

Identifying and Motivating students who mostly need Physical ACTivity through Physical Education: Launching the European “IMPACT-PE” project

Athanasios Papaioannou, University of Thessaly (symposium chair)

A large number of students do not meet World Health Organization’s recommendations for daily Physical Activity (PA), while most schools in Europe do not provide opportunities for 60 minutes daily PA. Physical Education (PE) is the only setting where inactive students can be identified and encouraged to adopt regular PA. In this symposium we present the IMPACT project which is supported by the European Commission Erasmus+ Sport program. The project has four major aims: (1) providing tools for PE teachers and policy makers to facilitate the identification of inactive students within PE classes, as well as low levels of PA across schools (a monitoring system); (2) providing guidelines and educational material to assist PE teachers in motivating these students to become regularly physically active; (3) creating a European network of PE teachers with expertise in PA promotion who will collaborate with researchers and policy makers to promote PA through PE; and (4) investigating the effectiveness of these outputs with regard to the promotion of students’ PA and well-being. In this symposium presenters address each of these topics and the respective strategies adopted to achieve the goals of the project. They represent a consortium of six universities, four educational authorities and three PE teacher associations including the European Association of Physical Education. The tools and educational material are going to be developed in seven European languages (English, French, German, Greek, Italian, Spanish, Turkish) and will be Open Access to all. Researchers interested in the Erasmus+ Sport IMPACT project and its aims are invited to collaborate with the current project team and discuss ideas for future actions in this area.

Presentations

P1 Title

Overview of the Erasmus+ IMPACT project: A theory-based intervention in physical education to promote youth physical activity

Presenters:

A. Papaioannou¹, A. Carraro², P. Sarrazin³, G. Demirhan⁴, J. Duda⁵, M. Torregrossa⁶

¹ University of Thessaly, Greece

² University of Padua, Italy

³ University Grenoble-Alpes, France

⁴ Hacettepe University, Turkey

⁵ University of Birmingham, UK

⁶ Universitat Autònoma Barcelona, Spain

The Erasmus+ Sport IMPACT project is a theory-based application in Physical Education (PE) aiming to provide assistance to European PE teachers interested in the identification and motivation of students who mostly need Physical Activity (PA). It is a trans-contextual model applying theories of motivation (e.g., Ames, 1992; Ajzen, 1991; Bandura, 1986; Carver & Scheier, 1981; Gollwitzer, 1999; Nicholls, 1984; Ryan & Deci, 2017) in PE to promote PA in after-school activities (e.g., Hagger & Chatzisarantis, 2015). At the center of the model is the PA monitoring process, which is accomplished through an easy-to-use e-tool providing feedback to both PE teachers and students. This feedback is then used to set goals for PA promotion. Goal-setting takes place in a non-controlling, autonomous, mastery-oriented and caring PE environment. Through webinars researchers explain how to use the IMPACT outputs and provide ideas to PE teachers how to help students set PA goals within the aforementioned motivational climate. A network of European researchers and PE teachers will be developed to adjust this program to the needs of European PE teachers and to promote it throughout Europe. IMPACT researchers will develop invariant measures across 6 European countries aiming to assess PA and its determinants as well as motivational outcomes in PE. They will also investigate the effectiveness of this program across four European countries (France, Greece, Italy, Turkey) involving more than 10000 students in this intervention, using the aforementioned instruments and objective measurements of PA. Based on the findings a European roadmap will be proposed how to promote PA through PE.

P2 Title

Identifying inactive and low motivated students in Physical Education: Development of measures in 7 European languages

Presenters: P. Sarrazin¹, C. Krommidas², E. Gobbi³, Y. Ramis⁴, P. Appleton⁵, V. Bouglas², Aina Chalabaev¹
A. Papaioannou²

