DEVELOPMENT OF THE EUROPEAN BACHELOR PHYSICAL ACTIVITY AND LIFESTYLE COUNSELING PROGRAM (PALC) (510029-LLP-1-2010-1-NL-ERASMUS-ECDSP)

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ABSTRACT

Lifestyle related health problems are a tremendous burden for European societies that demands a shift towards prevention and a professional to guide this process. Therefore a new bachelor program PALC was developed. A consortium of seven universities from the Netherlands, Denmark, Portugal, Italy, Lithuania and Great Britain developed a competence-based curriculum. Six semesters were developed: 1) Basic Program, 2) Health Enhancing Physical Activity (HEPA), 3) Changing Behaviour, 4) Nutrition, 5) Policy & Entrepreneurship and 6) the Final Project. From 2012-2013, Changing Behaviour, HEPA and Nutrition were tested. Meanwhile, Portugal received full accreditation and Lithuania started the accreditation process. From September 2013, the program will start in Groningen/NL, Rio Maior/POR and Kaunas/LIT.

INTRODUCTION

Lifestyle related health problems like obesity, diabetes mellitus type 2, several forms of cancer, heart disease and other adverse conditions are increasing public health problems which cause an enormous burden for the EU society (European Health Report, 2009). From the lifestyle factors of smoking, alcohol consumption, unhealthy

nutrition, stress and physical inactivity, the last one causes 9% (range 5.1-12.5%) of premature mortality or more than 5.3 million of the 57 million deaths that occurred worldwide in 2008 (Lee, Shiroma, Lobelo, Puska, Blair & Katmarzyk, 2012). If physical inactivity decreased by 10% or 25%, more than 533 000 and more than 1.3 million deaths, respectively, could be averted every year. Blair (2009) even described physical inactivity as the biggest public health problem of the 21st century. Despite the negative sides of physical inactivity, a positive point of view is that it is preventable. There is increasing evidence that for effectively battling lifestyle related health problems combined lifestyle interventions show the best results (Loef & Walach, 2012). However, stimulating physical activity and a healthy lifestyle at individual, group and community level is a complex task and a process that should be guided, coached, stimulated by trained and qualified professionals who are trained in applying combined lifestyle interventions. In Europe, as far as we know, no specific education program on the bachelor level that is available to educate and train these 'new' professionals that are very urgently needed for the battle against physical inactivity and other unhealthy behaviours. Therefore a proposal for the development of a new European bachelor program entitled 'Physical Activity and Lifestyle Counselling' was developed and submitted by the Hanze University of Applied Sciences Groningen to the Lifelong Learning Programme, part of the Erasmus and accepted in 2010 (510029-LLP-1-2010-1-NL-ERASMUS-ECDSP). Aim of this multinational project was to develop a new 3-yr competence-based European bachelor program consisting of 6 semesters. The short-term impact of this project will be the deliverance of new professionals specialized in physical activity and lifestyle counselling. The long-term impact of this project is a decrease of physical inactivity and an increase in health related outcomes and quality of life of European citizens.

MANAGEMENT

The management of the project had three levels: 1) a project coordinator from the Hanze University of Applied Sciences Groningen; 2) a steering group consisting of one representative per participating University (Hanze University Groningen/the Netherlands; Inholland University of Applied Sciences Haarlem/the Netherlands; University of Southern Denmark/Denmark; University Worcester/United Kingdom; Escola Superior de Desporto de Rio Maior/Portugal; University Rome Foro Italico/Italy; Lithuanian Academy of Physical Education/Lithuania); 3) external advisory board of experts in the field together with a representative from the European Network of Sport Science Education & Employment (ENSSEE). From October 2010 to 2013 October 2013 6 meetings were held. The first two meetings (October 2010 and May 2011) were used to install the steering group, advisory board, development teams and make preparations for the conceptual guidelines.

