

# The Talent Development Environment in a Norwegian top-level football club

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Because international elite football is concerned with talent identification, this has generated a great deal of knowledge about what it takes to become a professional footballer. This research has however primarily focused on individual development and how external factors affect athletic performance. In this article we sought to describe the characteristics of the developmental environment in the youth department of the Norwegian elite club Rosenborg BK. Our case study, using a holistic and ecological development perspective as a framework, we followed the club's under-19 team for a total of 21 days, during 3 separate weeks in the 2014 season. The results showed that Rosenborg seems to offer an environment focusing on aspects highlighted by the ecological model athletic talent development environment (ATDE). The club seems to focus on giving players tools and resources both on and off the field, using a holistic and systematic methodology. Yet it appears that the club has a weak relationship between the youth department and its own senior team, even indicating a competitive relationship, also found in other elite academies. Furthermore, it may seem that the importance of developing players with local ties is downgraded because of the club's need for short-term success.

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*Keywords:* Football, Talent, Development, Top-level, Environment

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## Introduction

The talent development process is complicated and complex, mostly due to the fact that it is both a long-term process, but also presupposes short-term performance and achievements. Most elite football clubs are highly concerned with talent identification and development, which has generated a large amount of research on these processes (Carlson, 1991; Côté, Baker, & Abernethy, 2007; Sæther, 2014; Williams & Reilly, 2000). Although extensive amounts of research have been done in this field, this research has primarily focused on the individual and how external factors influence one's athletic performance (Cote et al., 2007; Stambulova, 2009; Stambulova & Alfermann, 2009; Stambulova, Alfermann, Statler, & Cote, 2009; Wylleman & Lavallee, 2004). Others have shown that the environment and contextual elements may be successful factors in themselves (Alfermann, Stambulova, & Zemaityte, 2004; Carlson, 1991; Helen et al., 1999; Stambulova, 2007). Yet talent research until recently has lacked a method that takes into account both a holistic individual focus and an ecological environmental focus, and integrated this under one theoretical umbrella (Henriksen, 2010).

Even so, because of the complexity in talent development, few have been able to accurately predict the likelihood for success at the highest senior level. Directing the focus to development rather than the selection process could devalue the importance of a players innate potential and skills. Such a focus would rather facilitate creative development environments, which would give athletes a better opportunity to develop. By highlighting the importance of development for all athletes in the training group (Henriksen, 2008), each athlete will develop their potential, without encountering contextual or organisational barriers. In elite sports, there are some communities that have a special history of developing talented athletes. The sports environment in Meråker in Norway is such an environment. Here they have gained international attention for their ability to develop world-class athletes in cross-country and biathlon (Aalberg & Sæther, 2013; Jervell, 2014). Such a tradition of success can be seen as a coincidence or as a result of a long-term philosophy. If one accepts the latter, studies of such communities create knowledge about the characteristics of successful sports environments, and how the environment could supports a practitioner's development. Such an approach appears to be appropriate, considering that contemporary talent research has tended to focus on the individual athlete and his/her micro environment (i.e. coach, parents), despite the fact that there is little consensus on what predicts future success at the elite level (Côté, Baker, & Abernethy, 2007; Sæther, 2014; Williams & Reilly, 2000).

The purpose of the present study was to describe the key characteristics of the development environment facilitated by an elite football club. The case we studied was the youth team of the Norwegian elite club, Rosenborg BK (hereinafter Rosenborg), a club well known for their senior players endeavours in the Champions league in the beginning of the 90s and start of this century. Rosenborg is however also well known for their talent development environment, reaching the final of the national under-19 championship in six of the last ten years, only losing two. By using a holistic and organic method, which was this article's theoretical tools, based on Henriksen (2010), we turned the focus from the individual athlete to athletic environment, and offered a more holistic perspective. Using a field study, we followed and partially took part in this developmental environment for a total of 21 days spread out over 3 different weeks in a period of 3 months. Using such a field study of a successful talent development environment could give knowledge of the development process such environment offer talented players.

### **Theoretical framework**

A talent environment according to Henriksen (2010) is defined as a system consisting of a practitioner's interactions inside and outside the sport at the micro level, and how these interactions are influenced by constituents at the macro level. His approach presents two models that are different, yet complementary. 'Athletic Talent Development Environment' model (ATDE) is a tool to describe a talent environment, while 'Environments Success Factors' model (ESF) provides an explanation of how different factors lead to a Talent Development Environment having greater or lesser degrees of success when it comes to developing elite athletes.

