

# Development stages of an athlete psychology essay



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Athlete development is seen as a continuous process, which starts at the first time an athlete engages in a sport until the time an athlete withdraws themselves from the sport. For clarification purposes athlete development is defined as “ the progression of steps that athletes must travel through to fully develop their talents; including athlete identification, athlete selection, and interaction with support services” (p. 125) (Stotlar and Wonders, 2006). This definition supports the notion that interaction with others is necessary for athlete development. For top level athletes, development is an intense process in which they prepare themselves physically and mentally to obtain successful performance outcomes. Before athletes can enter development programs provided by nations, clubs or organisations they must be identified as possible future champions.

Talent Identification systems have been employed across the globe in an attempt to maximize the potential of producing elite athletes. Since the identification of athletes is not an objective of this study, the next paragraph provides a brief description of talent identification systems. The premise for using talent identification programs are based on these assumptions; that international success in senior elite sport is the result of long-term “ linear” careers in one sport discipline; that success increases with extended duration of training and competition practice in this sport; and that early training onset, early success, early participation, and continuation in promotion programmes will stimulate the development process and correlate positively with long-term success in senior elite sport (Vaeyens et al., 2009). Thus, nations, policies and sporting organisations believe that by identifying talent as early as possible they can work toward producing champions. Once

these athletes are identified they are enlisted into talent development programs which are designed to accelerate talent development through a number of mediums; access top level coaches, increased exposure to training and competition, effective time-management, funding, scientific and medical intervention and psychological support (Vaeyens et al., 2009). However these assumptions do not correlate positively with actual athlete success. First, research has indicated that early sampling leads to more successful athletes and increases likelihood of continued participation and commitment to sport than early specialization (Coté, 1999). Moreover early specialization has been linked to athlete burnout and/or attrition (Baker, 2003). Second, talent identification programs are based on chronological age and not developmental age eliminating “late bloomers” from the talent pool (Vaeyens et al., 2009). Talent identification itself is not a source of development for athletes; it is merely the process of highlighting potential athletes for future development. The remaining paragraphs in this section discuss athlete development models outlining athlete development.

Several models have been developed in order to explain the stages of development of an athlete. A recent literature review by suggested dividing these models into two main categories; talent development and career transitions allows for a greater understanding of the research. Therefore, what follows is a summary of athlete development models under those two categories.

The majority of athlete development research to date is based on sport psychology research which developed theoretical models for the explanation of athlete pathways. Athlete development models based upon the talent <https://assignbuster.com/development-stages-of-an-athlete-psychology-essay/>

development literature are influenced by the works of Bloom (1985), Chase and Simon (1973), and Ericsson (e. g., Ericsson, Chase, & Faloon, 1980; Ericsson, Krampe, & Tesch-Römer, 1993) (Bruner et al., 2009). Bloom (1985) identified three main stages in the development of an elite performer; the initiation stage, the development stage and the mastery stage. Expanding on the work of Bloom, Côte (1999) developed a sport participation model outlining three stages; sampling, specializing and investment years. Sampling refers to the athlete's participation in a variety of sports at a young age. The next stage, specializing, shows an increase in commitment and training to one particular sport. Finally investment shows the largest increase in commitment and training for the refinement of skills and increase in performance for success in competition. In addition, Côte suggested the addition of a fourth stage relating to the maintenance and perfection of skills . Durand- Bush (2000) also proposed a ' maintenance' stage which was characterised as the increased quality of training, and the need for more support to deal with the additional stress of elite competitive sport . Ericsson and colleagues outlined deliberate practice as an important source for talent development. Deliberate practice is discussed in greater detail later in this section.

