CHAPTER

5

The Self-Fulfilling Prophecy Theory: When Coaches' Expectations Become Reality

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I couldn't believe it! This kid came to the first day of Little League draft tryouts with bright purple and spiked hair! Me and all of the other coaches . . . none of us wanted him on our team. But, in the last round of draft picks, I got stuck with him. The funny thing is that by the end of the season, he turned out to be our team's Most Valuable Player! Once you got past the purple hair, the kid was a real solid baseball player.

—Coach of a Little League Baseball Team

In 1968 Rosenthal and Jacobson published the results of an experiment they had conducted with teachers and students in 18 elementary school classrooms. This research study, which was appropriately titled "Pygmalion in the Classroom," had been designed to determine whether the academic progress of students could actually be affected by their teachers' expectations or beliefs concerning their intellectual abilities. To investigate this issue, Rosenthal and Jacobson informed the sample of teachers that certain children in each of their classes had been identified, via scores on a standardized test of academic ability, as latent achievers or "late bloomers" who could be expected to show big gains in academic achievement over the coming school year.

In actuality, the identified children had been selected at random from the total group, and there was no reason to expect that they would show any greater academic progress than their classmates. At the end of the school year, however, many of the targeted children, especially those in the lower elementary grades, had made greater gains intellectually than had children who were not so identified. Rosenthal and Jacobson concluded that the false information given to the teachers had led them to hold higher expectations for the targeted children and then to act

in ways that would stimulate better performance from those students. Thus, the authors were suggesting that the teachers' expectations served as self-fulfilling prophecies by initiating a series of events that ultimately caused the expectations to be fulfilled.

The publication of this study elicited considerable interest among other researchers, some of whom responded with criticism of the Pygmalion study for a variety of methodological and statistical flaws (Elashoff & Snow, 1971; Thorndike, 1968). The ensuing controversy concerning the legitimacy of the self-fulfilling prophecy phenomenon stimulated an impressive amount of research during the next several decades. Although most of these investigations were oriented toward the study of expectancy effects in the academic classroom, some of them were conducted in physical education classrooms or in competitive sport contexts (e.g., Cousineau & Luke, 1990; Horn, 1984; Martinek, 1988; Papaioannou, 1995; Rejeski, Darracott, & Hutslar, 1979; Sinclair & Vealey, 1989; Solomon, 2001; Solomon & Kosmitzki, 1996; Solomon, DiMarco, Ohlson, & Reece, 1998; Solomon, Golden, Ciapponi, & Martin, 1998; Solomon, Striegel et al., 1996; Solomon, Wiegardt et al., 1996; Trouilloud, Sarrazin, Martinek, & Guillet, 2002; Trouilloud, Sarrazin, Bressoux, & Bois, 2006). Several excellent reviews of this literature have been compiled (e.g., Brophy, 1983; Good & Brophy, 2000; Harris & Rosenthal, 1985; Jussim & Harber, 2005; Martinek, 1989). Based on a thorough examination of the expectancy research, the authors of these reviews have generally concluded that teachers' expectations certainly do have the potential to affect the academic progress of individual students. However, these writers also caution that the overall effects of teacher expectations on student learning and performance appear to be relatively small, with effect sizes ranging from .1 to .3. Despite this relatively small effect size, there does appear to be considerable variability between teachers (and, by extension, coaches) in the degree to which their expectations can and do affect their own behavior as well as the learning and performance of their student-athletes. Several recent studies (e.g., Jussim, Eccles, & Madon, 1996; Kuklinski & Weinstein, 2001; Trouilloud et al., 2006) have found, for example, that under some conditions (i.e., in some instructional situations) the impact of teachers' expectations on student learning and performance is much more powerful than the average effect size would suggest. Thus, although many teachers and coaches are not Pygmalion-prone (i.e., they do not allow their expectations to affect the performance or the achievement of their students and athletes), there certainly does appear to be a subset of teachers and coaches who exhibit expectancy biases in educational and sport settings.

Such variation among teachers and coaches implies that those who are aware of and understand the self-fulfilling prophecy phenomenon can avoid becoming Pygmalion-type coaches or teachers. Therefore, it is the purpose of this chapter to present coaches with information concerning the expectation–performance process. In the following pages, we will examine how coaches' expectations or judgments of their athletes can influence the athletes' performance and behavior and how such expectancy effects can be particularly negative for selected athletes. The chapter will conclude with a discussion of ways coaches can individualize their interactions with athletes to avoid behaving in expectancy-biased ways and thus facilitate the performance of all athletes.

The Expectation–Performance Process

According to the self-fulfilling prophecy theory, the expectations coaches form about the ability of individual athletes can serve as prophecies that dictate or determine the level of achievement each athlete will ultimately reach. Several researchers who have studied the self-fulfilling prophecy phenomenon in educational contexts (e.g., Brophy, 1983; Harris & Rosenthal, 1985; Jussim, 1986) have proposed a sequence of steps to explain how the expectation–performance connection is accomplished. These models or

sequences of events can be adapted to describe how the self-fulfilling prophecy phenomenon can also occur in sport settings.

Step 1: The coach develops an expectation for each athlete that predicts the level of performance and type of behavior that athlete will exhibit over the course of the year.

Step 2: The coach's expectations influence his or her treatment of individual athletes. That is, the coach's behavior toward each athlete differs according to the coach's belief concerning the athlete's competence.

Step 3: The way in which the coach treats each athlete affects the athlete's performance and rate of learning. In addition, differential communication tells each athlete how competent the coach thinks he or she is. This information affects the athlete's self-concept, achievement motivation, and level of aspiration.

Step 4: The athlete's behavior and performance conform to the coach's expectations. This behavioral conformity reinforces the coach's original expectation, and the process continues.

We will now examine each of these steps in detail.

Step 1: Coaches Form Expectations

At the beginning of an athletic season most coaches form expectations for each athlete on their teams. These expectations are really initial judgments or assessments regarding the physical competence or sport potential of each athlete and are based on certain pieces of information available to the coach. In particular, the research indicates that teachers and coaches most often use three types, or categories, of information.

The first category contains what we can label as **person cues** and includes such informational items as the individual's socioeconomic status, racial or ethnic group, family background, gender, physical attractiveness, body size, physique, and style of dress. The exclusive use of any or all of these person cues to form judgments about an athlete's physical competence would certainly lead to inaccurate and very stereotypic expectations (see the last section of this chapter). Fortunately, according to the research on expectancy effects, not all coaches form their expectations solely on demographic or physical appearance cues; they also use behaviorally based information. Thus, many coaches use additional **performance information** such as the athlete's scores on certain physical skills tests, the athlete's past performance achievements (e.g., previous season statistics or related sport accomplishments), as well as other teachers' or coaches' comments concerning the athlete's performance and behavior. Coaches also base initial impressions of athletes on observation of their behavior in practice or tryout situations (e.g., observation of the player's motivation, work ethic, enthusiasm, pleasantness, response to criticism, interaction with teammates).

A third and more recently identified category of information sources that coaches can and do use to evaluate their athletes' performance potential includes **psychological characteristics.** Specifically, Solomon (e.g., 2001; Becker & Solomon, 2005) has conducted a series of research studies showing that coaches' preseason expectations for their athletes' sport potential are based not only on coaches' perceptions of their athletes' physical competencies (e.g., strength, athleticism) but also on coaches' estimates of athletes' psychological abilities (e.g., coachability, role acceptance, self-discipline, maturity). In fact, Solomon's research has suggested that college coaches are very prone to using their perceptions of players' psychological characteristics to form expectations about individual athletes' performance ability.