Drawing on the work of ecological theory by Bronfenbrenner (1979) and organisational culture theory by Schein (1992), Henriksen (2010) hypothesised on the basis of studies of several talent development environments in various sports, that successful communities will have common characteristics that distinguish them from less successful communities. He believed that successful talent communities consider group and relational elements to have a positive effect on an athlete's development, and emphasised this in the development process. It is known that the performance in sports groups cannot be reduced to a product of athletes' individual skills (Carron, Shapcott, & Burke, 2007; Forsyth, 1990). How the group as a whole fails to coordinate their efforts governs their potential accumulation of skills and elements of self-determination, cohesion and autonomy are crucial to perform optimally (Moen, 2009; Ryan & Deci, 2002; 2007). This corresponds to Henriksen's (2010) descriptions, where he uncovered elements such as safety, belonging, psychological wellbeing and strong degree

of cohesion and connection as being important. Moreover, he argued that these factors are crucial for the practitioner's qualification to handle the transition to the elite level, which is not revealed in less successful development environments (Henriksen, Hvid Larsen, & Krogh Christensen, 2013).

He also pointed out that successful development environments are characterised by a long-term development focus, where mastery and progress are considered more important than achievement at a young age. This was also revealed by Martindale and colleagues (2005; 2007), whose work has shown that long-term planning and perspective are crucial to develop top performers at a young age. They also clarified that a good talent environment must facilitate flexible systems that are tailored to the individual performer, while the main focus of development should be the individual's progression rather than previous results. As the transition from junior to senior sport is a key point in the young practitioners' career, this transition is often described as challenging as it also coincides with important changes in life in general (Enoksen, 2002a; 2002b; Stambulova, 2009). One knows that poor coordination between sport and education are among the most common reasons for dropping out of sports (Enoksen, 2002a). It can also cause problems, stress and inner conflicts in the individual athlete (Christensen & Sørensen, 2009). Still others have pointed out that education and sports arena have conflicting demands, and thus stand in a competitive relationship above athletes who want to be the best (Bourke, 2003; McGillivray & McIntosh, 2006). Therefore Henriksen (2010) highlighted that it is essential that a sport's relation to other institutions emerges as coordinated so that the athlete gets the opportunity to work in a stable and safe environment.

Henriksen (2010) further clarified the importance of a successful community's capacity to take the athlete's overall development into consideration. Factors outside the sports arena are central, and largely impact an athlete's performance. Having a comprehensive and coherent career consists of development in various domains that are interdependent, and the sports context does not exist separate from real life. This is clearly formulated by Wylleman and Lavallee's development model (2004), which presents three non-sporting venues with significant influence on performance and well-being in the sports field. Changes in psychological, psychosocial and academic and occupational spheres are said to have a decisive impact on a performer's athletic career, and confirm that an athlete who experience central career and life transitions must coordinate the accompanying challenges in order to succeed in the sports context. A number of other studies have shown that contextual factors can affect the outcome of the talent development process. In a study of talent across sports Carlson (1991) showed that successful athletes largely were attributing their success to contextual factors, such as a good club environment,

friends within the sport, low pressure on achievement at a young age and good relations with their coaches. Others emphasised that support from coaches and significant others must be sustained and coherent (Stambulova et al., 2009). This corresponds well with Stambulovas' (2009) understanding of talent as more than a set of physical characteristics. She claimed that a practitioner's potential in equal measure consists of the individual's ability to develop and utilise their resources to deal with challenges both in and out of the sports arena.

## **Methods**

### **Context**

Most professional top clubs in football have youth teams who are part of the clubs' development of players, although the number of teams and which age groups clubs offer varies. Both the national and international football associations also demand that clubs have such departments, while also demanding that clubs should have players produced in their own club, so-called self-produced players. A junior division in a top football club usually consists of a large number of members who have different functions within the development environment that the club is trying to facilitate. These clubs consist therefore often of many types of structures in terms of layering, and often have a clear hierarchical division in terms of departments and responsibilities.