Although these models have been important in the identification of stages of development for athletes, they fail to recognise the training and competition elements of athlete development. Balyi (2010) reported in his model of athlete development that the athletes move through a six-step model; the fundamental stage, learn to train, train to train, train to compete, train to win and retirement. In addition to validating training and recovery, this model

shows a new essential element of the development process; competition. The fundamental stage focuses on the acquisition of fundamental movements through fun and non-competitive activities. The next stage, learning to train emphasises specialist movement skills and competition is well structured (Balyi and Hamilton, 2010b). Training to train, shows athletes how to train while they improve the specialized movement skills, as well as the building an aerobic and strength base; with a ratio of the training to competition of 60: 40 (Balyi and Hamilton, 2010a). Training to compete is the next stage which aims to optimise fitness and skill levels. This is characterized by the development of technical and tactical skills with a ratio for training to competition ratio of 50: 50 (Balyi and Hamilton, 2010a). Next, the training to win stage, all of the athletes technical, tactical, mental, and supplementary capacities are established and training now takes place specifically for major competitions within this stage, the training to competition ratio is 25: 75 (Stoltar and Wonders, 2006). Finally, the retaining or retirement stage describes activities performed after retirement. The models outlined above have been useful in their identification of talent based on skill and physical development; however, these models fail to place enough emphasis on the development of psychological behaviours at an early stage in order to optimize development.

The second approach to athlete development in sport is based on the career transition literature. Empirical evidence has illustrated the successful transition between stages of development is facilitated, and indeed characterized, by the development of an athlete and application of a range of psycho-behaviours (Abbott and Collins, 2004, Stambulova et al., 2007).

Abbott and Collins (2004) suggested that coping strategies are developed by athletes to overcome any difficulties when moving across stages. It is thought that without the development of these psycho-behavioural strategies athletes will not be able to effectively deal with the transition and not achieve their potential (Abbott and Collins, 2004). Present research on career transitions is based on the work of Schlossberg (Bruner et al., 2009). Schlossberg (1981) proposed a conceptual framework that identified three factors contributing to the adaptation of an individual to a transition; the individual characteristics (e. g., age, past experience with a similar transition), pre-transition and post-transition environments characteristics (e. g., social support of friends and family, institutional support), and perception of the particular transition (e. g., gradual or sudden event, degree of stress, positive or negative affect)(Bruner et al., 2009). Career transition models however are too general and do not account for cultural differences across contexts (Stambulova et al., 2007).

More recent research has begun to focus on the social influences that contribute to athlete development and transitions between stages.

Bronfenbrenner's ecological model of human development (1979) provided the foundation for future models that incorporated social influences as part of human development. Wylleman (2004) adopted this model by outlining three levels of influence on athlete development; macro-level (e. g. size of country, population); meso-level (e. g. athletic infrastructure, public support for athletes)and micro-level (e. g. the psychosocial position of the athlete) (Stambulova et al., 2007). This model is particularly useful in identifying differences in reactions based on the cultural context (Stambulova et al.,

2007). Stambulova et al. (2007) found in their study that Swedish athletes who received greater attention from the public had longer careers in sport and were satisfied with their professional careers than their French counterparts. This highlights the influence of society on athletes. Similar results emerged from the work of Bruner et al. (2008) who demonstrated that social issues influenced the transition of athletes to elite sport.

## **Psychological Characteristics**

At elite level, athletes have all been conditioned to the highest level possible which means that minimal differences in physical abilities exist between competitors. Therefore, another factor must play a role in determining first place from second. It has been suggested that athletes who are mentally as well as physically prepared will have an advantage over their opponents. The purpose of the following section is to provide examples of the psychological characteristics outlined by the literature as necessary for an athlete to possess to not only continue participating in the sport but influence performance. Research in sport psychology has shown that the coach athlete relationship (Bloom et al., 1997, Jowett and Meek, 2000), commitment, self efficacy (Gould et al., 1989), and motivation (Baker et al., 2003a) impact directly on athlete persistence and development. As such, these behaviours will be discussed briefly.

## **Commitment**

Commitment is defined ' as the psychological construct reflecting the desire and resolve to persist in an endeavour over time' (Scanlan et al., 2003b).

