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# Chapter Nineteen

## A Developmental Perspective on Transitions Faced by Athletes

*Paul Wylleman • David Lavallee*

To reach and to remain at the elite level in competitive sport require athletes—and those around them—to “invest” at different levels (e.g., physical, social, financial) during a long period of time. The termination of such a high-level athletic career can, therefore, be an emotional experience, not only for the athletes themselves but also for those in their close environment (e.g., parents, children, friends). Such a career end will also generate attention from the press, as reflected in these press clippings:

Next Sunday, the all-time greatest pole vaulter, and for some the greatest athlete ever, will announce his official retirement from track and field . . . His record of achievements includes among others 35 World records set between 1984 and 1994. . . Only an Olympic medal seemed to be out of reach of Sergeï Bubka (Het Volk, 2000).

Those who look at women’s tennis should think about Steffi Graf. This German player has been at the forefront in the world of tennis since she made her entry in the professional tennis circuit . . . Her farewell in 1999 exceeded the expectations of the 22-fold Grand Slam winner: “I’ve been very lucky. I’ve left sports with a feeling of happiness and fulfillment . . . I haven’t looked back. I’ve reached everything in tennis.” (De Morgen, 2000).

Although the end of a sport career is a clearly identifiable moment to all, it is not the only moment that athletes find crucial. Annelies, 34 years of age, silver medallist at the 1992 Olympic Games at Barcelona, reflects on some of the moments she found – retrospectively – important throughout her elite rowing career. One of these moments include her initial involvement in rowing:

I first played one and a half years of volleyball at regional level – the lowest of the lowest. I then started rowing when I was 16. I learned it at school where we went rowing instead of doing gymnastics and actually some of us stuck with

it. . . . Looking back I feel that I landed in a very good sport in view of my capabilities. Rowing means endurance, technique, strength.

Not qualifying for a World championship and breaking through at world level were two other moments that clearly stuck in her memory as she perceived them to influence the quality and level of her involvement in competitive rowing:

Once I got very disappointed because I failed to make the selection for a World championship. I quit my job and I tried to break through at elite level. . . .

I rowed some 6 years at sub-elite level since I was 18 years of age, in-between 7th and 10th at world level. Since 1991, I consistently trained twice a day. Since then, I remained at the top until Atlanta 1996.

Naturally, she remembers vividly the moment she decided to discontinue her competitive career:

I knew that I wanted to quit after the [Olympic] Games in Atlanta. A couple parties were thrown in my honor . . . I ended my career voluntarily. I wanted to start a family. Age was important, although not as if I wouldn't be able to compete anymore, but now I'm 32, and if I wanted to go on for another 4 years, I would have been 36 at the Games in Sydney . . . Once you've been to the Olympic Games, you start to think in Olympic years, and those 4 years seemed too much to me.

These moments or events that Annelies describes can be viewed as turning points or “transitions.” The most visible transitions include the moment that Annelies started with rowing, which reflects her transition *into* sport, whereas the moment she decided to end her competitive rowing career characterizes her transition *out* of sport.

Since the 1970s, sport psychologists have focused their attention on these two clearly identifiable transitions in organized sport—transition into and out of sport. Youth sport researchers have not only studied why and how children start participating in organized sport, but have also looked at the process of attrition among young athletes (see Brustad, Babkes, & Smith, 2001). Other researchers also examined the process of terminating involvement in competitive sport among elite athletes (for an overview, see Lavallee, 2000). Although the transition out of (elite) sport has become a well-delineated topic of study among the sport psychology community as reflected in the growing number of publications, conference symposia and workshops, position statements and even a special interest group (Lavallee, Sinclair, & Wylleman, 1998; Lavallee, Wylleman, & Sinclair, 1998), relatively little attention has been paid to the broad range of transitions that athletes face during their sport career and that athletes perceive to influence the quality of their athletic involvement (Wylleman, Lavallee, & Alfermann, 1999).

This chapter aims to provide a view on the relevance and occurrence of the different transitions that athletes may face during their sport career. First, a description is given of the nature and types of transitions that athletes may face throughout their athletic lifespan. Ensuing sections will include those transitions that are not only related to the athletic context, but also those that occur in the athlete's psychological, social, academic, vocational, financial, and legal course of development. Next, a developmental model on the transitions faced by athletes will be presented. Finally, the model will be used to illustrate how to approach a case study from a developmental and holistic perspective.

## Nature and Types of Transitions Faced by Athletes

A transition generally results from one or a combination of events (Lavallee, 2000; Taylor & Ogilvie, 2001) that are perceived by the athlete to bring about personal and social disequilibria (Wapner & Craig-Bay, 1992). These disequilibria are presumed to be beyond the ongoing changes of everyday life (Sharf, 1997) and cause “a change in assumptions about oneself” (Schlossberg, 1981, p. 5). These transitions are, among others, developmental in nature (Alfermann, 1995; Pearson & Petitpas, 1990; Wylleman, De Knop, Ewing, & Cumming, 2000), and they can be characterized by predictability and developmental context of occurrence.

Two types of transitions can be discerned: normative and nonnormative transitions. During a normative transition, the athlete exits one stage and enters another stage, which makes these normative transitions generally predictable and anticipated (Schlossberg, 1984; Sharf, 1997). Normative transitions are part of a definite sequence of age-related biological, social, and emotional events or changes (Baltes, 1987) and are generally related to the socialization process (Wapner & Craig-Bay, 1992) and the organizational nature of the setting in which the individual is involved (e.g., school, family). In the athletic domain, normative transitions include, for example, the transition from junior to senior level, from regional to national-level competitions, from amateur to professional status, or from active participation to discontinuation from competitive sport.

