

Webinar 1. IMPACT project: The importance of physical activity and school physical education

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Introduction to Webinar 1

- Good afternoon. My name is [your name and affiliation here]
- I would like to welcome you to the IMPACT project. Our purpose today is to introduce you to the first Webinar of the IMPACT project.

An important step for proceeding this webinar

- Please write your full name in the right side of the chat room
- During today's webinar we will see two educational videos in YouTube.
- We will watch now the first video on YouTube and then we will return back to this presentation/BBB.

Please click on this link to see the following video & then return to this presentation

- <https://youtu.be/PUrLrPoeme0>

Project Partners: Six European Universities



UNIVERSITÀ
DEGLI STUDI
DI PADOVA



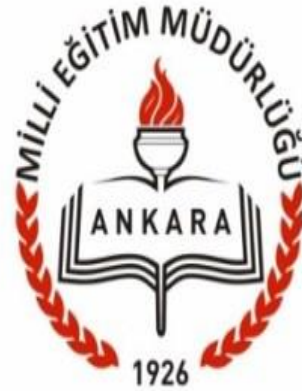
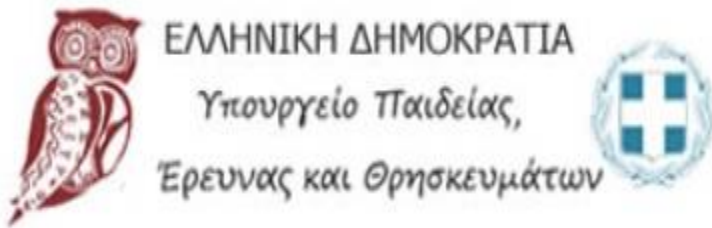
Universitat Autònoma
de Barcelona



UNIVERSITY OF
BIRMINGHAM



Project partners: Two European Ministries of Education and one Policy Institution



Project Partners: Three European Physical Education Associations



IMPACT project aims

- Promote children's and adolescent's participation in 60-minutes of moderate - to vigorous - intensity Physical Activities (PA) daily
- Raise awareness of the value of physical education
- Motivate young people to take part in physical activities throughout their lives
- Develop educational materials for teachers
- Create a network of PE teachers and researchers

Overview of topics to discuss today

- How much exercise or physical activity children need?
 - Why do we need physical activity?
 - What are the benefits of exercise?
 - Do you know how much your students meet the current physical activity recommendations?
- Why physical education is important?
 - How physical education can contribute to help students meet WHO's recommendation?
 - Can we promote physical activity for our students outside of school?

What do you think?

Do you know how many minutes per day each student needs to participate in moderate to vigorous physical activity?

- A. 20'
- B. 30'
- C. 60'
- D. I'm not sure; I don't know

Do you know how many days per week each student needs to participate in moderate to vigorous physical activity?

- A. 3 days
- B. 5 days
- C. 7 days
- D. I'm not sure; I don't know

Can we promote out-of-school physical activity through PE?

- A. YES
- B. NO
- C. I'm not sure; I don't know

Now we will watch the second video on YouTube and then we will return back to the BBB.

Note: It will open in a different tab in your browser

Why physical education is important?

- Students...
 - Have opportunities to be active
 - Can improve physical fitness
 - Can develop their motor skills
 - Develop self-discipline
 - Can develop positive relationships
 - Learn new things and connect knowledge with other subjects (e.g. diet and nutrition, dealing with health issues etc.)

Why physical education is important?

- Important for students' healthy growth and development
- Important for students' mental health (e.g. exercise relieves stress and anxiety)
- Meet with a variety of physical activities and adopt physical activity as a lifetime habit

One more thing:
Physical education is
fun!

Fun is a major
determinant of
physical activity!

What is physical activity?

“Physical activity is defined as any bodily movement produced by skeletal muscles that results in energy expenditure”.

Why do we need physical activity?