Commitment plays a central role in the persistence of athletes in their chosen sport. During the later stages of development increased commitment

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to training is necessary in order for an athlete to reach top-level (Coté, 1999). There is considerable empirical evidence showing a relationship between elite athletes and commitment levels (Abbott and Collins, 2004, Coté, 1999, MacNamara et al., 2010). The Sport Commitment Model was established by Scanlan et al. (2003b) in an attempt to explain the components that influence athlete commitment. Six components were outlined as influential on the commitment levels of athletes; sport enjoyment, valuable opportunities, other priorities, personal investments, social constraints and social support (Scanlan et al., 2003b). The Sport Commitment model was developed based on empirical evidence and tested by the authors to develop scoring values for the model, in an attempt to increase validity and credibility (Scanlan et al., 2003a). Results from the preliminary study and other studies conducted Scanlan et al. (2003b) suggested that the sport commitment model can be applied across contexts and can be expanded to include qualitative forms of data collection. It must be noted that although the model can be used to identify the sources of commitment for athletes, it fails to measure the degree to which each source impacts on their commitment suggesting that the factors play different roles according to the individual and the context.

### **Sports commitment model outlined in Scanlan et al. (2003)**

Commitment along with goal-setting, imagery and performance evaluation has been proven to be an indicator of athlete success (Abbott and Collins, 2004, Burton et al., 2010). These findings indicated that athletes with high levels of commitment to training and competition positively impact on



performance thus illustrating the importance of commitment to athlete development.

## **Motivation**

Motivation has also been linked as one of the most prominent factors which leads to an athlete reaching top level performance standards. Motivation is the psychological construct that initiates an action. Motivation can impact on an athlete in two main ways (intrinsic and extrinsic motivation). Intrinsic motivation comes from within the individual, for example, the desire to work hard or achieve success (Gillet et al., 2009). Extrinsic motivation comes from an external force, for example financial reward or fame (Gillet et al., 2009). Whether an athlete is intrinsically motivated or extrinsically motivated depends on the athlete and differs from person to person. However, motivation plays a key role in the commitment, participation, intensity and outcome of the athlete. The Self-Determination Theory (SDT) was developed to explain the motivations of an individual. Deci and Ryan (1985) which stated that individuals self-determine their behaviours in an attempt to satisfy three basic needs, autonomy, competence and relatedness. The determinants of motivation to achieve those needs include; social factors and psychological mediators (Deci and Ryan, 1985). Social factors cause feelings of competence, autonomy and relatedness (Cox et al., 2007). The most common factors identified by the SDT include; experiences of success and failure, experiences of competition and co-operation and coach behaviours (Cox et al., 2007). The psychological mediators determine motivation, and autonomy, competence and relatedness are psychological perceptions that mediate the relationship between social factors and the

manifestation of motivation (Cox et al., 2007). Thus motivation plays an important role in the development of an athlete.

## **Self-Efficacy**

Bandura (1977, , 1986, , 1997) defined self-efficacy as the belief one has in being able to execute a specific task successfully (e. g., a pitcher striking out a batter) in order to obtain a certain outcome (e. g., self-satisfaction or coach recognition (Bandura, 1977, Bandura, 1986, Bandura, 1997). Performance accomplishments have proved to be the most influential source of efficacy information because they are based on one's own mastery experiences (Bandura, 1997). One's mastery experiences affect self-efficacy beliefs through the cognitive processing of such information. If one has repeatedly viewed these experiences as successes, self-efficacy beliefs will increase; if these experiences were viewed as failures, self-efficacy beliefs will decrease (Bandura, 1997). The continued setting of challenging goals and the positive reactions to substandard performances help to elevate the intensity and level of motivation. Efficacy information can also be obtained from a person's physiological state or condition. Physiological information includes autonomic arousal that is associated with fear and self-doubt or with being psyched-up and ready for performance, as well as one's level of fitness, fatigue, and pain (in strength and endurance activities). Physiological information has been shown to be a more important source of efficacy information with respect to sport and physical activity tasks than in the case of non-physical tasks (Chase et al., 1994).