**There are two types of transitions: normative and nonnormative.**

Nonnormative transitions, on the other hand, do not occur in a set plan or schedule but are the result of important events that take place in an individual’s life. For athletes, these transitions may include a season-ending injury, the loss of a personal coach, or an unanticipated “cut” or termination from the team. These idiosyncratic transitions are generally unpredicted, unanticipated, and involuntary (Schlossberg, 1984). These transitions also include those that are expected or hoped for, but that did not happen – labeled *nonevents* (Schlossberg, 1984). Not making the first team although making the final preselection, and not being able to participate in a major championship (e.g., the 1980 Olympic Games) after years of preparation are two examples of nonevents. Although athletes will certainly face a combination of both types of transitions, this chapter will focus on the normative transitions because they are fairly voluntary, anticipated, and predictable.

Transitions are also related to the developmental context in which they occur. For an athlete, these will include those transitions inherent to the athlete’s involvement in the athletic context (i.e., athletic transitions), as well as those transitions related to her or his development at psychological, psychosocial, academic, and vocational levels (i.e., general or nonathletic transitions; Wylleman et al., 1999).

## Transitions Related to Athletic Contexts

Although competitive sport is unpredictable at moments, it actually is characterized by normative athletic transitions that are also referred to as normal (Petitpas, Champagne, Chartrand, Danish, & Murphy, 1997) or planned (Sinclair & Orlick, 1994) transitions. A first type of transition is determined by age, for example, going from junior to senior level. Although being at the top end in their age group, a junior elite athlete will become part of a larger group of senior athletes at the bottom end in level of athletic achievement. This is also a transition in which a number of athletes do not progress to the next age category. For example, in their study of female track-and-field athletes, Bussmann and Alfermann (1994) found that only 14 out of the 51 national elite junior athletes made it to the national senior level.

A second type of transition is determined by the structural or organizational characteristics of competitive sport, which may differ worldwide. In the United States, where organized sport is firmly embedded in the educational system, an athlete will be confronted with the transition from high school to collegiate athletics (Leonard, 1996). On the European continent, however, athletes will transit organized sport by making the transition from the local sports clubs to regional and national teams (De Knop, Wylleman, Van Houcke, & Bollaert, 1999).

Finally, athletic proficiency also confronts athletes with specific transitions. As the level of athletic achievements increases, an athlete will go from regional to national to continental competitions and finally to competitions at world level (e.g., World championships, World Games, Olympic Games). For example, making the Olympic Games had a long-lasting effect on the participation, personal satisfaction and fulfillment, and future success of Olympic athletes (Gould, Guinan, Greenleaf, Medbery, & Peterson, 1999). Moreover, Bussmann and Alfermann's (1994) study of female track-and-field athletes showed that junior athletes who were among the very best in the world in their age category were more likely to remain in elite sports as a senior athlete than were junior athletes who ranked lower in level of performance. Making a transition successfully is thus also related to the athlete's level of sporting achievements.

Bloom (1985) identified three stages of talent development (within the fields of science, art, and sport) that are delineated by specific transitions. These include (a) the *initiation* stage in which young athletes are introduced to organized sports and during which they are identified as talented athletes; (b) transition into the *development* stage during which athletes become more dedicated to their sport and the amount of training and level of specialization are increased; and (c) transition into the *mastery or perfection* stage in which athletes reach their highest level of athletic proficiency. Using retrospective qualitative data, Wylleman, De Knop, Menkehorst, Theeboom, and Annerel (1993) related these stages to the ages at which former Olympic athletes made the relevant transitions. They transitioned into the initiation stage at the average age of 14.3 years, into the development stage at age 15, and into the mastery stage at 18.5 years of age. Although normative in nature, the age at which these transitions occur as well as the age range between transitions may vary. For example, female gymnasts tend to end their competitive career between 15 and 19 years of age (Kerr & Dacyshyn, 2000), the age at which male rowers make the transition from the development into the mastery stage (Wylleman et al., 1993). Although the average tenure in major league baseball, football, basketball, and ice hockey in the United States is between 4 and 7 years (Leonard, 1996), the mastery stage of Belgian Olympic athletes spans on average 10 years (Wylleman et al., 1993), and that of German Olympic athletes, almost 15 years (Conzelmann, Gabler, & Nagel, 2001).

Côté (1999), similar to Bloom (1985), identified normative transitions occurring between the stages of sampling, specializing, investment, and mastery in the development of deliberate practice. Finally, Stambulova (1994, 2000) considered the athletic career as consisting of predictable stages and transitions, including (a) the beginning of the sports specialization, (b) transition to intensive training in the chosen sport, (c) transition to high-achievement sports and adult sports, (d) transition from amateur sports to professional sports, (e) transition from culmination to the end of the sports career, and (f) end of the sports career. The occurrence of these normative transitions underlines the developmental nature of the athletic career.

Nonathletic transitions generally include those faced by athletes in their development at psychological, psychosocial, academic, and vocational levels (Wylleman et al., 1999). Recently, research has shown that athletes also make specific transitions at financial and legal levels when transiting from one athletic stage to another. These specific developmental transitions are addressed in the following sections.

## Transitions in Psychological Development

Different conceptual frameworks have been developed that describe the stages and transitions relevant to the athlete's psychological development, such as Erikson's (1963) developmental stages, Piaget's (1971) stages of cognitive development, and Havighurst's (1973) developmental tasks over the lifespan. Major developmental stages include childhood, adolescence, and adulthood. Each of these stages is related to a specific pattern of participation in competitive sport. For example, 70.5% of (former West) German track-and-field athletes who started competitive sport participation during childhood discontinued involvement by the time they reached adolescence, 89.6% terminated their sports career when transiting to adulthood; and 61.8% of athletes who started during adolescence quit competitive sport at adulthood (Bussmann & Alfermann, 1994). The applicability of these conceptual frameworks to the entire athletic career may be limited (Lavalley & Andersen, 2000); thus, attention will be directed to the developmental stages of childhood and adolescence.

