College Coaches' Views About the Development of Successful Athletes: A Descriptive Exploratory Investigation

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In this study, semi-structured interviews were conducted with 10 NCAA Division 1 coaches. The coaches were asked to discuss their experiences coaching specific athletes who made substantial progress while they participated on their team. Six higher order themes emerged from the interviews: developmental considerations, motivation/competitiveness, coachability, the coaches' influence, the teams' influence, and miscellaneous contextual influences. The coaches identified athletes who made substantial progress as being highly competitive/ motivated and receptive to instruction. The coaches also emphasized the importance of individual meetings, one on one instruction, and getting to know the individual athlete as important factors in the skill development process. Finally, a competitive and supportive team atmosphere emerged as an important influence on the skill development process for successful college athletes. The implications of these results are discussed in terms of existing research and practical applications in sport psychology.

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Coaching behaviors have received considerable attention in the sport psychology literature. Researchers have investigated compatibility between the coach and athlete (Horne & Carron, 1985; Bennett & Carron, 1977), team climate (Fisher, Mancini, Hirsch, Proulx, & Straurowsky, 1982), strategies used by coaches to increase the self-efficacy of athletes (Gould, Hodge, Peterson, & Giannini, 1989; Weinberg, Grove, & Jackson, 1992), leadership styles and decision making (Chelladurai & Arnott, 1985; Chelladurai, 1980; Chelladurai, & Saleh, 1978; Gordon, 1988), and more recently, the structure of coaching knowledge (Côté, Salmela, Trudel, Baria, & Russell, 1995), the pre and post competition routines of expert coaches (Bloom, Durand-Bush, & Salmela, 1997), and the mental skills training techniques used by junior tennis coaches (Gould, Damarjian, & Medbery, 1999).

Sport psychology researchers have also utilized systematic observational techniques to examine coaching behaviors at various levels of competition (Horn, 1985; Lacy & Darst, 1985; Langsdorf, 1979; Smith, Smoll, & Hunt, 1977; Smoll, Smith, Curtis, & Hunt, 1978; Smith, Zane, Smoll, & Coppel, 1983; Tharp & Gallimore, 1976). In one widely cited study, Tharp and Gallimore (1976) observed hall of fame basketball coach John Wooden during 15 practice sessions and found that half (50.3%) of Wooden's behaviors were instructional in nature. Wooden rarely used positive statements without some form of instruction and his negative statements were consistently followed by instruction as well. Tharp and Gallimore (1976) also found that Wooden used cue words such as "hustle" or "drive" as a form of reinforcement and to encourage intensity in his players. Similar results concerning feedback and instruction patterns were found by Lacy and Darst (1985) with successful high school football coaches, Lacy and Goldston (1990) with high school basketball coaches and Bloom, Crumpton, and Anderson (1999) who observed basketball coach Jerry Tarkanian over an entire season.

Several investigators have attempted to obtain coaches' insights about the psychological characteristics important for athletic success and skill improvement. For instance, a recent survey by Kuchenbecker (1999) assessed coaches' views on the attributes necessary for sport success. Six-hundred and fifty eight coaches from a variety of competitive levels (e.g., youth, high school, college, etc.) were provided a list of several dozen physical and psychological attributes they felt were most important for sport success. The coaches indicated that loving to play the game, having a positive attitude, and being coachable were the most important determinants of athletic success (Kuchenbecker, 1999). In addition, some investigators have attempted to analyze various aspects of coaching strategies, philosophies, profiles of great coaches, and the use of sport psychologists (Kimiecik & Gould, 1987; Mechikoff & Kozar, 1983; Walton, 1992; Wrisberg, 1990). For instance, Kimiecik & Gould (1987) reported James "Doc" Counsilman's recommendations concerning the sport psychologist's role and the dissemination of information to athletes and recommended that sport psychologists con-

sider coaches' opinions in order to develop an understanding of the psychological principles utilized by successful coaches (Kimiecik & Gould, 1987). Similarly, Wrisberg (1990) interviewed Pat Head-Summitt in order to obtain her views on coaching style, conducting practice, interacting with athletes, and preparing athletes for competition.

Côté, Salmela, Trudel, Baria, & Russell (1995) conducted an open-ended interview study that closely examined the coaching process of elite gymnastics coaches. In this study, the researchers interviewed 17 Canadian expert high-performance gymnastics coaches in an effort to develop a "grounded heuristic model" of how coaches' knowledge is used to solve problems and develop athletic potential. Another major purpose of the Côté et. al. (1995) study was to develop a conceptual framework or coaching model to help organize future research efforts on coaching. The results of inductive analysis allowed Côté et. al. (1995) to represent coaches' knowledge into central (competition, training, and organization) and peripheral components (coach's personal characteristics, athlete's personal characteristics and level of development, and contextual factors). Of particular concern to the present study was the finding by Côté et. al. (1995) that coaches utilized knowledge about an athlete's personal characteristics (e.g., physical abilities, stage of learning, or other personal information) to influence coach/athlete interactions and the coaching process but, due to the nature of the research objectives, further exploration of this result was not possible. The present study will address this shortcoming.