Such research has demonstrated consistent evidence that people's

perceptions of their performance capabilities significantly affect their  
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motivation and performance (Feltz, 1994). The cognitive variables most strongly associated with self-efficacy expectations of athletes are anxiety, positive and negative affective states, one's goal orientation to win, and trait sport confidence. Research has found significant negative relationships between self-efficacy and state anxiety (cognitive and somatic) (George, 1994, Treasure et al., 1996). Treasure and his colleagues also found self-efficacy to be negatively correlated with negative affect (e. g., jittery, nervous, upset) and positively correlated with positive affect (e. g., alert, determined, inspired). Thus, not only do more efficacious athletes have lower levels of cognitive and somatic anxiety prior to competition, they maintain a more positive affective state, as Treasure et al. suggested (Feltz and Lirgg, 2001). Therefore, self-efficacy plays an important role in athlete development, as those with high self-efficacy will have increased motivation to train, and as indicated above athletes with lower self-efficacy will produce negative more frequently than those with higher self-efficacy.

In addition to possessing the necessary psychological characteristics necessary to pursue successful performance, the basic element of training must be enhanced to provide the athlete with experience, learning opportunities and competition like practice which will prepare them for competition. The constructs of deliberate practice and physical practice are therefore discussed below.

## **Deliberate Practice**

High levels of training or practice are required to reach top level in any sport.

Previous research has proven that there is a relationship between training

and skill acquisition (Janelle et al., 1999). Moreover, studies examining <https://assignbuster.com/development-stages-of-an-athlete-psychology-essay/>

experts and novices have developed general guidelines that describe the development of novices to expert status. Expertise was defined as “ the result of complex interactions among biological, psychological, and sociological constraints” (Baker et al., 2003b). According to Singer and Janelle (1999) characteristics of experts include:

1. Experts have greater task-specific knowledge.
2. Experts interpret greater meaning from available information.
3. Experts store and access information more effectively.
4. Experts can better detect and recognize structured patterns of play.
5. Experts use situational probability data better.
6. Experts make decisions that are more rapid and more appropriate (Baker et al., 2003b)

All of the elements that lead to expertise can be acquired through training. The most prominent theories relating to training and the development of expert athletes include the “ 10-year rule” (Simon and Chase, 1973) and the theory of deliberate practice (Ericsson et al., 1993). Simon and Chase (1973) developed the 10-year rule based on their study of chess athletes which indicated that expert level athletes had a greater ability to organize information into more meaningful ‘ chunks’ compared to lesser skilled athletes. The authors suggested that inter-individual variation in performance could be explained by quantity and quality of training.

According to the “ 10-year rule,” a 10-year commitment to high levels of

training is the minimum requirement to reach the expert level. This “ rule” has been supported across contexts, for example, sport; swimming (Kalinowski, 1985), distance running, (Wallingford, 1975 ) and tennis (Monsaas, 1985), academics; mathematics (Gustin, 1985 ), and in music (Ericsson et al., 1993). However, although the ten year rule can act as guideline of expertise, research has proven that it is not a good indicator of skill acquisition. Based on the work of Simon and Chase, Ericsson et al., (1993) developed the theory of deliberate practice suggesting that it was not simply training of any type, but engagement in ‘ deliberate practice’ that was necessary for the attainment of expertise (Baker et al., 2003a).

According to Ericsson et al. (1993), deliberate practice refers to non intrinsic motivating activities which require high levels of effort and attention. Additionally these activities do not yield immediate results either socially or financially. Through conditions involving high effort and concentration experts develop specific skills that are required by their field. Furthermore, the authors proposed that training activities should be modified to ensure that optimal amounts of effort and concentration are required, thereby maximizing physiological and cognitive adaptations. Central to the theory of deliberate practice is the monotonic benefits assumption. According to this assumption a monotonic relationship exists between the number of hours of deliberate practice performed and the performance level achieved (Ericsson et al., 1993). However, Ericsson et al. (1993) argued that merely accumulating hours of training was not sufficient for developing elite standard performances and the quality of training was also important.

Ericsson (1996) concluded that level of performance was determined by the amount of time spent performing a “ well defined task with an appropriate

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difficulty level for the particular individual, informative feedback, and opportunities for repetition and corrections of errors” (pp. 20-21). The authors therefore suggested that there is a direct relationship between the number of hours engaged in practice to the quality of the practice.

