DG Educação e Cultura
2012-1-PT1-ERA10-12525-COIMBRA 01

Managing youth sport in a dual career perspective

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Career transition in sport



perfection phase

developmental phase

initiation phase

Wylleman & Lavallee, 2004

Youth Athlete

- Search for talents (scouts, agents, etc)
- Early recruitment (clubs, academies, sport federation, etc)
- Long preparations for Championships

(10 years of experience or 10,000 hours of deliberate practice, *Ericsson et al., Psych Rev, 1993*)

Knowledge of Career Development

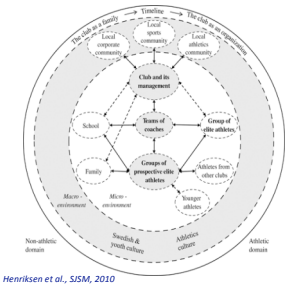
Initiation → Peak Performance

Sport discipline	Age at start (yr)	Age at Peak (yr)
Track and Field sprints	14-16	18-28
Track and Field middle & long distances	12-14	22-32
Track and Field hurdles and jumps	8-12	18-25
Track and field throwings	12-14	20-28
Artistic Gymnastics and Skating	7-9	16-26
Alpine Skyiing	7-9	18-25
Cycling	8-12	22-32
Team Sports	12-14	22-35

(Faina, Dal Monte, 1999)

Development of the Young Athlete:

A Multi-Factorial, Dynamic and Long Term Process



Henriksen et al., SJSM, 2010

- Growth
- Maturation
- Technical Skills
- Tactical Skills
- Psychological
- Cognitive
- Social/Environmental

Development of the Young Athlete:

A Multi-Factorial, Dynamic and Long Term Process

Age (yr)	10	15	20	30-35
Athletic Level	Initiation	Development	Mastery	Discontinuation
Psychological Level	Childhood	Adolescence	(Young) Adulthood	
Psycho-Social Level	Parents, Siblings, Peers	Peers, Coach, Parents	Partner, Coach	Family (Coach)
Academic/Vocational Level	Primary Education	Secondary Education	Higher Education	Vocational training, Professional occupation

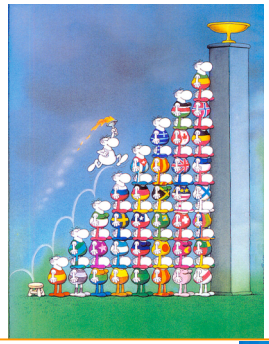
Wylleman & Lavallee, 2004

Youth Olympic Games (14-18 yr)

Dear athletes,

This evening marks your entry into the Olympic world. Over the next 12 days, you will compete with the world's best athletes of your generation. You will test the limits of your abilities and push past them. Many of you will compete at future Olympic Games. All of you will benefit from these Youth Games.

Jacques Rogge, YOG 2010



Developmental Years

ELITE SPORT
(>10.000 hours)

(Ericsson, 2006)

EDUCATION
(??hours??)

(Aries et al., 2004; Conzelmann and Nagel, 2003; Donnelly and Petherick, 2004; Amara et ;l., 2004) Aquilina and Henry, 2010)

Sport and Education

Education vs Sport





Education & Sport

An European Issue: The Dual Career

Through its role in formal and non-formal education, sport reinforces Europe's human capital....

... Time spent in sport activities at school and at university produces health and education benefits which need to be enhanced.

.... The Commission encourages support for sport and physical activity through various policy initiatives in the field of education and training ....

..... Investment in and promotion of training of young talented sportsmen and sportswomen in proper conditions is crucial for a sustainable development of sport at all levels.

Commission of European Communities, The White Paper on Sport, 2007

European Guidelines on Dual Career of Athletes

(Approved on November 16, 2012)

Need for cross-sectional, inter-ministerial approach at national level:

Sport:
- Sport Organization
- Sport Academies and high-performance training centres
- Coaches and other members of performance teams
- Supporting services (psychological assistance, educational and employment guidance).

Education:
- School education
- Vocational education and training
- Higher education
- Distance learning

Employment
- Combination of work and sport
- Transition to the post-sport careers
- Social dialogue

European Guidelines on Dual Career of Athletes

(Approved on November 16, 2012)

Need for dissemination, monitoring and evaluation:

Public awareness:

Dual career network:

Research, monitoring and evaluation:
- Valid indicators
- Comparison between different models
- Athletes' transitions
- Social dialogue
- Safeguard of the development of young athletes

The Dual Career Network





BUDGET FOR EUROPE 2020

Multiannual Financial Framework 2014-2020



AMBITIONS OF EAS

http://www.dualcareer.eu/

- **Uniting partners** involved in high performance sport and education.
- Exchanging **best practice** between countries and institutions.
- **Improving conditions** for high performance sport and education.
- The **link** between educational institutions and sports organisations.
- Actively **developing research projects** in sport and education.

