex construct comprised of several different behaviors.

While sport researchers have begun to make progress identifying the characteristics or behaviors included in coachability, they have not attempted to link those behaviors to specific personality traits. As a result, college coaches have little relevant knowledge from which to draw as they engage in the challenging task of selecting coachable athletes for their teams. Since personality traits appear to be primarily stable during the college years (Roberts & Del Vecchio, 2000), examining the relationship between coachability and specific personality traits in order to better understand what personality traits are most closely associated with being coachable and establish a practical method of better identifying and assessing these traits during recruitment appears to be a worthwhile endeavor. Practical knowledge about the relationships between personality traits and coachability could potentially be valuable to coaches as well as to sport psychologists who may be called upon to work with individual athletes or teams.

Although the constructs associated with coachability appear to fit within the Agreeableness and Emotional Stability domains of the FFM of personality, the potential relationship between coachability and personality traits in those domains has not been examined. Thus, many questions remain unanswered. Which personality traits from the Agreeableness and Emotional Stability domains are the best predictors of coachability? Do athletes who are more coachable possess and display specific personality traits from the Agreeableness and Neuroticism domains that are statistically different from athletes who are less coachable? If so, which personality

traits from those two domains distinguish highly coachable from less coachable athletes? What specific questions could help coaches better assess personality traits most closely associated with coachability?

Chapter 3

Methods

Research Questions and Hypotheses

Athlete coachability is both a desired and necessary attribute on successful athletic teams, but the coachability construct itself is not well understood. Additionally, the relationship between coachability and athletes' personality traits has not been examined. To better understand what personality traits of college softball athletes are most closely associated with being coachable, the following research questions were investigated:

1) Can personality traits from the Agreeableness and Emotional Stability domains predict whether or not an athlete will be more or less coachable?

2) Do more coachable athletes possess personality traits from the Agreeableness and Emotional Stability domains that are different than those of less coachable athletes?

3) Are there specific questions that could help coaches better assess the personality traits most closely associated with coachability?

The following hypotheses were examined:

- Hypothesis 1: Personality traits from the Agreeableness and Emotional Stability domains can predict Coachability.

- Hypothesis 2: There will be a positive correlation between Trust, Morality, Altruism, Cooperation, and Sympathy from the Agreeableness domain and Coachability for athletes who have been identified by their coaches as more coachable.

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- Hypothesis 3: There will be a negative correlation between Anxiety, Anger, Depression, Self-consciousness, Immoderation, and Vulnerability from the Emotional Stability domain and Coachability for athletes who are identified by their coaches as more coachable.

- Hypothesis 4: Athletes who are rated by coaches as being more coachable will display personality traits from the Agreeableness and Emotional Stability domains that are significantly different than those of athletes who are rated as less coachable.

The following sections outline the methodology utilized to examine these research questions and hypotheses. First, the limitations, sampling procedures, and characteristics of the sample are described. The next section details the development of the two instruments used in the study. A description of specific procedures implemented during the data collection phase is provided in the following section, and the final section outlines the research design and data analysis procedures conducted to examine the research questions and hypotheses.

Limitations

One limitation of this study is that it utilized a convenience sample of female college NCAA Divisions I and II softball teams. One reason the study used a one-sport sample is because due to the nature of the sport of softball, there are often few opportunities to assess athletes in high pressure, emotionally intense situations where anger, frustration, or other personality traits that may impact coachability and team dynamics are likely to surface. For example, in softball it is not unusual to observe an entire game where the athlete being observed only has an opportunity to handle two

balls and gets walked two of her three at-bats. Conversely, sports like volleyball or basketball provide many more opportunities to observe athletes in emotionally intense situations where core personality traits are more likely to surface.

Another reason softball teams were selected is because the primary softball season occurs in the spring, even though softball teams competing within the NCAA practice and play a few games in the fall. Consequently, softball teams were much more likely to participate in the study than were other female sport teams who were either participating in their primary seasons or seriously preparing for their primary seasons. It is important to note that approximately one-third of the 100 head coaches invited to participate in this study were former professional colleagues of the author. It is possible that the coaches and teams who volunteered to participate in this study may not be representative of all NCAA Divisions I and II softball coaches and teams. Therefore, conclusions may be less generalizable to all softball athletes and coaches. However, since one of the fundamental challenges in research involving team sports is obtaining a large enough sample to yield meaningful data and results, the author's former 12-year college coaching career and professional affiliation with college softball coaches was utilized as a means of soliciting participation and yielding a larger sample size.

A second limitation is that both instruments used in this study were developed for the study. Consequently, additional research is needed to establish the reliability and validity of each instrument. Additionally, due to the number of personality traits being examined in this study, each of the 12 personality traits was assessed with only 5 items. Likewise, coachability was assessed with only 18 items. Though restricting

the number of items on each of these scales may impact reliability, it was necessary to keep the survey instruments short enough to enhance participation and thoughtful completion of all items.

Another noteworthy limitation of this study is that coaches only identified and rated the coachability of six athletes on their teams. While evaluating all athletes on the team would certainly yield more data for comparisons, college softball teams are typically comprised of 15-24 athletes and expecting coaches to complete an 18-item evaluation on 15-24 athletes is not realistic. Thus, to minimize the time required to complete the coachability questionnaire and enhance participation and thoughtful completion of all items, each participating coach was asked to evaluate only three more coachable and three less coachable athletes.

Participants

To gain insights into potential relationships between personality and coachability in college softball athletes, it was critical to gain support and cooperation from team coaches who, in turn, could solicit participation from their team members. Since responses from only 6 athletes per team would be used in data analysis and 120 - 150 athletes were desired for this study, the goal was to gain participation from 30 - 50 head coaches and teams.

One hundred head coaches (56 NCAA Division I and 44 NCAA Division II) were invited to participate in this study. All head coaches from the Missouri Valley Conference (NCAA I), Atlantic Sun Conference (NCAA I), Ohio Valley Conference (NCAA I), Peach Belt Athletic Conference (NCAA II), and Mid-America Intercollegiate Athletics Association (NCAA II) were invited to participate. These

conferences were selected as a result of the author's professional affiliation with coaches from within each of these conferences who might encourage fellow coaches to participate. An additional 48 coaches from various regions of the United States were also invited. These coaches were either former professional acquaintances of the author or active members of the National Fastpitch Coaches Association.

Participation from head coaches was solicited via email utilizing the 2009 National Fastpitch Coaches Association Directory of Information. This directory contains contact information for softball coaches at all levels who are members of the National Fastpitch Coaches Association. When directory information was not available or did not include valid email addresses, the coach's contact information was secured through the institution's website. The general purpose of the study, timeframe for data collection, and expected amount of time required to complete the surveys was explained during initial email contact with head coaches. Thirty-eight head coaches (18 NCAA Division I and 20 NCAA Division II) agreed to participate and request participation from their athletes. Prior to participation, all participants received an Information Statement as required by the University of Kansas Human Subjects Committee.

Thirty-eight teams reported completing athlete surveys. However, one packet of athlete surveys was lost in the mail and two head coaches did not return the Athlete Coachability Survey for Coaches. Thus, complete data were received from 35 teams (17 in NCAA Division I and 18 in NCAA Division II). Data analysis for personality variables was conducted using responses from 35 head coaches and 190 athletes. Data analysis for coachability items and behaviors was conducted using responses from 36

head coaches (17 in NCAA Division I and 19 in NCAA Division II). These coaches and athletes represented teams in 21 athletic conferences from all regions of the United States.

Athlete demographics. To prevent athletes from knowing who head coaches had identified as more coachable and less coachable, all athletes from each team were invited to participate in the study. However, only responses from the six athletes identified by each head coach (3 more coachable and 3 less coachable) were analyzed. One hundred ninety-two more coachable and less coachable athletes completed surveys. One athlete had not yet turned 18 and was excluded from the study because parental permission was not obtained for her participation. Another athlete omitted 10 of the 60 personality items (16.7%) on the survey, including 3 of the 5 Trust items and was also excluded. Though personality instruments vary in their procedures for omitted items, the NEO-PI-R suggests that surveys with more than 16.7% omitted items should not be scored (Weiner & Greene, 2008). The removal of these two surveys resulted in 190 (94 NCAA Division I; 96 NCAA Division II) usable athlete surveys. The vast majority of athletes identified themselves as White (90%), and 95% were receiving some amount of an athletic scholarship. Athletes were between the ages of 18 and 23 and represented first-year through fifth-year students. Table 1 details the demographics of athletes who participated in this study.

Table 1

Demographics of Participating Athletes

Athlete demographics	*n*	%
Institutional Affiliation		
NCAA Division I	94	49%
NCAA Division II	96	51%
Scholarship Status		
Receiving Scholarship	180	95%
Not Receiving Scholarship	8	4%
Unknown	2	1%
Ethnicity		
White	171	90%
Black or African American	6	3%
Hispanic or Latino	8	4%
Indian or Alaskan	3	2%
Unknown	2	1%
College Year		
Freshman	35	18%
Sophomore	56	30%
Junior	46	24%
Senior	49	26%
5th Year	4	2%

Note. N = 190.

Head coach demographics. A primary component of this study required

coaches to identify the three more coachable and three less coachable athletes on their

teams. Head coaches usually have more experience coaching and are more astute at

evaluating athletes than do assistant coaches, so only their evaluations of athletes who are more coachable and less coachable were surveyed. Thirty-six head coaches (9 males and 27 females) completed Athlete Coachability Surveys rating 211 more and less coachable athletes from their current teams. Forty-two percent of these coaches were in the 40-49 age range and 26 head coaches (72%) had more than 10 years experience as a college head coach. Ninety-seven percent of head coaches identified themselves as White. Demographic details of participating coaches are outlined in Table 2.

Table 2

Demographics of Participating Head Coaches

Head coach demographics	*n*	%
Institutional Affiliation		
NCAA Division I	17	47%
NCAA Division II	19	53%
Gender		
Male	9	25%
Female	27	75%
Ethnicity		
White	35	97%
Hispanic or Latino	1	3%
Age		
24-29	2	6%
30-39	7	19%
40-49	15	42%
50-59	8	22%
60-69	3	8%
70-79	1	3%
Experience as Head College Coach		
1-5 years	4	11%
6-10 years	6	17%
11-15 years	9	25%
16-20 years	4	11%
21-25 years	7	19%
26-30 years	5	14%
31+ years	1	3%

Note. N = 36.

Athlete Characteristics Survey. As previously discussed, the IPIP appears to offer a reliable alternative to a proprietary personality instrument (Donnellan et al., 2006; Ehrhart et al., 2008; IPIP, 2009; Schmidt, 2008). In a pilot study with 79 college female team sport athletes preparatory to the current study, this author used items from the IPIP-NEO facet-level scales as well as items from the IPIP general database and found reliability coefficients of .91 for Extraversion (19 items), .76 for Agreeableness (16 items), .79 for Conscientiousness (17 items), .88 for Emotional Stability (18 items), and .74 for Openness to Experience (16 items). Also in the pilot study, at the facet-level, Gregariousness, Modesty, Trust, Achievement, Anger, Anxiety, Vulnerability, and Intellect yielded reliability coefficients above .75.

Consequently, the IPIP was used to develop a 60-item, self-report instrument to assess the 12 personality traits examined in athletes in this study. All 60 items were selected directly from the items proposed to parallel Costa and McCrae's NEO-PI-R (see http://ipip.ori.org/newNEOFacetsKey.htm). However, since 12 different personality traits were being examined and keeping the survey instrument concise enough to be completed in 10-15 minutes was an important aspect of enhancing team-level participation, 5 items were chosen from the proposed IPIP 10-item sample scales. While 10 items per scale may have improved facet-level reliability, it would have resulted in a 120-item survey, thus increasing the amount of time needed to complete the survey and likely decreasing athlete and coach participation.