In summary, qualitative interview studies with coaches as participants remain rare in the sport psychology literature. In addition, there is a dearth of research that has examined coaches' views about athletic development in general, and their perceptions of the important psychological attributes and developmental considerations of successful athletes in particular. This is unfortunate because experienced coaches can offer unique insights into the behaviors of successful athletes. Therefore, the purposes of the present interview study were to examine college coaches' views on the development, observed traits, and personal characteristics of individual athletes who made significant progress during their college athletic careers. In addition, team and coaching influences on the development of specific athletes were assessed.

Method

Participants

Ten NCAA Division I head coaches from a large southeastern university participated in this study. The coaches represented the sports of basketball, football, golf, swimming, diving, track and field, and soccer. Five of the coaches worked with women's sports while the other five coached men's teams. The coaches had been in their current positions for an average of

8 years (*SD* = 6.97) ranging from 3 to 26 years. Five coaches had previously coached teams or individuals that won national or international championships in their respective sports. The selection of participants was based upon the availability and willingness of coaches to partici- pate in the study. All coaches who were contacted agreed to be interviewed. Throughout this investigation, efforts were made to protect the confidentiality and anonymity of all partici- pants and standard informed consent procedures were followed.

Procedures

In depth, semi-structured interviews were conducted consistent with the methodologi- cal recommendations made by Creswell (1994) and Maxwell (1996). Specifically, an attempt was made to develop interview questions that "work in practice" and contribute to answering research questions (Maxwell, 1996, p. 74). For the present study, the interview questions allowed each participant to fully elaborate on his or her experiences of coaching college athletes. These questions were developed after discussions between the first and third au- thors. Once the interview guide was developed, pilot data were collected with an experienced collegiate coach, and the questions were refined. Probes followed the participants' responses in order to obtain more information concerning the relevant issues that arose throughout the interview sessions. The first author conducted all of the interviews.

The coaches were initially contacted with letters that provided information about the nature of the study. The letters informed the coaches that the purpose of the study was to obtain information from college coaches about how athletes make progress in their respective sports and to discuss their experiences coaching athletes "who have made a lot of progress while they were on their teams." These letters were followed by phone calls several days later to answer any questions coaches might have and to schedule the interview.

All participants were asked a series of general questions such as "Could you tell me how an athlete improves or makes progress in your sport?" and, "Could you describe your experi- ences coaching athletes who have made a lot of progress while they were on your team?" Each coach was asked to think about a specific athlete who made a lot of progress and developed his or her skills while on their teams and to "describe what it was like to coach that specific athlete." These questions were followed by probes that solicited information about the per- sonal characteristics of the athlete described, as well as team and coaching dynamics that may have influenced the development of this particular athlete. All interviews were tape-recorded and lasted between 20 to 60 minutes. The interviews were transcribed verbatim and combined with extensive notes taken by the lead investigator.

Data Analysis

Consistent with the data analysis strategies of Maxwell (1996) and Guba and Lincoln, (1989), member checks were performed to rule out the possibility of misinterpretation of the interviews. All participants were sent a copy of the interview transcript and a brief summary of the interviewer's observations. This was followed several weeks later by a newsletter that summarized the study's overall results. The coaches were instructed to read the interview transcripts and summaries and to contact the lead investigator if they had questions, concerns, or additional information they thought might contribute to the study. Two coaches contributed additional information and new insights about the study results after they received the final summarized results. These observations were incorporated into the final results.

Previous qualitative researchers have recommended the use of a reflective journal throughout the research process (Lincoln & Guba, 1985; Maxwell, 1996; Sparkes, 1998). In the present study, the reflective journal allowed the lead investigator to record and discuss relevant issues as they arose during and after the interviews and research group meetings in an effort to establish trustworthiness of the research results.

Following transcription, a research group comprised of sport psychology faculty and students reviewed each interview transcript to ensure that the information was clear and correctly printed (Gould, Tuffey, Udry, & Loehr, 1996; Tesch, 1990). The investigators then conducted an inductive interpretational analysis in order to identify meaning units and core categories that emerged from the data (Côté, Salmela, Baria, & Russell, 1993). The open-ended responses elicited from the participants were systematically examined and individual meaning units were tagged by manual methods consistent with the procedures described by Côté et. al., (1993) and Tesch, (1990). Subsequent research group meetings were conducted to discuss the "attribution of a tag for a piece of information" (Côté, et. al., 1993; p. 131). The tagged meaning units were grouped into thematic categories by comparing tags with similar meaning units and assigned a label that the group felt best captured the substance of the topic (Côté, et. al., 1993). The emergent thematic categories were subsequently discussed during research meetings until theoretical saturation was reached (Côté, et. al., 1993).

In summary, a variety of methods were utilized to reduce validity threats and verify the accuracy of the research results (Maxwell, 1996; Sparkes, 1998). First, the interview transcripts and summaries were sent to all participants in an effort to seek confirmation of the interview results, feedback, and new information that may add to the study. Second, the authors conducted research group meetings on a regular basis to discuss the interview results (Maxwell, 1996). Third, the lead investigator maintained a reflexive journal and recorded the major discussion points from each meeting and other important observations during the research pro-

cess (Lincoln & Guba, 1985; Maxwell, 1996; Sparkes, 1998). And finally, a review and synthesis of the major themes that emerged from the interviews was presented to all research participants at the end of the data analytic stage. Consistent with the recommendations of Sparkes (1998), exemplar quotes from the coaches are presented to illuminate the themes that emerged and to allow the readers to judge for themselves the accuracy of the research team's conclusions.