Although the initial expectations formed by most coaches are based on information from a variety of sources, individual coaches probably differ in regard to the weight they assign to each source. That is, some coaches may particularly value the comments of other coaches

in evaluating an athlete during recruitment or at the beginning of the season, whereas other coaches may place greater emphasis on the player's physical attributes (e.g., speed, size, strength, body build). Therefore, two coaches could form very different sets of expectations for the same athlete on the basis of what sources of information each valued most.

Exercise:

Assume that you have just been appointed to be the new varsity coach for a high school soccer team. Because you are new to the school, you know very little about the players who will try out for your team. However, your assistant coach has been in the program for several years and knows all of the players. Team tryout days arrive, and you realize that you will have to make some difficult cuts. How much will you rely on your own observation of the players' performance and behavior during tryouts rather than on the feedback provided by your assistant coach based on her or his years of work with these players?

It obviously follows, then, that a coach's initial judgment of an athlete may be either accurate or inaccurate depending on the sources of information used. Accurate assessments of a player's competence generally pose no problem as they usually do not adversely affect the player's subsequent performance. However, inaccurate expectations (i.e., expectations that are either too high or too low) that are *also* inflexible can be very disruptive for athletes and can interfere with their optimal athletic progress. Consider, for example, the coach who misjudges a particular athlete at the beginning of the season and falsely believes that individual to be less competent than he or she really is. If the coach's expectation or judgment is flexible (i.e., changes when the athlete demonstrates better performance than expected), then the initial false expectation does not cause a problem. In contrast, a coach who is very inflexible and resistant to modifying her or his initial beliefs may well "see" only what she or he expects to see from that player. That is, all evidence of skill errors by the athlete will reinforce the coach's belief that the athlete is incompetent, and the coach will either ignore all skill success or simply consider it to be "lucky" and not indicative of the athlete's sport skill. Solomon and her colleagues (e.g., Solomon & Kosmitzki, 1996; Solomon, Golden et al., 1998) have recently referred to this characteristic of coaches as "perceptual flexibility" or, by extension, "perceptual inflexibility." Coaches who develop expectations of players at the beginning of the season that are not flexible or fluid tend to perceive individual athletes' performance and behavior from a very rigid perspective. That is, these coaches will perceive in their athletes' performance and behavior exactly what they expect to see. This type of situation is illustrated in Example 1. In this example the coach's initial expectations or judgments concerning the relative basketball ability of both Chris and Robert are formed on the basis of information provided by a colleague. These initial expectations, which may *not* be accurate, cause the coach to *perceive* the two players' performance differently. Such differential perceptions, in turn, affect the way the coach reacts or responds to that player. This type of situation leads to the second step in the sequence of events composing the self-fulfilling prophecy phenomenon.

Step 2: Coaches' Expectations Affect Their Behavior

The expectations that coaches typically form for each athlete at the beginning of an athletic season do not necessarily or automatically act as self-fulfilling prophecies. Expectations do, however, have the potential for doing so if they affect the coaches' treatment of their athletes.

Much of the research on the self-fulfilling prophecy phenomenon in competitive sport situations has focused on this issue by asking the crucial question, "Do coaches treat athletes they believe have high ability (i.e., high-expectancy individuals) differently from athletes they believe

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Example 1

The new coach of a junior high basketball team is informed by the principal that the team has two point guards returning from last year. The first player, Chris, is described as a talented athlete, and the other player, Robert, is portrayed as having been a member of last year's squad "only because he was the coach's son." At practice the first day, Robert dribbles fast up the court but then loses control of the ball. The coach, who has developed the expectation that Robert is not a talented athlete, sees this error as proof of Robert's lack of innate basketball ability. Thus, the coach responds by telling Robert to slow down. Moments later, Chris also mishandles the ball during the same dribbling drill. The coach, who believes Chris to be an excellent dribbler, assumes that the error occurred because the basketball is either worn and slippery or overinflated (and thus difficult to dribble). Based on this perception, the coach orders that the ball not be used again and that Chris should get another ball and try again.

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have low ability (i.e., low-expectancy individuals)?" Generally this question has been studied by observing and recording the type, frequency, and quality of instructional behavior coaches exhibit toward individual athletes. Again, the overall conclusion from this research (see studies by Horn, 1984; Rejeski et al., 1979; Sinclair & Vealey, 1989; Solomon & Kosmitzki, 1996; Solomon, DiMarco et al., 1998; Solomon, Golden et al., 1998; Solomon, Striegel et al., 1996) indicates that *some* coaches do indeed show differential instructional behaviors to these two groups of athletes. Applying the results of this research to any specific athletic setting, we could expect the Pygmalion-type coach to show differential behavior to high- and low-expectancy athletes in regard to (a) the frequency and quality of interactions the coach has with the individual athletes, (b) the quantity and quality of instruction given to each athlete, and (c) the frequency and type of performance feedback given to each athlete.

In the first behavioral category, **frequency and quality of coach–athlete interactions,** a Pygmalion-prone coach typically shows fewer tendencies to initiate interpersonal contact (either of a social or a skill-related nature) with athletes he or she believes to be less skilled. As a result, the coach spends significantly more time with athletes who are highly skilled (see Example 2). In addition, the quality of coach–athlete interactions may also differ, with high-expectancy players being shown more warmth and positive affect (e.g., smiling, head nodding, and personal contact) than their low-expectancy teammates.

Perhaps of greater consequence is the differential treatment that high- and low-expectancy players may receive in regard to the **quantity and quality of instruction.** If a coach firmly believes certain players on her or his team do not have the requisite athletic competencies to be successful (i.e., the low-expectancy players), that coach may, first of all, reduce the amount of material or skills those players are expected to learn, thus establishing a lower standard of performance for them. Second, the coach may allow

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Example 2

Ashton and Kari, who are teammates on their school's varsity basketball team, stay after practice to play a game of one-on-one. Their coach comes over to watch. When Ashton (a high-expectancy athlete) executes a successful fake and drive, the coach responds with approval but also stops the game to provide Ashton with further instruction (i.e., what she should do in a similar situation if the weak side defender had moved across the key). Later when Kari (a low-expectancy player) executes the same successful fake and drive, the coach responds with approval only ("Good move, Kari") but then goes on to show Ashton how she should have prevented or defended against such an offensive move.

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the low-expectancy players less time in practice drills. As a result, these athletes may spend relatively more practice time in non-skill-related activities such as shagging balls, waiting in line, and keeping score. Finally, the coach may be less persistent in helping low-expectancy athletes learn a difficult skill. The Pygmalion-prone coach tends to give up on a low-expectancy player who fails after two or three attempts to learn a new skill but will persist in working with a high-expectancy player who is having the same difficulty (see Example 3).