Thirty of the 60 items selected for the instrument were previously used in the pilot study; and 6 scales (Anxiety; Anger; Vulnerability; Trust; Cooperation; and

Modesty) included at least three items that were used in the pilot study. For example, the items "*rarely get irritated; hold a grudge,* and *am calm even in tense situations*" were retained from the pilot test for the Anger, Cooperation, and Vulnerability scales respectively. The additional 30 items were selected directly from the IPIP scales proposed to measure constructs parallel to the NEO-PI-R in an attempt to improve reliability of less reliable facet-level scales used in the pilot study. For instance, "*trust others; suffer from others' sorrows;* and *seldom feel sad or blue*" were selected and substituted into the Trust, Sympathy, and Depression scales respectively.

Items from each facet-level scale were distributed throughout the survey and represented both high and low levels of the trait. Like Costa and McCrae's NEO-PI-R, athletes used a five-point Likert scale (Strongly Disagree; Disagree; Neutral; Agree; and Strongly Agree) to indicate how well each phrase characterized her (Weiner & Greene, 2008).

The Athlete Characteristic Surveys were coded by institution and included demographic information (institutional affiliation; year in college; primary position; age; scholarship status; high school; and ethnicity) and the 60-item descriptive phrases. Additionally, uniform number and high school from which the athlete graduated were collected in order to match each athlete's responses with the head coach's rating of coachability.

Prior to data analysis, internal reliability analysis was conducted on the Athlete Characteristics Survey. The 30-item Agreeableness scale had a Cronbach's reliability coefficient of .82, and the 30-item Emotional Stability scale had a Cronbach's reliability coefficient of .86. At the facet-level, reliability analysis

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resulted in the removal of one item each from the Trust, Morality, Anxiety, and Depression scales and two items from the Sympathy scale. Facet-level reliability coefficients ranged from .52 to .83 as shown in Table 3. Reliability coefficients of the Sympathy (.52) and Vulnerability scales (.56) were lower than anticipated suggesting these scales may have failed to adequately measure the intended constructs. Consequently, any differences between more coachable and less coachable athletes in these traits must be viewed with caution as differences may be due to random error.

Following reliability analysis, the remaining items for each of the 12 facet-level personality traits were summed to create a mean score. Thus, each athlete ($N =$ 190) had a mean score for each of the 12 personality traits as well as an overall mean score for Agreeableness and Emotional Stability.

Table 3

Reliability Coefficients and Mean Scores for More and Less Coachable Athletes

Personality Variable	Items	Cronbach's Alpha	More Coachable Mean	Less Coachable Mean
Agreeableness	30	.82	3.48	3.35
Trust	4	.82	3.42	3.24
Morality	4	.65	3.87	3.69
Altruism	5	.67	4.01	3.84
Cooperation	5	.61	3.64	3.35
Modesty	5	.71	2.98	3.01
Sympathy	3	.52	2.77	2.72
Emotional Stability	30	.86	2.47	2.67
Anxiety	4	.73	3.04	3.20
Anger	5	.83	2.72	3.06
Depression	4	.66	2.10	2.29
Self-Consciousness	5	.66	2.32	2.38
Immoderation	5	.60	2.44	2.72
Vulnerability	5	.56	2.41	2.50

Note. More Coachable (*N*= 97); Less Coachable (*N*= 93).

Athlete Coachability Survey for Coaches. Athlete coachability was evaluated by coaches with an 18-item survey, which was developed for this study. This instrument was developed in three stages. First, a list of potential items designed to distinguish more coachable from less coachable athletes was generated primarily from qualitative interview statements from coaches reported by Giacobbi and colleagues (2000; 2002) and from the author's personal experience as a college coach. Additionally, a few potential items were modified from Giacobbi's (2000)

Athlete Coachability Scale. For example, *"I always listen closely to my coaches' instruction during practice"* was modified to *"As compared to less coachable athletes, more coachable athletes are more attentive and listen carefully to instructional feedback."*

In the second stage, efforts were made to improve the validity of the instrument by inviting a panel of expert NCAA Divisions I and II coaches to judge and provide feedback on the 34 potential items. Ten veteran NCAA softball coaches representing eight conferences were contacted via email and invited to serve on an expert coach panel to evaluate the items. Expert coaches were selected based on three criteria: 1) a minimum of 15-years experience as a NCAA Divisions I or II head softball coach; 2) success as an NCAA head softball coach reflected through wins and losses; and 3) previous professional coaching affiliation with the author. Three of the 10 coaches invited to serve on the expert coach panel are members of the National Fastpitch Coaches Association Hall of Fame, the most prestigious coaching membership extended to college softball coaches in the United States.

Surveys were sent to the 10 expert coaches electronically, and 9 coaches completed and returned surveys to the author. However, one survey was received after the deadline and was not used in the analysis. Thus, feedback from eight expert coaches (6 NCAA Division I; 2 NCAA Division II), including all three National Fastpitch Coaches Association Hall of Fame coaches, was used to determine the final items for the Athlete Coachability Survey. The 8 expert coaches (3 males; 5 females) had been a head college softball coach 16 - 42 years and had accumulated between 472 and 1,000 wins. Coaches used a 5-point Likert scale from *Strongly Disagree* to

Strongly Agree to evaluate each of the 34 original items, each of which began with

the stem "As compared to less coachable athletes, more coachable athletes …"

Since the primary objective of the expert coaches panel was to enhance

validity of the instrument by identifying which items best distinguished more

coachable from less coachable athletes, means, standard deviations, and variances for

each item were calculated and analyzed. Items with higher mean scores and lower

standard deviations and variances represent a higher degree of agreement among

expert coaches regarding behaviors that best represent coachability. Of the 34 original

items, 11 items with mean scores of 4.3 or above were retained for the final

instrument. Two other items (*engages in honest communication with coach* and *trusts*

coaches' expertise) had mean scores of 4.1 and variances of .98 and .41 respectively

and were also retained.

In addition to evaluating the 34 original coachability items, expert coaches

were asked whether or not they agreed coachability includes the five components

proposed by Giaccobbi (2000): 1) intensity of effort; 2) trust and respect for coaches;

3) being willing to listen, learn, and change; 4) reaction to feedback, negative

reinforcement, and criticism; and 5) ability to get along with others. Coaches used

Yes, No, or *Unsure* to evaluate these components. Seven of the eight (88%) expert

coaches indicated that intensity of effort is a component of coachability, while one

coach was unsure.

All eight coaches (100%) agreed that trust and respect are components of

coachability. Likewise, all eight expert coaches (100%) agreed that being willing to

listen, learn, and change is included in coachability.

Reaction to feedback, negative reinforcement, and criticism received mixed results from the expert coaches. Five coaches (63%) reported that reaction to feedback, negative reinforcement, and criticism comprise one component of coachability, two were uncertain, and one indicated that it is not a component. A follow-up, telephone discussion with one expert Hall of Fame coach suggested that today's athletes do not handle negative reinforcement, feedback, or criticism well. This coach suggested that items with words like *criticism* and *negative reinforcement* be re-structured. Consequently, items containing the words *negative reinforcement* or *criticism* were changed to *corrective* or *instructional* for the final instrument.

The ability to get along with others was also perceived differently among coaches. Five coaches (63%) indicated that being able to get along with others is a component of coachability, while three coaches were unsure. Interestingly, however, seven of the eight expert coaches (88%) agreed or strongly agreed with the statement *"As compared to less coachable athletes, more coachable athletes get along better with all coaches and teammates."* Consequently, this item was retained on the final instrument.

The final question on the survey asked expert coaches to list any other observable behaviors that more coachable athletes display. Responses included the ability to enjoy what they were working on, a good sense of humor when things were not going well, displaying happiness through body language, being grateful for the opportunity, and buying into the team concept. Since several of these responses appear to be related to displaying on overall positive attitude, "*displays a positive outlook or attitude"* was added to the final instrument.

Based on the evaluations and insights of the expert coaches' panel, 13 of the 34 potential coachability items were retained for the final instrument, and one new item representing displaying a positive attitude was added. Four new items closely related to items that received the highest mean scores from expert coaches were also generated, resulting in 18 items for the final Athlete Coachability Survey.

The Athlete Coachability Survey gathered demographic information including sex, age, college head coaching experience, ethnicity, 2009 team record, and coaches' perceptions of coachability for six athletes. Coaches were asked to identify in rank order by uniform number, three more coachable and three less coachable athletes on their current team. After identifying these 6 athletes, coaches used a 5-point Likert scale (Almost Never, Seldom, Sometimes, Usually, or Almost Always) to indicate how well each of 18 statements described each of the 6 more or less coachable athletes.

Prior to data analysis, the Athlete Coachability Survey underwent reliability analysis. Since the objective of internal reliability analysis is to establish how consistently the instrument measures what it is intended to measure, all 36 coach surveys and their coachability ratings on 211 athletes were used in this analysis. The 18-item survey yielded a Cronbach's alpha reliability coefficient of .97. Scores on all 18 items were combined to create one mean Coachability score for each athlete who completed an Athlete Characteristics Survey ($N = 190$).

Procedures

After securing approval from the Human Subjects Committee, survey materials were mailed to the 38 head coaches who agreed to participate in the study in

the fall of 2009, near the end of the fall practice season. Each packet contained survey

materials for each athlete on the roster and the head coach, directions for

administering the surveys, and a large, self-addressed and stamped envelope for

returning athletes' surveys to the author. In order to minimize negative emotions that

may be associated with a particularly poor practice by both coaches and athletes,

directions for administering surveys requested that all surveys be completed during a

routine team meeting or before practice.

Athlete survey packets included an Information Statement, the Athlete

Characteristics Survey, and an envelope. Like most self-report personality

questionnaires, items on the Athlete Characteristics Survey are transparent and the

socially desirable answer could be inferred relatively easily. This presents the

possibility athletes could respond in ways that make their personalities look more

positive. However, specific procedures were implemented to help minimize the

possibility of socially desirable responses. First, directions on the Athlete

Characteristics Survey explicitly stated that sport teams are comprised of athletes who

have a wide variety of characteristics, and there are no right or wrong answers.

Instructions also explicitly stated responses would be confidential and would not be

shared with coaches or anyone else. Athletes were encouraged to answer all items

honestly considering only how they actually are now, not how they would like to be

or hope to be in the future.

To further encourage honest responses and alleviate any concern that coaches

or others might look at their responses, each athlete received an envelope with her

survey. The Athlete Information Statement as well as the administration directions to

coaches explained that each athlete should complete her survey, place her survey in the individual envelope, seal the envelope herself, and then place the sealed envelope in the large, return envelope. Directions further indicated that a team captain or appointed team member should seal the large envelope containing all athlete surveys in front of the team and place the envelope into the United States mail.

Survey packets for head coaches contained an Information Statement, the Athlete Coachability Survey for Coaches, and an addressed, stamped envelope. Directions asked coaches to identify by uniform number and in rank order, three more coachable and three less coachable athletes on their team. Since this study did not evaluate skill or athletic ability, coaches were reminded to consider only how coachable each selected athlete is, not how talented or skilled she might be. Coaches used a 5-point Likert scale from *Almost Never* to *Almost Always* to rank each identified athlete on the 18 items. Coaches were instructed to use the small, self-addressed, stamped envelope included in their packet of materials to return their surveys directly to the author.

Research Design and Analysis

Since researchers have not yet examined potential relationships between personality traits and coachability, a cross-sectional, self-administered survey design was utilized. A survey design provided an opportunity to begin exploring potential relationships between coachability and personality by gathering data from NCAA Divisions I and II college softball coaches and athletes across the United States within a reasonable time-frame.

Prior to data analysis, the Athlete Coachability Survey for Coaches and Athlete Characteristics Survey underwent reliability analysis. Mean scores were then created for each participating athlete for the following variables: Coachability; Anxiety; Anger; Depression; Self-Consciousness; Immoderation; Vulnerability; Trust; Morality; Altruism; Cooperation; Modesty; and Sympathy. A mean score was also created for each athlete on overall Emotional Stability and Agreeableness.

Testing of Hypotheses

- Hypothesis 1: Personality traits from the Agreeableness and Emotional Stability domains can predict Coachability.