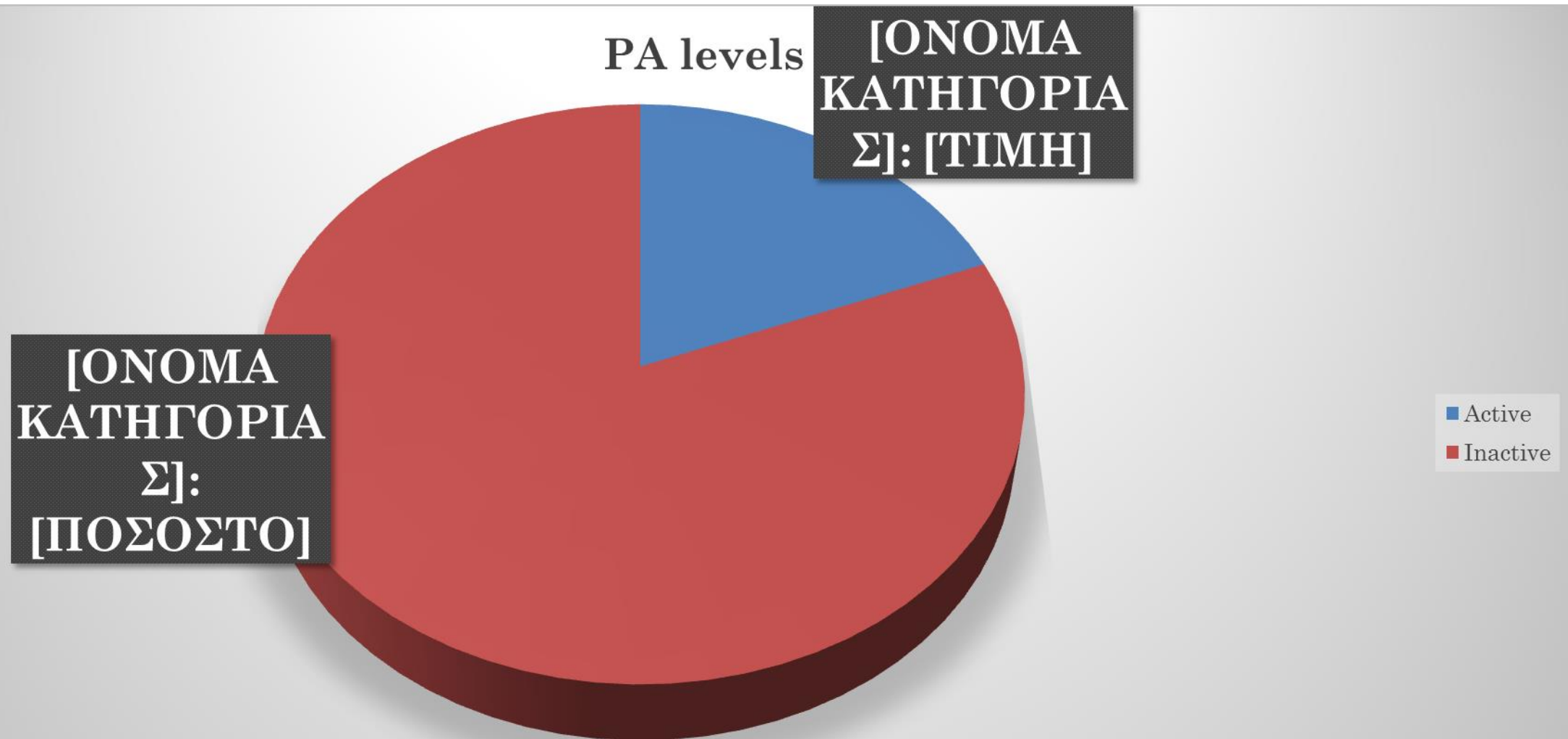
- Improves cognition on the day it is performed
- Improves mood and boosts energy
- Strengthen your bones and muscles
- Promotes better sleep
- Improves your ability with daily activities
- Helps in maintaining our weight in a healthy range
- Reduces the risk of a variety of health conditions and diseases (e.g. risk of cardiovascular disease, type 2 diabetes, a number of cancers, blood pressure etc.)
- Increases chances of living longer and better

Source: ACSM, 2018

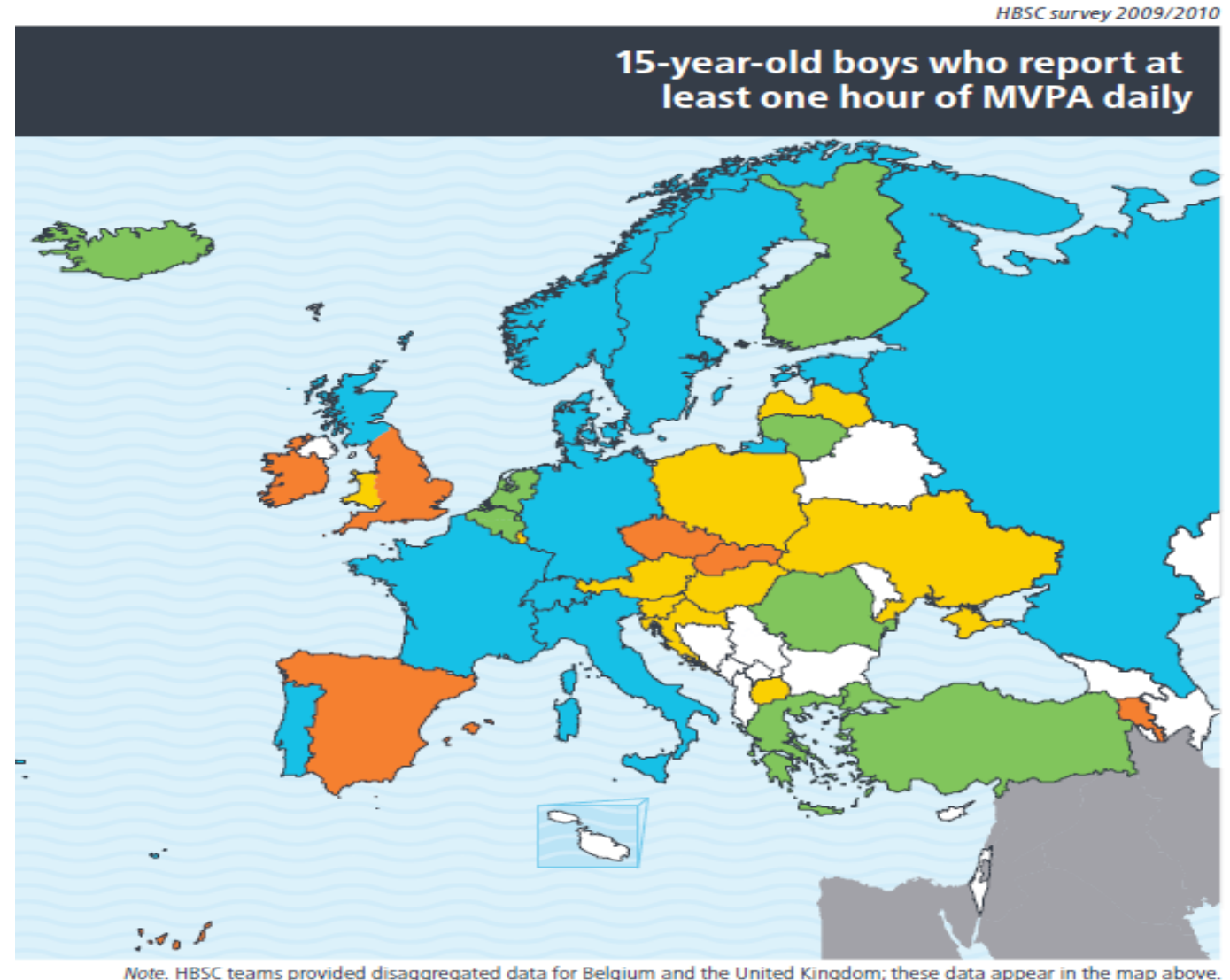
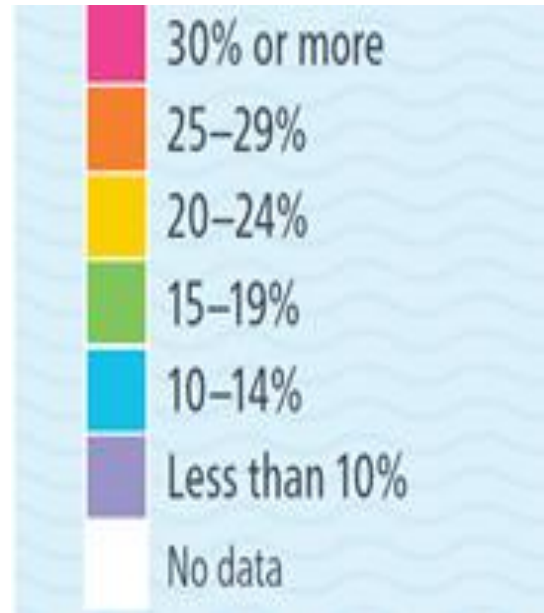
WHO's Recommended PA levels