### **Design**

To gain insight into the development environment of the youth department at Rosenborg BK, we started with a case study. A case study is an empirical method that examines a contemporary phenomenon in its actual context. This causes the researcher's assumptions to be tested based on actual events as they occur, which is the method's major strengths, according to Flyvbjerg (2006). We focused on the U19 group at the club. According to Maaløe's exploratory and integrative approach to case studies, these should be carried out as a 'cyclical approach, with continuous dialogue between predefined theories generated data, the researchers' interpretations and feedback from informants' (Maaløe, 2004, p. 3). Where retrospective studies assume that the researcher can know beforehand what is relevant to ask, the case study provides the opportunity to formulate questions one previously failed to acknowledge, but that later may prove to be very important (Yin, 2009). Thus, a case study could be seen as a good way to create fertile knowledge of a complex phenomenon that occurs in its natural context (Yin, 2009). Therefore we had in addition to carrying out 'formal' in-depth interviews with both coaches, chief of development, top player development coaches and players, more casual conversations with coaches, players and other people around the U19 group. The first author also appeared in the club's environment for three periods on each of 7 days, for a total of 21

days (total 75 hours), in the 2014 pre-season. The period was selected since the pre-season is a vital part of the development face of the season. During this period, he participated in 18 training sessions and 5 games, joined bus tours for training and away matches, player meetings, video conferences and internal training meetings. In addition, he was present in the locker room before and after both training and match, to get the 'inside' view of the environment.

### **Participants**

The first author conducted semi-structured interviews with the head coaches for the team including head coach, chief of development and top player development coach, and all well experienced youth level coaches. We expanded the range to include an individual player interview and one focus group interview with 6 players, to also reveal players' perspectives on the development environment. All respondents were men. Using a snowball method to select respondents, we chose the informants who probably had the most information that was relevant to our study of the development environment (Saunders, Lewis & Thornhill, 2009). As a hallmark of a case study, we continually received new, relevant information during the case study, and tried to integrate this knowledge into our overarching questions for our study.

### **Interview**

We used semi-structured interviews in our study, characterised by the interviewer having a list of topics or general questions prepared, but respondents could speak freely about these topics. We developed an interview guide focusing on the participants' description of the development environment they were part of, closely linked to Henriksen's (2010) understanding of development. As we in the interviews were open to emerging relevant topics that we did not anticipate, we also tried to follow up on a 'track' or theme that was taken up by the respondents, but who were not involved in the original interview guide. Interviews were conducted face to face. On average interviews with coaches and the single player interview lasted 49 minutes, while the focus interview lasted 35 minutes. All subjects of these interviews were selected by the coaches, selecting players they would expect to be reflected on these topics.

### **Analysis of themes and topics**

We started with a theme-focused analysis, which is often used to compare information from all respondents (both formally and informally), together with any observations, to gain a deeper understanding of important topics and events (Thagaard, 1998). Both observations and interviews are designed with a broad brush, so it is the interviewees' answers which draw our attention to interesting categories. Nevertheless, we worked hard to not assume an affirmative position, which Beek (2009) claimed may be a challenge using an ecological approach to

sport psychological issues. We have strived to let the field study ‘take the floor and present themselves’ (Nilsen, 2012, p. 69), and not let our starting questions dictate results. Through this we relied on Nilsen (2012) who argued that reality is best understood as a (re) construction that occurs in the encounter between the researcher and the subjects of science. After the first author had gone through all the formal and informal interviews and conversations, as well as observations and impaired reflections, we ended up with some topics that we took up and reflected on in light of Henriksen’s model for developing environment.

## Results

In the following sections we present the youth department of the Rosenborg football club. Our results are described by using the empirical versions of the ATDE and ESF working models, as these two models summarize the results of the data analysis.

### The ATDE working model adapted to describe the youth department of Rosenborg football club

Figure 1 shows the empirical version of the ATDE model adapted to present the youth department of Rosenborg football club. Bearing in mind that all the components of the environment are interconnected and affect one another, the model depicts the most important components and relationships as well as the structure of the environment.