Results

As previously stated, the participants were asked to share their observations of the personal and psychological characteristics of athletes who made a lot of progress during their college athletic careers. As shown in Figure 1, six major higher order themes emerged from the interview data: developmental considerations, motivation/competitiveness, coachability, the coaches' influence, the teams' influence, and miscellaneous contextual influences. These higher order themes were organized into the general dimensions of athlete development and skill improvement, contextual influences on athletes' development and skill improvement, and miscellaneous contextual influences. Consistent with the methodological procedures described by (Côté, et. al., 1993), a raw data theme was deemed to represent a theme if the research group came to agreement on the substance of information expressed by a particular coach.

Developmental Considerations. The coaches in the present study viewed personal characteristics of athletes as being the most important determinant of athletic success. Many of the participants noted the importance of player development in general, and emotional maturation in particular. For instance, one coach described a particular athlete who improved "tremendously" during her college career by saying "She's got a perfect attitude toward her personal development." The participants also shared their views on some of the important psychological qualities necessary to make the transition from high school to college athletics.

> Well, in general it's a process from freshmen year to senior year...obviously they mature as a person as well as a player...I think the biggest jump you see is probably that junior year when they reach a new level of skill-development...

Finally, this coach discussed some important personal/psychological characteristics necessary for adjustment to the demands of college life and athletics.

> Many times their gifts are god given in high school but once they get to our level that word commitment, that word accountability, and responsibility...whether that be academically, socially, or athletically because to progress it's going to take a lot of effort on all those areas.

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Motivation and Competitiveness. All of the coaches described successful college athletes as being motivated and competitive. As shown in Figure 1, the participants used words such as determined, competitive, and committed to describe these athletes (See Figure 1). One coach described the motivation of a successful athlete by saying, "He's got a burning desire to be the best in the world," while the following quote demonstrated another coach's view that a particular athlete's success had a lot to do with her personality. "I think her personality had a lot to do with it. I think she's very driven." Similarly, one participant said "A lot of it comes from the individual...The combination of their own direction and drive have a lot to do with it." She further suggested "...it is really how much they want it, and then if they want it bad then they're willing to do the things necessary, you know the sacrifice, the time, and the dedication it takes..." Another coach also discussed the important role of motivation. "...the players that have improved the most with us are obviously the ones who are receptive to coaching, that are hard working, that are completely committed to becoming a better player..."

Coachability. The coaches in this sample described successful college athletes as inquisitive, attentive to instruction, and trusting of the coaches (See Figure 1). Many participants described successful athletes as "coachable" and they defined this trait as being "receptive to instruction," "willing to make changes," "organized," "more educable," and "open." The following quote best illustrated this theme:

> The main thing was that they [successful athletes] were coachable. They wanted to change. They wanted to get better and they trusted what we as coaches had to say in terms of making that change.

Another coach described a current professional athlete as "super inquisitive" and went on to say that this person was a "student of the game." Furthermore, this coach stated "coachable athletes...They take what you tell them and they work on it and work on it and that's just being open."

Interestingly, one coach stated that "coachability" is part of the coach/athlete relationship by saying "coachability depends a lot on the coach. If players don't respect the coach, then the message isn't going to be well received " while another participant stated that coachable athletes "...can give me feedback when I ask for it."