An important developmental task relevant to young athletes during childhood includes their readiness for structured sport competition (see Passer, 1996). From a motivational point of view, *readiness* refers to the extent to which a child is motivated to participate in sport because of his or her own interest in and attraction to the activity. Because a child's initial participation in organized sport may reflect a parental decision, the young athlete may not necessarily be motivationally ready to participate. Motivational readiness also relates to a child's interest in comparing his or her skills with those of other children, which is not likely to be present for youngsters prior to age 7 or 8 years (Passer, 1996). From a cognitive point of view, readiness refers to the child's capacity for abstract reasoning and an understanding of roles, responsibilities, and relational characteristics that are relevant to the athletic setting. For example, a child's role-taking abilities are not fully developed until 8 to 10 years of age (van der Meulen & Menkehorst, 1992). Children who are expected (e.g., by the parents) to participate in sport earlier than their cognitive maturational level may experience considerable frustration and could lose interest in subsequent sport participation because they do not have the cognitive capacities to handle the demands placed on them.

A young athlete also needs to understand the causes of performance outcomes. Because children do not effectively distinguish among the various contributors to achievement outcomes until around age 10 to 12 years, it may be that young athletes cannot estimate accurately their own ability and therefore need to rely on adults for information about their competence (Fry & Duda, 1997). As 10- to 14-year-old athletes start to rely more on comparison with peers, they could have a higher chance of dropping out if they are strongly ability oriented and if they perceive themselves to have less ability than do other athletes (Roberts, 1993). Young athletes thus need to be cognitively and motivationally mature to be able to progress in competitive sport.

Adolescence is a period during which individuals are confronted with a number of developmental tasks. These include achieving new and more mature relations with peers of both sexes, identifying with a masculine or feminine role in society, accepting one's physique and using the body effectively, and attaining emotional independence from parents and other adults (Rice, 1998). Developing a self-identity is, therefore, a crucial developmental task for adolescents. This is especially relevant for an athlete as it has been shown that participation and continued involvement in competitive sport can have a significant influence on the way self-identity develops (Brewer, Van Raalte, & Petitpas, 2000). The degree to which an individual will develop an athletic identity can have both positive and negative consequences for the athlete. As young athletes become and remain involved in high-level competitive sport through adolescence, their self-identity may become strongly and exclusively based on athletic performance (Coakley, 1993). Individuals who strongly commit to the athlete role may be less likely to



explore other career, education, and lifestyle options (Baillie & Danish, 1992; Werthner & Orlick, 1986). *Identity foreclosure*, which is the process by which individuals make commitments to roles without engaging in exploratory behavior (Petitpas, 1978), plays also an important role as it may negatively influence the use of coping strategies that are essential during career transitions (Crook & Robertson, 1991; Gordon, 1995; Pearson & Petitpas, 1990). Both athletic identity and identity foreclosure have been found to be inversely related to career maturity among intercollegiate athletes (Murphy, Petitpas, & Brewer, 1996). Both play a crucial role in the way adolescents seek and establish continuity of the self in search of an identity (Rice, 1998). Adolescents' search for a self-identity will lead them to strive toward more autonomy from their parents by developing their own lifestyles or by identifying their own place within their psychosocial environment (Dusek, 1987). For example, as the onset of puberty and associated biopsychosocial changes may be delayed for female gymnasts until their retirement from sport, their transition of identity exploration may also be delayed (Kerr & Dacyshyn, 2000).

**Both athletic identity and identity foreclosure are inversely related to career maturity among intercollegiate athletes.**

An athlete's self-identity has also been found to play a significant role in successfully making a transition. Athletes with a strong athletic identity, and those with a strong identity foreclosure, may lack coping strategies essential during career transitions (Crook & Robertson, 1991; Gordon, 1995; Pearson & Petitpas, 1990) and, consequently, may experience a more difficult adjustment to psychological transitions than do those athletes who committed themselves to nonsport participatory roles (e.g., Chamalidis, 1995; Grove, Lavalley, & Gordon, 1997; Werthner & Orlick, 1986). For example, Chamalidis showed that former Greek and French athletes who placed great importance on their athletic role were more likely to experience problems when ending their sport career than were those athletes who placed less value on the athletic component of their self-identity. Adolescence is important for an athlete to navigate the developmental task of developing a self-identity that is not only defined in terms of his or her athletic role, but that also allows effective coping with transitions essential to an athletic career.

The empirical data on the relationship between the athlete's psychological and athletic development is still relatively limited. The available findings, however, do suggest that the way in which athletes cope with developmental tasks such as cognitive and motivational readiness for competitive sport participation, and successfully develop a multidimensional self-identity, influences if and when they are able to progress from one athletic stage to the next.

## Transitions in Social Development

As relationships with other people are the most important part of an individual's life (Hinde, 1997), it should not be surprising that social development can be characterized in terms of specific stages and transitions (e.g., Trickett & Buchanan, 1997). During childhood, young children need to learn how to get along with their peers; adolescents need to achieve new and more mature relations with their peers, as well as establish emotional independence from parents and other adults; and adults need to establish stable and permanent family and social relationships (Rice, 1998).

Relevant in the athlete's psychosocial development is her or his role within the social environment and the role other relationships play in the quality of athletes' sport involvement throughout the athletic lifespan. The role of relationships is significant throughout the sport career in view of the support they can provide to athletes. For example, in a recent study on the importance of social support perceived by high-level sports performers, Rees and Hardy (2000) concluded that there was a need to recognize "that important others can play a crucial

role in the life of the performer, and that the consequences of performers being isolated from support are damaging” (p. 344). Research has also shown that the athlete’s social network is strongly determined by the stage of the athletic career. Bona (1998) asked two 18-year-old former elite athletes to indicate the persons they perceived to be significant to them during the mastery and discontinuation stages. After making the transition out of sport, both athletes perceived they lost contact with almost all individuals who were significant to them during their active sport career (e.g., coach, teammates), and their interactions especially with friends and family were rekindled.


The athlete’s social network generally consists of coaches, parents, and peers. The importance of parents and coaches to athletes is illustrated in the fact that the athlete-parents, athlete-coach, and coach-parents relationships have become known as a network, namely as *the athletic triangle* (Smith, Smoll, & Smith, 1989), or as the *primary family of sport* (Scanlan, 1988). The relevance of this triangle was shown by Carlsson (1988) in a study of Swedish tennis players, which revealed that the quality of the interpersonal relationships in the athletic triangle was one of the major factors that determined whether young talented tennis players made it to world level or not. Although peer relationships can also play a significant role, the focus of attention will be centered on the role played by parents and coaches.