¹ University Grenoble-Alpes, France

² University of Thessaly, Greece

³ University of Padua, Italy

⁴ Universitat Autònoma Barcelona, Spain

⁵ University of Birmingham, UK

Following a review of existing measures of Physical Activity (PA) and its motivational determinants, we selected the following instruments for pilot testing and initial investigation of their invariance across European countries. In spring 2018 we concluded pilot studies across 6 European countries including approximately 250-350 adolescent students in each country. PA was captured via two measures, the 2-item scale of Prochaska, Sallis and Long (2001) and the Youth Activity Profile (Saint-Maurice & Welk, 2015). Proximal determinants of PA included intentions, perceived behavioral control (Ajzen, 2002), action planning (Sniehotta, Schwarzer, Scholz, & Schüz, 2005), self-monitoring of PA (Sniehotta, Scholz, & Schwarzer, 2005; Theodosiou & Papaioannou, 2006) and self-efficacy (Dishman, Jackson, & Bray, 2014). Distal determinants of PA included attitudes towards exercise (Ajzen, 2002), behavioral regulations (Markland & Tobin, 2004), basic needs satisfaction (Quested, et al., 2013), achievement goals in PE (Duda & Nicholls, 1992), teacher-initiated motivational climate in PE (Papaioannou, Kosmidou, Tsigilis & Milosis, 2007) and social support (Dewar, Lubans, Morgan, & Plotnikoff, 2013). We also assessed motivational outcomes in PE, including positive-negative affect in PE (Motl, et al., 2001) and enjoyment (McAuley, Duncan, & Tammen, 1989) and a global well-being index, that is, subjective vitality (Ryan & Frederick, 1997). Double translation has been adopted in countries where these scales had not been used in the past. Results supported their reliability and construct validity of these measures across all countries. For these tools we expect to establish measurement invariance across the 6 countries using larger samples ($N > 2000$ in each country) of students aged 12-17. These measures will be also used in an intervention across 4 countries aiming to promote PA.

P3 Title

Developing educational material for the training of in-service PE teachers in European countries

Presenters: A. Carraro¹, I. Sympas², D. Tessier³, G. Erturan-Ilker^{4,5}, N. Lovecchio⁶, N. Digelidis²

¹ University of Padua, Italy

² University of Thessaly, Greece

³ University Grenoble-Alpes, France

⁴ Pamukkale University, Turkey

⁵ Hacettepe University, Turkey

⁶ Italian Confederation of Provincial Associations of Physical Education Teachers, CAPDI-LSM, Italy

Central role in the present project has the development of an educational material that will be integrated into the physical education (PE) curricula of the participating countries. The educational material will be developed in order to help PE teachers participating in the IMPACT project to identify and motivate the students who mostly need physical activity (PA). The educational material will be delivered, through webinars, to a minimum number of 200 PE teachers from four countries (France, Greece, Italy, and Turkey). This educational material and training will be theory-based, emphasizing on pupils' personal progress in relation to PA and sport adoption. Main topics and themes that will be developed in the educational material will include but not limited to: i) Importance of daily PA and self-monitoring, ii) Setting goals for PA with autonomy and not controlling, iii) Setting personally challenging/mastery and not normative goals, iv) Developing self-efficacy to promote PA, v) Caring for others and setting goals to support others. Webinars will focus not only on the delivery of knowledge but also on the interaction among PE teachers during the webinars. This online educational material could be used for the professional development of European PE teachers.

P4 Title

The role of physical education teachers and policy makers in the identification and motivation of inactive children

C. Scheuer¹, E. Gortsila², M. Holzweg³, H. Ozdurak⁴, J. Louvet^{5,6}, B. Cremonesi¹, M. Langousi⁷, L. Eid⁸

¹ European Physical Education Association

² Greek Institute of Educational Policy, Greece

³ German Federation of Physical Education Teacher, DSLV, Germany

⁴ Ankara Directorate of National Education, Turkey

⁵ Regional Education Authority of Grenoble, France

⁶ University Grenoble-Alpes, France

⁷ Greek Ministry of Education, Research & Religious Affairs, Greece

⁸ Italian Confederation of Provincial Associations of Physical Education Teachers, CAPDI-LSM, Italy

Background and purpose

In the frame of the IMPACT-project, a European network of Physical Education (PE) teachers with expertise in physical activity (PA) promotion will collaborate with researchers and policy makers to promote PA through PE. This European network is headed by EUPEA (European Physical Education Association), which is the umbrella association for PE teacher associations in Europe.

The role of PE teachers in the identification and motivation of inactive children is essential, as PE is generally a mandatory school subject in this age group and all children from all social backgrounds can be reached in school. Professionally educated PE teachers provide high quality PE and a great variety of games and sport can be offered and learned during PE in school.

Furthermore, it is important that inactive children receive support from significant others, like e.g. PE teachers. The role of the PE teacher as a role model is essential, as negative experiences in PE might occur as well (e.g. preference for boys' interests, unstructured teaching, insults by teachers, ...).

Conclusions and implications

This said, several questions with regard to the role of PE teachers can be raised:

- Is there mutual understanding and do PE teachers understand young inactive people?
- Are all PE teachers well prepared to motivate young inactive people, regardless of their background, for an active lifestyle?
- How can the gap between recommendations or science and the professional practice of PE teachers be closed?

One objective of the IMPACT project will be to find answers to these questions. Furthermore, in order to make a strong impact possible, policy-makers will take a key role, as they will have to provide the framework for quality PE with regard to the status of PE as well as the work conditions for PE teachers to implement proactive measures improving the motivation of children to be more active.