Figure 1.
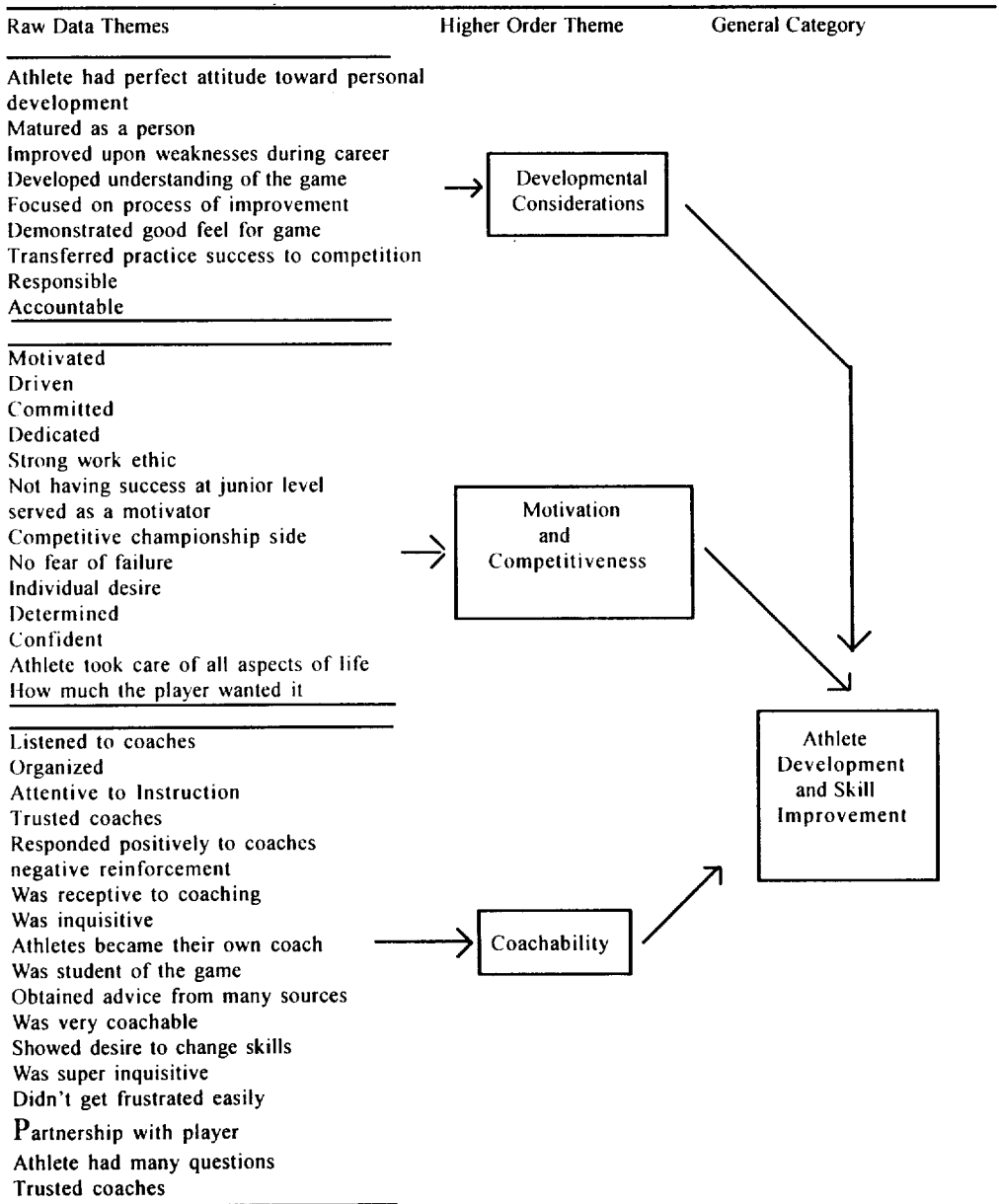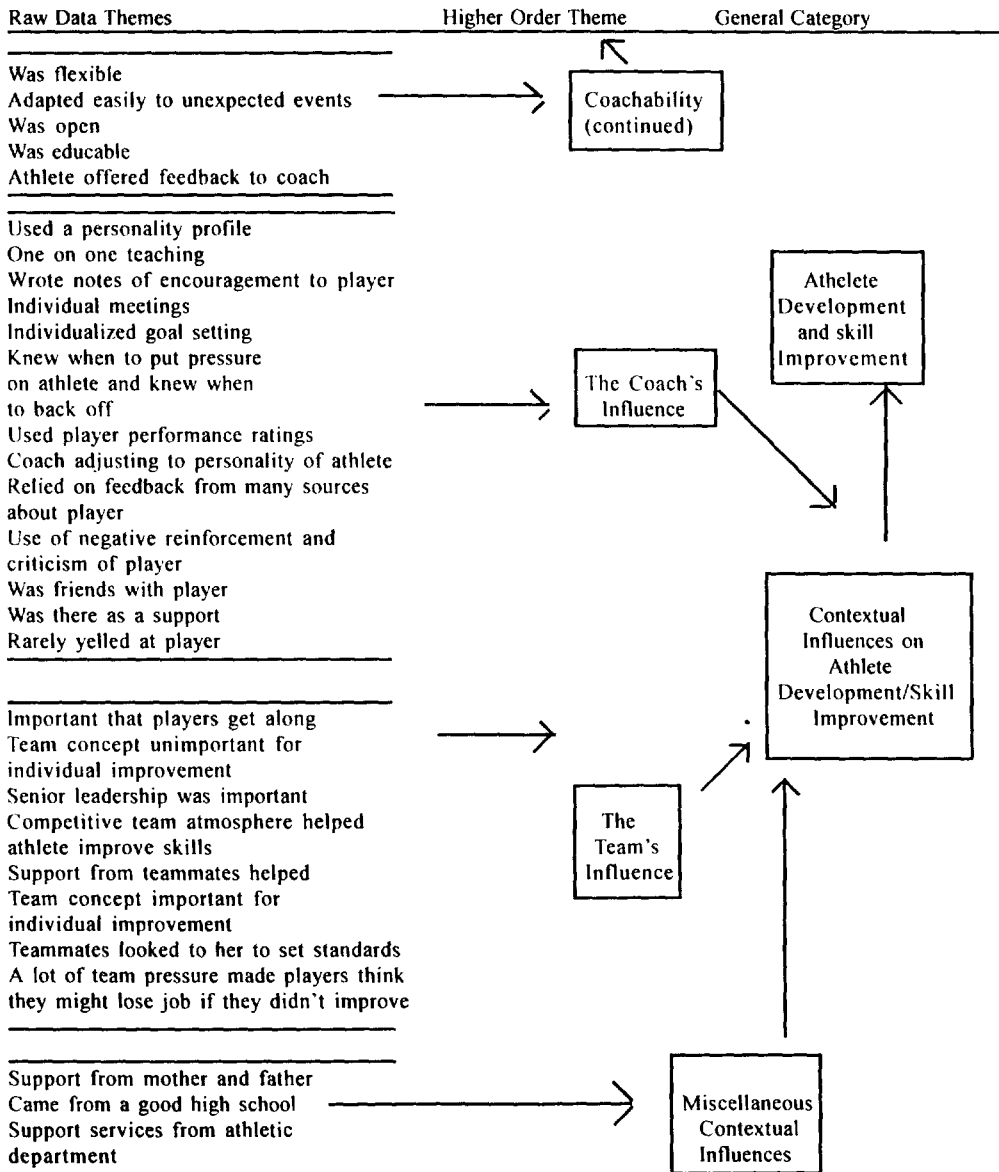# Raw Data Thems, Higher Order Themes and General Dimensions