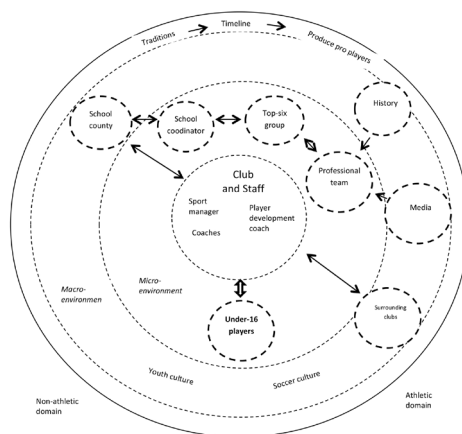


Figure 1. *The ATDE empirical model of the RBK football club*



*Microenvironment.* This study focused on the male under-19 team (23 players) and the staff in the professional department. Most of these players are local players, growing up in Trondheim, but there are also players recruited from other parts of Norway. Rosenborg football club is described as one of the leading talent development environments in Norway, in terms of winning record in both youth level and elite level football.

*The staff.* Compared to other Norwegian elite level clubs the staff of Rosenborg is quite large. During a regular week of training, at least 5 coaches and one physiotherapist interact with the group. This includes a dedicated goalkeeper coach and a top player developer. The players describe a good access to educated helpers, ready to provide the guidance they are in need of.

The link between the *U16 and U19 group* is an essential part of the environment of the youth department in the club. It's a tight link between U16 and U19 groups at the club. Both groups are part of a club-controlled guideline, and thus meet the same working methods and the same criteria for success evaluation. By having been present in the environment, we observe that the two groups are closely knit. They conduct training sessions that have much in common, and by shared time in the locker room before and after training sessions and regular secondments between the groups, the ties are close. In light of this, we saw that the groups have close relations and stabile frames of development. For the players who take the step from U16 to U19 level the distance is narrow and the transition seems smooth.

The club takes the challenge of coordination between sports and *school* wholeheartedly, adding significant resources to offer players a smooth and well-coordinated structure every day. The collaboration the club has with a local high school in the community is a good illustration of the club's facilitating role. During the week, the players usually have four sessions as part of their school schedule, where the players are taken out of ordinary education. This is solved through the head coach also having a coordinator position at the collaborating school. In practice this means that players have physical education, activity learning and specialised elite sport classes while they are training and the coach is responsible for grading at the end of the semester. The head coach considers this relation to be positive: 'Both compared with ourselves before, and with other school systems we know, we believe we have come a long way' (Coach 1).

This coordination is further supported since the club also provides *transportation* from school to training sessions and back during the day. Previously, all joint training was conducted in afternoon sessions, while the current arrangement gives players at least one afternoon free a week. The whole



cooperation scheme is set up so that players should not miss lessons at school, and use the least energy necessary on coordinating school and football.

*Top six-group.* Rosenborg seems to recognise that the transition from junior to senior level can be challenging. Therefore, they have created a top player group consisting of players who have made the most progress in their development and who are closest to a place on the senior squad. Currently in April 2014 this group included 6 players who received extra monitoring from a top player developer who has a special focus towards them. His role is described in the quote below:

‘He (top player developer, our notes) works closely with each player. Parents, school situation, and oversees the overall picture, including when players train with the senior squad. He follows them on professional team trainings, communicates with a senior head coach, and communicates with the national team. The players have a dedicated person who is their 1st helper’ (Coach 3).

Both players and their support staff experienced this initiative as positive for the development of the players in the top group of players. The following quote tells a lot about what the players think of their access to qualified guidance:

“No-one in Norway has similar preconditions when it comes to staff and trainers. I’ve talked to others (other players on the national team, our remark) when I’m with the national team, and they are shocked when I tell them how many coaches we have. Especially the fact that we have an own coach dedicated to the players that are at the highest level” (Player 4).

Somewhat surprising is the observed *lack of relations* to the senior squad. Even if the relationship between the U19 team and the professional team seemed important enough to introduce a level between (top-six group), the overall relationship seemed distant. Since the development programme’s main goal is to develop players for the club’s professional team, the collaboration with the coaches and significant others on the professional team seems vital. The relationship between professional team and the talented players still seems to be remote. Coach 1 illustrated this well in the following quote:

‘We lack a bit on both delivering and having an impact, by clarifying the senior squad’s roles compared to our own. The total development process could be lifted. The whole quality of relationships in our work could be lifted between the development department and professional team’ (Coach 1).