### **Parents**

Although the role of parents has generally been situated during the initiation stage (e.g., Kirk et al., 1997; Régnier, Salmela, & Russell, 1993), research has shown more and more that athletes perceive parental involvement to be salient throughout the athletic lifespan. For example, Hellstedt (1987, 1990) found that 12- and 13-year-old elite ski racers perceived their parents to have a strong influence on their athletic development. Additionally, Ewing and Wiesner (1996) interviewed parents of regionally ranked 12- to 15-year-old tennis players and found that parents consistently reported a direct involvement with their children’s development as competitive tennis players, even though each child had a coach from one of the local clubs. In a study in which 8- to 21-year-old athletes were studied over a 2-year period, Würth (2001) found that athletes who perceived they had a successful transition from one stage to another reported that their parents provided more sport-related advice and emotional support than did athletes who did not make the transition. These findings confirmed earlier results by Carlsson (1988) that parents of successful Swedish elite tennis players had, in comparison to parents of players who did not make it to world level, been supportive by not putting their children under too much pressure to achieve.

Wylleman and colleagues have conducted several studies pertaining to parental involvement throughout athletes’ career stages. Wylleman, Vanden Auweele, De Knop, Sloore, and Martelaer (1995) assessed 13- to 21-year-old talented athletes competing in one of 14 different sports at national (66.4%) or international (33.6%) levels. They discovered that athletes perceived parental involvement as important throughout the development and mastery stages of their athletic career, even though the quality of interactions with both parents changed. For example, as athletes reached the mastery stage, they perceived themselves to expect less emotional support from their mother but more emotional support from their fathers. This finding was related to a decrease in mothers’ involvement, which started in the initiation stage, in favor of fathers’ surging interest in their children’s athletic achievements when they reached a higher level of proficiency. In a related study with 20-year-old talented swimmers and their parents, Wylleman, De Knop, and Van Kerckhoven (2000) found that swimmers perceived that their parents played an emotional-supportive role during their childhood participation, underlining the need for discipline and motivation in order to enhance the athlete’s level of athletic achievements. During adolescence, parental influence was perceived to evolve from an active,





participation-inducing role, advocating the need for hard work to develop their athletic abilities. During young adulthood, swimmers perceived that their parents acknowledged swimmers' need for more freedom and personal space, and the athletes felt that their parents would accept and support their son's or daughter's decision to discontinue their athletic career.

Côté (1999) presented empirical data suggesting that the role of parents changes over the different stages of athletic development. During the sampling years, parents assume a leadership role by initially getting their children interested in sport and allowing them to sample a wide range of enjoyable sporting activities. During the specializing years, parents are committed supporters of their child-athlete's decision to be involved in a limited number of sports. During the investment years, parents respond to the various demands and expectations put on their child-athlete by fostering an optimal learning environment rather than creating new demands or pressure. Finally, parental involvement remains relevant, even as young adult athletes

make the transition into the mastery stage. Moreover, Wylleman and De Knop (1998) investigated 15- to 22-year-old competitive swimmers and track-and-field athletes who were coached by one of their own parents. Results revealed that although the majority of "parent-coaches" (67%) started to coach their child during the initiation stage of the athlete's sport career, another 20% initiated their cooperation during the development stage, and even 13% still during the mastery stage.

### ***Coaches***

Research shows that, similar to parents' influence, the quality and content of the coach-athlete relationship change during the different athletic stages. For example, the aforementioned study by Bloom (1985) revealed that during the initiation stage, coaches generally rewarded the young children for the effort they put in, rather than for the result itself. This positive reinforcement encouraged the children to remain in sport. These findings are confirmed by the coach effectiveness training studies conducted by Smith and Smoll (1996), which revealed that dropout rates were lower during the initiation stage for young athletes who played for coaches trained to use more praise following desirable performances and more instruction and encouragement following skill errors than they were for athletes who played for untrained

coaches (Barnett, Smoll, & Smith, 1992). Black and Weiss (1992) also found that among 12- to 18-year-old swimmers, a relationship existed between their perceptions of the coach's behaviors and their own self-perceptions, enjoyment, and intrinsic motivation.

During the development stage, Bloom (1985) contends that coaches become more personally involved, emphasize the technical proficiency of the young athletes, and expect progress through discipline and hard work. In the mastery stage, athletes became more responsible for their training and competitions, whereas coaches placed greater demands upon these elite-level athletes. Serpa and Damasio (2001) reinforced this evolution in the way coaches interact with their athletes throughout the athletic career in a study of 13- to 30-year-old trampoline athletes. Although the coach was perceived by athletes to remain friendly toward them, the coach's dominating role was perceived to diminish during the latter stages of the athlete's sport career in favor of a more equal partnership. Martin, Jackson, Richardson, and Weiller (1999) found that 10- to 13- and 14-to-18-year-old athletes reported they preferred similar coaching behaviors, including possibilities for greater participation in making decisions pertaining to group goals, practice methods, and game tactics. They also preferred the coach to develop warm interpersonal relations with team members and create a positive group atmosphere.

The role of the coach-athlete relationship has also been underlined in instances where the coach is also the athlete's marital partner. For example, Jowett and Meek (2000) found among coach-athlete relationships in married couples that coaches were seen as good friends by their elite-level athlete-partner, that their common goals promoted a common direction, and that feelings were augmented while working together to tackle the perceived demands of top-level sport.