    The first hypothesis was tested using Multiple Regression procedures and the enter method. All 12 facet-level personality traits of Agreeableness (Trust; Morality; Altruism; Cooperation; Modesty; and Sympathy) and Emotional Stability (Anxiety; Anger; Depression; Self-Consciousness; Immoderation; and Vulnerability) served as predictor variables in the linear regression model. Coachability, as rated by head coaches, served as the criterion variable. Predictors with significant t score values ($p < .05$) were retained in the regression model, and non-significant predictors were removed to yield the strongest model.

- Hypothesis 2: There will be a positive correlation between the personality facets of Agreeableness (Trust; Morality; Altruism; Cooperation; and Sympathy) and Coachability for athletes who have been identified by their coaches as more coachable.

    This hypothesis was tested using a Pearson Product Correlation analysis at a .05 significance level with the Bonferroni approach to control for Type I errors.

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- Hypothesis 3: There will be a negative correlation between the personality facets of Emotional Stability (Anxiety; Anger; Depression; Self-Consciousness; Immoderation; and Vulnerability) and Coachability for athletes who are identified by their coaches as more coachable.

   This hypothesis was tested using Pearson Product Correlation analysis at a .05 significance level using the Bonferroni approach to control for Type I errors.

- Hypothesis 4: Athletes who are rated by coaches as being more coachable will display personality traits from the Agreeableness and Emotional Stability domains that are significantly different than athletes who are rated as less coachable.

   This hypothesis was tested using Multivariate Analysis of Variance (MANOVA) procedures at a .05 significance level. Athletes were combined into two groups (more coachable and less coachable). The first MANOVA compared the means of more coachable and less coachable athletes on each of the six facets of Emotional Stability. The second MONOVA compared the means of the more and less coachable athletes on each of the six facets of Agreeableness. Wilks's Lambda was utilized to determine significant differences in means, and follow up Analysis of Variance (ANOVA) procedures were conducted for each personality facet using the Bonferroni approach to control for Type I errors.

   Although college coaches routinely cite the importance of having athletes who are coachable, this construct is not well understood and the relationship between specific personality traits and coachability has not been examined. This study serves as an initial investigation into these relationships and will provide important insights about which personality traits from the Agreeableness and Emotional Stability

domains might be most closely associated with coachability. If relationships are found, they can help develop a practical method of better identifying and evaluating personality traits during the recruiting process.

Chapter 4

Results

Coaches know that the characteristics and personality traits athletes possess impact team dynamics. One characteristic coaches desire in athletes is coachability. However, the coachability construct itself is broad and has not been well researched. Thus, it is not well understood. Furthermore, the relationship between coachability and personality traits has not been examined. This study sought to determine if personality traits from the Agreeableness and Emotional Stability domains can predict whether or not an athlete will be more coachable and whether more coachable athletes possess personality traits that are different than less coachable athletes on female college softball teams.

This chapter outlines the results of statistical analyses conducted to evaluate the research questions and hypotheses. In the first section, results of the multiple regression, Pearson Product Moment Correlation, and multivariate analysis of variance analyses conducted to evaluate each hypothesis are reported. The following section reports the results of statistical analysis conducted to better understand the coaching construct and identify questions that might by most useful to coaches in evaluating coachability. Means and standard deviations for more coachable and less coachable athletes on each item on the coachability survey as well as the results of a Pearson Product Moment Correlation analysis for each coachability item and each personality trait are included.

Hypothesis 1

Hypothesis 1 proposed that personality traits from the Agreeableness and Emotional Stability domains can predict Coachability. To evaluate this hypothesis, a multiple regression analysis using the enter method was conducted. The 12 facet-level personality traits were predictors in the model, and the overall Coachability score was the criterion variable. The linear combination of Anger and Immoderation was significantly related to an athlete's Coachability score, $F(2, 187) = 8.51$, $p = .000$. This combination of personality variables produced a multiple correlation coefficient of .29 indicating that approximately 8% of the variance in Coachability scores can be accounted for by the linear combination of Anger and Immoderation. As expected, both Anger and Immoderation were negatively related to Coachability. Table 4 presents the beta and standardized beta weights for Anger and Immoderation. Since both Anger and Immoderation lie within the Emotional Stability domain and no personality traits from the Agreeableness domain were significantly related to Coachability, hypothesis 1 was partially supported.

Table 4

Multiple Regression Analysis for Coachability

Variable	*B*	*SE B*
Anger	-.23	-.20
Immoderation	-.22	-.16

Note. $R^2 = .08$. $p < .05$. $N = 190$.

Hypothesis 2

The second hypothesis proposed that Trust, Morality, Altruism, Cooperation, and Sympathy would be positively related to Coachability for athletes identified by coaches as being more coachable. To investigate these relationships, Pearson's Product Moment Correlation coefficients were computed between each of the six personality facets from the Agreeableness domain and Coachability. Using the Bonferroni approach to control for Type I errors across the six correlations, a *p* value of less than .008 (.05/6 = .008) was required for significance. As shown in Table 5, positive relationships between each of the five hypothesized personality facets of Agreeableness and Coachability were found, which supports the hypothesis, though only Cooperation was statistically significant, r (188) = .22, p = .002.

Table 5

Pearson Product Correlations between Coachability and Agreeableness Facets

	Trust	Morality	Altruism	Cooperation	Modesty	Sympathy
Coachability	.12	.12	.14	.22**	-.004	.004

Note. **$p < .01$, two-tailed. $N = 190$.

Hypothesis 3

The third hypothesis proposed a negative relationship between Anxiety, Anger, Depression, Self-Consciousness, Immoderation, Vulnerability and Coachability for athletes identified by coaches as more coachable. To investigate relationships between these variables, Pearson's Product Moment Correlation analysis was computed between each personality facet and Coachability. Using the Bonferroni approach to control for Type I errors across the six correlations, a *p* value

of less than .008 (.05/6 = .008) was required for significance. This hypothesis was partially supported as negative relationships between five of the six personality traits and coachability were found, as shown in Table 6. Anger, r (188) = -.25, p = .001, and Immoderation, r (188) = -.21, p = .003 were statistically significant and negatively related to Coachability.

Table 6

Pearson Product Correlations between Coachability and Emotional Stability Facets

	Anxiety	Anger	Depression	Self-Consciousness	Immoderation	Vulnerability
Coachability	-.13	-.25**	-.09	.00	-.21**	-.05

Note. **p < .01, two-tailed. N = 190.

Hypothesis 4

The final hypothesis proposed that more coachable athletes possess personality traits from the Emotional Stability and Agreeableness domains that are significantly different than those of less coachable athletes. Prior to evaluating this hypothesis, athletes were combined into two groups, more coachable and less coachable, and means and standard deviations were calculated for the 12 personality facets. These results suggest some mean-level differences in personality traits between more coachable and less coachable athletes as shown in Table 7. In general, less coachable female athletes in this sample displayed lower levels of Trust, Morality, Altruism, Cooperation, and Sympathy than did more coachable athletes. Conversely, less coachable athletes displayed higher levels of Anxiety, Anger, Depression, Immoderation, and Vulnerability than did more coachable athletes. Modesty and Self-Consciousness were nearly identical between the two groups.

Table 7

Means and Standard Deviations for Personality Traits

Personality Trait	More Coachable		Less Coachable	
	M	SD	M	SD
Trust	3.42	.69	3.23	.84
Morality	3.87	.66	3.69	.70
Altruism	4.01	.52	3.84	.52
Cooperation	3.64	.66	3.35	.66
Modesty	2.98	.71	3.01	.75
Sympathy	2.77	.77	2.72	.69
Anxiety	3.04	.81	3.20	.71
Anger	2.72	.85	3.06	.77
Depression	2.10	.69	2.29	.70
Self Consciousness	2.32	.64	2.38	.67
Immoderation	2.44	.62	2.72	.72
Vulnerability	2.41	.52	2.50	.54

Note. Head coaches rated 211 athletes on Coachability; 190 of those

athletes completed personality surveys ($N = 97$ more coachable athletes;

$N = 93$ less coachable athletes).

    To determine whether the personality differences between more coachable

and less coachable athletes suggested by mean scores were significant, one-way

multivariate analysis of variance (MANOVA) procedures were conducted at a .05

significance level. In the first MANOVA, Coachability (more and less coachable)

served as the independent variable and Anxiety, Anger, Depression, Self-

Consciousness, Immoderation, and Vulnerability were dependent variables.

Significant differences were found between more coachable and less coachable

athletes' personality traits from the Emotional Stability domain, Wilks's $\Lambda = .93$,

$F(6, 183) = 2.21$, $p = .04$. The multivariate η^2 based on Wilks's Λ was .07.

Analyses of variances (ANOVA) were conducted on the dependent variables

as follow-up tests to the MANOVA. Using the Bonferroni approach to control for

Type I errors across the six dependent variables, each ANOVA was tested at the .008

level (.05/6 = .008). The ANOVA for Anger, $F(1, 188) = 8.56$, $p = .004$, $\eta^2 = .04$ and

Immoderation were significant, $F(1, 188) = 8.06$, $p = .005$, $\eta^2 = .04$, as shown in

Table 8.

Table 8

Analysis of Variance for Coachability and Emotional Stability Traits

Personality Trait	df	F	p	η^2
Anxiety	1	2.23	.14	.01
Anger	1	8.56**	.00	.04
Depression	1	3.41	.07	.02
Self-Consciousness	1	.32	.56	.00
Immoderation	1	8.06**	.00	.04
Vulnerability	1	1.52	.22	.00

Note. ** $p < .01$.

In the second MANOVA, the two levels of Coachability served as the

independent variable and Trust, Morality, Altruism, Cooperation, Modesty, and

Sympathy were dependent variables. There were no significant differences between

more coachable and less coachable athletes on personality traits from the

Agreeableness domain according to Wilks's Lambda, Wilks's Λ = .94, F (6, 183) =

1.94, p = .08, multivariate η^2 =.06. Since Wilks's Λ approached .05 significance and a

priori hypotheses proposed specific differences between more coachable and less

coachable athletes in personality traits from the Agreeableness domain, follow-up

ANOVAs were conducted on the dependent variables using the Bonferroni approach

at .008 to control for Type I errors across the six variables. Follow-up ANOVA

analysis indicated that Cooperation was significantly different between more

coachable and less coachable athletes, F (1, 188) = 9.43, p = .002, η^2 = .05 as shown

in Table 9. Hypothesis 4 was supported.

Table 9

Analysis of Variance for Coachability and Agreeableness Traits

Personality Trait	*df*	*F*	*p*	η^2
Trust	1	2.76	.10	.01
Morality	1	3.34	.07	.02
Altruism	1	5.09	.03	.03
Cooperation	1	9.43**	.00	.05
Modesty	1	0.10	.76	.00
Sympathy	1	0.19	.67	.00

Note. ** p < .01.

Coachability Survey Item Analysis

Even though no specific hypotheses were identified, this study sought to better

understand the coachability construct and identify specific questions coaches might

use to better evaluate coachability. Consequently, means and standard deviations for

each item on the Athlete Coachability Survey for Coaches were also calculated for the two groups of athletes. In general, coaches reported striking behavioral differences between more coachable athletes and less coachable athletes.

To further evaluate the significance of behavioral differences between more and less coachable athletes suggested by mean scores, independent *t* tests were conducted for each item on the Athlete Coachability Survey. Using the Bonferroni approach to control for Type I errors across the 18 survey items, a *p* value of less than .003 (.05/18) was required for significance. All 18 items yielded significant *t* scores indicating large differences between the two groups of athletes. Cohen's *d* effect sizes were also large, ranging from -1.11 to 2.90, as shown in Table 10.