Raw Data Themes	Higher Order Theme	General Category

Athlete had perfect attitude toward personal
development
Matured as a person
Improved upon weaknesses during career
Developed understanding of the game
Focused on process of improvement
Demonstrated good feel for game
Transferred practice success to competition
Responsible
Accountable

→ Developmental
Considerations

Motivated
Driven
Committed
Dedicated
Strong work ethic
Not having success at junior level
served as a motivator
Competitive championship side
No fear of failure
Individual desire
Determined
Confident
Athlete took care of all aspects of life
How much the player wanted it

→ Motivation
and
Competitiveness

Listened to coaches
Organized
Attentive to Instruction
Trusted coaches
Responded positively to coaches
negative reinforcement
Was receptive to coaching
Was inquisitive
Athletes became their own coach
Was student of the game
Obtained advice from many sources
Was very coachable
Showed desire to change skills
Was super inquisitive
Didn't get frustrated easily
Partnership with player
Athlete had many questions
Trusted coaches

→ Coachability

Athlete
Development
and Skill
Improvement

Figure 1. continued
Raw Data Thems, Higher Order Themes and General Dimensions

Raw Data Themes	Higher Order Theme	General Category

Was flexible
Adapted easily to unexpected events → Coachability (continued)
Was open
Was educable
Athlete offered feedback to coach

Used a personality profile
One on one teaching
Wrote notes of encouragement to player
Individual meetings
Individualized goal setting
Knew when to put pressure
on athlete and knew when   → The Coach's Influence
to back off
Used player performance ratings
Coach adjusting to personality of athlete
Relied on feedback from many sources
about player
Use of negative reinforcement and
criticism of player
Was friends with player
Was there as a support
Rarely yelled at player

Athlete Development and skill Improvement

Important that players get along
Team concept unimportant for
individual improvement
Senior leadership was important
Competitive team atmosphere helped
athlete improve skills   The Team's Influence
Support from teammates helped
Team concept important for
individual improvement
Teammates looked to her to set standards
A lot of team pressure made players think
they might lose job if they didn't improve

Contextual Influences on Athlete Development/Skill Improvement

Support from mother and father
Came from a good high school   → Miscellaneous Contextual Influences
Support services from athletic
department

Contextual Influences on Athlete Development and Skill Improvement

As discussed in the methods section, the participants in this study were also asked to describe team and coaching factors that may have influenced the skill development of the specific individual athlete they were instructed to reflect upon. As shown in Figure 1, the coaches shared coaching, team, and miscellaneous contextual influences that they felt enhanced the skill development of previously successful college athletes.

The Coach's Influence. A majority of the coaches explained the importance of trying to understand the individual athlete and applying this knowledge to various coaching strategies and methods of giving feedback. One particular coach described an athlete on his team who was having tremendous success at the time of the interview.

> I think she responds best to one on one communication. Yelling at her is probably the worst thing you can do. And, I think that's part of being a good teacher and a good coach just to find out what is the best button to push to get the best results

Similarly, another coach described the many roles and complexities involved with being a coach. As with other testimonials, this coach believed that it was important to relate to the players on a variety of different levels.

> I think each one of us, as coaches, are also sport psychologists because different guys have different buttons and they respond to different things...You're their father figure, you're the minister, you're the advisor, and sometimes the warden. You know, you're all those things. You're their friend if you have the right kind of relationship.

The theme of adjusting to the individual athlete was pervasive throughout the interviews. Often times, knowledge about how an athlete responded to feedback was used during practice. For instance, one coach believed that yelling and criticism helped to focus his athlete's attention.

Several coaches claimed that individual meetings with players were crucial in helping their athletes make progress. These meetings often involved setting goals, creating specific training programs, viewing video, or talking about personal matters that were important to the athlete. For example, this coach discussed the evolving nature of these meetings and how he included the athlete in discussions about goals.

> Later in her career...when she became a more mature athlete, it would become more of a discussion between the two of us. She would come up with ideas that she thought would be helpful and...we would incorporate them into her program.

