

16. FOOTBALL ACADEMIES

O-093 Analysis of fitness and skill profiles by category and position: A case study of Spanish regional academy

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OBJECTIVE It is a well known fact that in the professional football, the position in the field determines certain physiological profiles of the football players (Reilly et al., 2000) as well as effecting young players present somatotypes of successful professional players (Peña Reyes et al., 1994). In order to avoid premature specialization of the football players, they have to be provided with experiences in several positions. This study aimed at determining if significant differences existed in physical levels and skills in players of different categories of football base in a football school that competes at the regional level.

METHODS The population were 54 young football players. From Siete Picos Football Academy (age +/- 15.27 years old, height: 1.68 m.; weigh 57.67 kg) with at least three years of sport practice. We assess the different variables with those tests: Ability: Tests of Skill: 8 Tests of specific skills of football; Physical condition: yo-yo IET n2., 30 m., 10x5 m., 7 Sprints, SJ, CMJ, Abalakov; and morphology: height, weight, 6 skinfolds, 2 Perimeters, 5 diameters.

RESULTS Having reduced all the tests proposed by means of principal components, there were related the most significant tests of physical condition and skill to the different categories (U18, U16 and U14) and positions on the field, we find only differences for categories in the diameter biepicondilar of the humerus ($p=0,013$) and for positions in the abalakov ($p=0,024$).

DISCUSSION The results of this study was in line with the previous findings of the literature as there was no significant difference among the three groups, except for the diameter biepicondilar from the humerus and for positions in the abalakov. This case study derived that, the conventional training system in football does not allow the football players to develop in various skills and physical capacities

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KEY WORDS Youth soccer, physical condition, skills, evaluation.

O-094 Youth development structure, working practices, and philosophies of top-level football clubs: A pan European perspective

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OBJECTIVE Professional clubs are investing in youth development. Developing young players may reap both sporting and financial rewards. Specifically, football clubs must reduce the risks of investment in youth training and development. This study was part of a research project that explored the youth development working practices of elite level professional football clubs from a Pan European perspective. Moreover, this study identified and explored the organisational structure, working practices, and philosophies regarding the development of young players.

METHODS Face-to-face semi-structured interviews were conducted with the Head of Youth Development within top-level clubs ($n=19$) across countries in Europe ($n=4$). Interviews were transcribed verbatim and analysed utilising the principles of content analysis. Interviews were supplemented with additional information sourced directly from club administrators and club web sites.

RESULTS Different macro organizational structures were evidenced. Many clubs have the same staff, but there appears to be a differentiation of the operationalisation of each role within different clubs. The main objective is to produce players for the 1st team however, in Sweden, the clubs presented also a more national orientation. The communication between the 1st team and the youth team staff proved difficult.

DISCUSSION Young players would benefit from a structured and coherent development approach with elements of socio-psychological support (Richardson et al., 2004), however the findings of this study showed difficulty in the communication between the 1st team and the youth team staff that may hinder a successful transition of the young players (Wylleman et al., 2004). Such communication difficulties were an element of staff dissatisfaction.

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KEY WORDS Youth development, football, organizational structure.

O-095 Turning pro: The case for meaningful competitive football

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OBJECTIVE July 2004 witnessed the beginnings of UEFA's campaign to create (what they term) 'a level playing field' within their respective competitions (e.g., Champions League, UEFA Cup) by implementing a European wide policy on the utilisation of homegrown players. UEFA envisage that these directives to establish a better competitive balance should be adopted by its member associations at a domestic level. This paper offers a brief synopsis of UEFA's proposals and outlines the existing and subsequent challenges facing young players in their pursuit of first team football. The paper provides some contextualisation of the potential impact of UEFA's directives on the development of young English players, before proposing key issues for consideration for both football administrators and coaches.

METHODS Two 'young' professional football players from two top level English football clubs were engaged in a series of in-depth informal interviews (Dale, 1996) over a protracted period of 6 months following their transition from the youth academy to the professional environment. The experiences of player A and player B are presented in a series of creative non-fiction vignettes.

RESULTS The transition of an academy player to a young professional can be a complex and dysfunctional experience. Player A's experience was bereft of internal and/or external support and guidance. Player B's experienced an apparently more strategic and purposeful loan experience aided by more inclusive support from associated practitioners within the donor club. Specifically, Ryan experienced meaningful competitive football.

DISCUSSION The post-academy experience introduced new barriers to a young player's progression into the first team. Players experienced a heightened level of professionalism and performance expectation but lack of 'meaningful' competitive football. A more strategic and informed approach to this critical phase of transition may enhance the readiness of players for the next phase of their career.

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KEY WORDS Youth, professional, football, transition.