In addition to differences in the quality of instruction, researchers have also found differences in the **type and frequency of feedback** that coaches give to high- and low-expectancy players. One of the primary ways coaches respond differently to individual athletes is in their use of praise and criticism. Some researchers investigating expectancy issues in the physical education or sport setting (e.g., Martinek & Johnson, 1979; Martinek & Karper, 1982; Rejeski et al., 1979; Solomon, DiMarco et al., 1998; Solomon, Striegel et al., 1996) have found that teachers and coaches give high-expectancy students and athletes more reinforcement and praise after a successful performance than they do low-expectancy individuals. In contrast, other researchers have found that low-expectancy students and athletes are the ones who receive proportionately more reinforcement (Horn, 1984; Martinek, 1988). However, as Horn noted in her discussion, the higher frequency of reinforcement or praise given by coaches and teachers to these low-expectancy individuals may actually be qualitatively suspect because the reinforcement is often given inappropriately (i.e., given for a mediocre performance or for success at a very easy task) (see Example 4). Therefore, it appears that Pygmalion-prone coaches may (a) provide low-expectancy athletes with less frequent reinforcement and (b) give them less appropriate and less beneficial feedback after successful performances.

Observation of teachers' and coaches' feedback also has revealed differences in the amount of corrective or technical instruction given. In the sport setting such differential treatment may be especially evident in the feedback coaches provide their athletes following a performance. As illustrated in Example 5, high-expectancy performers receive informational and corrective feedback that tells them how to improve their performance. In contrast, low-expectancy performers receive a positive communication from the coach but no accompanying technical information to tell them what they can do to improve their performance. These differences in feedback responses may well be due to the different expectations the coach holds for the various athletes. For example, because the coach fully expects Jared's performance to improve, he is more apt to provide Jared with technical information to help him achieve skill success. However, the low expectations the coach holds for Charlie lead the coach to believe that corrective instruction may be fruitless and certainly not useful for Charlie.

Finally, coaches may also differ in the type of attribution they use to explain the cause of the high- and low-expectancy athletes' successful or unsuccessful performances. Although this aspect of performance feedback has received very little research attention, we certainly might speculate that a coach's beliefs concerning the competence or incompetence of selected players on his or her team would induce that coach to verbalize different attributions for the athletes' performance outcome. For instance, the coach in Example 6 holds different perceptions or expectations concerning the physical competence of Jonathan (a high-expectancy player) and P.J. (a low-expectancy player). These expectations lead the coach to attribute these players' performance to different causes. When P.J. reaches first base safely, the coach immediately, and in this case verbally, attributes that success to the opposing team's error (i.e., a lucky break for P.J.). In comparison, the coach verbally attributes the same performance by Jonathan to Jonathan's ability (i.e., his batting prowess and speed). Similarly, the coach's response to these athletes' performance errors may also be affected by the coach's judgment of each player's ability. In Example 7 the coach attributes Jonathan's lack of success in stealing a base to poor positioning and thus suggests that the performance can be corrected. The coach attributes a similar failure by P.J. to P.J.'s lack of ability (i.e., his lack of speed).

Example 3

During a practice scrimmage, Ashton (the high-expectancy player in Example 2) is having problems running a particularly difficult offensive pattern. The coach stops the team drill and spends 3 or 4 minutes helping Ashton learn the pattern. When Kari (the low-expectancy athlete) later evidences the same difficulty, the coach removes her from the scrimmage team by saying to another player, "Joci, come here and take Kari's place. Let's see if you can run this play."

Example 4

During the course of a varsity volleyball match, a hitter approaches the net for a spike. Seeing her opponents put up a single block, she reaches out to "tip" the ball around the block. No point is scored, but the ball is kept in play. The athlete, who is a high-expectancy player, is told by her coach, "OK, Keisha, at least you kept the ball in play. But next time you go up against a single block, hit the ball. Your spike is good enough to get it through that block." If, however, a low-expectancy player executes the same play, the Pygmalion-type coach might respond with approval only: "Great work, Kara, you kept the ball away from the block. That was smart."

Example 5

Jared and Charlie have both joined an age-group swimming team. Although both swimmers begin the season at the same level of performance, their coach has very high expectations for Jared's improvement and ultimate success because of his "natural" physical attributes. The coach does not have the same high expectations for Charlie. At the first meet of the season, both swimmers take fifth place in their respective events. The coach responds to Jared's performance by telling him that he can considerably reduce his time if he improves his technique on the turns. The coach concludes with the comment, "We'll work on those turns all next week so you'll be ready for the next meet." In contrast, the coach responds to Charlie's fifth place performance by saying, "Good job, Charlie. Hang in there."

Example 6

During a baseball game, P.J. (a low-expectancy athlete) hits a pitched ball sharply toward the left side of the infield. The shortstop makes a nice backhanded move for the ball and fields it. Although he then slightly mishandles it, he does throw it hard to first for a close play, with the runner (P.J.) being called safe. The coach comments, "What a break, P.J.! We were lucky he [the shortstop] bobbled it, or you would have been out." However, in a similar situation with Jonathan (a high-expectancy player) as the batter/runner, the coach responds to the same performance by exclaiming, "Way to hit the hole, Jonathan, and great speed! You beat the throw again!"

Example 7

Later in the game described in Example 6, Jonathan (the high-expectancy player) attempts to steal second without the coach's giving a steal sign. Jonathan is easily thrown out. As he reaches the dugout, the coach tells him, "Good try, Jonathan. That would have been a good pitch to steal on, but you didn't have a big enough lead to go. Next time, you should . . . ." When P.J. (the low-expectancy player) attempts the same performance, the coach angrily responds, "What are you doing out there? I didn't tell you to go . . . you're too slow to steal second, especially on that catcher."

As the previous examples illustrate, coaches may indeed treat their high- and low-expectancy athletes differently. However, we need to exercise caution in regard to these observed differential coaching behaviors. That is, we must not jump to the conclusion that it is essential for coaches to treat all athletes on their teams in exactly the same way. Because athletes differ in their skills as well as in their personalities, coaches are well advised to individualize their instructional behavior to accommodate the uniquenesses of each athlete. Therefore, it is important at this point to emphasize that observable differences in a coach's behavior toward individual athletes on his or her team do not automatically imply that the coach is acting in a biased manner and that the athletes' progress will be impeded. If the differences in the coach's behavior are designed to and actually do facilitate the performance and achievement of *each* athlete, then such differential coaching behavior is appropriate. However, if the differential treatment an athlete or a group of athletes *consistently* receives from their coach in practices and games limits the athletes' ability or opportunity to learn, then such differential coaching behavior is dysfunctional, and the coach's expectations may be serving as self-fulfilling prophecies.

Step 3: Coaches' Behavior Affects Athletes' Performance and Behavior

The third step in the sequence of events in the self-fulfilling prophecy phenomenon occurs when a coach's expectancy-biased treatment of an individual athlete affects that athlete's performance and psychological growth. It is easy to understand how the biased behavior described in the preceding section is likely to maximize the athletic progress of high-expectancy athletes while limiting the achievements of their low-expectancy teammates. Players who are *consistently* given less effective and less intensive instruction or who are allowed less active time in practice drills will not show the same degree of skill improvement as their teammates who are given optimal learning opportunities. In Examples 2 and 3, Ashton and Kari are obviously not being given the same quality of instruction. If this instructional behavior is typical of the treatment these athletes receive from their coach over the season, we might well anticipate that after a certain period of time Ashton's basketball skills will be considerably better than Kari's. Their coach will attribute these skill differences to what she believes to be the innate differences in Ashton's and Kari's basic athletic talent. Given the observed variation in the coach's instructional behavior toward these two athletes, it is equally likely that the coach's original expectation or judgment concerning each athlete's sport potential actually *determined*, rather than just *predicted*, the level of achievement that Ashton and Kari reached. The coach's expectations, then, served as self-fulfilling prophecies by setting in motion a series of events (i.e., consistent differences in the quality of instruction) that ultimately caused the original expectations to be fulfilled.