- Children and youth aged 5–17 should accumulate at least **60 minutes of moderate - to vigorous - intensity physical activity daily.**
- Most of the daily PA should be **aerobic.**
- PA that strengthen muscle and bone should be included in their exercise program for at least **3 times per week.**

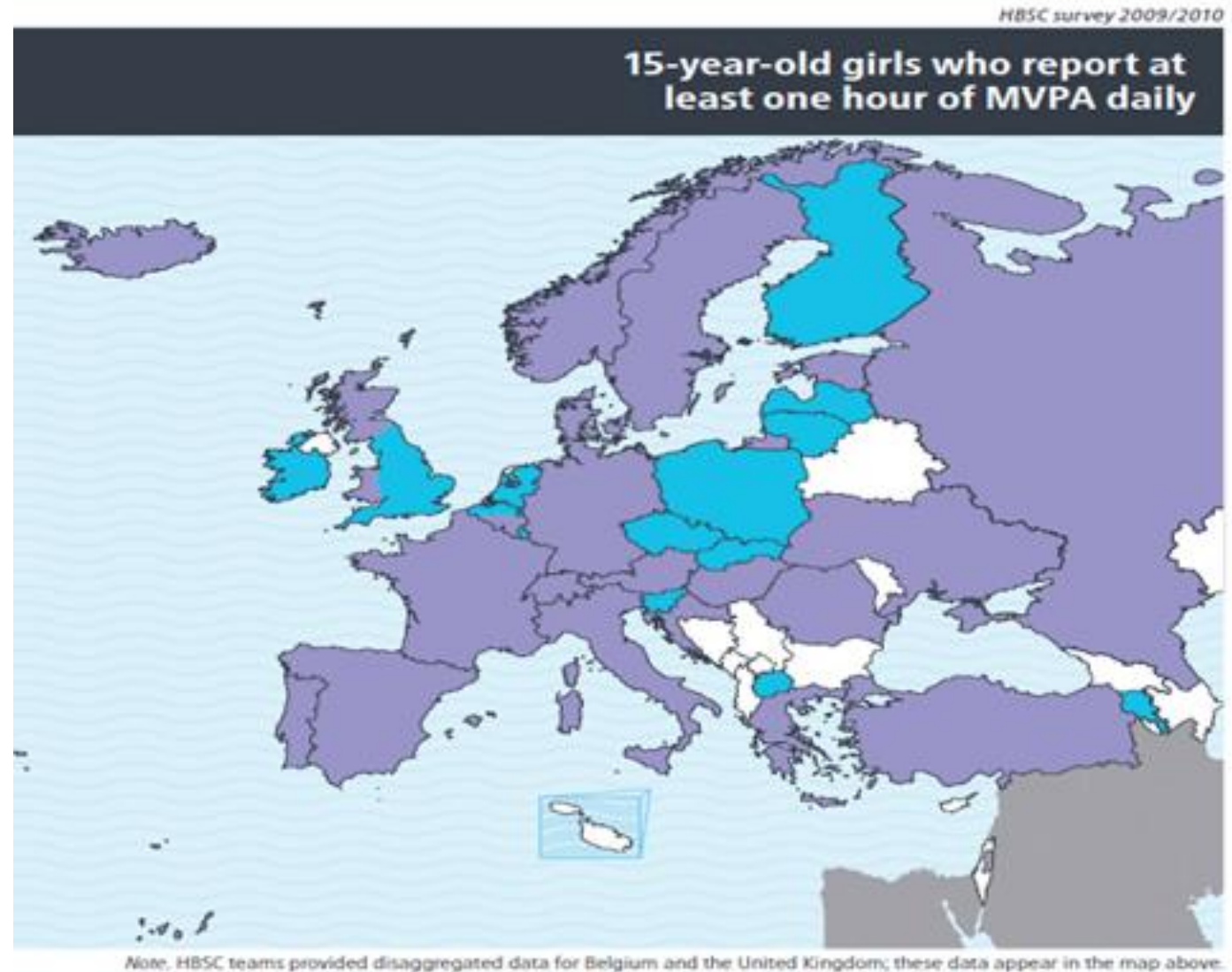
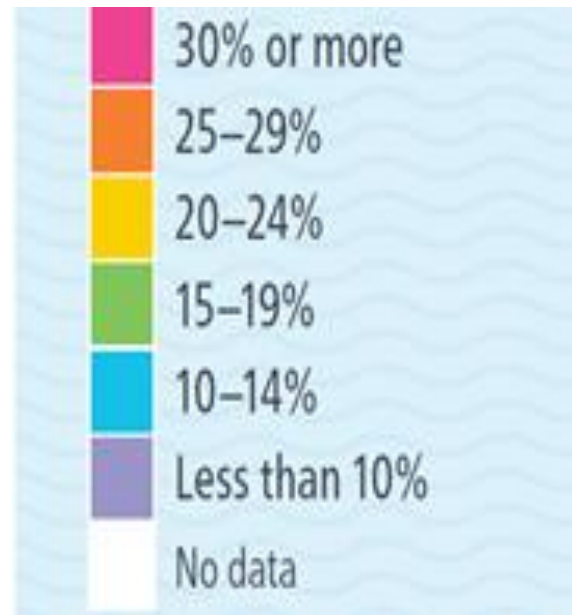
Rates of PA among Children & Adolescents