O-096 Barriers to progression in elite level English football academies: A player perspective

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OBJECTIVE The introduction of The Football Association Technical Department's 'Charter for Quality' in 1997 provided formal managerial structures for professional football clubs to adhere to with regards to developing talented players. The Charter aimed to maximise participation and to increase the quality of players at all levels, hence sustaining participation and improving performance. This paper offers an insight into youth players' perceptions on the role of football Academies in elite level English professional football. Moreover, it outlines the barriers to player progression that are perceived to exist in such environments. The paper also proposes some key messages for practitioners and administrators in enhancing the development and progression of young players.

METHODS A focus group methodology (Bloor, 2000) explored the perceptions of home-grown players (N=29) in four separate elite level English professional football academies. Data was analysed using content analysis (Côté et al., 1993). The authors engaged in triangulation to ensure notions of trustworthiness were adhered to (Patton, 1990).

RESULTS Analysis revealed that a football Academy was intended to develop and produce players for a club's 1st team, but a variety of contextual factors influenced the process (e.g., status of club, number of professional players). Some players viewed the acquisition of foreign players as a barrier to their progression. In this regard, opportunities to engage in higher-level football were restricted.

DISCUSSION The current findings are similar to those previously reported. Fogelholm (1994) reported daily energy intake of 2131 ± 400 kcal with a 111 ± 450 kcals energy deficit in normal weight female soccer players. Carbohydrate is the primary fuel substrate during soccer, and consequently high dietary intakes of 60-70% of total calorific intake have been recommended for footballers (Schokman et al., 1999). In the present study carbohydrate intake was significantly lower than these recommendations ($53.8 \pm 6.8\%$, $p < 0.05$), but fall within the range previously reported for female soccer players 47.8 ± 9.8 to $55.0 \pm 7.5\%$ (Clark et al., 2003; Scott et al., 2003).

CONCLUSION The global expansion of football in England has witnessed a significant increase in the acquisition of foreign-born nationals. The existence of such players appears to provide a further barrier for youth player progression in English football. Findings resonate with UEFA's concerns over the development of home-grown talent within domestic clubs in European football.

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KEY WORDS Football, academies, progression, youth.

O-097 Changes in body composition and aerobic fitness according to chronological age and maturity offset in elite junior rugby players

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OBJECTIVE Professional Rugby clubs are increasingly investing in young talent. Early maturing boys have a distinct physical advantage in a game not only reliant on skill and understanding but also size and power. There are no recent data reported on elite junior rugby players where playing position, chronological age and maturity have been taken into account. This study first aimed to provide descriptive, anthropometric and aerobic fitness data in elite young players by age, maturity and position, and second to compare differences in boys composition and aerobic fitness by controlling for decimal age and maturity offset.

METHODS 12 elite boys in season 2004-5 and 17 elite boys in 2005-6 had their body composition measured using DEXA, aerobic fitness using a discontinuous treadmill protocol. Maturity offset was also calculated (Mirwald et al., 2002). Differences in lean body mass (LBM), fat mass (FM) and VO_{2peak} were compared by time and playing position whilst separately controlling for decimal age and maturity offset.

RESULTS VO_{2peak} was stable across time for both forwards and backs although backs had significantly higher aerobic power than forwards even after controlling for decimal age of maturity offset. Forwards carried significantly more LBM than backs although increases were similar between time 1 and 2. Differences in LBM disappeared when controlling for maturity but not for decimal age.

DISCUSSION Forwards had greater LBM and FM whereas backs had similar levels of LBM. Backs had significantly greater aerobic fitness than forwards. Forwards had greater amounts of LBM and FM than backs although the differences in LBM disappeared after controlling for maturity offset. It was suggested that most differences in LBM were a result of more advanced maturity in forwards.

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Table 1. Descriptive Data (\pm SE) for Forwards and Backs in the 2004-5 and 2005-6 Seasons

Season	Forwards		Backs	
	2004-5	2005-6	2004-5	2005-6
Decimal age (yrs)	13.18 (.11)	14.0 (.09)	13.2 (.11)	14.0 (.11)
Maturity offset (\pm years PHV)	.11 (.24)	.90 (.19)	-.23 (.24)	.67 (.22)
Stature (cm)	168.4 (3.3)	174.4 (2.6)	164.8 (3.3)	171.1 (3.1)
Mass (Kg)	66.3 (2.9)	72.4 (2.4)	52.1 (3.2)	59.0 (2.9)
Lean Body mass (Kg)	45.28 (2.13)	54.52 (1.78)	41.25 (2.30)	50.73 (2.13)
Fat Mass (Kg)	16.16 (2.25)	16.96 (1.86)	5.56 (2.48)	6.79 (2.04)
VO2peak (ml·O2·kg⁻¹·min⁻¹)	50.4 (2.0)	50.5 (1.7)	61.0 (2.2)	61.5 (2.0)

KEY WORDS Rugby union, elite juniors, maturity offset, decimal age, positions, lean body mass, fat mass, aerobic fitness, longitudinal.