In addition to the negative effects that a coach's biased instructional behavior has on an athlete's rate of learning and level of achievement, such behavior can also affect the athlete's psychological growth. Recent research in sport psychology has demonstrated that the type of instructional behaviors a coach exhibits in games and in practices is correlated with, and can actually cause, changes in athletes' self-concept, perceived competence, intrinsic motivation, and level of competitive trait anxiety over a season (see reviews of this work by Chelladurai, 2007; Duda & Balaguer, 2007; Horn, 2008; and Mageau & Vallerand, 2003). This association between coaches' behavior and changes in athletes' self-perceptions, intrinsic motivation, and anxiety is quite consistent with several developmental, cognitive, and social psychological theories (e.g., Bandura, 1997; Eccles, 2005; Harter, 1999; Ryan & Deci, 2000; Vallerand, 2007; Weiner, 1992) that suggest that the evaluation or feedback adults provide is an important source of information that children and adolescents use to determine how competent or incompetent they are.

In the athletic setting, then, the type of feedback coaches give to individual athletes may affect the athletes' self-perceptions (e.g., their self-confidence, self-efficacy, and anxiety) by

communicating to the athletes how competent or skilled the coach thinks they are. Occasionally, of course, the coach communicates this evaluative information directly to the athletes. More commonly, however, coaches communicate their judgments or beliefs concerning the athletes' abilities in more subtle or indirect ways. Specifically, the coach's reinforcement patterns (i.e., the level of performance or type of behavior the coach rewards) provide athletes with information that tells them how skilled the coach thinks they are. In Example 4, Keisha and Kara have demonstrated the same level of performance, but each receives a different response from the coach. This differential feedback may be communicating to these athletes what standard of performance each is expected to achieve. Kara, who is clearly reinforced for that level of performance, may be receiving information telling her that she is at the maximum level she is capable of achieving. Keisha, however, is led to believe her performance, although acceptable, can and should be improved because she has the requisite skills to perform at a higher level.

Correspondingly, the amount and frequency of corrective instruction a coach provides after a skill error may also tell each athlete how competent or skillful the coach thinks he or she is. In Example 5, for instance, the coach responds to Jared's fifth-place performance with corrective feedback, thus overtly telling him that his performance can be improved with effort and covertly supplying him with the perception that he is capable of a higher level of skill. In contrast, although the coach gives Charlie a positive and encouraging response for a similar level of performance, the coach does not provide Charlie with the additional information to tell him that he can improve his performance and that he is capable of achieving at a higher level. Thus, the coach has indirectly communicated his expectations or judgments concerning each athlete's level of ability. In summary, then, the evaluative feedback coaches give to individual athletes is indeed providing the athletes with information concerning their competence. Certainly the differential feedback that low- and high-expectancy athletes receive from Pygmalion-prone coaches may affect the athletes' perceptions or beliefs concerning their own skill competence.

Similarly, there is reason to believe that the differential feedback received by high- and low-expectancy athletes would also affect these athletes' levels of anxiety in sport contexts. Specifically, researchers (e.g., Smith, Smoll, & Barnett, 1995) have found that athletes who receive higher frequencies of technically instructive and corrective feedback, delivered by coaches in a positive and encouraging way, may have fewer problems with performance anxiety in sport contexts than do athletes who receive punishment-oriented or no corrective feedback. Thus, the differential type of feedback that high- and low-expectancy athletes receive from their coaches not only may affect the athletes' perceptions of their sport ability but also may have an effect on the degree of anxiety they will experience in performance situations.

Finally, as noted in the previous section, coaches also may affect their athletes' self-perceptions by the attributions they make for their athletes' performance. Such attributions provide each athlete with information concerning his or her competence. When a coach attributes an athlete's successful performance to the athlete's innate ability (e.g., Example 6) the athlete develops a high expectancy for future success and a positive attitude toward the sport activity. In contrast, when a coach attributes successful performance to luck, the attribution does not encourage an athlete to believe that he or she can attain the same performance in the future and provides the athlete with no information concerning personal competence. Similarly, a coach who attributes an athlete's skill error to lack of effort, lack of practice, or some other athlete-controlled factor will do more to facilitate future motivation, decrease feelings of helplessness, and encourage a positive attitude than attributing the athlete's failure to lack of ability. In Example 7, Jonathan's performance failure is attributed by his coach to incorrect skill execution (a controllable and correctable error), whereas P.J.'s failure is attributed to his lack of speed (a less controllable and less correctable cause). The differential messages carried via these

coaching communications may affect each athlete's future performance and motivation.

Step 4: The Athlete's Performance Conforms to the Coach's Expectations

The final step in the chain of events in the self-fulfilling prophecy phenomenon occurs when the athlete's performance and behavior conform to the coach's original expectation. This behavioral conformity is, in itself, a very important component in the chain of events because it reinforces for the coach that his or her initial judgment of the athlete was accurate. This confirms for the Pygmalion-prone coach that he or she is a very astute judge of sport potential and can recognize true athletic talent at the beginning of the season. Unfortunately, such "success" may reinforce or intensify the coach's Pygmalion tendencies.

As a final point in regard to the self-fulfilling prophecy process, it is important to recognize that *not* all athletes allow their coach's behavior or expectations to affect their performance or psychological responses. Just as all coaches are not Pygmalion prone, so, too, all athletes are not susceptible to the self-fulfilling prophecy. Earlier research in the coaching effectiveness area (as summarized by Horn, 2008) has suggested that the self-perceptions of some athletes are more easily affected by their coach's evaluative feedback than the self-perceptions of their teammates are. It is likely that individuals who tend to be very dependent on their coach's feedback to provide them with information concerning their competence would be most easily "molded" by their coach's expectations. In contrast, those athletes who are resistant to the Pygmalion process may not use the coach's feedback as a sole source of information to tell them how competent they are. If these resistant athletes do receive biased feedback from a coach, they may respond by discounting that information and using other informational sources (e.g., feedback from peers, parents, or other adults) to form their perceptions of how competent or skilled they are. Research from the educational psychology literature (e.g., Madon, Jussim, & Eccles, 1997) has suggested that high-achieving students in academic classrooms are almost completely invulnerable to negative teacher perceptions/expectations, whereas their lower-achieving classmates are very susceptible to their teachers' expectations (i.e., their academic achievement over the school year was significantly predicted by their teachers' initial expectations of their academic potential). Assuming that such interindividual variability in susceptibility to adult expectations also occurs in the athletic setting, it would be reasonable to believe that there are some athletes (perhaps the higher-achieving ones) who will be resistant to their coaches' expectations. Thus, even if a coach shows biased treatment of an individual athlete, the self-fulfilling prophecy process will short-circuit if the athlete is resistant to the coach's bias. It is important to note, then, that all four steps in the sequence are essential if the self-fulfilling prophecy phenomenon is to occur in the athletic setting.

Sport Applications

The research and theory detailed in the previous pages describe the processes by which coaches' expectations and behavior can affect the performance and psychological growth of individual athletes on their team. Some of this information is based on research work that has been conducted in the academic classroom and that is then applied to the sport domain. Although these two instructional contexts certainly have many similarities, some factors make each domain unique. This section discusses four expectancy-related issues that are particularly relevant to the sport context.