Table 10

Means, Standard Deviations, t-scores, and Effect Sizes for Coachability Items

Athlete Coachability Survey Item	More Coachable		Less Coachable		Effect Sizes	
	M	SD	M	SD	*t*	*d*
1. Takes responsibility for mistakes	4.64	.50	2.71	.92	18.81	2.61
2. Wants to learn and is open to changing to improve	4.76	.43	2.69	.91	20.88	2.90
3. Exhibits a genuine respect for coaches	4.83	.44	3.47	.90	13.83	1.93
4. Is willing to do whatever coaches ask	4.79	.47	3.12	.98	15.67	2.18
5. Gets angry or pouts when given corrective feedback	1.38	.77	3.17	1.03	-14.27	-1.98
6. Engages in honest communication with coach	4.48	.62	3.04	1.02	12.31	1.71
7. Is determined to master new skills or techniques	4.74	.48	2.82	1.01	17.52	2.42
8. Gets along well with all coaches and teammates	4.75	.50	3.64	.98	10.23	1.43
9. Gets upset or angry when given corrective feedback	1.30	.66	3.01	.98	-14.81	-2.05
10. Is open to trying new ways of doing things	4.50	.69	2.70	.89	16.30	2.25
11. Makes excuses, complains, blames others	1.25	.74	3.31	1.12	-15.64	-2.16
12. Is attentive and listens to instructional feedback	4.69	.48	2.95	.99	16.00	2.24
13. Trusts coaches' expertise	4.68	.52	3.02	.92	16.01	2.21
14. Is stubborn and resistant to learning new techniques	1.26	.73	3.47	1.06	-17.57	-2.43
15. Provides honest and open feedback to coach	4.36	.73	2.99	1.03	11.02	1.52
16. Is genuinely committed to improving her game	4.84	.42	3.36	1.08	13.13	1.82
17. Argues with coaches or teammates	1.21	.66	2.28	1.18	- 8.07	-1.11
18. Displays a positive attitude or outlook	4.61	.51	3.11	.92	14.62	2.03

Note. Head coaches rated 211 athletes (*N* = 107 more coachable; *N* = 104 less coachable) using a 5-point scale with 1 = Almost Never; 2 = Seldom; 3 = Sometimes; 4 = Usually; and 5 = Almost Always. Personality surveys were completed by 190 of these athletes.

A Pearson's Product Moment Correlation analysis was then computed to investigate possible relationships between specific coachability items and Cooperation, Anger, and Immoderation. Using the Bonferroni approach to control for Type I errors across the 54 correlations, a p value of less than .0009 (.05/54 = .0009) was required for significance. As shown in Table 11, five coachability items showed a significant small to moderate relationship to Anger, Immoderation, and Cooperation.

Table 11

Pearson Product Correlations between Coachability Items and Significant Personality Traits

Athlete Coachability Survey Item	Cooperation	Anger	Immoderation
1. Takes responsibility for mistakes	.12	-.12	-.15
2. Wants to learn and is open to changing to improve	.19	-.15	-.12
3. Exhibits a genuine respect for coaches	.19	-.21	-.19
4. Is willing to do whatever coaches ask	.21	-.22	-.17
5. Gets angry or pouts when given corrective feedback	.20	-.30**	-.23
6. Engages in honest communication with coach	.13	-.24	-.16
7. Is determined to master new skills or techniques	.12	-.09	-.18
8. Gets along well with all coaches and teammates	.23	-.29**	-.25**
9. Gets upset or angry when given corrective feedback	.15	-.21	-.18
10. Is open to trying new ways of doing things	.18	-.13	-.15
11. Makes excuses, complains, blames others	.20	-.21	-.24
12. Is attentive and listens to instructional feedback	.20	-.16	-.15
13. Trusts coaches' expertise	.20	-.17	-.10
14. Is stubborn and resistant to learning new techniques	.16	-.15	-.11
15. Provides honest and open feedback to coach	.09	-.27**	-.18
16. Is genuinely committed to improving her game	.10	-.12	-.18
17. Argues with coaches or teammates	.33**	-.26**	-.17
18. Displays a positive attitude or outlook	.27**	-.30**	-.20

Note. $N = 190$. **$p < .0009$, two-tailed.

Summary of Findings

Results indicate distinctive behavioral and personality differences between more coachable and less coachable female NCAA Division I and Division II softball athletes. Head coaches reported clear behavioral differences between these two groups of athletes, and partial or full statistical support of the four hypotheses suggests there may also be distinctive differences in personality traits between more coachable and less coachable female softball athletes. In general, less coachable athletes reported lower levels of Trust, Morality, Altruism, Cooperation, and Sympathy, and higher levels of Anxiety, Anger, Depression, Self-consciousness, Immoderation, and Vulnerability than more coachable athletes. Specifically, statistical analyses suggest that Anger, Immoderation, and Cooperation appear to be particularly relevant traits in predicting and/or gaining insight about an athlete's Coachability. The next chapter will examine these findings in greater depth and discuss ways that coaches could potentially use this information to increase the probability of selecting more coachable athletes for their teams.

Chapter 5

Discussion, Summary, and Future Implications

Discussion

The purpose of this study was to determine if more coachable athletes possess personality traits from the Agreeableness and Emotional Stability domains that are different than less coachable athletes and to investigate whether personality traits might help predict whether or not an athlete will be more or less coachable. Results indicate that female college softball athletes perceived by head coaches as more coachable do appear to possess personality traits that are different than athletes perceived as less coachable. Less coachable female athletes were more likely to possess higher levels of Anger and Immoderation and lower levels of Cooperation than were more coachable athletes. More importantly, the combination of Anger and Immoderation appear to be the best predictors of coachability and may help coaches gain insight about how coachable an athlete might be. Results also support recent scholars' suggestions that coachability is complex construct displayed through a variety of distinctive behaviors. The following sections discuss these findings in more detail.

The primary goal of this study was to explore relationships between personality traits and coachability. In a study with female college soccer athletes, Piedmont et al. (1999) found a negative relationship between Neuroticism and Coachability (-.31) and a positive relationship between Agreeableness and Coachability (.26). While not quite as large as those reported by Piedmont and colleagues, this study with female college softball athletes also found a negative

relationship between Emotional Stability (Neuroticism) and Coachability (-.20) and a positive relationship between Agreeableness and Coachability (.16). Thus, in both studies, more coachable female college athletes were perceived by head coaches as being more emotionally stable and agreeable than their less coachable teammates.

Unlike Piedmont et al.'s (1999) research, which focused only on broad personality domains, this study attempted to identify which specific personality traits within the Emotional Stability and Agreeableness domains were most closely related to Coachability. Until a better understanding of which personality traits are most closely related to Coachability is gained, there is little opportunity to begin creating practical methods of better identifying and evaluating these traits in athletes during the recruitment process.

Predictors of coachability. The first research question sought to determine if personality traits from the Agreeableness and Emotional Stability domains can predict whether or not an athlete will be more coachable. Two combined traits from the Emotional Stability domain, Anger and Immoderation, were the strongest predictors of how coachable an athlete will be. In other words, an athlete who possesses high levels of Anger *and* Immoderation is likely to be perceived as less coachable than an athlete who possesses low levels of these traits.

Discovering that Anger is related to coachability is no surprise. Athletes who possess high levels of Anger become upset, mad, or annoyed more easily than athletes who are more even-tempered. High levels of Anger often lead to behaviors that are destructive to relationships and the coaching process. For example, providing feedback and instruction, which is often corrective in nature, and changing

mechanics, technique, or skills to improve performance are critical aspects of coaching. Athletes who are high in Anger typically get frustrated more easily when trying to learn new skills or techniques, often take corrective feedback personally, and spend time being mad rather than improving their skills. These athletes may also lash out at others verbally more quickly than athletes who are more even-tempered.

Coaches know athletes who get angry easily inhibit the learning process so vital in coaching, so most coaches attempt to evaluate behaviors associated with Anger during recruitment. Typically, this evaluation occurs by closely observing the athlete's behaviors in response to coaching feedback, mistakes, or situations that do not go the athlete's way during games. However, as previously noted, observational assessment can be extremely difficult. Not only are prospective athletes usually displaying their best behaviors when college coaches are observing, but some sports provide fewer opportunities for behaviors commonly associated with Anger to surface. For example, in softball or baseball, a prospective athlete has only two or three at-bats each game and may field the ball only once or twice the entire game. Thus, there are often few opportunities to observe how an athlete reacts to receiving corrective feedback from coaches, making mistakes, or dealing with situations that do not go his or her way. Conversely, a basketball athlete typically handles the ball many times, takes numerous shots, and receives more coaching feedback and instruction during a game, thus providing more opportunities to observe behaviors typically associated with Anger.

While most college coaches try to learn about behaviors associated with an athlete's Anger during recruitment, few, if any, would report attempting to evaluate

behaviors associated with Immoderation. However, in this study, female athletes who reported difficulty resisting temptation along with a greater tendency to go on binges, spend more than they could afford, and do things they regretted later were also more likely to be rated by coaches as less coachable. A close examination of the preceding items reveals that these behaviors are closely related to a lack of impulse control. Costa and McCrae's popular NEO PI-R refers to this scale as Impulsivity rather than Immoderation (IPIP, 2009).

Even though coaches seldom attempt to evaluate behaviors associated with Immoderation or Impulsivity during recruitment, it makes sense that high levels of this trait could quickly impede the coaching process. Athletes with high levels of Immoderation have trouble resisting temptation and are more likely to make decisions based on short-term gratification rather than long-term outcomes; and athletes who make spontaneous decisions without thinking through the potential ramifications of those decisions can easily impede team processes. For example, nearly all sport teams have specific rules, policies, and behavioral expectations, and athletes are expected to adhere to team rules and policies and consider the effects their decisions and behaviors could have on the team and institution they represent. The inability to resist temptations could cause an athlete to be late for practice, break team rules, miss curfew, or engage in other behaviors the coach and teammates deem inappropriate. Athletes who display these types of behaviors are generally perceived as lacking respect for coaches and teammates, which nearly always damages relationships among athletes and coaches and disrupts team dynamics as well.

The examples above demonstrate how possessing high levels of Anger or Immoderation alone might impede the coaching process, damage relationships, and disrupt team dynamics. However, the combination of Anger *and* Immoderation appear to offer the most valuable insight into how coachable an athlete might be. For example, possessing high levels of Anger alone may not necessarily inhibit the coaching process, but expressing that anger behaviorally usually does. Some athletes with higher levels of Anger may have learned to cognitively control expressing their anger. Thus, even though corrective feedback or being asked to do things differently may upset or frustrate these athletes, they seldom visibly express anger in ways that damage relationships and impede the coaching process. Consequently, these athletes may be perceived as being more coachable because they have learned how to control their anger, rather than express it in damaging ways. However, it seems reasonable to expect that athletes with high Anger *combined* with high Immoderation might experience more difficulty *controlling* behavioral expression of their anger. The inability to control urges might increase the likelihood these athletes would express their anger through emotional outbursts, disrespectful remarks, or other inappropriate behaviors that can quickly cause severe damage to relationships and the coaching process.

In summary, results of this study suggest that the combination of two traits from the Emotional Stability domain, Anger and Immoderation, may help predict how coachable an athlete will be. Athletes who possess high levels of both Anger and Immoderation are more likely to be less coachable than athletes who demonstrate lower levels of these traits. Consequently, from a practical perspective, it appears that

coaches can increase their chances of getting more coachable athletes by learning

more about an athlete's personality in these two specific traits.

Personality trait differences. The second research question sought to

determine whether there are discernable personality trait differences between more

coachable and less coachable athletes. As a group, less coachable female athletes

appear to be slightly less trusting, moral, altruistic, and sympathetic than more

coachable athletes. Less coachable female athletes also appear to be slightly more

anxious, depressed, self-conscious, and vulnerable than more coachable athletes. It is

important to note, though, that these personality differences were small and provide

little help for coaches seeking to identify and select more coachable athletes.

However, meaningful differences in personality traits between more coachable and

less coachable female athletes did surface for three traits: Anger, Immoderation, and

Cooperation. Anger and Immoderation, from the Emotional Stability domain, have

already been discussed.

Cooperation was the only trait from the Agreeableness domain that differed

significantly between more coachable and less coachable athletes. According to the

way female athletes responded to survey items, athletes perceived as less coachable

were more likely to hold grudges, have a sharp tongue, get back at others, and enjoy a

good fight. Less coachable athletes perceived themselves as more difficult to satisfy

than did more coachable athletes.