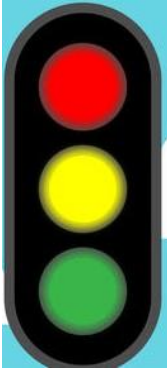
European boys' PA levels



European girls' PA levels



IMPACT preliminary findings from a sample N= 2079
students aged 12-16 from 6 countries (FR, GR, IT, TU, SP, UK)



Days of 60 minutes Physical Activity	BOYS	GIRLS	TOTAL
Less than 3 Days/week	31 %	46 %	39% (N= 799)
3-4.5 Days/week	38 %	35 %	36% (N= 757)
5-7 Days/week	31 %	19 %	25% (N= 523)

Almost 1 every 2 girls, and 1 every 3 boys are characterized as
INACTIVE

Just 1 every 5 girls and 1 every 3 boys can be characterized as ACTIVE

How physical education can contribute to increase students' participation in physical activity?

Enables children and youth to become physically literate through the development of attitudes, behaviors and skills



The importance of physical literacy

- Physical literacy is the foundation of physical education, it is not a programme but an outcome of any structured physical education provision, which is achieved more readily if learners encounter a range of age and stage appropriate opportunities.

What does a physically literate person look like?

- Maintain **motivation** and **confidence** in adopting physical activity as an integral part of life
 - Appreciate the intrinsic value of physical activity, as well as its contribution to **health** and **well-being**,
 - Related to others, demonstrate sensitivity in their verbal and non-verbal communication, and develop empathetic **relationships**

What does a physically literate person look like?

- Demonstrates **physical competence** that enables an individual to participate in a wide range of physical activities and settings
- **Knows and understands** how to be physically active in a variety of physical environments
- **Engages** in physical activities for life

Becoming physically literate is not an automatic process

- An action plan needed to be planned and implemented.
- PE teachers need to be appropriately educated