Expectancy Effects in Youth Sport Programs

Although Pygmalion-prone coaches can almost certainly be found at any level within the sport system (e.g., from youth sports through the professional level), the negative effects of a coach's expectancy-biased behavior may be particularly devastating at the younger age levels for three reasons. First, because children's initial experience with any particular sport is typically through a youth sport program, their interest in and enjoyment of that particular activity is being formed. Ineffective or expectancy-biased feedback from the coach during these early years may cause children to develop extremely negative feelings about that activity and subsequently to discontinue participation before they have had an opportunity to learn the skills.

Second, a series of research studies recently conducted with children ranging in age from 8 to 18 years (see summary of this research by Horn, 2004) shows that the self-perceptions of younger children (those under the age of 10) are based, to a large extent, on the feedback of significant adults. That is, these children are very much apt to evaluate how "good" or "bad" they are at a sport or physical activity based on what their parents, coaches, or teachers say to them. For example, a child in this age range is apt to say, "I know that I am a good runner because my mom says I am" or "I don't think that I'm a very good soccer player because my coach is always yelling at me." Thus, for children under 10, the feedback of a coach can have significant effects on the child's self-esteem and self-confidence in that sport.

Third, based on research information obtained from the motor development literature (e.g., Thomas, Gallagher, & Thomas, 2001), children in the early and midchildhood years (4 to 10 years) should be acquiring a variety of fundamental motor and sport-specific skills. Specifically, children should be learning to throw, catch, kick, jump, and run using mature and efficient movement patterns. In addition, this is a good time for children to learn some fundamental sport-specific skills (e.g., dribbling, passing, trapping). If children do not acquire these fundamental motor and sport skills during the formative years, it will be difficult for them to participate with any degree of skill in the more competitive sport programs available to children after the age of 10 years. Because Pygmalion-prone coaches tend to act in ways that impede the skill progress of their low-expectancy players, these children will be prevented from learning the necessary fundamental motor and sport skills. This, in turn, serves as a limiting factor in regard to their subsequent participation in the more advanced sport programs. Thus, again, the negative effects of a coach's expectancy-biased behavior may be particularly devastating in the early and midchildhood years.

Maturational Rates and the Sport Expectancy Process

A second expectancy issue, which is related to the first, is that children vary considerably in the rate at which they grow and mature. Children who mature early will reach full physical maturation 2 to 3 years earlier than children who mature at a more average rate. Furthermore, children who mature late will not reach full physical maturation until 2 or 3 years later than their average maturing peers and 4 to 5 years later than the early maturing child. As a result, within any given chronological age group, there will likely be considerable variation in children's physical status. Such differences in maturational rates may be a factor that not only affects children's and adolescents' performance and behavior in sport situations but also causes coaches to hold differential expectancies for individual athletes.

On a seventh-grade basketball team, for example, all boys may be between 12 and 13 years old chronologically, but they may differ in terms of their biological and physical status. The early maturing 12-year-old boy may be at a stage of physical development comparable to that of the average 14- or 15-year-old boy. In contrast, a late maturing 12-year-old may be at a stage of development comparable to that of a 9- or 10-year-old boy. Given such obvious differences in rate of maturation, the early maturer's physical and motor abilities are likely to be superior to those of the late maturer. It is important to know, however, that the late maturing boy's disadvantage is only temporary—he will eventually catch up to and may even surpass his early maturing peers in physical size and athletic performance. Unfortunately, however, because the late maturing boy in many youth sport programs is falsely diagnosed by unwitting coaches to be a low-expectancy

athlete (i.e., a child who is not now and never will be physically competent), that child may not receive optimal instruction, adequate playing time, or effective performance feedback and may even, in fact, be cut from the program. Thus, even though the late maturing boy could develop into a proficient athlete, he may be inhibited from doing so because of expectancy-biased coaching behaviors. Therefore, we should consider late maturing boys to be at an especially high risk for negative expectancy effects.

A more complicated pattern of expectancy bias may occur for girls in sport. Although early maturing girls may have the same advantages as early maturing boys during the childhood years (before the age of 12), the reverse may be true after this age. That is, early maturing girls could begin experiencing the effects of a negative expectancy bias on the part of their coaches around or after the time that these girls reach puberty. This could occur because some of the physical changes that girls experience as they reach puberty (e.g., breast development, menarche, increase in hip width, increase in body fat) are typically not perceived in our society as conducive to sport proficiency. Thus, some coaches may perceive or believe that these physical changes, which occur at an earlier age for the early maturing girls, will be detrimental to their sport proficiency and performance. In addition, gender-biased coaches may believe girls who are becoming more "womanly" in appearance may no longer be interested in sport, because such gender-biased individuals still perceive participation in sport as antithetical to femininity. Thus, early maturing girls (i.e., girls who reach puberty earlier than their female peers) may suddenly be seen by gender-biased coaches as less physically competent and less interested in sport participation.

This argument is consistent with the biosocial hypothesis developed by Malina (1994, 2002) to explain the correlational relationship that links girls' participation in intensive sport training with a delay in age of menarche. As Malina suggests, coaches may use a linear body build (narrow hips, flat chest, relatively low body fat), which is more typical of a late rather than an early maturing girl, to select athletes into particular sport programs such as gymnastics, dance, track, volleyball, swimming, and diving. Thus, early maturing girls who no longer exhibit a linear build may either be cut from sport programs once they reach puberty or be socialized out of sport (i.e., be encouraged to turn to more feminine activities). It is the early maturing girl, then, who may be at especially high risk for negative expectancy effects once she reaches (early) puberty.

Another issue relating to maturation and expectancy effects in the sport setting concerns the concept of "developmental vulnerability." Specifically, recent research in the educational setting (e.g., Rudolph, Lambert, Clark, & Kurlakowsky, 2001; Valeski & Stipek, 2001) has indicated that children and adolescents may be more susceptible to socioenvironmental factors at particular times in their educational careers. These particularly vulnerable times appear to be at important transition points (e.g., from kindergarten to first grade and from elementary to middle or junior high school). The increased vulnerability of children and adolescents to experience academic or psychological problems at these time points is likely because of the uncertainty, unfamiliarity, or novelty that are characteristic of a new achievement situation as well as the increased demands that are placed on them in the new (higher level) achievement context (see arguments on this point by Eccles, Wigfield, & Schiefele, 1998 and Jussim & Harber, 2005). Applying this concept to expectancy effects in the sport setting, we might hypothesize that individual children may be more susceptible to their coaches' expectancy-biased behavior when such children make transitions from the recreational to the more select or competitive level (i.e., from sport programs in which everyone makes the team to programs where tryouts are held and only select players make the team). Similarly, transitions from middle school or junior high programs to high school sport programs, and, eventually, from junior varsity to varsity programs, may result in greater susceptibility of children/adolescents to their coaches' expectancy-biased behavior.

Exercise

You have just been appointed director of an age-group youth sport program for a particular sport. This program provides nonschool competitive sport opportunities for children from ages 8 to 16 years. The previous director of this program had used an ability tracking system. That is, at each age level, children had been assigned, based on a tryout system, into one of three ability-differential teams: (a) a high competitive, travel-oriented team comprised of the best athletes at that age level; (b) a moderate-level competitive team that competed at the local or regional level; and (c) a low competitive team that was open to all those who tried out and that was primarily instructional in nature. Will you continue this practice of ability tracking children/adolescents at each age group? What are the arguments for and against such a practice? Should your decision on this issue be different for different age groups?