DESCRIPTION OF THE OCCUPATION OF PALC

The whole development of PALC was based on the document 'description of the occupation and educational conditions' (Dikkeboer & De Jong, 2010). From the description of the new occupation and professional, key tasks, professional roles competences and learning outcomes were defined. The Physical Activity and Lifestyle Counsellor possesses competencies to deliver professional products aimed at improving the client's health. The professional PALC operates in the areas of primary, secondary and tertiary prevention. The main forms of interventions applied are sport, physical activity and behavioural change. These interventions take place within the settings: recreation/sport, the work setting, and care setting. The physical Activity and Lifestyle Counsellor has the required competences to develop, deliver and evaluate professional products and interventions aimed at improving a client's health across a wide range of lifestyle factors (nutrition, smoking, alcohol consumption, stress) with an emphasis on physical activity and sport.

KEY TASKS OF PALC

Key tasks describe the essence of what the professional does. They are distinctive and meaningful parts of the profession. Each key task in PALC is described in terms of process, roles and responsibilities, complexity, stakeholders, tools, quality of process and results, choices and dilemmas. These descriptions serve as tool for formulating the (professional) competences of PALC.

Key tasks of PALC are that he/she:

- 1. Changes the behaviour of clients within the domain of sport, physical activity, and other lifestyle factors;
- 2. Develops and advises on the basis of research about strategy and policy in sport, physical activity and other lifestyle components;
- 3. Develops positions and supervises sport, physical activity and other lifestyle programs;
- 4. Gathers, develops and disseminates knowledge of sport, physical activity and lifestyle programs, organizations and services;
- 5. Manages the daily business of an organization related to sport, physical activity and lifestyle;
- 6. Creates opportunities and generates resources for sports, physical activity and other lifestyle programs.

PROFESSIONAL ROLES OF PALC

These key tasks lead to the following professional roles of PALC he/she is:

- Instructor/personal coach;
- Advisor/educator/counsellor;
- Developer/researcher;
- Initiator/organizer/entrepreneur/manager.

For being able to fulfil the above-mentioned professional roles, the PALC professional needs to have acquired certain personal & interpersonal competences and instrumental competencies. In the development of PALC we used the definition of Parry (1996) that described a competence as "a cluster or related knowledge, skills, and attitudes that reflects a major portion of one's job (a role or responsibility), that correlates with performance on the job, that can be measured with well-accepted standards, and that can be improved with training and development." Table 1 describes the 8 PALC competencies. A thorough description of each competence was available and per competence learning outcomes were defined. These educational guidelines were used by each development team when developing their semester.

Table 1. The PALC competences per level and dimension.

		Competence		Description
A (inter)personal (30%)		PALC-1	Reflection	Self-management, self-awareness, individual learning
		PALC-2	Professional orientation	Cooperation
				Communication/presentation
				Leadership
				Networking
				International orientation
B Instrumental (70%)	Operational	PALC-3	Assessing	Test, measure, interview
		PALC-4	Changing	Advise, Instruct, stimulate, motivate
			behaviour	Health education, coaching
				Counselling
	Content related	PALC-5	Research	Evaluate, use qualitative and quantitative methods, writing skills, presentation
		PALC-6	Develop &	Design, develop, innovate
			Innovate	
	Strategic level	PALC-7	Entrepreneur-	Project management
			ship	Business development
		PALC-8	Policy making	Policy development and implementation

THE PALC PROGRAM

The total bachelor program (180 credits) consists of 6 semesters. The semesters cover 30 credits each of which 28 credits are structured and 2 are so called elective credits. These electives provide students the opportunity to follow certain study units of free choice at the bachelor level. Each credit represents 25-28 hours of study load including lectures, workshops, internships, tests and self-study time. The whole PALC curriculum is designed in a modular way except for the integrated longitudinal learning lines of (applied) research, personal development, physical activity & teaching didactics and project management. These themes are integrated in a concentric way throughout the whole bachelor program. Per semester study units of 3-5 (or a combination of this amount of credits) are described with a total of 30 credits. For a description of all PALC semesters see below.