Research reveals that the quality and content of the coach-athlete relationship are influenced by the athlete's transition to the next athletic stage. Alfermann and Würth (2001) conducted a 2-year study of 11- to 15-year-old handball, basketball, and hockey players and found that players who perceived their coaches gave them more instruction and feedback made a more successful transition into the next athletic stage compared to players coached by less attentive coaches. However, the quality of the coach's behaviors can also be negatively related to athletes' responses such as higher anxiety and burnout, contributing to an unsuccessful transition to the next athletic stage. At the high school level, athlete burnout was related to lower social support, positive feedback, training and instruction, and democratic decision making (Price & Weiss, 2000), whereas at the collegiate level, athlete burnout was primarily due to a lack of coach empathy and praise and a greater emphasis on winning (Vealey, Armstrong, Comar, & Greenleaf, 1998). Other coach-related factors that contribute to career termination among athletes include a conflicting or problematic athlete-coach relationship and psychological abuse by the coach (Kerr & Dacyshyn, 2000; Werthner & Orlick, 1986).

Although the parents-coach relationship has largely been neglected as a topic of study (Wylleman, 2000), some research has shed light on the way in which parent-coach interactions evolve during the athlete's sport career. For example, Wylleman and colleagues (1995) found that athletes in the mastery stage perceived, in contrast to those in the development stage, their parents and coaches to interact in a less consultative and more independent way. The quality of the parents-coach relationship also influenced athletes' progress toward the next athletic stage. Vanden Auweele, Van Mele, and Wylleman (1994) found that coaches and parents perceived themselves to have a good relationship if coaches worked with their athletes toward reaching a higher level of athletic achievement.

Few studies have actually studied the direct relationship between the athlete's psychosocial and athletic development. However, the existing research reveals that the quality of athletes' relationships not only changes during each of the athletic stages, but that it also influences the way in which athletes are able to transit to the next athletic stage.

## Transitions in Academic and Vocational Development

Formal education and development of a professional occupation compose a process that will be pursued by a majority of individuals (Newman, Lohman, Newman, Myers, & Smith, 2000). This process consists of (a) transition into primary education/elementary school at 6 or 7 years of age, (b) transition into secondary education/high school at the age of 12 or 13, (c) transition into higher education (college or university) at 18 or 19 years old, (d) transition into vocational training and a professional occupation, and (e) transition into a postgraduate, life-long learning phase. Research shows that this lifespan process challenges individuals to adapt to shifts in role definitions, expected behaviors, membership within social networks, personal and social support resources, and coping with stressors resulting from uncertainty about the ability to accomplish transition tasks (Elias, Gara, & Ubriaco, 1985).

Because most countries have compulsory education up until the age of 16 or 17 years, most athletes will be confronted with a major overlap between their academic and athletic development (De Knop et al., 1999). For example, the normative transitions in the sport life-cycle of a basketball player in the United States will run parallel to transitions at academic levels—from youth sport to high school junior varsity to high school varsity to college and, finally, professional level (Petitpas et al., 1997). In nonprofessional sports, Beamish (1992) found that 6 in 10 Canadian Olympians were students at the time of participating in the Olympic Games, whereas during the 2000 Olympic Games in Sydney, 1 Belgian athlete in 10 was a current or recently graduated university student-athlete. This dual role of student and athlete puts individuals in a situation where they need to invest their available time and energy into developing potential in two areas of achievement (De Knop et al., 1999). This is reflected in the fact that academic or vocational training, or developing a professional occupation, has been an important reason for talented athletes to terminate their sport career (Bussmann & Alfermann, 1994; Greendorfer & Blinde, 1985; Koukouris, 1991; Petitpas, Brewer, & Van Raalte, 1996; Wylleman et al., 1993).

### *Transition Into Secondary Education/High School*

Many developmental tasks and challenges must be negotiated by adolescents during the transition into secondary education or high school, including physical maturation, cognitive advancements, emotional development (e.g., becoming more self-reliant, more autonomous from parents), expanding relationships with peers, and gaining the ability to have intimate friendships (Newman & Newman, 1999). The intensity and level of classes and studying for subjects change. For incoming high school freshmen, this transition is accompanied by increased choices, changes, and responsibilities in the adolescent's academic and social worlds (Newman et al., 2000). Newman and colleagues found that the transition to high school was a significant stressor to youngsters as it couples maturational changes with family system changes and changes in the nature of peer relations. This transition may even become more important when athletic achievements are given a prominent role through participation in high school athletics. The transition into high school is a pivotal point for most talented athletes in North America, because failing to make the high school team means that their sports participation will largely be limited to recreational opportunities. Athletes who are selected are provided with another 3 to 4 years to learn and develop physically, and they may experience even greater opportunities to make the transition into intercollegiate sports, which is the steppingstone to most Olympic and professional sport opportunities (Ewing & Seefeldt, 1996).

With the establishment of schools focused on talented athletes, secondary education has also been awarded a prominent role in the development of talented athletes in European countries (De Knop et al., 1999). For example, talented Belgian athletes are given the opportunity

to complete their secondary education in a “topsport” school that provides “pupil-athletes” with a weekly 20-hour academic program similar, albeit in compressed form, to that of their nonathletic peers. Specialized coaches in local or nearby sporting facilities provide this academic program. Similar schools exist, for example, in France and in the Netherlands (De Knop et al., 1999). For athletes who do not attend such schools, problems arise ranging from compulsory school attendance, which restricts the athlete’s training, to lack of time and a lack of notes or tutoring due to absenteeism for participating in training camps and competitions (De Knop et al., 1999). Athletes in secondary education have also shown underdeveloped peer group relationships and a lack of academic skills (De Knop et al., 1999). Athletes and parents have also “fought battles” with school administrators over timetables, deferring tests and exams, and allowing athletes to stay at home to study for tests or to complete required assignments that were neglected due to athletic activities (Donnelly, 1993).

The transition out of secondary education may entail a diversification in career paths among talented athletes. Some may choose to end their academic pursuits and go for a professional sport career. The probability that an athlete will be able to make this type of transition successfully is very small as reflected in the fact that only two tenths of 1% of high school athletes attain a professional sports career (Leonard, 1996)! Of those athletes who discontinued their academic career at this point in favor of a professional sports career, some regretted not pursuing their academic endeavors after retiring from a professional or elite-level sport career (Donnelly, 1993). However, a majority of athletes have little perspective on a full-time professional athletic career and will probably discontinue participation in high-level competitive sport altogether to look for or engage in a part- or full-time professional occupation. This decision may also be brought about by the lack of a structured and organized level of professional sports, which is generally the case for female athletes. For example, Wylleman et al. (2001) found that talented young female basketball players chose not to continue in competitive basketball after graduating from secondary education due to the lack of professional-level possibilities.