Sport Stereotypes and the Expectancy Process

A third expectancy issue concerns selected stereotypes that are related to the performance and behavior of individuals in sport situations. The two most pervasive stereotypes in the sport setting are those concerning ethnicity and gender. In regard to ethnicity, it is commonly believed that African American individuals are "naturally" gifted in particular sports and physical activities (e.g., basketball, sprinting events). Although this may initially appear to be a positive stereotype, it has certain negative ramifications for those African American children who are not "as good as they are supposed to be." Coaches may perceive an African American child who, for example, does not score *higher* than his Euro-American (white) peers on a series of sport skills tests as either lazy or "untalented." That is, even though he may have performed as well as his Euro-American peers, he is perceived by the Pygmalion-prone coach to be less than adequate. Such perceptions may be reflected in the fact that African American athletes in some programs must either make the starting lineup or be cut from the team (i.e., they will not make the team unless they are significantly more talented than the other athletes). Thus, African American children may be held to a higher standard of performance in these sports because of the stereotypes concerning their physical prowess.

Another aspect of ethnically biased stereotypes involves perceptions concerning athletes' mental capabilities. Specifically, although African American athletes are perceived to be very competent in regard to physical capabilities (e.g., speed, reaction time, strength), Euro-American athletes are perceived to be better in regard to mental capabilities (i.e., they are believed to be better decision makers and leaders). Pygmalion-prone coaches who subscribe to such ethnic stereotypes will act in ways that reflect these biased beliefs. Thus, African American athletes may not be considered for sport leadership or decision-making positions (e.g., football quarterback, basketball point guard, volleyball setter, baseball catcher). Even if they are given the opportunity to practice or play at such positions, their "mistakes" will be perceived as evidence of their innate inability to perform well in these roles rather than as an indicator that they may need more instruction or practice to acquire the necessary skills.

The situations described in the previous paragraphs only illustrate *some* of the ethnicity-related stereotypes that abound in the sport context. There are certainly many more (see, for example, Brooks & Althouse, 2000). The examples given in the previous paragraphs show that expectations based on ethnicity are not accurate and certainly can inhibit the progress of individual athletes or groups of athletes. Support for this idea is evident in the educational psychology literature where researchers (e.g., Jussim et al., 1996) have found that teacher expectations or teacher stereotypes have greater effects on the academic achievement of African American students and students from lower socioeconomic backgrounds than they do on children who are

not from these two backgrounds. Other support for the effect of negative racial stereotypes on academic and athletic performance comes from the work of Steele (1997; Steele & Aronson, 1995), Stone (2002; Stone, Perry, & Darley, 1997; Stone, Lynch, Sjomeling, & Darley, 1999), and Beilock (Beilock & McConnell, 2004).

In regard to gender stereotypes, it is commonly believed that females are less physically capable than males. Although these beliefs are based to some extent on research showing that postpubertal males and females do differ on selected physical characteristics (e.g., height, body composition, limb length) (Malina, 1994, 2002; Ransdell, 2002), they also are based on inaccurate stereotypes concerning the performance and behavior of females. In particular, the available research indicates that there are very few physiological or biological differences between boys and girls prior to puberty (particularly before 10 years of age) (Malina, 1994, 2002). Despite these research findings, many teachers, coaches, and parents continue to believe that girls from early childhood on are not "naturally talented" in the physical activity area. Because of such stereotyped beliefs, girls in coeducational youth sport programs may be more apt to be treated as low-expectancy athletes. That is, their coaches may give them less instruction in practice and less playing time in games. When they do play in games, they may be relegated to positions where they are inactive for large amounts of time. (For interesting detail regarding gendered behavior in children's sport contexts, see recent observational studies by Landers & Fine, 1996, and Messner, 2000.) Even on all-girl teams, a coach's stereotyped belief that girls are not and cannot be physically competent may cause her or him to establish lower standards of performance for them and to give greater amounts of inappropriate praise (i.e., to accept and praise mediocre performance accomplishments). Again, such expectancy-biased behavior is particularly negative during the childhood years because girls may then be less apt to develop the necessary fundamental motor and sport skills. As indicated earlier in this section, failure to acquire these skills during the childhood years serves as an inhibitor of sport performance in the postpubertal years. Thus, as several researchers and writers have suggested, any differences that are observed in the physical performance capabilities of postpubertal males and females may be due as much to inadequate instruction, participation, and training during the childhood years as to actual physiological or biological differences between males and females (Smoll & Schutz, 1990; Thomas & French, 1985). Furthermore, even if there are post-pubertal gender differences in strength, speed, power, and endurance, this does not necessarily mean that all girls are less strong or less fast than all boys. Thus, coaches who develop expectations concerning the physical competencies of children and adolescents based solely or primarily on gender ignore the reality that there is as much (or more) variation within each gender as there is between genders. Thus, coaches' expectations should be based to a greater extent on characteristics specific to each individual child rather than on the ethnic group or biological gender to which that child belongs.

The information provided in this section clearly indicates that selected children may be more apt to be perceived as low-expectancy athletes by their coaches than are other children. The specific concern here is that because such expectancies are based either on inaccurate stereotypes (e.g., ethnicity and gender) or on coaches' lack of knowledge concerning the physical growth and maturation process, these expectancies have the potential to seriously inhibit children's sport development. Thus, we need to consider such children as at greater risk for negative expectancy effects than their peers.

Coaches' Personal Characteristics, Their Leadership Styles, and the Sport Expectancy Process

As noted earlier in this chapter, the research conducted to date suggests that not all coaches are expectancy biased. Given this variability in coaches' tendency to be Pygmalion prone, it would seem to be of interest to determine what types of coaches are most apt to fall into this category. That is, what characteristics distinguish those coaches who act in expectancy-biased ways from coaches who do not do so?

Many characteristics of coaches could be investigated as possible correlates or predictors of expectancy-biased behavior. Based on the research concerning gender stereotypes in sport settings (see, for example, Griffin, 1998; Harry, 1995; Krane, 1996; and Messner, 1992), it might be hypothesized that coaches of male athletes who hold strong gender-stereotyped and homophobic beliefs would act very positively toward the players on their team who "fit" the masculine stereotype (i.e., those who have broad shoulders, high muscle mass, and who act in aggressive ways) while acting less positively toward the players who do not "fit" this masculine stereotype (i.e., players who have a more linear body shape and lower amounts of muscle mass, and who do not exhibit aggressive behaviors). Similarly, gender-biased and homophobic coaches of female athletes might act more positively to the athletes on their team who conform to the "feminine" ideal (i.e., female athletes who have longer hair, have boyfriends, wear makeup off the court) than to those athletes who do not conform to this image.

From the cognitive psychology (e.g., Skinner, 1996) theoretical literature as well as from the teacher education research literature (e.g., Cooper, 1979; Guskey, 1981), it appears that we might want to examine individual coaches' perceptions or locus of control with regard to their job responsibilities. That is, coaches may differ in how much they perceive that they personally can control the performance outcomes their teams can achieve. Coaches who possess an external locus of control would believe that the degree to which their teams will be successful over a season (i.e., have a high win–loss record) will be a function of external factors (e.g., "Do I have good athletes this year?" "Will we have any significant injuries?"). In contrast, coaches with an internal perception or locus of control might believe that a successful season would be, at least in large part, under their own personal control (i.e., "if I design my practices well," "if I work hard to teach my athletes the basic skills," "if I choose and implement the right offensive and defensive strategies," "if I maximize my athletes' level of conditioning"). Based on these different perceptions or beliefs on the part of the coaches, their behaviors toward and with their athletes might differ. Because coaches with an internal perception of control have a stronger belief that they can personally affect the degree to which their athletes can learn skills, such coaches might be more apt to persist in their efforts to teach all athletes the basic skills and to spend extra time with those who need more help or more repetitions. In contrast, coaches who generally believe successful outcomes are not under their own control but, rather, are more dependent on the athletes themselves may be more apt to give up on individual athletes who cannot perform the skills the right way the first time and focus all of their practice time and attention on the higher-skilled athletes. Thus, we might well find that coaches who have such an external perception or locus of control with regard to seasonal outcomes also would tend to be Pygmalion-prone coaches (i.e., act in expectancy-biased ways).