WHAT EAS PROVIDES

http://www.dualcareer.eu/

- An annual **EAS conference**:
- **Inform members** about ongoing best practice.
- **Promote co-operation** between institutions, coaches, teachers and students.
- **Discussion and debate** around sport on a local, national and European level.
- an **EAS award for young researchers** in the area of dual career

EAS PROJECTS

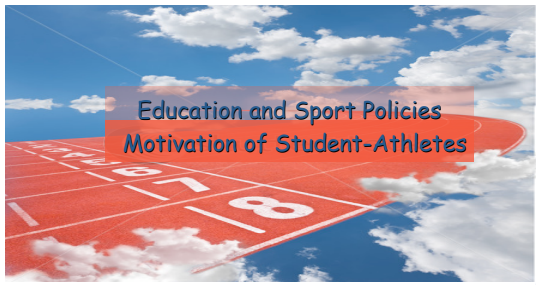
http://www.dualcareer.eu/

2009 Athletes to Business Project

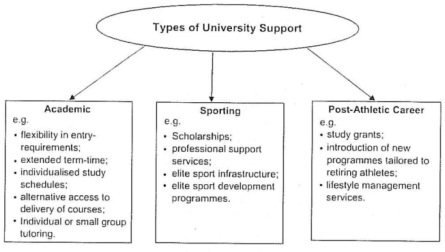
2011 Better Boards Stronger Sport Project

2012 EU Expert Group on Education and Training in Sport - Observer Status as Dual Career Stakeholder

The start line of research on dual-career



Education and Sport Policies in Europe



Aquilina & Henry (2010). *Intern Jour Sport Policy*, 2, 1, 25-47.

Education and Sport Policies in Europe

Table 1. Typology of approaches to educational services for elite athletes in higher education.

Type	Key Features	Examples
1. State-centric Regulation	Responsibility is placed on HE institutions to provide adapted opportunities for student-athletes through legislation, statutory requirement or government regulation.	France, Hungary, Luxembourg, Spain, Poland, Portugal
2. State as Sponsor/ Facilitator	An approach where by the state promotes formal agreements to ensure that student-athletes' needs are being met at University level, for example through 'permissive legislation'.	Belgium (Flanders), Denmark, Estonia, Finland, Germany, Latvia, Lithuania, Sweden.
3. National Sporting Federations/ Institutes as Intermediary	There is an established system of recognised channels for sporting advocates (usually national governing bodies or national institutes of sport) to act on behalf of the student to negotiate flexible educational provision with HE	Greece, United Kingdom
4. Laissez Faire: no formal structures	There are no structured measures in place and arrangements rely on individually negotiated agreements where these prove possible.	Austria, Cyprus, Czech Republic, The Netherlands Ireland, Italy, Malta, Slovakia, Slovenia

Aquilina & Henry (2010). *Intern Jour Sport Policy*, 2, 1, 25-47.

Motivation of Student-Athletes Toward Sports and Education



Student-athletes

- "… strongly motivated toward sport but are not interested in academics"
(Simons et al., 1999)

- Stereothypes > negative opinions regarding their academic capacities
(Simons et al., 2007)

- Time devoted to training severely limits time and energy dedicated to study and the fulfillment of academic requirements (Peltier et al., 1999)

Student Athletes' Motivation Toward Sports and Academics Questionnaire (SAMSAQ)

Based on principles and assumptions of expectancy-value, self-efficacy and attribution theories

30 items

6 point scale:
from *very strongly agree* (6) to *very strongly in disagree* (1)

3-Factors Model
Student Athletic Motivation (SAM=eight items),
Career Athletic Motivation (CAM = five items),(Gaston-Gayles, 2005)
Academic Motivation (AM = sixteen items)

The Literature on SAMSAQ

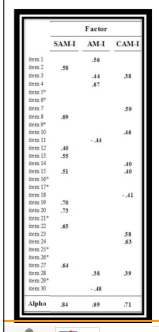
➢**In the USA**
(Willis, 2005; Shultz, 2007; Alexander, 2008; Shuman, 2009;Rasmussen, 2009; Harrison et al., 2010)



➢**In United Arab Emirates**
(Fortes et al., 2010)