Much of the initial studies examined music (Ericsson et al., 1993) and chess (Charness and Gerchak, 1996) experts, and results supported the relationship between the number of hours of deliberate practice and level of performance. Specifically, they found that experts accumulated over 10,000 hours in deliberate practice by age 20. In comparison, amateurs only accumulated about 2000 hours at the same age. Support for the theory can also be found with regards to expertise in sport (Ericsson and Lehmann, 1996, Ericsson et al., 1993). A number of studies provided support for the factors emphasized by the theory of deliberate practice in sport contexts. For example, Helsen and colleagues (Helsen et al., 2000, Helsen et al., 2004) uncovered a positive linear relationship between practice time and skill level for soccer athletes and ice skaters. (Starkes et al., 1996) reported a positive relationship between practice time and concentration and performance level. Moreover, Young (1998) provided evidence that deliberate practice factors play a salient role in the development of elite distance runners. Similar results were found in studies examining karate (Hodge and Deakin, 1998), wrestling (Hodges and Starkes, 1996), soccer (Helsen et al., 2000, Helsen et al., 2004), middle distance running (Young and Salmela, 2002), field hockey (Baker et al, in press-a; Helsen et al., 1998), basketball and netball (Baker et al., in press-a). In sum, differences between experts and non-experts on both quantity and quality of training are strongly supported in sport and other

domains. While deliberate practice may enhance skill development, expertise is likely to arise as a result of an interaction between several related factors.

## **Physical Practice**

The physical development of an athlete refers to the methods of fitness and training that will prepare an athlete physiologically for competition. As the coach is in control of 100% of the training session, the coach plays a significant role in deciding on the mode of training and practices for the athlete. The impact of the coach is discussed in a later section called the coach athlete relationship.

Successful performance outcomes in competition are achieved through practices which are designed to induce an automatic response of motor skills and improve structural and metabolic functions (Smith, 2003). Training also plays a role in psychological skills development as trainings can be adapted to increase self-confidence and provide athletes with coping strategies for training and competition (Smith, 2003). Some researchers argue that genetics determine the success of an athlete, whilst others are of the opinion that the training environment and work ethic of the athlete determine success (Davids and Baker, 2007, Smith, 2003). It is now known that inherited attributes are not the sole requirement for top level athletes. The environment in which an athlete is brought up as well as the social interactions also plays important roles in the athlete's development. This section will deal specifically with the training environment that aids in athlete development. With this in mind training elements can be broken down into frequency, intensity, time and type (FITT principles). The principles <https://assignbuster.com/development-stages-of-an-athlete-psychology-essay/>

of fitness acts as a guideline for the amount of time, the effort needed and how often an athlete must train to produce favourable results.

The dynamics of training involve the manipulation of the training through these variables: intensity, specificity (type), duration (time) and frequency (Smith, 2003). According to the research effective training practices also involve short- and long-term planning (periodisation) which requires the coach to plan alternating periods of training load with recovery to avoid overtraining (Smith, 2003). Furthermore, these plans should ideally be constructed in macro- (long term), meso- (medium length) and microcycles (short term) throughout the season with the objective of achieving peak performance at competition. Finally, at competition time, the training preparation should have the athlete in a position to perform optimally through the combination of the physiological, the psychological, technical and tactical elements.

Elements of sport science can significantly enhance the growth of an athlete. These include biomechanics, physiology, and training. Sports science researchers have examined the various factors that influence the acquisition and manifestation of high levels of performance (Baker et al., 2003b). For example, Singer and Janelle (1999) examined the respective roles of genetics, training and resources on the development of expertise. The results provided evidence that although genetics play an important role they do not define the success of an athlete. In fact it is a combination of genetics, training, social and cultural factors that are necessary to develop elite athletes. Biomechanics has played an important role in athlete development through various research studies. Biomechanics research has <https://assignbuster.com/development-stages-of-an-athlete-psychology-essay/>



studied gait analysis, sprinting techniques, shooting, swinging, throwing techniques all of which have advanced our knowledge for improving athletes. Physiological research has increased our knowledge on injury, the mechanisms of the body before, during and after performance and the impact of dietary intake on performance which have also lead to athlete development. (REFERENCES)

## **Environmental Factors**

Moving beyond the traditional research assumptions that genetics and training are the only factors that account for successful performance, it is now well known that factors such as the situational context, cultural and social elements of human interaction also play an integral role in their development. Thus this next section looks at the contextual factors that impact athlete development.