The development department's success evaluation is explicitly linked with developing players for the senior squad. When the connection to the professional team seems to not be perceived as satisfactory, their success can be described at the mercy of an environment that exists on its own terms beyond their control. Coach 1 underpinned this in the following quote:

'We cannot escape the fact that the way a professional team is operating, will be the most important factor to develop players to the professional level. This is an x-factor existing independent from us, which to a much greater extent should be linked to our department. We should have had more matching together' (Coach 1).

The professional players were however consistently present in the environment, and acted as role models for the U19 group. The groups shared time and space, but the interaction was characterised by uneven balance of power and little exchange of knowledge. The distance was great, both physically (groups exercising at various locations) and culturally (little context of what was happening). As an example, this was repeatedly observed in both U19 group and professional team trained at the same time and with the same content, without these sessions being coordinated. Seen from the outside it appears striking since this could help to improve the relationship between the U19 group and the professional team players, without it affecting the session quality.

*Macroenvironment.* One explanation for the lack of relationship between the U19 group and professional team can probably be linked to professional team's *need for short-term results*. The club is situated in a region that is accustomed to success in sports, with Rosenborg as one of the great flagships. Their successful history can undoubtedly be seen as a factor affecting the relationship between U19 group and the professional team. Coach 2 expanded on this in the following quote:

'The surroundings are very impatient here, and in this respect it's tougher for youngsters with us. There are many here who must accept playing at the 2nd Division, who would have been in a senior squad if they had grown up somewhere else. The potential for success is narrow, it is tougher here' (Coach 2).

Claims of success and trophies exist every day, and the surroundings are impatient. If the need for short-term results overshadow the long-term development, it becomes more difficult for the club's young players to gain confidence in a team. The players feel that the focus on developing their own star players is genuine, but is less prioritised when demand for performance is precarious. Player 2 and 3

described the situation from a player standpoint as follows:

‘They (the senior coaches, our notes) have so much pressure on themselves, and when it burns a little around their ears, they do not dare to give a youngster a chance’ (Player 2). ‘Yes, they seem a little afraid. It seems as though they have much to lose’ (Player 3).

*School county.* As already mentioned, the close relationship with county in terms of school collaboration is seen as essential for the clubs environment. As a consequence of a newly increased cooperation, the players now have the same school opportunities as everyone else in the county. This makes it easier for the players to withhold interests outside of football, showed as important by Christensen & Sørensen (2009). The fact that the headcoach is employed by the county is a good description of how tight and formal the ties actually are.

*Surrounding clubs.* The club has ambassadors travelling around and giving training sessions to surrounding clubs. This is thought to compensate for the fact that the club don’t have teams under the age of 15. Coach 3 told us that Rosenborg in many ways are depending on the work being put down in the surrounding clubs, and therefore they prioritize to educate both players and coaches in the county. The club recognize that the day-to-day training is the most important arena for player development, and therefore it’s also in their own interest to lift the quality and knowledge in other clubs.

### The ESF working model adapted to describe the youth department in Rosenborg football club

The empirical version of the ESF model (see Figure 2) summarizes the factors influencing the success of Rosenborg football club as an ATDE.

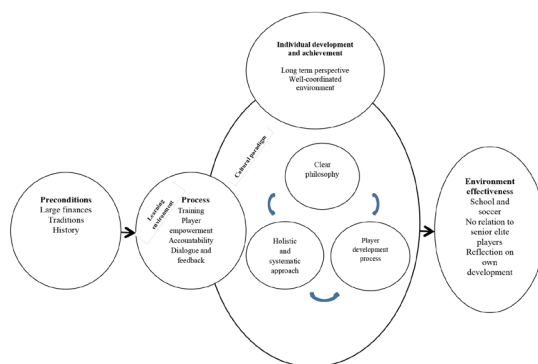


Figure 2 - The ESF empirical model of the RBK football club

*Preconditions.* Rosenborg have a strong position in Norwegian standards as one of the largest talent development environments in terms of economy and number of employees. Furthermore, the clubs both history as a successful clubs and location in the third largest cities in Norway, was also considered as huge resources. The clubs large surroundings of rural area with lots of smaller soccer clubs, as well clubs in the city can be describes as an enormous resource.