**Research has shown that coaches are more personally involved and expect progress during the athletes’ development stage.**

### ***Transition Into Higher Education***

Athletes may further their academic career by transiting into higher education (college or university). This is an important stage in a long-term process whereby the risks and disadvantages of high-performance sport gain more and more significance, while the need for educational and vocational training becomes apparent. Parents play an important role in this transition. They have been shown to “gently” pressure their children into continued formal education on the way to a professional future (Koukouris, 1991), although their guidance, support, and involvement have been related to the amount of reported transition distress among student-athletes (Zaichkowsky, King, & McCarthy, 1997). Moreover, because only 5% of high school athletes play in 1 of the 4 major U.S. team sports (football, baseball, basketball, ice hockey) at the collegiate level (Leonard, 1996), most student-athletes will need to learn to cope with not making the team or the next athletic career level. This may affect the incoming student-athlete’s athletic identity that was strongly reinforced at the high school level based on successful performances (Danish, Petitpas, & Hale, 1993; Finch & Gould, 1996).

In contrast to secondary education, student-athletes need to be more personally involved in developing their academic career. The relatively high degree of freedom in college or university requires a stronger personal investment from student-athletes to attend academic activities, systematically plan their course of study, and commit enough time to academic activities (De Knop et al., 1999; Donnelly, 1993). De Knop et al. compared student-athletes’ adherence to academic activities with that of students involved in nonacademic activities (e.g., fraternities)

and found that although both groups of students invested a similar amount of time to academic activities, student-athletes reported more academic problems caused by lack of time and physical fatigue related to their sports involvement. Student-athletes are required to cope with changes within the social environment of higher education, which strongly differs from that at the secondary level. Although student-athletes rated the support provided by their academic institute, coaches, and parents as influential to their success in their academic and athletic careers, the role of their peers was perceived to be crucial in sustaining their efforts in furthering both careers (De Knop et al., 1999).

The way in which athletes conclude their college or university career is largely determined by the choices made when entering higher education (e.g., selection of a specific subject of study or a major) as well as by the status of their sport career. Athletes who were not able to pursue a professional athletic career elected to further their academic endeavors (De Knop et al., 1999). Maintaining the status of student-athlete allows them to not have to focus on looking for a professional occupation, of being able to enjoy the support provided to student-athletes (e.g., financial, logistic, coaching), and of bridging one or more years in preparation for a major competition (e.g., Olympic Games).

## **Transition From Academic to Vocational Development**

The transition out of an academic career is often accompanied by an athlete's increased efforts to secure greater financial and personal security (e.g., by entering the job market). This is necessary for those athletes who cannot rely on a revenue-income via their athletic achievements. Because only 3% of collegiate athletes and a mere two tenths of 1% of high school athletes will play football, baseball, basketball, and ice hockey at the professional level in the United States (Leonard, 1996), it should not be surprising that a large majority of athletes will try to enter the job market. Although sports-governing bodies such as the International Olympic Committee emphasize that elite athletes be provided with opportunities to develop a professional career (Olympic News, 1994), obtaining vocational training and finding a job to earn a living are among the top reasons athletes give for terminating their sport career (Bussmann & Alfermann, 1994).

Those athletes who are actually able to start a professional occupation may be confronted with the process of "occupational delay" (Naul, 1994). As most athletes have been busy with the development of their athletic career, few will have had the opportunity to participate in summer jobs or vocational or in-service training. Therefore, these athletes may, in comparison to their nonathletic peers, lack the relevant professional skills, experience, and networking necessary for vocational success.

The athlete's academic career is in view not only because of its duration, but also because of its concurrence with at least two (or possibly three) consecutive athletic stages – the initiation, development, and the mastery stages. The combination of a compulsory law requiring education and the value attributed to an academic background by society at large results in talented athletes' going through a multiyear process of academic development within structured schools, colleges, and universities. From this perspective, one could argue that the educational system could act as the "backbone" for the development of talented athletes. Although this may be the case in North America, where organized competitive sport is greatly embedded in the educational system, it is only relatively recently that national sport-governing bodies in Europe have started to cooperate with academia at local (e.g., schools) or central levels (e.g., Ministry of Education) to further the development of talent athletes (De Knop et al., 1999). The successful progress of student-athletes from one academic transition to the next has consequently become a crucial factor in athletic talent development. The importance of the relationship



between academic and athletic development was confirmed in a survey on participation in and attrition from organized sport in a sample of Flemish 11- to 18-year-olds (Van Reusel et al., 1992). Results showed that a majority of these youngsters quit participating in organized sport on average at 12.1 years of age, the age at which pupils transit from their primary school and disperse to new schools at the secondary level. This geographical dispersion reduced the possibilities for former school friends to keep up their initial frequency and quality of interactions, causing one of their major participation motives, namely “being together with friends,” to dwindle and thus increasing the chances for youths to drop out.

## **Transitions at Financial and Legal Levels**

Finally, two types of transitions have become more visible during the last 5 years (Wylleman, De Knop, Maeschalck, & Taks, 2002) and include those faced by athletes at financial and legal levels. At the financial level, athletes at the initiation and development stages (or their family) will need to spend money and endure costs (e.g., renting the skating rink during extra hours, hiring a top-level coach, buying sports equipment) to promote their athletic career. However, except for a minority, some athletes will be able to reduce costs or earn money (e.g., sponsorship, starting money) once in the pinnacle of the mastery stage. In fact, some of the former world-level athletes are still able to earn money via long-running sponsorship contracts. Although little research has been conducted on the psychosocial ramifications of these economic transitions, it could be assumed that, for young athletes, the large amount of financial investment made by their families and, for adult athletes, the need to earn a good living for themselves and their families can be a heavy burden on their sport involvement.