## **Social Factors**

Support from coaches, family and friends play an important part in an athlete's continued commitment to training and the sport. Athletes rely on this support system to provide support, motivation, understanding, confidence etc.

To illustrate the impact of a strong support system on the development of an athlete a brief outline of two models of talent development (Bloom & colleagues, 1985; (Coté, 1999) is discussed below. As mentioned previously Bloom's model of athlete development included three stages; the early years, the middle years, and the later years. Bloom et al., (1985) interviewed talented performers and their families in the fields of music, art, science,

mathematics, and athletics and created this model on their findings. Each stage was characterized by shifting demands on the child and parents (Baker et al., 2003a). The early years shows a high level of involvement from the parents in which they assumed a leadership role providing the initial opportunities for their child to participate in sports (Baker et al., 2003a). Parents were also found to encourage and support their child's learning. Emphasis was on having fun and enjoying learning the basics skills. The transition to the middle years was characterized by an increase in commitment of both parents and the athletes (Baker et al., 2003a). Bloom et al. (1985) proposed that in this stage parents assumed a leadership role, devoting more time and resources to the activity. During the later years, parental involvement decreases as the performer takes greater responsibility over their involvement in the sport (Bloom et al., 1985). The parents assumed a background role which provided financial support and emotional support.

Côté (1999) furthered the work of Bloom (1985) by developing a sport-specific model of talent development which describes three stages of development. These include; the sampling years (ages 6-12), specializing years (ages 13-15), and investment years (ages 16+)(Coté, 1999). Similar to Bloom's model, parental roles changed with the differing demands of each stage. During the sampling years parents provided their children with the opportunity to sample a wide variety of sports (Coté, 1999). Parents engaged in a leadership role during the sampling years by initiating sport involvement (Baker et al., 2003a). The specializing years saw parents in a facilitative role where they made financial and time commitments to their child's sport,

supporting access to better coaches, equipment, and training facilities (Baker et al., 2003a). Finally, in the investment years parents engaged in a supportive and advisory role as the athlete committed to a higher level of training and (Baker et al., 2003a). Parents maintained a high interest in their child's sport and were essential in providing emotional support to help their child overcome setbacks, such as injuries, pressure and fatigue as well as financial support for training (Baker et al., 2003a). The research of Bloom (1985) and Côté (1999) demonstrates how parental support helps elite athletes deal with the demands of the sustained deliberate practice necessary to reach an expert level of performance.

## **Cultural Factors**

Cultural elements play a significant role in the development of a sport and subsequently on the development of an athlete. The capability of a sport to develop depends largely on the importance a country or society places on a particular sport (Baker et al., 2003a). For instance, the historical identity of certain sports may impact on the amount of funding a sport will receive. GAA, Ireland's unique and historical sports within the country, get large support from the country's government (O' Donoghue, 2007) and general public which in turn impacts on its development. There are almost 2, 600 GAA clubs across the globe with structure and programs in place for development of athletes from 7 years of age to senior level. The opportunity for children to play at an early age, impacts largely on their development, and also, impacts on the development of the sports. Within the country itself, certain regions focus on one sport alone and have done so for generations. Kerry (gaelic football) and Kilkenny (hurling) have reaped the benefits of

their GAA cultures and as it stands they are the most successful teams in their particular sports. Looking abroad cultural factors can be used to attribute to a country's success relating to a particular sport. Canada for instance believes ice-hockey is part of the Canadian identity (Robidoux, 2002). The countries sporting history and climate has laid a strong foundation for the development of its athletes and adequately explains why Canada is such a successful country in ice-hockey. Similarly, the same can be said for Austria for alpine skiing (Coakley, 2001) and Nordic countries for cross-country skiing (Baker et al., 2003a).

## **Competition**

Competition is the ideal time to evaluate the development of an athlete as well as the effectiveness