The challenges of PE in contributing to students' physical activity

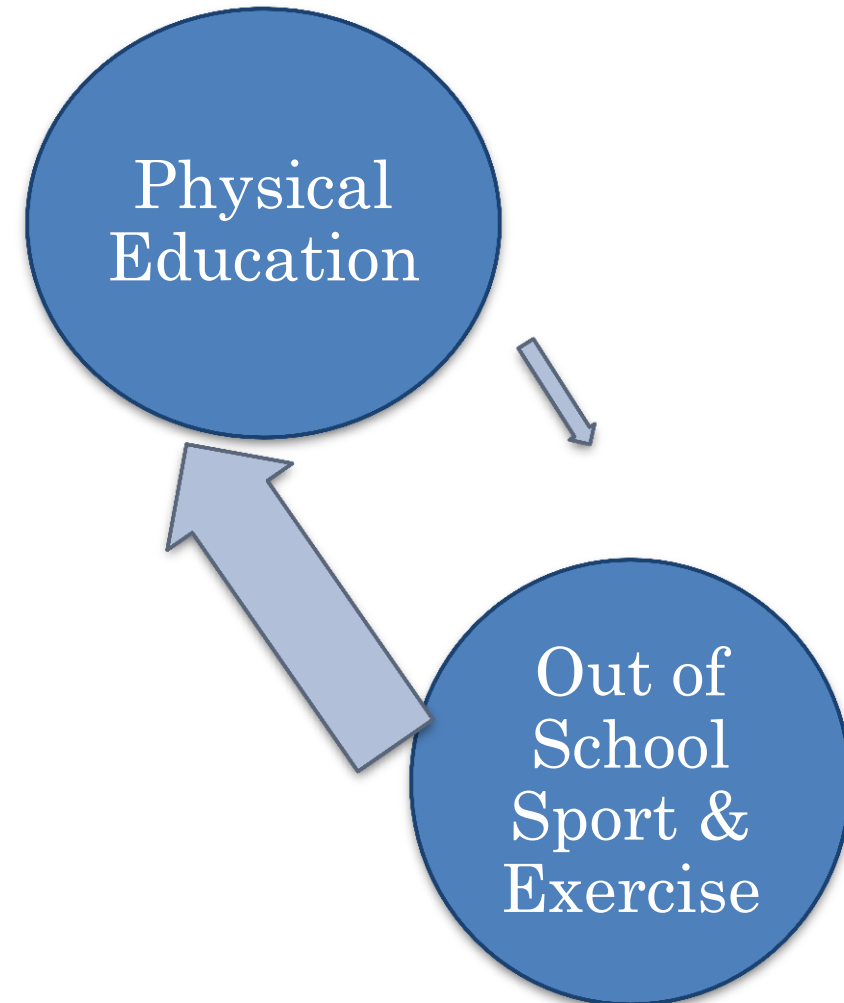
- The PE lesson in most countries is limited to 2 – 3 hours per week
- Thus the PE lesson can not help students to meet World Health Organization's recommendation

The potential of PE in promoting students' physical activity

- The limited time allocated to PE in school makes more important the promotion of PA out of school
- PE teachers can plan and deliver a lesson that may urge students to participate in PA out of school (World Health Organization, 2007).

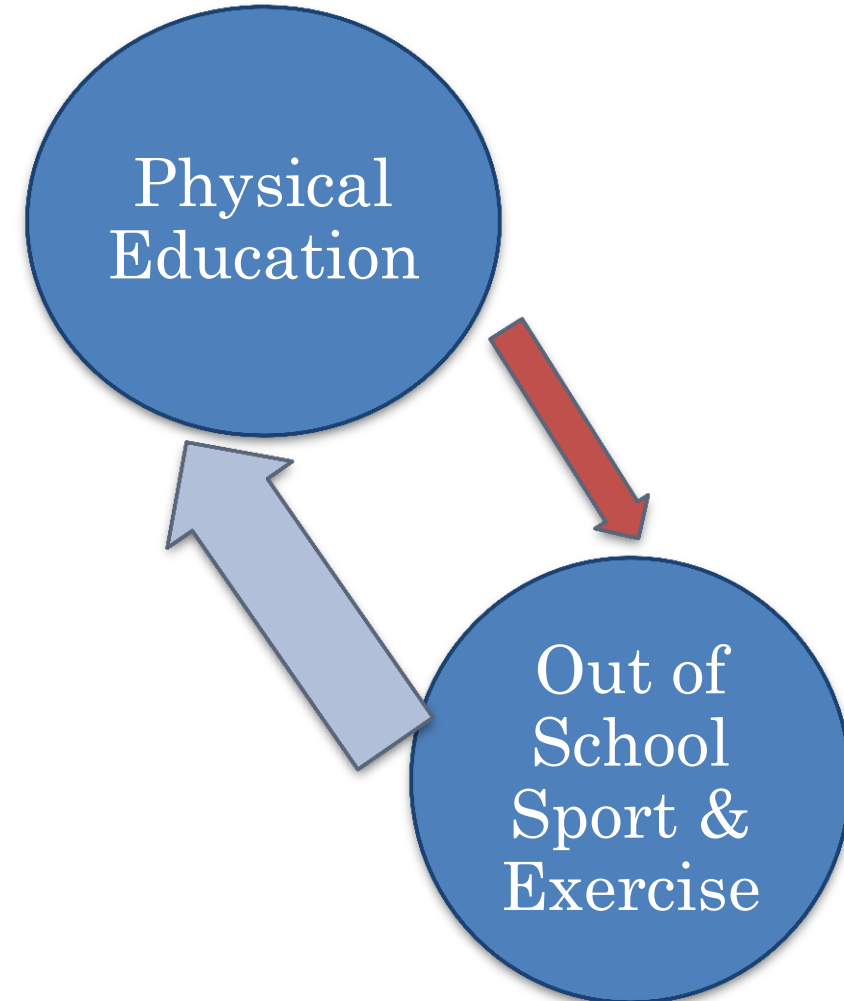
Motivation in School Physical Education is connected with participation Out-of-School Sport & Exercise

Unfortunately,
participation in out-of-school Sport and
Exercise has **much bigger** impact on
Motivation in School Physical Education
than the vice-versa