Exercise:

As a college coach, your philosophy is that you want to be as fair as possible to all athletes on your team and to provide all of them with equal opportunities. How do you balance this coaching philosophy of equity for all with the pressure you feel from the university and the fans to train and play only the best athletes so that you can win games? Would your answer to this question be different if you were a high school varsity coach? A high school junior varsity coach? A junior high school coach?

A more recent concept that certainly may be related to coaches' perceptions of control concerns their implicit theories regarding individuals' traits or abilities. This concept was introduced by Carol Dweck and her colleagues (e.g., Chiu, Hong, & Dweck, 1997; Erdley & Dweck, 1993; Levy, Stroessner, & Dweck, 1998) to describe two

types of individuals. Entity theorists are those individuals who believe that people's traits and abilities are fixed. In contrast, incremental theorists are those individuals who believe that traits and abilities are malleable (i.e., that abilities can be changed or improved over time or with effort). In a series of experiments, Dweck and her colleagues have shown that these two types of theorists differ in their perceptions and beliefs about others. Specifically, entity theorists, as compared to incremental theorists, (a) made more extreme judgments about others' traits and abilities based on a small sample of their behavior; (b) believed more strongly that individuals will show a high degree of consistency in their behavior over time; (c) showed a lesser tendency to adjust their initial trait judgments of another person even when exposed to information that was contrary to their initial trait judgment of that individual; and (d) more strongly agreed with societal stereotypes regarding particular ethnic and occupational groups. In contrast, incremental theorists viewed people's behavior as varying across time and contexts. Thus, for incremental theorists, the initial information they received about a person's characteristics or traits served as only tentative or provisional descriptors of their future performance and behavior. Assuming that coaches also can be identified or categorized as either entity or incremental theorists, it would follow that such a global perspective or worldview regarding the fixedness or malleability of athletes' traits or abilities would predict the degree to which coaches would exhibit expectancy-biased behavior. Coaches who adhere to an entity perspective (i.e., that an athlete's traits and abilities are fixed) should be more apt to be Pygmalion prone whereas coaches who adhere to an incremental perspective (i.e., that an athlete's traits and abilities are malleable) should be less at risk for developing and exhibiting Pygmalion-prone behaviors.

From a somewhat different perspective, we could also look at the research on coaches' leadership styles to identify possible predictors of Pygmalion-prone behaviors. Based on the sport research conducted to date on the topic of leadership styles in coaches (see Chelladurai, 2007; Horn, 2008, and Mageau & Vallerand, 2003), it is clear that coaches do differ in the type of leadership styles they employ in sport contexts. An examination of some of these leadership styles may reveal possible links to the expectancy-bias process. For example, a highly autocratic coaching style might be associated with a tendency to act in expectancy-biased ways. As Chelladurai explains (2007), coaches who exhibit an autocratic leadership style tend to stress their own personal authority in working with athletes. These coaches are the source of all rules, and they make all decisions. They also demand strict compliance from their athletes in following these rules. Of necessity, autocratic coaches also tend to separate themselves from their athletes. That is, they remain emotionally distant or aloof from players on their team. In contrast, coaches who exhibit a democratic leadership style encourage and solicit the participation of their athletes in making decisions pertaining to group goals, practice methods, game tactics, and strategies. Such coaches also tend to interact more frequently with individual athletes to solicit their opinions and feedback regarding team rules, practices, and games. Given such contrasting styles, it would seem reasonable to hypothesize that coaches who adopt a more autocratic leadership style would be more apt to act in expectancy-biased ways than would coaches who adopt a more democratic style. Trouilloud et al. (2006) recently demonstrated initial support for this link in their research with teachers and students in physical education classes.

From a related perspective, we can contrast coaches who create a more **mastery-oriented** team climate with coaches who create a more **performance-oriented** team climate. Based on the work of several researchers and writers (see reviews by Ames, 1992; Duda & Balaguer, 2007; Ntoumanis & Biddle, 1999), we can describe coaches who create a performance-oriented climate as those who place heavy emphasis in practices and games on performance outcomes (e.g., winning or losing). Such coaches also create a team environment that encourages between-player rivalries (e.g., coaches try to motivate athletes to outperform each other) and focuses attention on a limited number of players (e.g., only the "stars" get attention from the coach). In addition, in this type of team climate, player mistakes are perceived as extremely negative and deserving of punishment. In contrast, coaches who create a mastery-oriented team climate place greatest emphasis in practices on the development of individual players' skills (e.g., reinforcement and rewards given to all individuals who work hard and who show improvement in skills). Such coaches also view player mistakes as part of the learning process and distribute their time and attention to all players on the team and not just the "stars." Again, based on behavioral differences between these two contrasting leadership styles, we could hypothesize that performance-oriented coaches would be more apt to exhibit expectancy-biased behaviors than would mastery-oriented coaches (see corresponding research on this hypothesized link by Papaioannou, 1995 in the physical education context).

As the comments in this section indicate, certain coaching characteristics, attitudes, beliefs, and leadership styles may be more conducive than others to the occurrence of expectancy effects in the sport setting. A summary of these personal factors is provided in Table 5-1. Coaches who adopt, assume, or exemplify the characteristics, beliefs, attitudes, and behaviors descriptive

Table 5-1 **Characteristics, Attitudes, Beliefs, and Behaviors of Pygmalion-Prone and Non-Pygmalion-Prone Coaches**

	Pygmalion-Prone Coach	Non-Pygmalion-Prone Coach
Beliefs about Athletic Ability	"Good athletes are just born that way."	"Athletic ability is something that can be developed through practice and good training."
Beliefs about Coaching Success	"I can be a successful coach if I recruit or get good athletes." "If my team does not have a successful season, it's because I did not have good athletes, or because my athletes did not do what they could or should have done to be successful. I don't have to change any of my strategies or behaviors next season. I just need to get better athletes or more cooperative athletes."	"I can be a successful coach if I work hard to design and conduct good practices and institute the right game strategies and tactics." "If my team does not have a successful season, I will consider the possibility that I could or should have done something differently. I will likely change some of my strategies, behaviors, and tactics next season in an effort to improve my coaching effectiveness."
Stereotypic Beliefs	The Pygmalion-prone coach holds stereotypic beliefs regarding gender, race/ethnicity, country of origin, and socioeconomic status. These stereotypic beliefs affect or determine the coach's attitude toward, and behaviors with, individual athletes.	The non-Pygmalion-prone coach does not subscribe to stereotypic beliefs regarding gender, race/ethnicity, country of origin, or socioeconomic status. The coach's behaviors toward and with athletes are individualized.
Preseason Expectations	This coach tends to form preseason expectations for individual athletes based on "person" cues (e.g., race/ethnicity, gender, body size, and appearance).	This coach forms preseason expectations for individual athletes based primarily on performance-related information sources (i.e., how athletes perform in drills, scrimmages, and other performance contexts).