- 1. Basic program: In the basic program, the PALC student will be in introduced in the total PALC program. Basic competences, necessary for the following semesters, will be offered. During this semester introductions in teaching didactics & physical activity, public health, applied basic health sciences, behavioural change models, presentation & communication and project management are offered in a theoretical and practical way. The following study units will be offered: Teaching didactics & physical activity (5 credits); Introduction in public health (5 credits); Applied basic health sciences (biology/biochemistry/exercise physiology (5 credits); Behavioural change models (3 credits); Presentation & communication (5 credits); Project management (5 credits); Electives (2 credits).
- 2. Health enhancing physical activity: The steady growth of exercise and physical activity for health industry is continuing as the governments strive to combat the increasing health costs related to an aging population demographic, obesity and hypokinetic diseases such as coronary heart disease and diabetes. This industry requires health professionals with an understanding of safe practice in the assessment and prescription of exercise to work in both health and fitness centres and clinical exercise settings. In this semester the focus will be on the role of physical activity in promoting health. The following study units will be offered: Exercise testing and prescription (5 credits); Exercise for clinical prescription (3 credits); Intervention Mapping (5 credits); Leading Physical Activity I (5 credits); Leading Physical Activity II (10 credits); Electives (2 credits).
- 3. Behavioural change: Physical symptoms are related to life style. Physical activity has profound effects on physical and psychosocial complaints and disability. Transformation from a sedentary state to a more active lifestyle could pay large

dividends to the individual and to society. Despite of increasing knowledge concerning benefits of physical activity, an increasing number of people are finding it difficult to meet the amount of health beneficial physical activity. Behavioural change is therefore needed. Students in this curriculum will be introduced to theories of behavioural change, psychology of change and are taught ways of advising, coaching and counselling to support changing. Changing behaviour is educated by a combination of conceptual courses (theories and models) and practical courses (application). Students will enlarge their knowledge, attitude and skills by a traineeship. The following study units will be offered: Psychology (5 credits); Counselling (6 credits); Behaviour (6 credits); Physical activity (3 credits); Traineeship (8 credits); Electives (2 credits).

- 4. Nutrition: During this semester the student will be taught about nutrition, biochemistry and physical activity, nutrition across lifespan and nutrition and chronic diseases. The student will be practicing how to advise and consult an individual client from a nutrition perspective. Also the student will make a group intervention to promote healthy food and lifestyle. The following study units will be offered: Nutrition 1: Nutrition, biochemistry and Physical Activity; Nutrition across lifespan (5 credits); Individual consultation (10 credits); Nutrition 2: European Nutrition Policy; Nutrition and chronic disease (3 credits); Nutrition Intervention Plan (10 credits); Electives (2 credits).
- Entrepreneurship & policy: The PALC is a professional focusing on enhancing health by counselling and delivering interventions across a wide range of lifestyle factors. For implementing new ways of working within a company, understanding of policy and politics is important, but also for starting up local, regional or national projects and networks. Understanding how organizations function, analysing the organization, getting things done within the organization and with various stakeholders and changing the organization are important learning outcomes. An entrepreneurial PALC professional will be confronted with strategy, finance, marketing, communication, human resources management, operations and events. Changing these aspects not only requires knowledge on how organizations functions but also leadership and an entrepreneurial attitude. The following study units will be offered: Strategy and policy game (3 credits); Business planning and advice (5 credits); Sport and health policy and governance (3 credits); Small business and entrepreneurship (3 credits); Policy implementation (5 credits); Leadership in sport and health (3 credits); Integrated business case and organizational development (3 credits); Final project preparation (3 credits); Electives (credits 2).

6. Final project: The PALC bachelor program is completed by carrying out an independent innovative (final) project for an appropriate client in the field of the physical activity and lifestyle counsellor. The results of this project consist of one or more desired professional products and a research report. Examples of a professional product might be an exercise program, a review, a policy plan, an evidence based intervention, a health protocol, a website and other products wanted by the stakeholders. In the research report the student shows that he/she is able to manage applied research to develop this professional product. The following study units will be offered: Final project (27 credits); Final interview (3 credits).