In addition, the content of some coach-athlete meetings were of a personal nature and involved issues beyond sport. "The meetings weren't all about [the sport]. Sometimes they were about her personal life or getting other things in order." Another coach discussed the importance of being supportive and stated "I'd write her notes of encouragement when she

had a bad day. I'd call her and there are times when I'd back off of her too." This coach also discussed a variety of techniques she used to get to know and motivate the player. Interestingly, this process began while the athlete was in high school and it involved personality assessment. "I did a personality profile on her during the recruiting process and I would refer to that often."

The Team's Influence. There was some disagreement among the participants over the significance of the team in promoting the development and progression of individual athletes. However, the majority of coaches felt that team support and a team concept had a positive influence on the athletes they were discussing in terms of developing motivation and offering social support. For instance, one coach said that senior leadership helped a particular athlete develop trust early in her career. "I think on any great team you have to have great leaders. I think we had leaders and that convinced her to trust the coaches and trust the system" while another participant stated that "Obviously the pressure of having a guy next to you doing well or the guy behind you really improving makes you think 'I'm going to lose my job if I don't improve." However, another coach offered an opposing view. "A player may be working hard on something with teammates who are very supportive but that does not help her learn any quicker."

Miscellaneous Contextual Influences. At the end of each interview, the coaches were encouraged to share anything else that may have contributed to the development of the participants they described. Some coaches shared additional information and these responses included issues related to family support, the use of support services within the athletic department, and having received a good high school education. For instance, the following quote illustrated the role of the family: "I think the support from her mom helped...Maybe both of them [mother and father] helped." With regard to the university's support system offered at the university, this coach said, "Once you get a kid here regardless of the situation that comes up, you gotta give him the support system to allow him to succeed."

Discussion

The purposes of the present descriptive study were to investigate college coaches' perceptions about the observed traits and personality characteristics of individual athletes who made "a lot of progress" with skill development during their college athletic careers. In addition, team and coaching influences on the development of specific athletes were assessed. According to the college coaches in this sample, a combination of individual characteristics (e.g., maturity, motivation/competitiveness, coachability), and contextual influences (e.g., coach-athlete dynamics and team considerations) represent important contributions

towards the development of college athletes. The results from the present study will be discussed with regard to its contributions to the sport psychology coaching literature, some possible areas of future inquiry, and some suggestions for applied sport psychologists. These issues will be elaborated in the following sections.

The present findings are consistent with Kuchenbecker's (1999) results which revealed that coaches at a variety of competitive levels view loving to play the game, having a positive attitude, and coachability as the most important determinants of sport success. The findings of both studies indicate that coaches consider coachability as an important aspect of an individual's athletic success.

A perusal of the sport psychology research literature reveals that little empirical research attention has been devoted to the coachability construct. Ogilvie and Tutko (1966) and Tutko and Richards (1971) were probably the first sport psychologists to use the word "coachability" in the sport sciences. At that time, Ogilvie and Tutko (1966) claimed, "coachability is one of the most essential qualities for truly great athletic effort" (p. 26) but offered little empirical evidence to support this claim.

The Athletic Coping Skills Inventory-28 (ACSI-28) developed by Smith, Schutz, Smoll, and Ptacek (1995) includes the most recent conceptualization of coachability in the sport psychology literature. The present study offered some support for Smith et. al's (1995) inclusion of a coachability subscale within a broader measure of psychological skill in sport. Specifically, the ACSI-28 is comprised of the following seven subscales: coping with adversity, peaking under pressure, goal setting/mental preparation, concentration, freedom from worry, confidence and achievement motivation, and coachability. The four-items that assess coachability appear to reflect an athlete's reactions to feedback, advice, and criticism from coaches and managers. However, as the observations from the coaches in the present study indicate, coachability may be a much more complex construct comprised of other aspects of an athlete's personality and contextual influences. Specifically, coachability can also be characterized by an athlete's willingness to give information back to the coach, the degree of trust and respect exhibited towards the coach, flexibility/adaptability to changes in routines, and an athlete's desire to seek feedback and information from other sources. It is also possible that coachability is influenced by a coach's personal characteristics. From these observations, it stands to reason that coachability is a reciprocal, interactional construct that is quite possibly influenced by a coach's behaviors and personal characteristics (e.g., leadership style, personality, frequency and quality of feedback given to athletes). Thus, conceptualizing coachability as an interactional sport-specific manifestation of personality is consistent with contemporary views on the nature of individual differences in the sport context (Gill, 2000). Although the ACSI-28 has demonstrated impressive psychometric characteristics (Smith, Schutz, Smoll, &

Ptacek, 1995), the coachability subscale on the ACSI-28 does not appear to accurately represent the multidimensional nature of this construct. Therefore, future assessments and measures of coachability should reflect the added complexity of this construct demonstrated by the results from this study.[1]

The present study also extended the findings of Côté et al., (1995) who reported that expert gymnastics coaches often used knowledge about athletes in the coaching process. As shown by the coaches' testimonials, a variety of specific techniques (e.g., offering encouragement, knowing when to back off, sending players notes, phone calls, using criticism to focus attention or motivate a player, using video, and conducting individual meetings) were utilized to enhance the learning process of specific athletes. Such findings offered further insight into the complexity of coaching. The coach-athlete relationship involves a great deal of trust and communication and knowledge of individual athletes is crucial in coaches' decisions regarding the type of feedback to be used. For instance, one coach used frequent criticism and yelling to motivate and focus the attention of a player while another coach stated that it was important not to yell at a specific player. Another participant clearly demonstrated how far he would go to learn about a player's personality with the use of a personality measure. Although this practice raises a number of practical and ethical concerns (Gill, 2000; Vealey, 1993), the provision and ethical utilization of specific information and feedback about the personality of an athlete has been suggested as one potentially advantageous use of personality measures in sport (Singer, 1988).