The legal transitions occur simultaneously with those at the financial level and refer to the athlete’s status of being an “amateur” or a “professional.” In Belgium, for example, an athlete’s legal status will change from “amateur” or “nonprofessional athlete” to that of “paid” or “professional” athlete when he or she receives financial rewards for athletic achievements. Although the status of nonprofessional athlete is legally under the control of local or state government, the professional athlete is considered to be a “laborer” and will, therefore, come under the control of the federal or national government. This generally occurs when the athlete is in the mastery stage. Although the relevant empirical data are still lacking on this issue, it could be hypothesized that this transition could bring about changes in the quality of an athlete’s participation in competitive sport.

## **A Developmental Model on Transitions Faced by Athletes**

Although the stages and transitions that athletes may face at different levels of development were described independently in the previous sections, one should take into account that they will generally occur in an interacting way. Because sport psychologists should take a “holistic” approach to the study of transitions faced by athletes (Wylleman et al., 1999), a developmental model is proposed that (a) takes a “beginning-to-end” perspective and (b) reflects the developmental, as well as the interactive, nature of normative transitions at athletic, psychological, social, academic, and vocational levels (see Figure 1).

This developmental model consists of four layers. The top layer represents the stages and transitions athletes face in their athletic development including the three stages identified by Bloom (1985) and a discontinuation stage. This latter stage was added in line with research reflecting that former elite athletes describe their transition out of competitive sport as a process that could have a relatively long duration (e.g., Lavalley, 2000; Taylor & Ogilvie, 2001; Wylleman et al., 1993, 2000). The ages at which transitions occur and the age range of the four



athletic stages are tentatively based upon empirical data gathered with former Olympic athletes (Wylleman et al., 1993), elite student-athletes (Wylleman & De Knop, 1997; Wylleman et al., 2000) and talented young athletes (Wylleman et al., 1995; Wylleman & De Knop, 1998). The athletic transitions include (a) transition into organized competitive sports at about 6 to 7 years of age, (b) transition to an intensive level of training and competitions at age 12 or 13, (c) transition into the highest or elite level at about 18 or 19 years of age, and (d) transition out of competitive sports between 28 and 30 years of age. Of course, one should take into account that these age ranges are averaged over many athletes and several different sports, and therefore may not be sport specific. For example, female gymnasts discontinue their sport between 15 and 19 years of age (Kerr & Dacyshyn, 2000).

The second layer of the developmental model of transitions reflects the normative stages and transitions occurring at a psychological level. It consists of the developmental stages of childhood (up until 12 years of age), adolescence (13 to 18 years), and adulthood (from 19 years of age onward; Rice, 1998). Although not represented in the model itself, the developmental task of being psychologically ready for competition is related to childhood, whereas developing a self-identity is a developmental task during adolescence.

The third layer is representative of the changes that can occur in the athlete's social development relative to her or his athletic involvement. It is based upon conceptual frameworks related to the development of the athletic family (Hellstedt, 1995) and marital relationships (e.g., Coppel, 1995), as well as empirical data on athletes' interpersonal relationships described earlier (e.g., Alfermann & Würth, 2001; Bloom, 1985; Price & Weiss, 2000; Vealey et al., 1998; Wylleman & De Knop, 1998; Wylleman et al., 1993, 1995).

The final layer contains the specific stages and transitions at academic and vocational levels. It reflects the transition into primary education/elementary school at 6 or 7 years of age, the stage of secondary education/high school at ages 12-13 (including junior high, middle

**Figure 1**

A developmental perspective on transitions faced by athletes at athletic, individual, psychosocial, and academic/vocational levels.

AGE	10	15	20	25	30	35
<b>Athletic Level</b>	Initiation	Development		Mastery		Discontinuation
<b>Psychological Level</b>	Childhood	Adolescence			Adulthood	
<b>Psychosocial Level</b>	Parents Siblings Peers	Peers Coach Parents		Partner Coach		Family (Coach)
<b>Academic Vocational Level</b>	Primary education	Secondary education	Higher education			Vocational training Professional occupation

Note. A dotted line indicates that the age at which the transition occurs is an approximation.

high, and senior high), and at 18 or 19 years of age, the transition into higher education (college/university). Although the transition into vocational training or a professional occupation may occur at an earlier age (e.g., after high school), it was included after the stage of higher education. This not only reflects the “predictable” sports career in North America, where college/university sport bridges high school varsity and professional sport (Petitpas et al., 1997), but also mirrors the current developments in Europe, where many talented athletes continue their education up to the level of higher education (De Knop, et al., 1999). For elite athletes, this professional occupation may also be in the field of professional sports and, thus, may concur with the athletic mastery stage.

**The successful progress of student-athletes from one academic transition to the next has become a crucial factor in athletic talent development.**

It should be noted that some of these normative transitions may not occur, and thus, they become nonevents. For example, due to a stagnating level of athletic achievement, an athlete may not make the transition to the next athletic developmental stage; or due to a lack of support, an athlete may discontinue her academic career and not make the transition into college. Although athletes will also face nonnormative transitions that may affect the quality of their participation in competitive sport, these are not included in this model.

This developmental model is intended to provide sport psychologists with a conceptual model or framework on the transitions athletes may face throughout their athletic career. However, it should also enable sport psychologists to situate and reflect upon the developmental, interactive, and interdependent nature of transitions and stages faced by individual athletes. This approach is illustrated with a brief analysis of a case study in the following section. Some of the basic questions that remain are also formulated and used to construct a follow-up interview with the athlete.

## Case Study

Tim is 16 years old, and he has recently taken his school examinations, producing results that exceeded his expectations. As an international swimmer, he has been training for about 18 hours per week, getting up at 5:30 a.m. four mornings a week and training after school on each of the five weekdays with his teammates. This year has been especially demanding because additional training was required in order to gain selection for a major championship. Tim was selected and performed creditably. Tim is very mature for his age and has a desire to do everything perfectly as evidenced by his acute frustration when he does not meet his personal standards. On the other hand, he sometimes disagrees with what he considers to be an unrealistic training load that the coach imposes upon him that disregards other demands upon his time. It is clear that he is talented both academically and athletically, with the capacity for hard work and a strong desire to be organized. He says he is especially “stressed out” when hard physical demands are placed upon him in training, and he is currently considering whether he should continue to focus on his swimming as much as he previously has or dedicate more time to his academic studies. His parents are very supportive and have not pressured him either way, although Tim sometimes perceives pressure to focus more on his swimming from his coach.