In the IMPACT project we want to make a small change on this

By **increasing the impact** of Motivation in School Physical Education on Participation in out-of-school Sport and Exercise



How to increase the impact of motivation in Physical Education

On pupils' participation in out-of-
school Physical Activity



A motivational process

School-PE class

Teacher

Class environment

Class Motivational Climate

Teaching that supports students' needs for

- Competence/Mastery
- Autonomy
- Relatedness/support

Student

Internalization of motives & formation of goal orientations

Self-Determined
reasons & goals for
physical activity –
Intrinsic
Motivation
Improvement goals

Enjoyment in Physical Education
Happiness-Wellness



A motivational process



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Enjoyment in Physical Education
Happiness-Wellness

Out-of-School Physical Activity

Specification of intentions/goals
Formation of Confidence

**Self-Monitoring
Intention/Goal-
setting to be
active**

**Confidence to
participate in
extracurricular
physical activity**

**Behavior
Extracurricular
Physical
Activity**

Country & Cultural environment

Governmental & regional policies (including School curricula)

Environment

After-School Physical Activity (PA) Environment

(sport, exercise, dance, etc.)

Determined by

Facilitators & Barriers, e.g. **distance of clubs/gyms from school**
openness of school facilities for after-school sport & PA
Local authorities' policies related to PA, Sport & Exercise industry,