O-098 A cross-cultural comparison of the participation histories of English and French elite youth soccer players

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OBJECTIVE The amount and type of soccer activity that young players participate in predicts their later performance levels (Ward et al., 2004). This participation may be dependent on the country or culture that they live in. The objective is to compare the participation histories of elite youth English soccer players to those living at the Clairefontaine Academy in Paris, France.

METHODS Elite U14 youth soccer players selected at randomly from the Clairefontaine Academy (n = 23) and an English Premier League Youth Academy (n = 16) completed a retrospective questionnaire recording the amount of time spent between the ages of 6 and 14 years in different types of soccer-specific activities. To explore for differences in these variables a 2 group (French, English) x 9 ages (6-14 years) x 5 activities (Match play, Coach-led practice, Individual practice, Play, Indirect involvement) mixed ANOVA with repeated measures on the last two factors was conducted.

RESULTS Clairefontaine players spent more hours per week compared to English players in peer-led play at U7 to U10 age groups (Figure 1), in coach-led practice at U13 and U14 age groups (Table 1), and in total playing time at U8. English players spent more time in peer-led play compared to Clairefontaine players at the U14 age group only.

Table 1. Mean (SD) hours per week spent in coach-led practice as a function of age group.

Age group	U6	U7	U8	U9	U10	U11	U12	U13*	U14*
English	0.33 (0.71)	0.73 (0.79)	1.50 (0.88)	1.88 (1.00)	1.90 (1.17)	2.66 (1.69)	3.50 (2.02)	4.72 (1.40)	4.74 (0.76)
Clairefontaine	1.09 (0.65)	1.35 (0.82)	1.98 (1.35)	2.38 (1.73)	2.86 (1.79)	3.70 (2.42)	6.05 (2.80)	8.25 (3.37)	9.62 (2.91)

* denotes significant difference.

DISCUSSION Clairefontaine players engaged in more peer-led play early in their participation histories, but more coach-led practice later at U13 and U14 compared to their English counterparts. Early exposure to a discovery learning environment, which peer-led play may provide, is advocated in the skill acquisition literature

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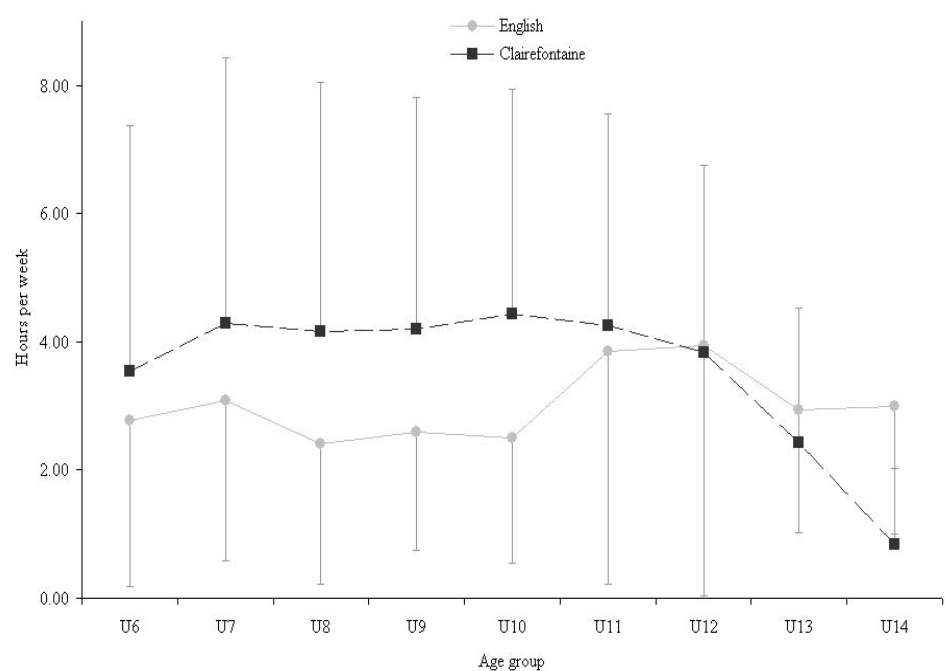


Figure 1. Hours spent per week in the age groups.

KEY WORDS Expertise, practice, play, soccer.