Validation of the SAMSAQ for the Italian Student-Athletes



Factor	SAM-I	AM-I	CAM-I
item 1		.56	
item 2	.58		
item 3		.44	.58
item 4		.67	
item 5*			
item 6*			
item 7			.59
item 8	.69		
item 9*			
item 10			.66
item 11		-.44	
item 12	.40		
item 13	.55		
item 14			.48
item 15	.51		.48
item 16*			
item 17*			
item 18			-.41
item 19	.70		
item 20	.75		
item 21*			
item 22	.65		
item 23			.58
item 24			.63
item 25*			
item 26*			
item 27	.64		
item 28		.38	.59
item 29*			
item 30		-.48	
Alpha	.84	.69	.71

Fit Indices of the Italian Model

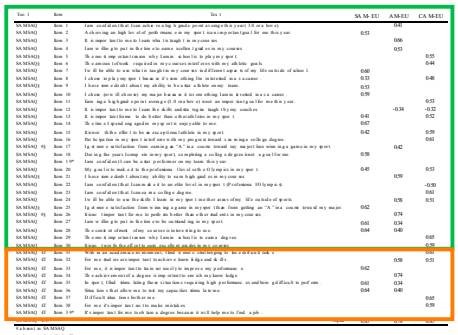
χ^2	χ^2/df	NFI	TLI	CFI	RMSEA	PCLOSE
338.827	1.95	.831	.889	.908	.054	.224

Note. χ^2 = chi-square; χ^2/df= ratio; NFI = normed fit index; TLI = Tucker-Lewis index; CFI = Comparative fit index; RMSEA = root mean square error of approximation; PCLOSE = p of close fit.

- 3 Factors but items grouped differently
- 9 items excluded - 21 items retained
- Acceptable internal consistency and fit of the model
- No differences for motivation scores in relation to gender and competition level

Guidotti et al., in press

SAMSAQ-EU for the European Student-Athletes



Var. 1	Item	Var. 1	SA M-EU	A M-EU	CA M-EU
SA MSAQ	Item 1	I am enrolled in this academic year as a high-ranked student-athlete (i.e., I will receive a scholarship, I will be a member of a national team, I will participate in international competitions, etc.).		0.41	
SA MSAQ	Item 2	Achieving an high level of performance is one important reason why I practice sport.	0.53		
SA MSAQ	Item 3	It is important to me to learn what it is taught in my course activities.		0.66	
SA MSAQ	Item 4	I am willing to put in the time, effort, and sacrifice necessary to excel in my activities.		0.53	
SA MSAQ	Item 5	The main reason I practice sport is because I enjoy it.			0.55
SA MSAQ	Item 6	The time I spend practicing sport is important because it interferes with my academic goals.			0.44
SA MSAQ	Item 7	I will be able to use what I am taught in my course activities in different aspects of my life outside of school.	0.60		
SA MSAQ	Item 8	I choose to play my sport because it is fun, exciting, challenging, and interesting to me.	0.53		0.48
SA MSAQ	Item 9	I have some doubts about my ability to be a top athlete in my sport.	0.53		
SA MSAQ	Item 10	I always strive to excel in my sport because it is important to me to be satisfied with my performance.	0.59		
SA MSAQ	Item 11	Earning a high grade point average (3.0 or better out of 4.0) is an important thing for me to do this year.			0.53
SA MSAQ	Item 12	It is important for me to learn the skills and the logic taught by my coaches.		-0.34	-0.52
SA MSAQ	Item 13	It is important for me to do better than my friends in my sport.	0.41		0.52
SA MSAQ	Item 14	The time I spend engaged in my sport is enjoyable to me.	0.67		
SA MSAQ	Item 15	I strive to be effective in the academic activities in my sport.	0.42		0.59
SA MSAQ	Item 16	For the reasons in my sport is not even worth my participation toward various college degrees.			0.61
SA MSAQ	Item 17	I get more satisfaction from mastering the challenging aspects of my sport than from winning games in my sport.		0.42	
SA MSAQ	Item 18	During the years I compete in my sport, completing a college degree is not as important as practicing for me.	0.58		
SA MSAQ	Item 19*	I am not enrolled in this academic year as a high-ranked student-athlete (i.e., I will not receive a scholarship, I will not be a member of a national team, I will not participate in international competitions, etc.).			
SA MSAQ	Item 20	My goal is to make it to the professional level (Olympics) in my sport.	0.45		0.53
SA MSAQ	Item 21	I have some doubts about my ability to earn high grades in my course activities.		0.59	
SA MSAQ	Item 22	I am enrolled in this academic year as an elite-level athlete in my sport (Professional, Olympic).			-0.50
SA MSAQ	Item 23	I am enrolled in this academic year as a college student.			0.65
SA MSAQ	Item 24	I will be able to use the skills I learn in my sport in other areas of my life outside of sports.		0.58	0.51
SA MSAQ	Item 25	I get more satisfaction from winning games in my sport (that is, getting an "A" in a course toward my major, graduating, etc.)	0.62		
SA MSAQ	Item 26	It is important for me to perform better than others and succeed in my course activities.		0.74	
SA MSAQ	Item 27	I am willing to put in the time, effort, and sacrifice necessary to excel in my academic activities.	0.61	0.34	
SA MSAQ	Item 28	The overall reason why I am enrolled in this academic program is to graduate.	0.64	0.40	
SA MSAQ	Item 29	The main reason why I am in school is to earn a degree.			0.65
SA MSAQ	Item 30	I am enrolled in this academic year as a college student because I want to graduate.			0.59
SA MSAQ - E	Item 31	With my academic performance, I feel I am challenging myself to the fullest of my ability.			0.61
SA MSAQ - E	Item 32	For me, academic performance is more important than sport participation.		0.58	0.53
SA MSAQ - E	Item 33	For me, it is important to me to try to improve my performance in my academic activities.	0.62		
SA MSAQ - E	Item 34	The academic reason why I am enrolled in this academic program is to graduate.		0.74	
SA MSAQ - E	Item 35	In sport, I find it challenging when I have to work very hard to perform well.	0.61	0.34	
SA MSAQ - E	Item 36	When I have a difficult academic task, my cognitive performance is enhanced when I put forth a great deal of effort.	0.64	0.40	
SA MSAQ - E	Item 37	I find it more challenging to do well academically than socially.			0.65
SA MSAQ - E	Item 38	For me, it is important to me to graduate with honors.			0.59
SA MSAQ - E	Item 39*	If I graduate with a degree, I will not be able to get a good job.			