Family affluence, low cost programs for low SES-pupils & migrants

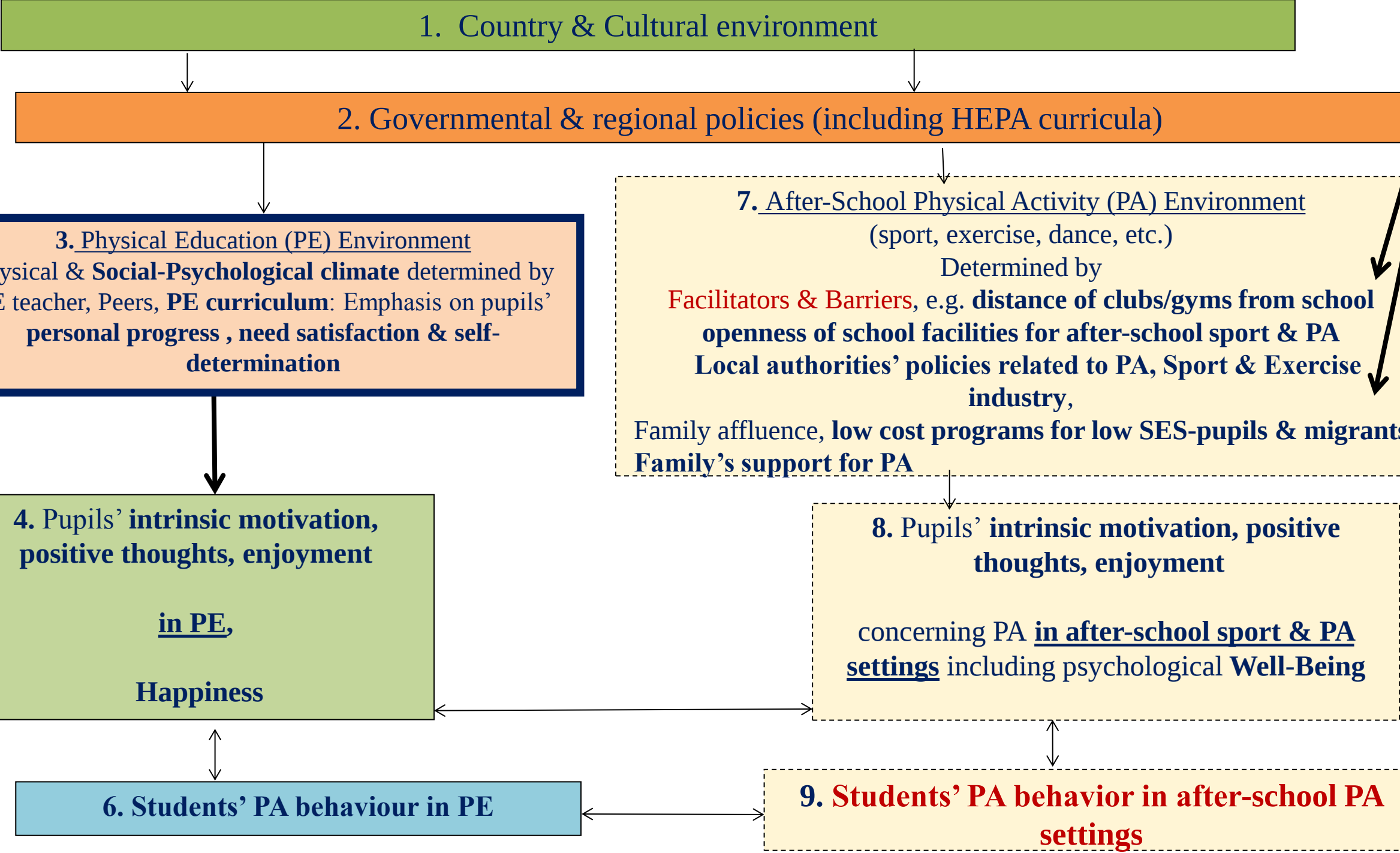
Family's support for PA

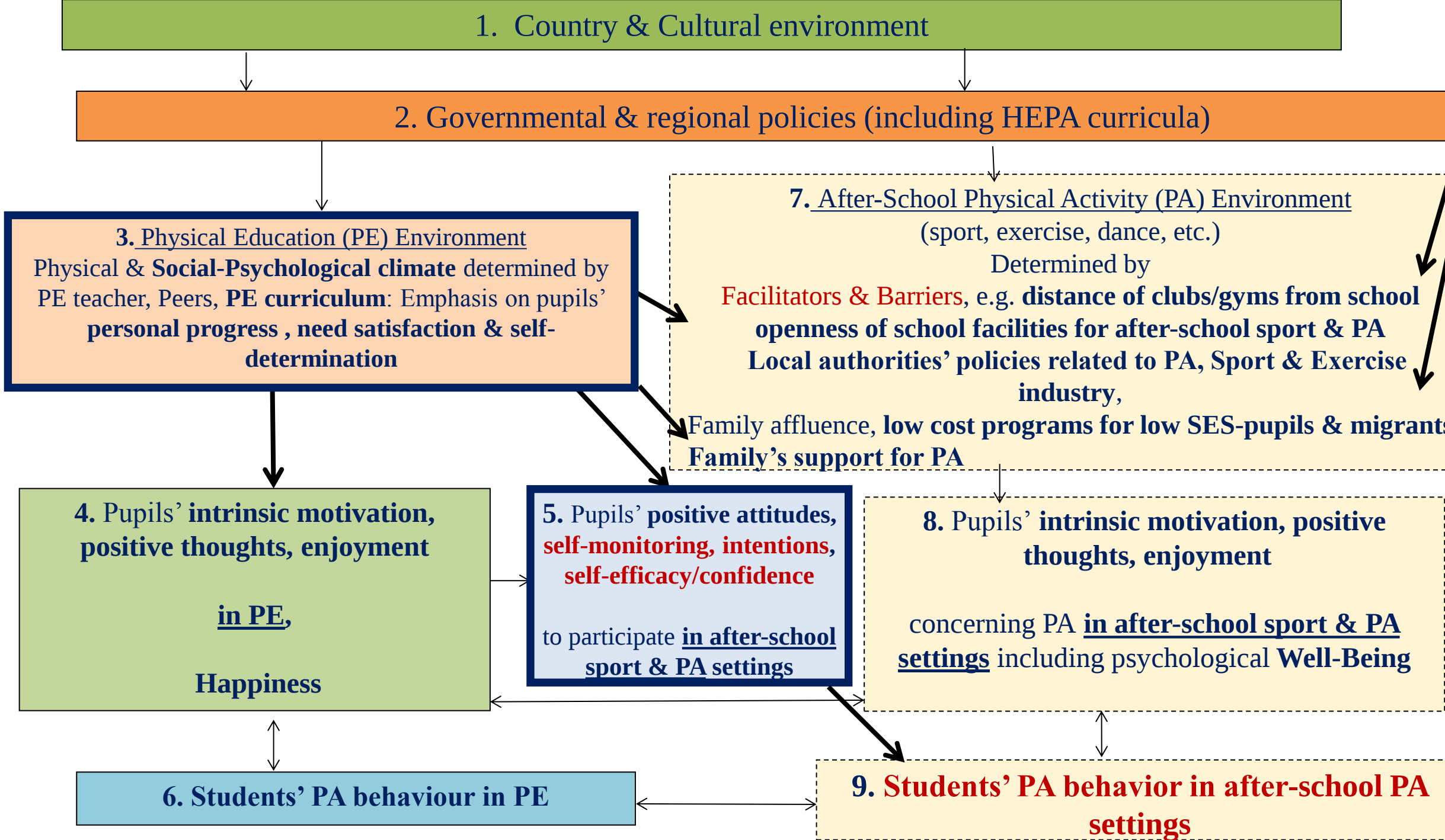
Pupil

Pupils' **intrinsic motivation, positive thoughts, enjoyment**

concerning PA in after-school sport & PA settings
including psychological **Well-Being**

Students' PA behavior in after-school PA settings





School is the ideal
setting for promoting
students' health

(World Health Organization, 2007)

So, what teachers can
do in order to
promote out-of-school
physical activity?

The IMPACT methodology

What can we do?

PE teachers can help students:

- Learn how to exercise properly
- Experiences a variety of physical activities
- Learn basic principles of exercise and adjust under different conditions
- Learn how to collaborate with others in order to play games and enjoy physical activity

What can we do?

PE teacher can help students learn how to:

- Evaluate their level of fitness
- Measure their progress
- Set goals for themselves and become self-regulated in physical activity

The IMPACT
methodology: Strategies
that may have an
IMPACT on students'
physical activity

The IMPACT methodology

Monitoring of
physical
activity
levels

PE teachers
receive reports
about students
who mostly
need physical
activity

PE teachers
apply specific
strategies to
promote
students' out-of-
school physical
activity

Strategies that may have an IMPACT on students' physical activity

- Self-monitoring
- Goal setting
- Action planning

Please click on this link to see the following video & then return to this presentation

- <https://youtu.be/cvjd4BS-RBY>

Self-monitoring our physical activity levels

Emphasis on personal improvement

How to monitor your physical activity?

- Self-evaluate yourself: Can you recall the amount of physical activity that you have done last seven days?