*Process.* Player empowerment was an essential part of the clubs environment. The earlier descriptions portray the club's development programme as greatly facilitating the young player's everyday life providing both training and matches in a stable, well-coordinated environment. This adaptation must be seen in relation to the apparent player centred focus, said to be the main core of their development philosophy. Coach 3 described this as follows:

'The individual is set in the centre, and we are trying to educate the individual much more than the team. We want to see more of the individual, and it involves physical training, school/football relationship, stress management and individual support' (Coach 3).

In pursuit of these objectives, the club has a strong focus on *giving the players accountability*. The coaches and others in the environment seem determined not to educate passive players who get benefits awarded without even having to take responsibility for their own development. In the interview with coach 1, he stated that the environment is deliberately trying to balance between facilitation and pamperedness. 'It can't be described as a crisis if the players do not get a taxi to school at the age of 17 years, then we do them a disservice', he stated. The club places responsibility on the players. They are all encouraged to treat their own bodies as the carpenter treats his hammer. Their body is also their workplace, and the players are requested to take this into account. This responsibility is also recognised by players, as the following quote shows:

'We're getting some indications of what is wise, but we must take a great responsibility ourselves' (Player 4).

'Yes, both the diet, what we do in our spare time, total load [physical and psychological] and stuff like that. It is up to us to take responsibility' (Player 3).

This applies to the whole group of players, not just the predicted best. Also players who rarely have a spot on the first team, gets kudos and recognition when they on their own initiative seek guidance.

*Dialogue and feedback* is another part of the players' development process. In the process of empowering the players, video analysis were frequently used. These in order to helping players feel responsibility for their own development. During the observation period, the group of players were regularly presented with video-sequences from matches, challenging the whole group of players. In such situations, it was striking how the whole group of players helped to provide solutions, regardless of the individual player's skill level. Furthermore, almost all structure-exercises ended with a discussion consistently using two-way communication. Players were challenged to see alternative solutions, and how these would affect the team in a match.

### Cultural paradigm

Even though the high number of employees, the club seemed to have a *clear philosophy* independently of the size of a club's coaching staff could be described as unimportant if not all follow the same recipe. If the individual coach has their own agenda and working methods the effects on players can be unclear and ambiguous. To exploit the club's resources, the club largely bases their development work on constructing a *holistic and systematic approach* on player development. Coach 3 described the main features of this approach as follows:

'We want to define quality standards for both players and the club in general. This involves the systematic quality, school collaboration, and cooperation models with other clubs and how to dress' (Coach 3).

The environment is about defining a more self-regulated and independent person, by giving the players predictability in the *player development process*. These tools are recorded in a database which is constantly updated and contains concrete descriptions of how the team handles the elements described in the quote above. When everyone follows the same recipe, the players meet a number of key people who all offer concurrent exposure. If they succeed with this, this approach could generate important knowledge of how one's own development programme actually works. As this is a new approach, it is uncertain to what extent this measure will involve further development of the club's development.

As already elaborated, the club is highly prioritizing developing players to their own senior team. Still, when there is an obvious distance between the youth- and senior group, this illustrates incoherence between written-down values and the actual life. Coach 1 puts it precisely in the following quote:

"It doesn't do much good talking about player development if we don't have the necessary systems to actually do something about it" (Coach 1).

This shows that the club recognizes the challenge that the topic brings, but are having a hard time of fixing it. If you are building a culture where player development are sought to be important, but the actual experiences of players and coaches don't correlate with this, then you are living with the consequences of a cultural discrepancy which can cause problems in a longer time span. Regarding the youth squads sole criterion of success, the development of players to their own senior squad, this inconsistency actually gives them a lesser opportunity to succeed in their work.

### Individual development

The environment's focus on developing individual players is indisputable and emerges as the sole core of the environment. If one considers the environment as fruitful and supportive, it implies a belief that a sustained interaction with the environment has a positive impact on a practitioner's realisation of their athletic potential. Thus, it is natural to have a longer time perspective on athlete's development. In Rosenborg the individual player's development and progress seemed more important than the team's performance. This was also emphasised by several players, which player 1 elaborated as follows:

'The coaches are very clear that there is no focus on result, but the development of players (...). Development precedes the result, it is quite clear. I've heard several times' (Player 1).