(continued)

Table 5-1 **Characteristics, Attitudes, Beliefs, and Behaviors of Pygmalion-Prone and Non-Pygmalion-Prone Coaches (*Continued*)**

	Pygmalion-Prone Coach	Non-Pygmalion-Prone Coach
Perceptual Flexibility	This coach's preseason expectations are rigid and fixed. Thus, coach sees in each athlete's performance and behavior in practices and games exactly what he or she expected to see.	This coach's preseason expectations are fluid and flexible. Thus, expectations for individual athletes may change as the athlete's performance and behavior in practices and games provide new information for the coach to use in evaluating that athlete.
Leadership Style	This coach exhibits an autocratic or controlling leadership style. Source of power lies within the coach. Athletes are not consulted about any team decisions, rules, strategies, or practices. Coach is central source of authority, and he or she conveys the attitude that "it's my way or the highway."	This coach exhibits a democratic or autonomous leadership style. Although coach is clearly the team leader, he or she regularly consults with athletes regarding team decisions, team rules, strategies, practices, etc. Coach encourages athletes to take personal responsibility for their own behaviors, motivation levels, training, etc.
Team Climate	This coach creates a climate in practices and games that is performance-oriented or ego-involving. In this climate, player mistakes are punished; better players receive more attention, encouragement, and rewards; and intrateam rivalry is encouraged.	This coach creates a team climate in practices and games that is mastery-oriented or task-involving. In this climate, each team member is perceived to be a valuable contributor, emphasis is placed on individual effort and skill improvement, and mistakes are viewed as opportunities to learn and improve.

of the Pygmalion-prone coach may certainly be at risk for undermining the performance and behavior of individual athletes on their team.

Exercise:

As a head coach, you know there are a number of ways to select team captains. You can let members of your team vote on who they want to be their captain(s). You can pick the captain(s) yourself with no input from your athletes. Or, you can use a combination of these methods. Using information from this chapter about the differing types of coaches' leadership styles, discuss the positive and negative effects of these different ways to select team captains.

Behavioral Recommendations for Coaches

The information on how coaches' expectations and behavior can affect the performance and psychological growth of individual athletes on their team can and should be used to promote positive coach–athlete interactions. Therefore, the following recommendations can help coaches and prospective coaches evaluate and perhaps modify their own behavior in the athletic setting.

1. *Coaches should determine what sources of information they use to form preseason or early season expectations for each athlete.* Performance-based information sources are generally more reliable and accurate predictors or indicators of an individual's physical competence than are person cues such as the athlete's gender, ethnic background, socioeconomic status, or physical appearance.
2. *Coaches should realize that their initial assessments of an athlete's competence may be inaccurate and thus need to be revised continually as the season progresses.* As the research literature in the motor learning area suggests, individuals do not always learn or progress at the same rate. Some individuals may show rapid progress early in the season but then slow down or even plateau toward the middle and end of the season. Other athletes may start slowly but then evidence a rapid increase in performance during the latter part of the season. Given such interindividual variation in learning and performance rates, it is obvious that expectations based on initial assessments of an athlete's capabilities may soon become inaccurate. Thus, coaches at all levels of play should maintain a certain degree of flexibility with regard to their expectations or judgments concerning individual athletes' abilities.
3. During practices, *coaches should keep a running count of the amount of time each athlete spends in non-skill-related activities* (e.g., shagging balls, waiting in line, sitting out of a scrimmage or drill). Certainly it is advisable for coaches to ask a friend or another coach to observe their practices and record the amount of time a starter (usually a high-expectancy athlete) and a nonstarter (usually a low-expectancy athlete) spend in practice drills.
4. *Coaches should design instructional activities or drills that provide all athletes with an opportunity to improve their skills.* In planning practice activities, the Pygmalion-type coach typically uses skill drills that are most appropriate for the highly skilled players. When the less skilled athletes cannot keep up, the coach then gives up on these athletes because he or she believes their failure is inevitable because of low skill abilities. The more effective coach, upon finding that his or her less skilled players cannot master the skill, will implement instructional activities designed to help them ultimately achieve success (e.g., break the skill down into component parts, employ performance aids, or ask the athlete to stay a few minutes extra after practice for more intensive work).
5. As a general rule, *coaches should respond to skill errors with corrective instruction* that tells each athlete what she or he can do to improve the skill performance. Also, praise and criticism should be given contingent to or consistent with the level of performance that was exhibited.
6. *Coaches should emphasize skill improvement as a means of evaluating and reinforcing individual athletes* rather than using absolute performance scores or levels of skill achievement. To the degree that a coach conveys the attitude that *all* athletes can *improve* their skill performance, no matter what their present level, then positive expectations can be communicated to each athlete.
7. *Coaches should interact frequently with all athletes on their team to solicit information concerning athletes' perceptions, opinions, and attitudes regarding team rules and practice organization.* Such individual coach–athlete interactions should allow each athlete to feel like a valued member of the team no matter what his or her level of skill is.
8. *Coaches should try to create a mastery-oriented climate in team practices.* Such a climate is most conducive to the development of skill in all players and to the maintenance of a team-oriented attitude.

Summary

Coaches' preseason judgments of individual athletes can serve as self-fulfilling prophecies by initiating a series of events that cause the coaches' initial expectations to become reality. This self-fulfilling prophecy phenomenon can be most detrimental when a coach forms an initial expectation that is inaccurate and underestimates an athlete's true ability. The coach's biased judgment of the athlete's sport potential, in turn, causes the coach to provide that player with less frequent and less effective instruction. Not only does such biased coaching behavior ultimately interfere with the athlete's opportunity to learn, but it also has a negative effect on his or her motivation and self-confidence. When the athlete subsequently exhibits an inability to perform well and a lack of motivation in practice situations, the coach's original but false judgment of incompetence is fulfilled.

Fortunately, the research that has been conducted in academic classrooms as well as in physical activity settings shows that all coaches are not Pygmalion prone. That is, some coaches do not allow their preseason judgments of individual athletes to affect the quality of their interaction with those players. It seems likely that coaches who are made aware of the effects that their expectations may have on athletes and who are trained to monitor their own instructional behavior may become more effective in working with individual athletes. The results of this research demonstrate that it is important that researchers and coaches more closely examine coaching behavior as one of the major factors that affect the performance and psychological growth of young athletes.

Study Questions

1. Identify and briefly describe the four steps in the expectation–performance process.
2. What sources of information might coaches use to form initial expectations for individual athletes on their team?
3. A coach's initial expectations for an individual athlete can vary along two dimensions (accuracy and flexibility). Briefly describe the consequences of the four possible combinations.
4. Do all coaches show expectancy-biased behavior? Explain what is meant by the term *Pygmalion-prone* coach.
5. Explain what the term *late maturing child* means, and then explain why late maturing boys may be at an especially high risk for negative expectancy effects.
6. Explain why early maturing girls may be at greater risk for negative expectancy effects once they reach puberty.
7. Describe the stereotypes in the sport setting associated with ethnicity. Explain how such stereotypes may affect selected groups of athletes.
8. Define the terms *entity theorist* and *incremental theorist*. Explain why coaches who adhere to an entity theorist perspective of athletic ability might be more apt to be Pygmalion prone in their interactions with individual athletes.

9. Compare and contrast the behaviors of an autocratic and a democratic coach.
10. Explain how a mastery-oriented team climate differs from a performance-oriented one.

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