= Item # in SA MSAQ
§ = Item # in SA MSAQ - E
* = Item # in SA MSAQ - EU

Lupo et al., in press)

Motivation toward Academic and Sport Careers of Italian and Slovenian Student-Athletes



Females: n=23, age: 22.1±1.5yrs;

Males: n=75, age: 24.3±2.9yrs



Females: n=103, age: 21.5±3.0yrs;

Males: n=113, age: 21.3±2.3yrs)

Lupo et al., in press)

SAMSAQ-EU: Results

3-factor model (alpha=0.85)

Student Athletic Motivation

SAM-EU → 16 items, alpha=0.85

Academic Motivation

AM-EU → 14 items, alpha=0.78

Career Athletic Motivation

CAM-EU → 18 items, alpha=0.85

Lupo et al., in press)

SAMSAQ-EU: Results

	SAM-EU		AM-EU		CAM-EU	
	ITALIAN	SLOVENIAN	ITALIAN	SLOVENIAN	ITALIAN	SLOVENIAN
Gender						
Female	4.3±1.6	4.4±1.6	4.2±1.6	4.3±1.6	3.9±1.7	4.1±1.6
Male	4.4±1.5	4.4±1.7	4.5±1.4	4.2±1.5	3.8±1.7	4.2±1.6
Age						
≤ 24 years	4.4±1.5	4.4±1.7	4.4±1.6	4.2±1.5	3.8±1.7	4.1±1.6*
>24 years	4.4±1.6	4.6±1.6	4.5±1.5	4.4±1.5	3.8±1.7	4.4±1.6
Type of Sport						
Individual sport	4.3±1.6	4.4±1.7	4.2±1.6*	4.2±1.6	3.8±1.7	4.2±1.6
Team sport	4.5±1.5	4.4±1.6	4.5±1.4	4.3±1.5	3.8±1.7	4.1±1.6

* difference ($p \leq 0.05$) with respect to their compatriot counterparts.