It seems intuitive that Cooperation is an important personality trait in team

sports that would be related to being more coachable. Maintaining positive

relationships with teammates and coaches is critical to positive dynamics in team

sports, and since women are often highly relationship-oriented, it may be even more important in female sport teams (Carron et al., 2002; Gilligan, 1982; Josselson, 2005). From this perspective, female athletes who hold grudges, have sharp tongues, and get back at others are more likely to engage in confrontations that can cause damage to relationships with coaches and team members. Thus, it is not surprising that athletes who were less cooperative were also perceived by coaches as less coachable.

Cooperation is likely related to being coachable in both team and individual sports. Even though individual sport athletes may be less dependent on teammates for their success, their respect for and ability to get along with coaches and teammates is most likely still an important component of being coachable. However, since female athletes may be more relationship-oriented than males (Brizendine, 2006; Gilligan, 1982; Josselson, 2005), an interesting question is whether the relationship between Cooperation and Coachability exists in male sport teams. Brizendine (2006) suggests that women experience more stress from relationship conflict than do men, yet women are neurologically and sociologically programmed to avoid conflict. Thus, rather than addressing and resolving conflict, women often seek social support from others (Brizendine, 2006). This may help explain why some coaches who have experience coaching male and female athletes report that when male athletes have issues with teammates or coaches, they typically confront and resolve the issues and move forward more quickly than do female athletes. If male athletes are less relationship-oriented than female athletes, in general, and more likely to address and resolve conflict more quickly, they may be less likely to hold grudges, get back at

others, or engage in other behaviors that damage relationships, impede the coaching process, and disrupt team dynamics.

To summarize, more coachable female softball athletes appear to possess some personality traits from the Emotional Stability and Agreeableness domains that are different than less coachable athletes. Specifically, less coachable female athletes appear to possess higher levels of Anger and Immoderation and lower levels of Cooperation than more coachable athletes. Thus, it appears that coaches could gain valuable insight about how coachable a prospective female athlete might be by better identifying and evaluating these three traits during the recruiting process.

Evaluating personality and coachability. While sport scholars have made significant strides in producing new knowledge about athletes and sport performance, there is often an unfortunate disconnect between scholarly research and actual practice. In short, new knowledge is not always transferred to coaches in ways coaches can easily use to enhance the success, performance, and day-to-day operation of their teams. In recent years, many sport scholars have strayed from general sport personality research, instead focusing their efforts on more specific, performance-related areas like competitive anxiety, attention, goal-orientations, and motivation (Vanden Auweele et al., 2001). Yet college coaches, in particular, continue to cite the importance of personality on team dynamics and success (Solomon & Rhea, 2008; Summitt, 1998). Solomon and Rhea (2008) challenged scholars to recognize that personality factors are important to college coaches and begin establishing methods of identifying relevant personality attributes in athletes. These scholars also noted that before this can be achieved, broad constructs like work ethic and coachability must be

better understood. Since few scholars have examined the coachability construct, one goal of this study was to better understand this construct from a female, team-sport perspective.

Giacobbi (2000) found that coachability includes intensity of effort, trust and respect for coaches, openness to learning, coping with criticism, working with teammates, and reaction to feedback. Giacobbi and colleagues (2002) later suggested that being motivated, listening and being receptive to change, displaying low frustration, and being flexible and able to adapt to the unexpected are also components of coachability. More recently, Solomon (2008) suggested coachability may also include handling pressure, mental maturity, integrity, trust, honesty, and respect.

The striking behavioral differences between more coachable and less coachable athletes in this study suggest college softball coaches believe being coachable includes these characteristics: willingness to listen, learn, and change; reaction to feedback and instruction; trust and respect for coaches; positive interactions with teammates and coaches; determination and commitment; positive attitude; and overall emotional maturity. This finding supports previous scholars' suggestions that coachability is a complex construct demonstrated behaviorally in a variety of ways.

In addition to better understanding coachability and personality traits that may be related to being more coachable, college coaches need practical methods of better identifying and evaluating an athlete's personality and coachability. The distinct behavioral differences between more coachable and less coachable athletes

discovered in this study provide an opportunity to begin bridging the gap between research and practice. Although this study was exploratory in nature and additional research is needed, this line of inquiry has practical implications for college coaches in at least two important areas: selecting more coachable athletes and enhancing team dynamics.

Selecting athletes for college sport teams is a complex equation that includes the analysis of a variety of athletic and personality factors. Solving the athletic side of the equation is easy for college coaches, but solving the personality side of the equation is more challenging, and making a recruiting mistake is usually painful for everyone affected. Coaches who understand that Anger, Immoderation, and Cooperation appear to be associated with athletes being more or less coachable can make a concerted effort to learn about these traits during the recruiting process. Thus, the final objective of this study was to begin bridging the gap between research and practice by investigating the final research question, "Are there specific questions coaches could ask to better evaluate the personality traits most closely associated with coachability."

The most obvious method of learning more about personality is to administer a personality instrument to prospective athletes. However, this may not be the most practical method for at least two reasons. First, a minimum level of formal academic training in psychology, counseling, and psychometrics is required to administer and interpret personality instruments. Most college coaches do not possess the necessary level of academic training and expertise. Second, in the cutthroat world of college

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recruiting, many coaches would fear that using a personality instrument might be used against them by opposing coaches who were trying to recruit the same athlete.

A more viable approach is to identify specific questions that may provide useful information about an athlete's personality and coachability and teach coaches how to strategically use these questions to gather additional information during the recruiting process. College coaches typically spend a significant amount of time on the telephone with prospective athletes, high school coaches, youth coaches, and parents and could easily and strategically integrate specific personality-oriented and coachability-oriented questions into their conversations. For example, since Anger appears to be related to coachability, a college coach could ask a prospective athlete specific questions strategically designed to gain insights about an athlete's level of Anger. Athletes perceived as more coachable in this study reported they rarely get irritated or mad, are not easily annoyed, and do not get upset easily. Consequently, college coaches might ask a prospective athlete questions like *"What kinds of things really annoy or irritate you?"* or *"What kinds of things really make you mad?"* to gain insight about an athlete's overall level of Anger, especially if combined with probing questions and requests for specific examples. Similarly, asking an athlete whether she tends to hold a grudge or is more likely to forgive and forget may yield meaningful insight into her level of Cooperation.

These discussions could progress to include questions designed to better evaluate specific behaviors associated with being more coachable. Rather than asking the broad question, *"Are you coachable?"* college coaches could ask more targeted questions. Coachability items from this study that demonstrated the largest behavioral

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differenced in this study might be particularly useful. For example, the survey items *"wants to learn and is open to changing to improve, takes responsibility for mistakes, is stubborn and resistant to learning new techniques, is determined to master new skills or techniques, is attentive and listens carefully to instructional feedback, and trusts coaches expertise"* might provide meaningful information to coaches. Efforts to glean insight into these behaviors might include questions like *"What has your coach asked you to do differently and how did you respond to that request?; What happens when you make a mistake during practice or a game?; What kinds of things make you angry during a game?;* and *What happens when you fail?"* Listening carefully to how the athlete responds to these questions and asking probing follow-up questions requesting specific examples could help coaches glean insights that may not be evident from observations alone.

It is important to note that the predictive validity of any personality assessment is enhanced when combined with assessments from others as well (Weiner & Greene, 2008). College coaches routinely solicit information about prospective athletes from others and could undoubtedly improve the quality of this information by using a more systematic approach that includes asking the same set of specific personality-oriented and coachability-oriented questions to the athlete, high school coach, youth coach, and parent. This systematic approach would likely provide the most useful insights about a prospective athlete's personality traits and behavioral tendencies as it would provide an opportunity to compare responses and identify inconsistencies. Coaches could easily develop either a checklist or short survey

instrument containing specific questions related to specific personality traits and coachability to gather information from those most closely affiliated with the athlete.

While coaches strive to select more coachable athletes during recruitment, they must also work with athletes they already have. In fact, some scholars believe the value of sport personality research may lie not in its predictive power, but rather in the ability to use that information to improve team dynamics (Beauchamp et al., 2008). Thus, the second practical implication of this study for coaches and sport psychologists lies in the potential to improve team dynamics.

An increased understanding of specific behaviors most closely associated with coachability may be particularly valuable. Despite the fact that coaches often use the broad term "coachable" to describe athletes, coaches clearly have specific ideas regarding behaviors that demonstrate being coachable. However, it is clear these behaviors are diverse and cross several categories including willingness to listen, learn, and change, reaction to feedback and instruction, trust and respect for coaches, positive interactions with teammates and coaches, determination and commitment, positive attitude, and overall emotional maturity. Consequently, it is highly possible that an athlete and a coach may have different perceptions of behaviors that demonstrate being more or less coachable. These differences in perceptions could easily lead to communication and relationship challenges between coach and athlete.

When communication or relationship challenges surface, some college teams have the luxury of utilizing a sport psychologist. Sport psychologists who understand the specific behaviors coaches, or a particular coach, associate with being more coachable are better prepared to help athletes understand how their behaviors might

be perceived by coaches. For example, a coach who places a high value on being attentive and listening to instructional feedback could easily perceive that an athlete who does not maintain eye contact during instruction is not paying attention or being receptive to feedback, and thus is not being coachable. A sport psychologist might help the athlete understand how her behavior is being perceived and help her change a specific behavior in order to be perceived as being more coachable. Even the many coaches who do not have access to a sport psychologist would likely benefit from clearly communicating with their athletes the behaviors they most value. Coaches might even consider rating each athlete themselves and then having each athlete complete a self-assessment rating herself on the same set of coachability behaviors. That self-assessment could then be used to open dialogue with the athlete regarding differences in the athlete's perception and the coach's perception.

A better understanding of athletes' and coaches' personality traits, in general, also has the potential to improve team dynamics. Over time, coaches and athletes learn about each others' personalities and related behavioral tendencies. However, this trial-and-error method often results in relationship damage that is not easily repaired. Coaches who better understand their own personalities as well as the personalities of their athletes' and staff members are better positioned to use this knowledge to improve team dynamics. A coach who knows a particular athlete is high in the Anger trait, for example, might strategically alter the type of feedback given to that athlete. Rather than short, directive feedback, the coach might deliberately choose a softer, less directive approach with that particular athlete. Or, a head coach who is relatively high in Anger himself or herself might choose to let an

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assistant coach who is low in Anger work more closely with that particular athlete. Coaches who better understand the personalities of their athletes could also match more compatible athletes together on road trips or even during daily drills. Obtaining insight about current athletes' personalities could be especially valuable for coaches who take over new teams and have no idea what types of personalities they may be inheriting. The variety of ways in which a better understanding of personality traits could be used to improve team dynamics in sport is a fruitful and untapped area for future research.

Summary and Future Research

This study was as an initial investigation into the relationships between personality traits and coachability in female college softball athletes. Some scholars have hypothesized that coachability is a more complex construct than previously theorized, and this study supports that hypothesis. College softball coaches reported striking behavioral differences between more and less coachable athletes in a variety of areas including trust and respect for coaches, interactions with teammates and coaches, willingness to listen, learn, and change, reaction to feedback and instruction, determination and commitment, attitude, and overall emotional maturity.

Unlike previous sport research, this study provides initial insight into specific personality traits that may differ between more coachable and less coachable athletes. Although he did not investigate the potential relationships, Giacobbi (2000) hypothesized that coachability is likely most closely related to Agreeableness and Conscientiousness, and Trust and Achievement Striving may be particularly relevant traits. While this study did not investigate traits from the Conscientiousness domain,

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results suggest traits from the Emotional Stability domain may offer more insight about a female athlete's coachability than traits from the Agreeableness domain. Anger and Immoderation from the Emotional Stability domain and Cooperation from the Agreeableness domain were most closely related to coachability. More importantly, Anger and Immoderation, combined, appear to offer the most useful insight about how coachable a prospective athlete might be.