Player-coach meetings were a frequently cited theme of the participants in this study and it appeared that personal matters, coaching/teaching, and soliciting the feedback and input of athletes constituted a part of that process. As one participant indicated, he regularly included the athlete in meetings to establish season long goals. To date, sport psychology researchers have not systematically studied the nature, structure, and content of player-coach meetings. Such inquiry might benefit applied sport psychologists who are interested in designing interventions geared towards helping coaches communicate to athletes. There presently exists several non-empirical sources of information that provide some information about player-coach meetings in sport. For instance, the media has reported that New York Yankee coach Joe Torre regularly conducts meetings with individual players to maintain team harmony and cohesion. New York Yankee assistant coach Mel Stottlemyre was quoted as saying that Torre "has more mini one-on-one meetings with players than anyone I've been around. He refuses to allow issues to become problems" (Verducci, 1998; p.43). In support of the general theme underlying the purposes of this study, observations such as the one described above indicate that sport psychologists can learn a lot from successful elite coaches.

The findings of the present study do not necessarily represent a complete picture of coaches' perceptions about the development of all college athletes. Rather, they reflect some common themes that one group of college coaches expressed about specific athletes who they perceived to be successful. Potential follow-up investigations might examine developmental factors, team influences, and other social support systems (including the family), available to college athletes. It would also be interesting to examine college coaches' experiences and perceptions of athletes who have failed to make significant progress and development during their college athletic careers.

Although the interview methodology used for the present study allowed for the explication of specific information about athletic development, future researchers may be able to obtain more interpersonal, contextual, and developmental information by performing multiple interviews with individual coaches that track the course of specific coach-athlete dyads, or by utilizing focus groups to supplement the interview portion of the study. Although the time and energy required to complete these more complex, multi-method designs would be considerable, the dividends could greatly enhance our understanding of the practices of elite coaches.

In summary, the present study yielded some rich and detailed information about coaches' observations of the growth and development of specific athletes. The participants provided a variety of accounts about the experiences and psychological qualities (e.g., motivation/competitiveness, coachability, developmental characteristics) they deemed as important to the progress of the athletes they described. It is recommended that future researchers and applied sport psychologists observe the behaviors and listen more closely to the voices of elite coaches in order to gain a deeper and more complete understanding of the challenges faced by coaches.

References

Bennett, B. & Carron, A.V. (1977). Compatibility in the coach-athlete dyad. *Research Quarterly, 48,* 671-679.

Bloom, G.A., Crumpton, R., & Anderson, J.E. (1999). A systematic observation study of the teaching behaviors of an expert basketball coach. *The Sport Psychologist, 13,* 157-170.

Bloom, G.A., Durand-Bush, N., & Salmela, J.H. (1997). Pre- and postcompetition routines of expert coaches of team sports. *The Sport Psychologist, 11,* 127-141.

Chelladurai, P. (1980). Leadership in sport organizations. *Canadian Journal of Applied Sport Sciences, 5,* 226-231.

Chelladurai, P. & Arnott, M. (1985). Decision styles in coaching: Preferences of basketball players. *Research Quarterly for Exercise and Sport, 56,* 15-24.

Chelladurai, P., & Saleh, S. (1978). Preferred leadership in sport. *Canadian Journal of Applied Sport Sciences, 3,* 85-97.

Côté, J., Salmela, J.H., Baria, A., & Russell, S.J. (1993). Organizing and interpreting unstructured qualitative data. *The Sport Psychologist, 6,* 55-64.

Côté, J., Salmela, J.H., Trudel, P. Baria, A., & Russell, S. (1995). The coaching model: A grounded assessment of expert gymnastic coaches' knowledge. *The Sport Psychologist, 17,* 1-17.

Creswell, K.F. (1994). *Research design: Qualitative and quantitative approaches.* Thousand Oaks, CA: Sage Publications.

Fisher, C.A., Mancini, V.H., Hirsch, R.L., Proulx, T.J., & Straurowsky, E.J. (1982). Coach-athlete interactions and team climate. *Journal of Sport Psychology, 4,* 388-404.

Gill, D.L. (2000). *Psychological dynamics of sport and exercise* (2nd edition). Champaign, IL: Human Kinetics.

Gill, D.L. & Deeter, T.E. (1988). Development of the sport orientation questionnaire. *Research Quarterly for Exercise and Sport, 59,* 191-202.