Lupo et al., in press)

Motivation Toward Elite Sport (SAM-EU)

Tool	Item	SAM-EU
SAMSAQ	Item 2	Achieving an high level of performance in my sport is an important goal for me this year.
SAMSAQ	Item 7	I will be able to use what is taught in my courses in different aspects of my life outside of school.
SAMSAQ§	Item 9	I have some doubt about my ability to be a star athlete on my team.
SAMSAQ	Item 10	I chose (or will choose) my major because it is something I am interested in as a career.
SAMSAQ	Item 14	The time I spend engaged in my sport is enjoyable to me.
SAMSAQ	Item 18	During the years I compete in my sport, completing a college degree is not a goal for me.
SAMSAQ§	Item 25	I get more satisfaction from winning a game in my sport than from getting an "A" in a course toward my major.
SAMSAQ	Item 27	I am willing to put in the time to be outstanding in my sport.
SAMSAQ	Item 28	The content of most of my courses is interesting to me.
SAMSAQ -IT	Item 33	For me, it is important to train seriously to improve my performance.
SAMSAQ -IT	Item 35	In sport, I find stimulating those situations requiring high performances and being difficult to perform.
SAMSAQ -IT	Item 36	Situations that allow me to test my capacities stimulate me.
#absent in SAMSAQ		
§absent in SAMSAQ -IT		

Lupo et al., in press)

Motivation Toward Academic Related Tasks (AM-EU)

Tool	Item	AM-EU
SAMSAQ	Item 1	I am confident that I can achieve a high grade point average this year (3.0 or above).
SAMSAQ	Item 3	It is important to me to learn what is taught in my courses.
SAMSAQ	Item 4	I am willing to put in the time to earn excellent grades in my courses.
SAMSAQ	Item 12	It is important to me to learn the skills and strategies taught by my coaches.
SAMSAQ #§	Item 17	I get more satisfaction from earning an "A" in a course toward my major than winning a game in my sport.
SAMSAQ§	Item 21	I have some doubt about my ability to earn high grades in my courses.
SAMSAQ	Item 24	I will be able to use the skills I learn in my sport in other areas of my life outside of sports.
SAMSAQ #§	Item 26	It is not important for me to perform better than other students in my courses.
SAMSAQ -IT	Item 32	For me studies are important to achieve knowledge and skills.
SAMSAQ -IT	Item 34	The achievement of a degree is important to enrich my knowledge.
#absent in SAMSAQ		
§absent in SAMSAQ -IT		

Lupo et al., in press)

Motivation to Pursue a Professional Sport Career (CAM-EU)

Tool	Item	CAM-EU
SAMSAQ§	Item 5	The most important reason why I am in school is to play my sport.
SAMSAQ§	Item 6	The amount of work required in my courses interferes with my athletic goals.
SAMSAQ	Item 8	I chose to play my sport because it's something I'm interested in as a career.
SAMSAQ	Item 11	Earning a high grade point average (3.0 or above) is not an important goal for me this year.
SAMSAQ	Item 13	It is important for me to do better than other athletes in my sport.
SAMSAQ	Item 15	It is worth the effort to be an exceptional athlete in my sport.
SAMSAQ	Item 16	Participation in my sport interferes with my progress toward earning a college degree.
SAMSAQ	Item 20	My goal is to make it to the professional level or the Olympics in my sport.
SAMSAQ	Item 22	I am confident that I can make it to an elite level in my sport (Professional /Olympics).
SAMSAQ	Item 23	I am confident that I can earn a college degree.
SAMSAQ	Item 29	The most important reason why I am in school is to earn a degree.
SAMSAQ	Item 30	It is not worth the effort to earn excellent grades in my courses.
SAMSAQ -IT	Item 31	With in an academia environment, I find it more challenging to face difficult tasks.
SAMSAQ -IT	Item 37	Difficult situations bother me.
SAMSAQ -IT	Item 38	For me it's important not to make mistakes.
#absent in SAMSAQ		
§absent in SAMSAQ -IT		

Lupo et al., in press)

Main Findings

Italian and Slovenian student-athletes are highly motivated toward a dual career, independently from gender.

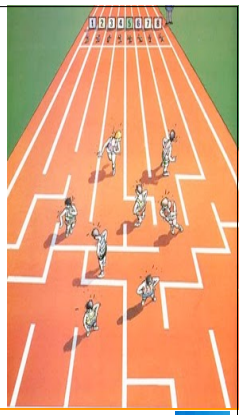
Italian and Slovenian student-athletes are determined to perform both in classroom and on the field.

The higher academic motivation of Italian team sport athletes could be ascribed to the Italian sport system, which strongly relies on military sport organization supporting mainly athletes involved in individual sports.

Slovenian student-athletes showed a higher motivation toward professional sport, especially evident for athletes >24 yr involved in individual sport.

Lupo et al., in press)

Further Directions



Studies including countries with
-"State Centric Regulations",
-"Stete as Faciltator/Sponsor",
-"National Sport Federations as Intermediary"

More European actions on dual-careers

Thanks for Your Attention