Surprisingly, while more coachable athletes in this study reported being slightly more trusting than did less coachable athletes, these differences were not significant. In fact, Altruism was the only other trait from the Agreeableness domain that approached significance. The fact that Trust did not surface as a predictor of being more coachable is interesting since head coaches reported clear behavioral differences between more and less coachable athletes on items related to *trust and respect for coaches*. In evaluating this finding, there are at least two areas that future researchers may want to address. First, it is important to remember that Trust is a personality trait; Respect is not. It is hypothesized that respect is the behavioral result of possessing several personality traits from the Agreeableness domain. More coachable athletes in this study tended to score higher than did less coachable athletes in Trust, Morality, Altruism, and Sympathy and were significantly higher in Cooperation. It is possible that athletes who possess higher levels of these Agreeableness traits combined behave in ways that are perceived by coaches as being more trusting and respectful. Future researchers may want to investigate this possibility. Future researchers may also consider measuring Trust and Respect as two completely separate coachability constructs. This would provide an opportunity to

more clearly distinguish which personality traits, if any, are most closely related to Respect. It is possible that respect and the behaviors typically associated with demonstrating respect are purely learned behaviors and have little relevance to core personality traits.

Second, future researchers would learn more about *trust and respect for coaches* by collecting data from athletes and coaches. It is possible that head coaches *believe* more coachable athletes trust and respect them more than those athletes really do. Measuring *trust and respect for coaches* as well as the other components of coachability from the athletes' perceptions would yield more accurate information than that provided by measuring coaches' perceptions alone, and it would also provide an opportunity to correlate athlete and coach perceptions on all coachability behaviors.

This study serves as an initial investigation into the relationships between personality and coachability. As such, there are a number of limitations that must be addressed. First and foremost, participating head coaches did not complete a personality instrument in this study. Coach-athlete compatibility is based on an interaction between the two parties, and thus, is unquestionably influenced by both the personality of the head coach as well as the personality of the athlete. It is possible head coaches may perceive athletes whose personalities are more similar to their own as being more coachable than athletes whose personalities are significantly different than theirs. Neuman and Wright (1999) theorized that group outcomes are influenced by the extent to which personality traits of leaders and team members are

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compatible or incompatible. Future researchers may want to examine these possibilities.

It is also important to note that assessment of athletes' personalities was based on a short, self-report instrument designed for this study. Even though a significant body of research suggests that personality traits remain primarily stable during the college years, the complexity of personality itself combined with the constant interactions with various environmental factors limits the accuracy with which personality traits can be measured by any self-report instrument. Self-report personality instruments can help infer probabilities about behavior but cannot measure them with certainty (Weiner & Greene, 2008). In general, self-report personality instruments are limited in predictive power because they require critical reflection and analysis and are subject to social desirability. It is possible that some 18-to-23-year old college athletes in this study do not possess the ability to critically evaluate their personality tendencies and behaviors. Additionally, even though several specific strategies were implemented to help assure athletes that their responses would be confidential, the possibility exists that some athletes doubted whether confidentiality would be guaranteed and responded in socially desirable ways. Items utilized in the Athlete Characteristics Survey are transparent and have a clear, more socially desirable response. Thus, some participants may have chosen more socially desirable responses rather than responses that are more indicative of their real behaviors. However, based on the data collection methods implemented to enhance confidentiality and encourage honest responses, there is no particular reason to suspect that socially desirable answers impacted this study more negatively than any

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other self-report survey study. Nonetheless, future research would be improved by using more than one method to evaluate athlete personality. Consequently, it is important to state that coaches should not make decisions about whether or not to recruit an athlete based on the results of a self-report personality instrument alone. Instead, as proposed earlier in this discussion, personality tendencies revealed on a self-report instrument or through conversations with others should be combined with other pieces of information gathered during recruitment to gain additional insights and assist in the overall decision-making process.

Since both survey instruments were designed specifically for the study, additional research is needed to refine and improve the reliability and validity of each instrument. Efforts to improve the Athlete Characteristics Survey at the facet level are particularly important. By using only 5 items to measure each of the 12 personality facets, this study undoubtedly sacrificed some reliability in an effort to enhance team participation by minimizing the time commitment required. As a result, the Immoderation and Cooperation scales yielded lower reliability coefficients than desired. However, since this study provides some initial insight into which specific personality traits from the Emotional Stability and Agreeableness domains appear to be most closely associated with coachability and which traits offer little useful information, future efforts to improve the reliability and validity of the instrument can focus on relevant traits only; irrelevant traits might be removed from the instrument altogether. Additionally, future research can be enhanced by adding traits from the Conscientiousness domain to the instrument as it seems intuitive that traits like

Achievement Motivation, Self-Discipline, and Dutifulness would be related to Coachability.

Finally, it is important to note that this study used a homogeneous convenience sample of female, college softball athletes and a small sample of head coaches. Since high levels of Anger and Immoderation and low levels of Cooperation can cause behaviors detrimental to relationships in sport teams, it seems reasonable to expect these traits might be related to coachability for both female and male athletes in a variety of team and individual sports. However, additional research with other sports, age groups, sexes, and ethnicities is needed to support or disprove this hypothesis.

Despite these limitations, this study provides some initial insight into which personality traits may be most closely related to coachability in female softball athletes. It also provides an increased understanding of the coachability construct and specific behaviors that best distinguish between more coachable and less coachable athletes. Coaches who understand which specific personality traits may be most closely associated with being more coachable and which behaviors most clearly distinguish more coachable from less coachable athletes can make a concerted effort to learn about these traits and behaviors during the recruiting process. This effort might include creating a checklist of questions strategically designed to elicit insight into specific personality traits and coachability behaviors and using this same checklist with the athlete as well as with others who are familiar with the athlete. Likewise, coaches and sport psychologists might use this knowledge with current athletes to improve team dynamics.

Most high-achieving athletic teams are characterized by good team dynamics and a high degree of compatibility among athletes and coaches. Coaches understand the impact personality compatibility and team dynamics have on overall success and try to find athletes whose personalities will mesh well with other athletes and coaches. Consequently, many college coaches try to identify and evaluate a variety of intangible personality attributes and behaviors related to coachability, work ethic, attitude, mental toughness, integrity, and confidence when they select athletes for their teams (National Fastpitch Coaches Association, 2009; Solomon & Rhea, 2008). This may explain why Tennessee women's basketball coach Pat Summitt compares assembling a team of female athletes with compatible personalities to solving a jigsaw puzzle. When the pieces of the puzzle do not fit together well due to incompatible personalities, team dynamics suffer and the team often fails to reach its potential. The relationships between personality traits and coachability discovered in this study provide a starting point for future research and may eventually help coaches begin solving one previously unsolved piece of the team dynamics puzzle.

References

Acosta, R. V. & Carpenter, L. J. (2010). Women in intercollegiate sport: A longitudinal, national study thirty three year update 1977-2010. Retrieved February 6, 2010, from http://www.acostacarpenter.org

Barrick, M. R., Stewart, G. L., Neubert, M. J., & Mount, M. K. (1998). Relating member ability and personality to work-team processes and team effectiveness. *Journal of Applied Psychology, 83*, 377-391.

Becker, A. J., & Solomon, G. B. (2005). Expectancy information and coach effectiveness in intercollegiate basketball. *The Sport Psychologist, 19*, 251-266.

Bell, S. T. (2007). Deep-level composition variables as predictors of team performance: A meta-analysis. *Journal of Applied Psychology, 92*, 595-615.

Beauchamp, M. R., Jackson, B., & Lavallee, D. (2008). Personality processes and intra-group dynamics in sport teams. In M. R. Beauchamp & M. A. Eys (Eds.), *Group dynamics in exercise and sport psychology* (pp. 25-41). New York: Routledge.

Brizendine, L. (2006). *The female brain.* New York: Morgan Road Books.

Carron, A. V., Colman, M. M., Wheeler, J., & Stevens, D. (2002). Cohesion and performance in sport: A meta analysis. *Journal of Sport & Exercise Psychology, 24,* 168-188.

Carron, A. V., & Dennis, P. W. (2001). The sport team as an effective group. In J. M. Williams (Ed.), *Applied sport psychology.* (4th ed., pp. 120-134). Mountain View, CA: Mayfield Publishing.

Carron, A. V., Hausenblas, H. A., & Eys, M. A. (2005). *Group dynamics in sport*. Morgantown, WVA: Fitness Information Technology.

Caspi, A., Roberts, B. W., & Shiner, R. L. (2005). Personality development: Stability and change. *Annual Review of Psychology, 56*, 453-484.

Chickering, A. W., & Reisser, L. (2005). The seven vectors. In M. E. Wilson & L. E. Wolf-Wendel (Eds.), *ASHE reader on college student development* (pp. 181-190). Boston: Pearson Custom Publishing.

Costa, P. T. J., & McCrae, R. R. (1992). Revised NEO personality inventory (NEO-PI-R) and NEO five factor (NEO-FFI) inventory professional manual. Odessa, FL: PAR.

Donnellan, M. B., Conger, R. D., & Burzette, R. G. (2007). Personality development from late adolescence to young adulthood: Differential stability, normative maturity, and evidence for the maturity-stability hypothesis. *Journal of Personality, 75*, 237-263.

Donnellan, M. B., Oswald, F. L., Baird, B. M., & Lucas, R. E. (2006). The mini-IPIP scales: Tiny-yet-effective measures of the big five factors of personality. *Psychological Assessment, 18,* 192-203.

Driskell, J. E., Goodwin, G. F., Salas, E., & O'Shea, P. G. (2006). What makes a good team player? Personality and team effectiveness. *Group dynamics: Theory, research, and practice, 10*, 249-271.

Ehrhart, K. H., Roesch, S. C., Ehrhart, M. G., & Kilian, B. (2008). A test of the factor structure equivalence of the 50-item IPIP five-factor model measure across gender and ethnic groups. *Journal of Personality Assessment, 90,* 507-516.

Giacobbi, P. R., Jr. (2000). *The athletic coachability scale: Construct conceptualization and psychometric analyses.* Unpublished Dissertation, University of Tennessee, Knoxville, TN.

Giacobbi, P. R., Roper, E., Whitney, J., & Butryn, T. (2002). College coaches' views about the development of successful athletes: A descriptive exploratory investigation. *Journal of Sport Behavior, 25,* 164-180.

Gilligan, C. (1982). *In a different voice: Psychological theory and women's development.* Cambridge, MA: Harvard University Press.

Goldberg, L. R. (1999). A broad-bandwidth, public domain, personality inventory measuring the lower-level facets of several five-factor models. In I. Mervielde, I. Deary, F. De Fruyt, & F. Ostendorf (Eds.), *Personality psychology in Europe, 7* (pp. 7-28). Tilburg University Press: The Netherlands.

Goldberg, L. R. (1981). Language and individual differences: The search for universals in personality lexicons. In L. Wheeler (Ed.), *Review of personality and social psychology, 2,* (pp. 141-165). Beverly Hills, CA: Sage.

Goldberg, L. R., Johnson, J. A., Eber, H. W., Hogan, R., Ashton, M. C., Cloninger, C. R., & Gough, H. G. (2006). The international personality item pool and the future of public-domain personality measures. *Journal of Research in Personality, 40,* 84-96.

Gould, D., Dieffenbach, K., & Moffatt, A. (2002). Psychological characteristics and their development in Olympic champions. *Journal of Applied Sport Psychology, 14,* 172-204.

Halfhill, T., Nielson, T. M., Sundstrom, E., & Weilbacher, A. (2005). Group

    personality composition and performance in military service teams. *Military*

    Psychology, 17, 41-54.

Halfhill, T., Sundstrom, E., Lahner, J., Calderone, W., & Nielson, T. (2005). Group

    personality composition and group effectiveness: An integrative review of

    empirical research. *Small Group Research*, *36(1)*, 83-105.

International personality item pool: A scientific collaboratory for the development of

    advanced measures of personality traits and other individual differences.

    Retrieved March 2, 2009, from http://ipip.ori.org

Janssen, J. (1999). *Championship team building.* Tucson, AZ: Winning the Mental

    Game.

John, O. P., Naumann, L. P., & Soto, C. J. (2008). Paradigm shift to the integrative

    big five trait taxonomy. In O. P. John, R. W. Robins, & L. A. Pervin (Eds.),

    Handbook of personality: Theory and research (3rd ed., pp. 114 - 158). New

    York: The Guilford Press.

John, O. P., & Srivastava, S. (1999). The big five trait taxonomy: History,

    measurement and theoretical perspectives. In L. Pervin & O. John, P. (Eds.),

    Handbook of personality: Theory and research (2nd ed., pp. 1-71). New

    York: Guilford.