When this is the case the coach can select the team based on development and *long-term perspective* rather than the need for short-term success. Players get to focus on their own progress, and the coaches do not have to choose short-term solutions as a talent selection approach encourages. That way the prospects are promising to allow a sustained interaction with *well-coordinated environment* and tough matching deciding later who becomes the best, rather than an imminent need for immediate success and early selection.

### Discussion

The purpose of the study was to provide a holistic description of Rosenborg football club, to examine factors influencing the environments success in developing future elite players, and how features of successful environments are present in the club. According the holistic ecological approach researchers and practitioners need to consider the environment in which the talented athletes are embedded, to be able to understand the complex nature of talent development in sport. In contrast, a focus on individuals in a performance setting like this can potentially be based on a talent selection approach, where success in a short

time horizon is the primary selection criterion (Durand-Bush & Salmela, 2001; Williams & Reilly, 2000). Success in sports relates to success in other domains (Wylleman & Lavallee, 2004), and highlights the impact other domains can have on football performance (Carlson, 1991; Csikszentmihalyi, Rathunde, & Whalen, 1993; Enoksen, 2002a; 2002b; Helen et al., 1999).

In sum, the results of this study showed that Rosenborg offer an environment focusing on aspects highlighted by Henriksen. The club seems to focus on giving players tools and resources both on and of the pitch, using a holistic and systematic methodology. Yet it appears that the club has a weak relationship between the youth department and its own professional team.

The under-19 group seems closely related to the U16 team. This appears to be important when one knows that career transitions can be challenging for young athletes (Enoksen, 2002a; Stambulova, 2009; Stambulova et al., 2009). Knowledge of what is 'the next step in evolution' is important for a smooth transition (Henriksen, 2010), and improves the groups' close ties. Since the groups are so similar, this also provides good conditions for a sustained implementation of the philosophy and goals, a positive factor for development revealed by Martindale and colleagues (2005; 2007).

Being a junior player in Rosenborg requires sacrifices, and the young boys have little time for other things. Therefore, the club is concerned with providing the players with a well-coordinated environment, in order to give them the best possible conditions to focus their efforts to perform on the pitch.

According to Henriksen (2014) the development of the players' responsibility and social skills, could help players learn that talent is not a static ingredient that can be realised without adding the effort required. This empowerment could also be a way of educating wise and reflective players. The ability to participate in and influence their own training situation is essential to ensure motivation and maintenance of effort (Moen, 2009; Ryan & Deci, 2002; 2007). Rosenborg emphasised that players need to have ownership of their own development, which Henriksen (2014) also highlighted as crucial. Research has shown that coherence in support and feedback are important (Martindale et al., 2005; Martindale et al., 2007; Stambulova et al., 2009). On the contrary, if young athletes have it 'too good', Henriksen (2014) claimed they will not develop the capacity to take responsibility and initiative, and that they thus become 'guests in their own development'.



Coordination between sports and school has proven to be crucial both for the individual player, and for the environment's ability to develop successful athletes (Christensen & Sørensen, 2009; Henriksen, 2010). This appears to be important when one knows that exercise amounts tend to be big for this age group (Sæther & Aspvik, 2014). The description is reminiscent of cooperation between the training environment and school in Meråker, a skiing community that is known for producing world-class athletes in cross country (Aalberg & Sæther, 2013; Jervell, 2014). Club/school relationship is so closely coordinated that it seems unnatural to see these two as competing institutions, which Christensen and Sørensen (2009) highlighted as a significant challenge for talented footballers in Denmark. Also others have pointed out that education and sports arena often stand in a competitive relationship among athletes who want to be the best (Bourke, 2003; McGillivray & McIntosh, 2006), and Rosenborg facilitation shows that they are aware of this issue.

Despite the creation of a top-six group, which was intended to facilitate the transition from junior to the professional team, the relationship between the U19 group and the professional team was described as distant. This appears to be paradoxical since the club largely has a dedicated focus on their talents, both through a written board resolution and good economic conditions. The club seems to have recognised the importance of maintaining close links and stable relations between U16 and U19 groups. It was therefore surprising that they did not increasingly facilitate exchange of expertise, proximity and a more streamlined communication between U19 group and professional team.