Some important aspects of the development and implementation of PALC were employability and intercultural exchange. Therefore the semester nutrition and policy & entrepreneurship were labelled as exchange semesters indicating that during this phase of the bachelor student had the opportunity to go abroad. In the long-term the consortium is looking for more possibilities for students to exchange but this will largely depend on the amount of new partner university that are also willing to implement PALC.

IMPLEMENTATION

After finishing the development phase of the PALC program in December 2011, several steps were made to prepare the implementation phase. In February 2012 the concept consortium agreement was discussed thoroughly. From broad experiences from the European master in Health and Physical Activity and the fact that national rules and legislations for bachelor programs and degrees are very strict, the steering group decided to start the implementation phase of PALC on the basis of the principles of a joint program. When students follow and pass the PALC program they will receive a national diploma and a consortium certificate. For the long-term perspective the consortium will further explore the possibilities of working towards a joint degree. Furthermore, agreements were made crucial for the quality assurance of the European bachelor like English language skills of teachers and students, competences, credits distribution etc.

Parallel with the process of working on this consortium agreement, three semesters were pilot tested. From September 2012 to February, the semester changing behaviour was offered by the Hanze University of Applied Sciences Groningen/Groningen. Subsequently, from January 2013 to July 2013 the semesters "Nutrition" and "Health Enhancing Physical Activity" were offered by the University of Inholland/Haarlem and Escola Superior de Desporto de Rio Maior/Rio Maior, respectively. During these pilots exchange of lecturers and students took place. At the moment of writing this paper, the

results of the evaluations of these pilots are analysed. The lessons learned from these pilots will be followed by adjustments of the study units and the way of offering these study units if necessary.

FUTURE OF THE EUROPEAN BACHELOR PAL (PHYSICAL ACTIVITY & LIFESTYLE)

In January 2013, one of the necessary decisions of the steering group meeting was to decide on the name of the European bachelor for the implementation phase. Since in many European countries, "counsellor" is a protected name and function that in many cases has a strong connection with the medical field, the steering group decided to change the name from PALC into PAL for the implementation phase from September 2013.

In October 2013 the official project period will end and the steering group becomes a PAL board. Important tasks for the new PAL board will be: further dissemination of the program, recruit new consortium partners, ensure the quality of the PAL program and develop a vision and perspective on further short- and long-term goals related to PAL.

For the future, three Universities have planned to start with the implementation of the PAL program. The first university that received a full recognition and accreditation for PAL was the Escola Superior de Desporto de Rio Maior/Rio Maior in Portugal. They will start with the implementation of the new European bachelor program in September 2013. The Lithuanian Academy of Physical Education /Kaunas in Lithuania is in the middle of the accreditation process and expects to start with the full program in 2014. The Hanze University of Applied Sciences Groningen/Groningen, the Netherlands, start with the implementation of the full PAL program as an international stream of the already existing Dutch bachelor Sport, Health and Management in September 2013. The other consortium partners will fulfil a role of exchange partner meaning they will send and receive students and lecturers on the basis of one semester or parts of one or more semesters.

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REFERENCES

Blair SN. Physical inactivity: the biggest public health problem of the 21st century. British Journal of Sports Medicine 2009;43:1-2.

Dikkeboer B, de Jong J. Study guide of the European bachelor Physical Activity and Lifestyle Counselling: educational conditions and occupational description 2010.

Lee IM, Shiroma EJ, Lobelo F, Puska P, Blair SN & Katzmarzyk PT. Effect of physical inactivity on major non-communicable diseases worldwide: an analysis of burden of disease and life expectancy. The Lancet 2012;380(9838):219-229.

Loef M & Walach H. The combined effects of healthy lifestyle behaviors on all cause mortality: A systematic review and meta-analysis. Preventive Medicine 2012;55:163-170.

Parry SR. The Quest for Competence. Training Magazine 1996; July: 48-56.

The European Health Report 2009 (http://www.euro.who.int/ data/assets/pdf file/0009/82386/E93103.pdf)