Josselson, R. (2005). Identity. In M. E. Wilson & L. E. Wolf-Wendel (Eds.), *ASHE*

    reader on college student development (pp. 191-199). Boston: Pearson

    Custom Publishing.

Kenow, L., & Williams, J. M. (1997). Coach-athlete compatibility and athlete's perception of coaching behaviors. *Journal of Sport Behavior, 29,* 251-259.

Kohlberg, L. (2005). Moral stages and moralization: The cognitive-developmental approach. In M. E. Wilson & L. E. Wolf-Wendel (Eds.), *ASHE reader on college student development* (pp. 549-568). Boston: Pearson Custom Publishing.

McClendon, B. (2009). Digging deeper can give you insight into intangibles. *Fastpitch Delivery, 14(4),* 15.

McCrae, R. R., & Costa, P. T., Jr. (2008). The five-factor theory of personality. In O. P. John, R. W. Robins, & L. A. Pervin (Eds.), *Handbook of personality: Theory and research* (3rd ed., pp. 159-177). New York: The Guilford Press.

McCrae, R. R., Costa, P. T., Jr., Ostendorf, F., Angleitner, A., Hrebickova, M., & Avia, M. D. (2000). Nature over nurture: Temperament, personality, and life span development. *Journal of Personality and Social Psychology, 78*, 173-186.

McCrae, R. R., & John, O., P. (1992). An introduction to the five-factor model and its applications. *Journal of Personality, 60*, 175-215.

Mount, M. K., Barrick, M. R., & Stewart, G. L. (1998). Five-factor model of personality and performance in jobs involving interpersonal interactions. *Human Performance, 11*, 145-165.

National Fastpitch Coaches Association. (2009). The good…and the bad. *Top Recruit, 4,* 22-23.

Neuman, G. A., & Wright, J. (1999). Team effectiveness: Beyond the skills and

    cognitive ability. *Journal of Applied Psychology, 84,* 376-389.

Norman, W. T. (1963). Toward and adequate taxonomy of personality attributes:

    Replicated factor structure in peer nomination personality ratings. *Journal of*

    Abnormal and Social Psychology, 66, 574-583.

Peeters, M. A. G., Tuijl, H. F. J. M., Rutte, C. G., & Reymen, I. M. M. J. (2006).

    Personality and team performance: A meta-analysis. *European Journal of*

    Personality, 20, 377-396.

Piedmont, R. L., Hill, D. C., & Blanco, S. (1999). Predicting athletic performance

    using the five-factor model of personality. *Personality and Individual*

    Differences, 27, 769-777.

Perry, W. G. (2005). Different worlds in the same classroom: Students' evolution in

    their vision and knowledge and their expectations of teachers. In M. E. Wilson

    & L. E. Wolf-Wendel (Eds.), *ASHE reader on college student development*

    (pp. 473-482). Boston: Pearson Custom Publishing.

Roberts, B. W., Caspi, A., & Moffit, T. E. (2001). The kids are alright: Growth and

    stability in personality development from adolescence to adulthood. *Journal*

    of Personality and Social Psychology, 81, 670-683.

Roberts, B. W., & Del Vecchio, W. L. (2000). The rank-order consistency of

    personality traits from childhood to old age: A quantitative review of

    longitudinal studies. *Psychological Bulletin, 126*, 3-25.

Robins, R. W., Fraley, R. C., Roberts, B. W., & Trzensniewski, K. H. (2001). A longitudinal study of personality change in young adulthood. *Journal of Personality, 69*, 618-640.

Robins, R. W., Trzensniewski, K. H., & Roberts, B. W. (2005). Do people know how their personality has changed? Correlates of perceived and actual personality change in young adulthood. *Journal of Personality, 73*, 490-521.

Schmidt, J. (2008). Personality, group context, and performance behaviors in university football teams. Unpublished Dissertation. University of Calgary, Alberta, Canada.

Shaw, M. E. (1981). *Group dynamics: The psychology of small group behavior* (3rd ed.). New York: McGraw-Hill Book Company.

Shiner, R. L. (2006). Temperament and personality in childhood. In D. K. Mroczek & T. D. Little (Eds.), *Handbook of personality development* (pp. 213-230). Mahwah, NJ: Lawrence Erlbaum Associates.

Smith, R. E., Smoll, F. L., Schutz, R. W., & Ptacek, J. T. (1995). Development and validation of a multidimensional measure of sport-specific psychological skills: The athletic coping skills inventory-28. *Journal of Sport & Exercise Psychology, 17*, 379-398.

Solomon, G. B., & Rhea, D. J. (2008). Sources of expectancy information among college coaches: A qualitative test of expectancy theory. *International Journal of Sports Science & Coaching, 3*, 251-268.

Solomon, G. B. (2008). The assessment of athletic ability in intercollegiate sport: Instrument construction and validation. *International Journal of Sports Science and Coaching, 3,* 513-525.

Srivastava, S. (2009). Measuring the big five personality factors. Retrieved March, 20, 2009, from http://www.uoregon.edu/~sanjay/bigfive.html

Summitt, P. H., & Jenkins, S. (1998). *Reach for the summit. The definite dozen system for succeeding at whatever you do.* New York: Broadway Books.

Tupes, E. C., & Christal, R. C. (1961). Recurrent personality factors based on trait ratings. Technical Report, United States Air Force, Lackland Air Force Base, TX.

Van Vianen, A. E. M., & De Dreu, C. K. W. (2001). Personality in teams: Its relationship to social cohesion, task cohesion, and team performance. *European Journal of Work and Organizational Psychology, 10*, 97-120.

Vanden Auweele, Y., Nys, K., Rzewnicki, R., & Van Mele, V. (2001). Personality and the athlete. In R. N. Singer, H. A. Hausenblas, & C. M. Janelle (Eds.), *Handbook of sports psychology* (2nd ed., pp. 239-268). New York: John Wiley & Sons, Inc.

Vealey, R. S. (2002). Personality and sport behavior. In T. Horn (Ed.), *Advances in sport psychology* (2nd ed., pp. 43-82). Champaign, IL: Human Kinetics.

Weiner, I. B., & Greene, R. L., (2008). *Handbook of personality assessment.* Hoboken, NJ: John Wiley & Sons.

Wood, V. F., & Bell, P. A. (2008). Predicting interpersonal conflict resolution styles

    from personality characteristics. *Personality and Individual Differences, 45*,

    126-131.

Yukelson, D. P. (2001). Communicating effectively. In J. M. Williams (Ed.), *Applied*

    sport psychology (4th ed., pp. 135-149). Mountain View, CA: Mayfield

    Publishing.

Appendix A

Informed Consent Form for Athletes

Dear Athlete,

The Department of Health, Sports and Exercise Sciences at the University of Kansas supports the practice of protection for human subjects participating in research. The following information is provided for you to decide whether you wish to participate in the present study. You should be aware that even if you agree to participate, you are free to withdraw at any time without penalty.

We are conducting this study to better understand the characteristics of female athletes who participate in college softball. Participation in this study will require you to complete the attached survey, which will take approximately 10-15 minutes. The content of the survey should cause no more discomfort than you would experience in your everyday life.

Although participation in this study may not benefit you directly, we believe that the information obtained from this study will help us gain a better understanding of female collegiate softball teams and the athletes who comprise those teams. Your participation is solicited and highly desired, although strictly voluntary.

There is no need to put your name anywhere on the survey. Your responses will be kept completely confidential and will not be shared with your coach, teammates, or anyone else. If you would like additional information concerning this study before or after it is completed, please feel free to contact us by phone or mail.

Completion of the survey indicates your willingness to participate in this project and that you are over the age of eighteen. If you have any additional questions about your rights as a research participant, you may call (785) 864-7429 or (785) 864-7385 or write the Human Subjects Committee Lawrence Campus (HSCL), University of Kansas, 2385 Irving Hill Road, Lawrence, Kansas 66045-7563 or email mdenning@ku.edu.

To participate in this study, answer all questions on the attached survey as honestly as possible, then remove this information sheet and place your completed survey in the small, white envelope attached to this packet of materials. Be sure to seal the envelope and place your sealed envelope in the large yellow envelope, which will be sealed by a team captain or designated player and mailed directly to the researcher. Thank you for participating in this study.

Sincerely,

Judy Favor, M.A.   Dr. Angela Lumpkin
Principal Investigator   Faculty Supervisor
Department of HSES   Department of HSES
University of Kansas   University of Kansas
Lawrence, KS 66045   Lawrence, KS 66045
(913) 626-6751   (785) 864-0778
jfavor@ku.edu   alumpkin@ku.edu

Appendix B

Informed Consent Form for Coaches

Dear Coach,

       The Department of Health, Sports and Exercise Sciences at the University of Kansas supports the practice of protection for human subjects participating in research. The following information is provided for you to decide whether you wish to participate in the present study. You should be aware that even if you agree to participate, you are free to withdraw at any time without penalty.
       We are conducting this study to better understand the traits that are associated with coachability in female softball athletes. Participation in this study will require you to complete the attached survey, which will take approximately 10-15 minutes. The content of the survey should cause no more discomfort than you would experience in your everyday life. Your participation is solicited and highly desired, although strictly voluntary.
       There is no need to put your name anywhere on the survey and your responses will be confidential. They will not be shared with anyone else. If you would like additional information concerning this study before or after it is completed, please feel free to contact us by phone or mail.
       Completion of the survey indicates your willingness to participate in this project and that you are over the age of eighteen. If you have any additional questions about your rights as a research participant, you may call (785) 864-7429 or (785) 864-7385 or write the Human Subjects Committee Lawrence Campus (HSCL), University of Kansas, 2385 Irving Hill Road, Lawrence, Kansas   66045-7563 or email mdenning@ku.edu.
       To participate in this study, complete all parts of the attached survey as honestly as possible, then remove this information sheet and place your completed survey in the attached self-addressed, stamped envelope and drop it in the United States mail. Thank you for participating in this study.

Sincerely,

Judy Favor, M.A.   Dr. Angela Lumpkin
Principal Investigator   Faculty Supervisor
Department of HSES   Department of HSES
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Appendix C

Athlete Characteristics Survey

Athlete Characteristics Survey

Institution: ☐ NCAA I ☐ NCAA II	**Year in College:** 1ˢᵗ 2ⁿᵈ 3ʳᵈ 4ᵗʰ 5ᵗʰ 6ᵗʰ	**Primary Position:**
Age:	**Are you on athletic scholarship?** ☐ Yes ☐ No	**High School from which you graduated:**
College Uniform Number:	**How do you describe your ethnicity:** ☐ White ☐ Black or African-American ☐ Hispanic or Latino ☐ American Indian or Alaska Native ☐ Native Hawaiian or Pacific Islander ☐ Other	

Teams are comprised of people who have lots of different characteristics. Below are several phrases that describe various characteristics of people. Read each phrase carefully and decide how well each one describes you. Think about the way you generally are in your everyday life, rather than in a specific context. There are no right or wrong answers and your responses will be completely confidential – they will not be shared with your coaches or anyone else. You will put this survey directly into the attached envelope and seal it yourself, so answer as honestly as possible and describe the way you usually are right now, not the way you wish you were or would like to be. Using the scale below, **circle** the number below each phrase **that indicates how well each statement describes you.**

1 ---------------- 2 ---------------- 3 ---------------- 4 ---------------- 5
Strongly Disagree   Disagree   Neutral   Agree   Strongly Agree