Over the past 7 days, on how many days were you physically active for a total of at least 60 minutes per day?

☐	☐	☐	☐	☐	☐	☐	☐
0 days	1	2	3	4	5	6	7 days

Self-monitoring through the use of diary

Record your participation for more that 10 minutes in vigorous to moderate PA next week

Name_____

Date____/____/____

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Morning							
Afternoon							
Evening							

Evaluating the
intensity of physical
activity based on
heart-rate

Vigorous-intensity physical activity - feel it really hard

The target heart rate should be 70% to 85% of our maximum heart rate.

- For example, for a 15-year-old student, the estimated maximum age-related heart rate would be calculated as $220 - 15 \text{ years} = 205$ beats per minute (bpm).
- The 70% and 85% levels would be:
- 70% level: $205 \times 0.70 = 143$ bpm, and
- 85% level: $205 \times 0.85 = 174$ bpm

Moderate-intensity physical activity – feel it hard but comfortable

The target heart rate should be 50% to 70% of our maximum heart rate.

- An estimate of a student's maximum age-related heart rate can be obtained by subtracting the student's age from 220.
- For example, for a 15-year-old student, the estimated maximum age-related heart rate would be calculated as $220 - 15 \text{ years} = 205 \text{ beats per minute (bpm)}$.
- The 50% and 70% levels would be:
 - 50% level: $205 \times 0.50 = 103 \text{ bpm}$, and
 - 70% level: $205 \times 0.70 = 144 \text{ bpm}$

Moderate and vigorous physical activities examples

Physical activities with **moderate** intensity

- Walking briskly (3 miles per hour or faster, but not race-walking)
- Gymnastics
- Recreational swimming
- Bicycling slower than 10 miles per hour in level terrain
- Tennis (doubles)

Physical activities with **vigorous** intensity

- Race walking, jogging, or running
- Playing football, basketball and team sports in general
- Swimming laps
- Tennis (singles)
- Aerobic dancing
- Bicycling 10 miles per hour or faster
- Jumping rope
- Hiking uphill or with a heavy backpack

Try it with your students!

Tasks and ideas to implement for the
next 2 weeks

Task 1: Knowledge and understanding

Discuss with your students about:

- WHO's PA recommendations
- What is moderate and vigorous PA with examples
- How to measure their pulse and be able to distinguish between moderate and vigorous PA based on their heart rate
- The benefits of PA

Task 2: Using the “MY IMPACT Journal” to self-monitor physical activity

- Ask students to recall their PA during the previous week using a diary (paper and pencil)
- Motivate your students to record their participation in physical activities by using the weekly diary for the coming week
- After one week, discuss and help them to evaluate physical activities that correspond to moderate and vigorous physical activity accordingly

Self-monitoring through the use of diary

Record your participation for more that 10 minutes in moderate to vigorous PA next week

Name_____

Date____/____/____

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Morning							
Afternoon							
Evening							

Task 3: Evaluating the level of fitness

Propose your students to select 2-3 from the following PA and help them to evaluate themselves:

- **6-minute walk or run test** (<https://www.topendsports.com/testing/tests/walk-6min.htm>) or (<https://www.topendsports.com/testing/tests/6-minute-run.htm>)
- **Shuttle run** (<https://www.topendsports.com/testing/tests/20mshuttle.htm>)
- **Plank test** (<https://www.topendsports.com/testing/tests/plank.htm>)
- **Sit ups** (<https://www.topendsports.com/testing/tests/sit-up-30seconds.htm>)
- **Push ups** (<https://www.topendsports.com/testing/tests/home-pushup.htm>)
- **Sit and reach** (<https://www.topendsports.com/testing/tests/sit-and-reach.htm>)

Evaluating our fitness levels

Test	Your performance
6-minute walk or run test	
Plank test	
Sit ups	
Push ups	
Sit and reach	

Fitness levels and setting personal goals

Test	Your performance	Set a goal to achieve in the next 2 weeks
6-minute walk or run test		
Plank test		
Sit ups		
Push ups		
Sit and reach		

One last word: Go social if you can!

- Remember the parents! You can organize an informational event to discuss with parents about WHO recommendations and the importance of being active
- E.g., Organize a simple PA event for parents and students together or send an information sheet about WHO's recommendation or create a Facebook group and disseminate information related to physical activity and health

The content of the forthcoming webinars

The next webinars will be about:

- Webinar 2: Fun and motivation in Physical Education and physical activity
- Webinar 3: Self-regulation strategies to increase physical activity
- Webinar 4: An example of an application to promote physical activity through Physical Education
- Webinar 5: Overview and future plans of the network between teachers and researchers

Discussion and exchange of ideas to implement

Discuss in the Big Blue Button with the members of your team the following topics

Group discussion: Based on the suggestions and topics we discussed today...

- How will you plan your teaching, during the following weeks, in order to facilitate students' involvement in PA? For example...
 - What initiatives are you planning to take?
 - How can you emphasize the benefits of exercise with your students?
 - How can you communicate WHO's guidelines for physical activity to your students?
 - How will you use self-monitoring with your students?

Any other ideas or
anything to discuss?

Ευχαριστούμε πολύ!
Merci beaucoup!
Grazie mille!
Çok teşekkür ederim!

**THANK
YOU
VERY
MUCH!**