## Questions

The first step will consist of situating Tim’s athletic career stage in the developmental model by using his chronological age and various levels of development. In a second step, Tim’s current profile will be described briefly by analyzing (a) the people who are significant in Tim’s life and

(b) the principal issues that Tim faces. The third step will involve describing in more detail Tim's development by answering a number of questions that are summarized below.

With regard to Tim's athletic development:

- Is Tim in the stage of athletic development identified in the model based on his chronological age, his athletic experience, or his level of athletic achievements?
- To what extent are the people who are significant in Tim's life (parents, coach) influential in his athletic development?
- What does Tim's coach need to take into account for Tim to successfully develop in his athletic development?
- How can the coach cooperate with Tim's parents in maximizing positive developments in Tim's athletic development?

With regard to Tim's psychological development:

- In what way does Tim's athletic identity influence the quality of his athletic involvement?
- Is Tim psychologically ready to cope with the requirements of competitive sport?
- What does Tim's coach need to take into account with regard to Tim's psychological development for him to successfully develop as an athlete?
- How can the coach cooperate with Tim's parents in this?

With regard to Tim's social development:

- What is the quality of Tim's relationships with significant persons in his life?
- In what way do these relationships influence Tim's athletic development?
- What does Tim's coach need to take into account with regard to his social development for him to successfully develop as an athlete?
- How can the coach cooperate with Tim's parents in this?

With regard to Tim's academic development:

- To what degree is Tim able to combine his academic and athletic careers?
- How does the combination of academic and athletic activities influence Tim's athletic development?
- What does Tim's coach need to take into account with regard to his academic development for him to successfully develop as an athlete?
- How can the coach cooperate with Tim's parents in this?

### ***Brief Report***

**Step 1.** Using his chronological age on the developmental model to present a profile across each level of development reveals that (a) Tim has reached the mastery level in terms of his athletic development; (b) Tim is psychologically at the adolescent level; (c) the key people in his life should be peers, coach, and parents; and (d) Tim is at the secondary education level.

**Step 2.** Tim's coach and parents play important roles in his current situation. (Could we not expect that his peers such as swimming teammates should also be an important part of Tim's life?) The principal issues reflected in the case description involves Tim's desire to perform perfectly, his coach's unrealistic expectations and pressure to focus more on his swimming, and Tim's being "stressed out" as a result of self-imposed and coach-imposed expectations and standards.

**Step 3.** Tim has performed exceptionally well as a swimmer to date. His athletic development reflects that he has reached the mastery level at a relatively early age. (Was the development stage too brief?) Tim has shown a high level of commitment to his sport, including his capacity for hard work and organization. (Does this cause him to be "stressed out"?) Tim perceives his coach as imposing too heavy a burden upon him. (Has he always worked with his current coach? If not, why and since when did he switch coaches?) His parents have influenced his development as a swimmer to a great extent and are not perceived as putting pressure on him to perform. (In what way are his parents actually involved in his swimming: emotionally, logistically, financially?) Tim's coach could look at the way in which the mastery stage could be planned over a period of 3 to 5 years. (Can we expect that Tim's mastery stage could end earlier than expected for an average elite swimmer if his development stage was relatively short?) What are the expectations of Tim's parents with regard to their son's future swimming career?

In terms of his psychological development, the degree to which Tim identifies with his role as a swimmer has significantly influenced the quality of his involvement. Before reaching this transition in his career, he has coped reasonably well with the requirements of competitive sport. (Does he feel "stressed out" due to a lack of readiness to cope at the mastery level?) In order for Tim to continue to develop as an elite-level swimmer, his coach will need to take into account his athletic identity and work with Tim's parents in developing a balanced plan for his future. On a social level, the quality of Tim's relationship with his coach and parents appears reasonably sound (see earlier question about the actual involvement of Tim's parents in his swimming career). These particular relationships have influenced his athletic development in significant ways, although we know little about his teammates and peers. (Does Tim have any intimate same- or opposite-sex relationships?) The coach could envisage that Tim may need and want to relate more with his peers from within as well as from outside the world of swimming. The coach could consult with Tim's parents in finding more quality time for him to interact with his peers.

Finally, Tim has been able to combine his academic and sporting careers quite successfully up until this point, having achieved better grades in school than expected (for someone who has already achieved elite level). Tim's capacity to work hard and his strong desire for organization help him in combining athletic and academic requirements. (To what extent do the physical training demands leave him enough rest to do work for school and to recuperate?) The coach should take into account that Tim is a good student, so he will probably want to continue into higher education. The coach and Tim's parents could inform him of the possibilities available for Tim to select a university or college that will allow him to develop fully at both academic and athletic levels.

## Conclusion

If we want to have a better understanding of how an athlete's sport career develops, then it is essential to focus on her or his athletic, psychological, social, academic, and vocational development. If we want to know the *whole* athlete, however, then the reciprocal and interactive nature of these different developmental contexts needs to be taken into account. The model presented in this chapter provides an overview of the stages and transitions that athletes may

face and represents a step toward a more holistic and developmental perspective on the athletic lifespan. It is aimed at facilitating an understanding of the role of developmental factors by linking them to the demands of a particular stage and transition. However, more empirical research is required to investigate the sport-, gender- and cultural-specific variations required of the developmental model (e.g., Seiler, Anders, & Irlinger, 1998). There is also a need to link the demands of the particular stages and transitions described in this developmental model with the resources available to athletes to make each transition successfully. In this way, professionals working with athletes could assist athletes at all developmental levels, stages, or transitions in structuring optimal experiences throughout their sport career.

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