Although each successful ATDE is unique, the present study as compared with previous studies shows that the environments share a number of factors contributing to their success. In a similar study of an under-17 team in a Danish football club, showed similar results as in the environment of Rosenborg (Larsen, Alfermann, Henriksen & Christensen 2013). Similar tendencies were revealed in football academies in Europe. In the 26 elite clubs Relvas and colleagues (2010) examined the junior and senior department which existed as two separate departments, characterised by a clear power hierarchy. There was a lack of closeness and converged communications, leading to disgruntled employees and made the career transition more difficult to handle for the young players. Players were not eligible to talk with the professional players about future challenges and potential pitfalls in the transition to the top level. The clubs wanted to 'protect' senior players, while motivating young people to fight for their place among the seniors. According to Henriksen (2013) the implicit logic that underlies this is that the players have to understand what is required to cope with the transition to senior football at the elite level. The transition from junior to senior sport can be challenging for young performers (Enoksen, 2002a; Stambulova, 2009;

Stambulova et al., 2009), and according to Relvas' research (2010) there seems to be little culture to take this into consideration in European football academies. This also seems to be the case in Rosenborg. The criteria for future success must be 'caught' rather than 'taught' (Gould & Carson, 2008), which in other studies was shown to be a significant challenge for young footballers who want to take the step from academy to peak (Henriksen, Alfermann, et al., 2013).

### **Barriers for Successful Transition from Youth to Professional Players**

Based on Henriksen (2010), Rosenborg seems to offer a development environment with a focus on a high degree of organisation regarding the domains that affect the team's players. This emerges very clearly in their relation with the collaborative school, which previous research has highlighted as crucial (Bourke, 2003; Christensen & Sørensen, 2009; McGillivray & McIntosh, 2006). The entire development department seems to work together to equip players with the resources needed, both on the pitch and in life in general. Their unified work methodology reduces the distance between U16 and U19 groups, something we also saw in practice with these groups' close relations. Knowledge of 'the next step' is important for a smooth transition (Henriksen, 2010) and improved by the close links between U16 and U19 groups. That these groups also fall under the same streamlined approach provided a good basis for implementation of a common philosophy and goals, which Martindale and colleagues have pointed out as important (2005; 2007). Furthermore, the club highlighted the players' accountability of development as more important than the team's performance. When using video analysis and bidirectional communication, they sought to develop individual players with a comprehensive understanding of the game.

In light of these results, the success criteria were not influenced by external factors and the club had good conditions to allow for sustained interaction with constituents that have a positive impact to decide who later becomes best. Nevertheless, it appears paradoxical that the club has not been able to create a better relationship between the development department and the professional team. As the situation stands, the development department and the professional team are in a competitive situation, where their interests are less successful at uniting. Even if similar tendencies have been revealed in other football academies (Relvas et al 2010), and clubs (Christensen & Sørensen 2009) the problem is essential for the development milieu the club is offering. Despite the creation of a top player group with the intention of reducing this distance, the distance between under-19 group and professional team seems to be great. It may seem as if the importance of developing players with local ties is downgraded on the basis of a senior head coach needed for success in the short-term.

## Conclusion

Based on Henriksen (2010), Rosenborg seems to offer a development environment with a focus on a high degree of structured and a well organised environment. This emerges very clearly in their relation with the collaborative school, which previous research has highlighted as crucial (Bourke, 2003; Christensen & Sørensen, 2009; McGillivray & McIntosh, 2006). The entire development department seems to work together to equip players with the resources needed, both on the field and in life in general, including accountability for their own development. Their unified work methodology reduces the distance between U16 and U19 groups, something we also saw in practice with these groups' close relations. The missing link between the youth level and the professional team could indicate that these groups don't fall under the same streamlined approach provided a good basis for implementation of a common philosophy and goals, which Martindale and colleagues have pointed out as important (2005; 2007).

This article intended to call attention to the development process by looking at development environments that talented players take part in. Our study does not provide an indisputable answer on what it takes to create good development environments. The findings cannot be unconditionally incorporated to other talent development environments in other contexts or sports. In light of this, it is worth pointing out that the examined sports that have revealed close links between young and older athletes are all individual sports (Henriksen, 2010), while research done on football shows that this link is not as painless (Henriksen, Alfermann, et al., 2013; Relvas et al., 2010). Based on the article's general argument, we still believe that our field study has the potential to present knowledge that is relevant for a wide variety of development, both successful and those who increasingly struggle to assist their athletes in the transition to the elite level in their sport.

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