Rarely get irritated 1 2 3 4 5	Have a sharp tongue 1 2 3 4 5	Believe others have good intentions 1 2 3 4 5	Am calm even in tense situations 1 2 3 4 5	Get stressed out easily 1 2 3 4 5
Trust what people say 1 2 3 4 5	Can't make up my mind 1 2 3 4 5	Am comfortable in unfamiliar situations 1 2 3 4 5	Suspect hidden motives in others 1 2 3 4 5	Suffer from others sorrows 1 2 3 4 5
Am relaxed most of the time 1 2 3 4 5	Seldom feel sad or blue 1 2 3 4 5	Dislike being the center of attention 1 2 3 4 5	Make people feel comfortable 1 2 3 4 5	Am not easily annoyed 1 2 3 4 5
Have frequent mood swings 1 2 3 4 5	Am not embarrassed easily 1 2 3 4 5	Don't know why I do some things I do 1 2 3 4 5	Think that all will be well 1 2 3 4 5	Love a good fight 1 2 3 4 5
Feel comfortable with myself 1 2 3 4 5	Am easy to satisfy 1 2 3 4 5	Have a good word for everyone 1 2 3 4 5	Seldom get mad 1 2 3 4 5	Make people feel welcome 1 2 3 4 5
Can't stand weak people 1 2 3 4 5	Take advantage of others 1 2 3 4 5	Never spend more than I can afford 1 2 3 4 5	Am often down in the dumps 1 2 3 4 5	Get back at others 1 2 3 4 5
Adapt easily to new situations 1 2 3 4 5	Hold a grudge 1 2 3 4 5	Know how to get around the rules 1 2 3 4 5	Sympathize with the homeless 1 2 3 4 5	Feel that my life lacks direction 1 2 3 4 5
Use flattery to get ahead 1 2 3 4 5	Love to help others 1 2 3 4 5	Find it difficult to approach others 1 2 3 4 5	Trust others 1 2 3 4 5	Anticipate the needs of others 1 2 3 4 5
Am easily intimidated 1 2 3 4 5	Think highly of myself 1 2 3 4 5	Would never cheat to get ahead 1 2 3 4 5	Am able to stand up for myself. 1 2 3 4 5	Get angry easily 1 2 3 4 5
Dislike talking about myself 1 2 3 4 5	Do not get upset easily 1 2 3 4 5	Believe people should fend for themselves 1 2 3 4 5	Have a high opinion of myself 1 2 3 4 5	Do things I regret later 1 2 3 4 5
Remain calm under pressure 1 2 3 4 5	Worry about things 1 2 3 4 5	Feel that I am unable to deal with things 1 2 3 4 5	Am not easily bothered by things 1 2 3 4 5	Stick to the rules 1 2 3 4 5
Go on binges 1 2 3 4 5	Easily resist temptations 1 2 3 4 5	Consider myself an average person 1 2 3 4 5	Believe in an eye for an eye 1 2 3 4 5	Easily overcome setbacks 1 2 3 4 5

Appendix D

Athlete Coachability Survey for Coaches

Athlete Coachability Survey for Coaches

Affiliation: ☐ NCAA I ☐ NCAA II	☐ Male ☐ Female	Team record Spring 2009 season:	Conference:	Age: ☐ 24 - 29 ☐ 30 - 39 ☐ 40 - 49 ☐ 50 - 59 ☐ 60 - 69 ☐ 70 - 79

Years of experience as a college head coach:
☐ 1-5 ☐ 6-10 ☐ 11-15 ☐ 16-20 ☐ 21-25 ☐ 26 -30 ☐ 31+

Ethnicity: ☐ White ☐ Black or African-American ☐ Hispanic or Latino
☐ American Indian or Alaska Native ☐ Native Hawaiian or Pacific Islander ☐ Other

Some sport teams are comprised of athletes who are all highly coachable, but many teams include athletes who are very coachable as well as athletes who are less coachable. Thinking only about your current team, identify by uniform number 3 more coachable and 3 less coachable athletes. Please consider only how coachable each athlete is, not how talented or skilled she may be. List the most coachable athlete on your team first, followed by the next most coachable, etc. Then, using the scale below, circle the number that most appropriately represents how well each phrase describes each athlete.

1 ----------- 2 ----------- 3 ------------- 4 ----------- 5
Almost Never   Seldom   Sometimes   Usually   Almost Always

This athlete:	3 more coachable athletes on current team (list most coachable first)			3 less coachable athletes on current team (list least coachable first)		
	Uniform #	Uniform #	Uniform #	Uniform #	Uniform #	Uniform #
takes responsibility for her mistakes	1---2---3---4---5	1---2---3---4---5	1---2---3---4---5	1---2---3---4---5	1---2---3---4---5	1---2---3---4---5
wants to learn and is open to changing to improve	1---2---3---4---5	1---2---3---4---5	1---2---3---4---5	1---2---3---4---5	1---2---3---4---5	1---2---3---4---5
exhibits a genuine respect for coaches	1---2---3---4---5	1---2---3---4---5	1---2---3---4---5	1---2---3---4---5	1---2---3---4---5	1---2---3---4---5
is willing to do whatever coaches ask	1---2---3---4---5	1---2---3---4---5	1---2---3---4---5	1---2---3---4---5	1---2---3---4---5	1---2---3---4---5
gets angry or pouts when given corrective feedback	1---2---3---4---5	1---2---3---4---5	1---2---3---4---5	1---2---3---4---5	1---2---3---4---5	1---2---3---4---5
engages in honest communication with coach	1---2---3---4---5	1---2---3---4---5	1---2---3---4---5	1---2---3---4---5	1---2---3---4---5	1---2---3---4---5
is determined to master new skills or techniques	1---2---3---4---5	1---2---3---4---5	1---2---3---4---5	1---2---3---4---5	1---2---3---4---5	1---2---3---4---5
gets along well with all coaches and teammates	1---2---3---4---5	1---2---3---4---5	1---2---3---4---5	1---2---3---4---5	1---2---3---4---5	1---2---3---4---5
gets upset or angry when given corrective feedback	1---2---3---4---5	1---2---3---4---5	1---2---3---4---5	1---2---3---4---5	1---2---3---4---5	1---2---3---4---5
is open to trying new ways of doing things	1---2---3---4---5	1---2---3---4---5	1---2---3---4---5	1---2---3---4---5	1---2---3---4---5	1---2---3---4---5
makes excuses, complains, or blames others	1---2---3---4---5	1---2---3---4---5	1---2---3---4---5	1---2---3---4---5	1---2---3---4---5	1---2---3---4---5
is attentive and listens carefully to instructional feedback	1---2---3---4---5	1---2---3---4---5	1---2---3---4---5	1---2---3---4---5	1---2---3---4---5	1---2---3---4---5
trusts coaches' expertise	1---2---3---4---5	1---2---3---4---5	1---2---3---4---5	1---2---3---4---5	1---2---3---4---5	1---2---3---4---5
is stubborn and resistant to learning new techniques	1---2---3---4---5	1---2---3---4---5	1---2---3---4---5	1---2---3---4---5	1---2---3---4---5	1---2---3---4---5
provides honest and open feedback to coach	1---2---3---4---5	1---2---3---4---5	1---2---3---4---5	1---2---3---4---5	1---2---3---4---5	1---2---3---4---5
is genuinely committed to improving her game	1---2---3---4---5	1---2---3---4---5	1---2---3---4---5	1---2---3---4---5	1---2---3---4---5	1---2---3---4---5
argues with coaches or teammates	1---2---3---4---5	1---2---3---4---5	1---2---3---4---5	1---2---3---4---5	1---2---3---4---5	1---2---3---4---5
displays a positive attitude or outlook	1---2---3---4---5	1---2---3---4---5	1---2---3---4---5	1---2---3---4---5	1---2---3---4---5	1---2---3---4---5

Appendix E

Expert Coaches Validation Survey

Expert Coaches Validation Survey

The following questions require you to <u>think about specific behavioral differences that distinguish more coachable athletes from less coachable athletes.</u> Using the scale below, rank how well you believe each statement distinguishes more coachable athletes from less coachable athletes. You may simply type an "X" next to the appropriate number or highlight the number and email this document back to me at jfavor@ku.edu . Or, you may print the document, circle or X the appropriate number and fax it to me at 913-696-1997. Thanks for your help!

1 -------------- 2 -------------- 3 -------------- 4 ---------------- 5
Strongly Disagree   Disagree   Neutral   Agree   Strongly Agree

As compared to less coachable athletes, <u>more coachable athletes</u>:

Often come to practice early or stay late for extra work 1---2---3---4---5	Genuinely respect coaches 1---2---3---4---5
Stay positive no matter how poorly things are going 1---2---3---4---5	Regularly solicit advice for improving skills 1---2---3---4---5
Want to learn and are open to changing to improve 1---2---3---4---5	Often ask for extra help to improve skills 1--2---3---4---5
Don't get angry or pout when given corrective feedback 1---2---3---4---5	Are positive role models 1---2---3---4---5
Respond more positively to negative reinforcement/criticism 1---2---3---4---5	Openly share problems or concerns with coach 1---2---3---4---5
Engage in honest communication with coach 1---2---3---4---5	Work harder on feedback coaches provide 1--2---3---4---5
Are more open to trying new ways of doing things 1---2---3---4---5	Take responsibility for their mistakes 1---2---3---4---5
Don't get angry or upset when given feedback or criticism 1---2---3---4---5	Are more respectful to coaches 1---2---3---4---5
Display positive body language and eye contact 1---2---3---4---5	Always strive to get better 1---2---3---4---5
Are more flexible and adapt to unexpected events more easily 1---2---3---4---5	Never make excuses, complain, or blame others 1---2---3---4---5
Are more determined to master new skills or techniques 1---2---3---4---5	Don't "talk back" to coaches 1---2---3---4---5
Are more attentive and listen carefully to instructional feedback 1---2---3---4---5	Obtain advice from many sources 1---2---3---4---5
Are well liked and more respected by all teammates and coaches 1---2---3---4---5	Seldom get upset or frustrated 1---2---3---4---5
Are more inquisitive. 1---2---3---4---5	Work harder every day to improve their skills 1---2---3---4---5
Demonstrate a desire to change skills 1---2---3---4---5	Trust coaches' expertise 1---2---3---4---5
Get along better with all coaches and teammates 1---2---3---4---5	Are willing to do whatever coaches ask 1---2---3---4---5
Are always willing to do whatever coaches ask to help team 1---2---3---4---5	Are always willing to help coaches and teammates 1---2---3---4---5

Do you consider _____ to be a component of coachability?

1.	intensity of effort	Yes	No	Unsure
2.	trust and respect for coaches	Yes	No	Unsure
3.	being willing to listen, learn, and change	Yes	No	Unsure
4.	reaction to feedback, negative reinforcement, criticism	Yes	No	Unsure
5.	ability to get along with others	Yes	No	Unsure

Please list any other observable behaviors that more coachable athletes display.

Appendix F

IPIP Personality Phrases Used in Survey

IPIP Personality Items Used in Athlete Characteristics Survey

Anxiety
worry about things +
am not easily bothered by things -
get stressed out easily +
Am relaxed most of the time -
Adapt easily to new situations -

Anger
 rarely get irritated -
 seldom get mad -
 do not get upset easily -
 am not easily annoyed -
 get angry easily +

Depression
am often down in the dumps +
feel comfortable with myself -
seldom feel sad or blue -
feel that my life lacks direction +
have frequent mood swings +

Self-Consciousness
am not embarrassed easily -
am able to stand up for myself -
am comfortable in unfamiliar situations -
find it difficult to approach others +
am easily intimidated +

Immoderation
easily resist temptations -
do things I regret later +
don't know why I do some of the things I do
never spend more than I can afford -
go on binges +

Vulnerability
can't make up my mind. +
remain calm under pressure -
am calm even in tense situations -
easily overcome setbacks -
feel that I am unable to deal with things +

Trust
trust what people say +
suspect hidden motives in others -
believe others have good intentions +
think that all will be well +
trust others +

Morality
know how to get around rules -
stick to the rules +
would never cheat to get ahead +
take advantage of others -
use flattery to get ahead -

Altruism
make people feel welcome +
have a good word for everyone. +
make people feel comfortable +
anticipate the needs of others. +
Love to help others +

Cooperation
am easy to satisfy +
hold a grudge -
love a good fight -
have a sharp tongue -
get back at others -

Modesty
dislike talking about myself. +
think highly of myself. -
have a high opinion of myself. -
dislike being the center of attention +
consider myself an average person +

Sympathy
believe in an eye for an eye -
can't stand weak people -
believe people should fend for themselves -
suffer from others sorrows +
sympathize with the homeless. +