Gordon, S. (1988). Decision styles and coaching effectiveness in university soccer. *Canadian Journal of Sport Sciences, 13,* 56-65.

Gould, D., Hodge, K., Peterson, K., & Giannini, J. (1989). An exploratory examination of strategies used by elite coaches to enhance self-efficacy in athletes. *Journal of Sport & Exercise Psychology, 11,* 128-140.

Gould, D., Damarjian, N., & Medbery, R. (1999). An examination of mental skills training in junior tennis coaches. *The Sport Psychologist, 13,* 127-143.

Gould, D., Tuffey, S., Udry, E., & Loehr, J. (1996). Burnout in competitive junior tennis players II: Qualitative analysis. *The Sport Psychologist, 10,* 341-366.

Guba, E.G., & Lincoln, Y.S. (1989). *Fourth generation evaluation*. Newbury Park, CA: Sage Publications Inc.

Horn, T. S. (1985). Coaches' feedback and changes in children's perception of their physical competence. *Journal of Educational Psychology, 77,* 174-186.

Horn, T. S. & Carron, A.V. (1985). Compatibility in coach-athlete relationships. *Journal of Sport Psychology, 7,* 137-149.

Huddleston, S., Ahrabi-Fard, I., & Garvin, G.W. (1995). Self-evaluation compared to coaches' evaluation of athletes' competitive orientation. *Journal of Sport Behavior, 18,* 209-214.

Kimiecik, J., & Gould, D. (1987). Coaching psychology: The case of James "Doc" Counsilman. *The Sport Psychologist, 1,* 350-358.

Kuchenbecker, S.Y. (1999). *Who's a winner? Coaches views on winning young athletes*. Paper presented at the annual meeting for the American Psychological Association.

Lacy, A. & Darst, P.W. (1985). Systematic observation of behaviors of winning high school head football coaches. *Journal of Teaching in Physical Education, 4,* 256-270.

Lacy, A., & Goldston, P.D. (1985). Behavior analysis of male and female coaches in high school girls' basketball. *Journal of Sport Behavior, 13,* 29-39.

Langsdorf, E.V. (1979). Coaching behaviors recording form. In P.W. Darst, V. H. Mancini, & D.B. Zakrajesek (eds.), *Systematic observation instrumentation for physical education* (pp. 306-315). West Point, N.Y.: Leisure Press.

Lincoln, Y.S. & Guba, E.G. (1985). *Naturalistic inquiry.* Beverly Hills, CA: Sage Press.

Maxwell, J.A. (1996). *Qualitative research design: An interactive approach*. Thousand Oaks, CA: Sage Publications Inc.

Mechikoff, R.A., & Kozar, B. (1983). *Sport psychology: The coaches' perspective.* Springfield, IL: Charles C. Thomas.

Ogilvie, B. C. & Tutko, T. A. (1966). *Problem athletes and how to handle them*. Great Britian: Pelham Books.

Singer, R. N. (1988). Psychological testing: What value to coaches and athletes? *International Journal of Sport Psychology, 19,* 87-106.

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

Smith, R.E., Smoll, F.L., & Curtis, B. (1979). Coach effectiveness training: A cognitive behavioral approach to enhancing the relationship skills in youth sport coaches. *Journal of Sport Psychology, 1,* 59-75.

Smith, R.E., Smoll, F.L., & Hunt, E.B. (1977). A system for the behavioral assessment of athletic coaches. *Research Quarterly, 48*, 401-407.

Smith, R.E., Zane, N., Smoll, F.L., & Coppel, D. (1983). Behavioral assessment in youth sports: Coaching behaviors and children's attitudes. *Medicine and Science in Sports and Exercise, 15*, 208-214.

Smoll, F.L., Smith, R.E., Curtis, B., & Hunt, E. (1978). Toward a mediational model of coach-player relationships. *Research Quarterly for Exercise and Sport, 49*, 528-541.

Sparkes, A.C. (1998). Validity in qualitative inquiry and the problem of criteria: Implications for sport psychology. *The Sport Psychologist, 12*, 363-386.

Tesch, R. (1990). *Qualitative research analysis types and software tools.* New York: Falmer Press. Tharp, R.G., & Gallimore, R. (1976, January). What a coach can teach a teacher. *Psychology Today, 9,* 74-78.

Tutko, T. A. & Richards, J. W. (1971). *The psychology of coaching.* Boston: Allyn and Bacon.

Vealey, R.S. (1993). In T.S. Horn (Ed.) *Advances in sport psychology* (pp. 23-59). Champaign, IL: Human Kinetics.

Walton, G.M. (1992). *Behind winning: The timeless wisdom of great philosopher coaches.* Champaign, IL: Human Kinetics.

Weinberg, R.S., Grove, R., & Jackson, A. (1992). Strategies for building self-efficacy in tennis players: A comparative analysis of Australian and American coaches. *The Sport Psychologist, 6,* 3-13.

Wrisberg, C.A. (1990). An interview with Pat Head-Summitt. *The Sport Psychologist, 4,* 181-191.

Authors' Notes

[1] As a result of this study, a new measure of coachability was developed and it's construct validity is currently being assessed. More information about this measure may be obtained from the first author.