Identifying and Motivating youth who mostly need Physical ACTivity (IMPACT)

Malia, Crete Oct 2019

Welcome to Crete, Greece !

Athanasios Papaioannou, university of Thessaly

IMPACT project aims

 Develop tools for European PE teachers & policy makers that will help them "Identify and Motivate youth who mostly need Physical ACTivity" (IMPACT):

1. Invariant IMPACT-related measures across 6 countries.

2. Educational material for PE teachers (currently in 5 languages).

3. IMPACTPE website incorporating all these tools.

 An example of good practice applying the above 3 tools across 4 European countries (FR, GR, IT, TU).

The European Social network in The Identification and Motivation of inAcTivE children (ESTIMATE)

A Roadmap document for European policy makers to promote PA to European youth who mostly need PA through PE.

Global Strategy on Diet, Physical Activity and Health

Diet, Physical Activity & Health

Global strategy development

Childhood overweight & obesity

Documents & publications

Related links

Physical activity and young people

Recommended levels of physical activity for children aged 5 - 17 years

For children and young people, physical activity includes play, games, sports, transportation, chores, recreation, physical education, or planned exercise, in the context of family, school, and community activities.

Photo: P. Desloovere

In order to improve cardiorespiratory and muscular fitness, bone health, and cardiovascular and metabolic health biomarkers:

1. Children and youth aged 5–17 should accumulate at least 60 minutes of moderate- to vigorous-intensity physical activity daily.
2. Amounts of physical activity greater than 60 minutes provide additional health benefits.
3. Most of the daily physical activity should be aerobic. Vigorous-intensity activities should be incorporated, including those that strengthen muscle and bone*, at least 3 times per week.

Related links

- Information sheet: global recommendations on physical activity for health 18 - 64 years old
- Information sheet: global recommendations on physical activity for health 65 years and above

http://www.who.int/dietphysicalactivity/factsheet_young_people/en/

But very few kids meet the WHO goal

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Percentage of children physically active for ≥ 60 minutes daily measured with questionnaires

Boys   Girls

■ Jimenez-Pavon et al. (2012) [29] ENERGY   ■ HBSC report (2016) [46]
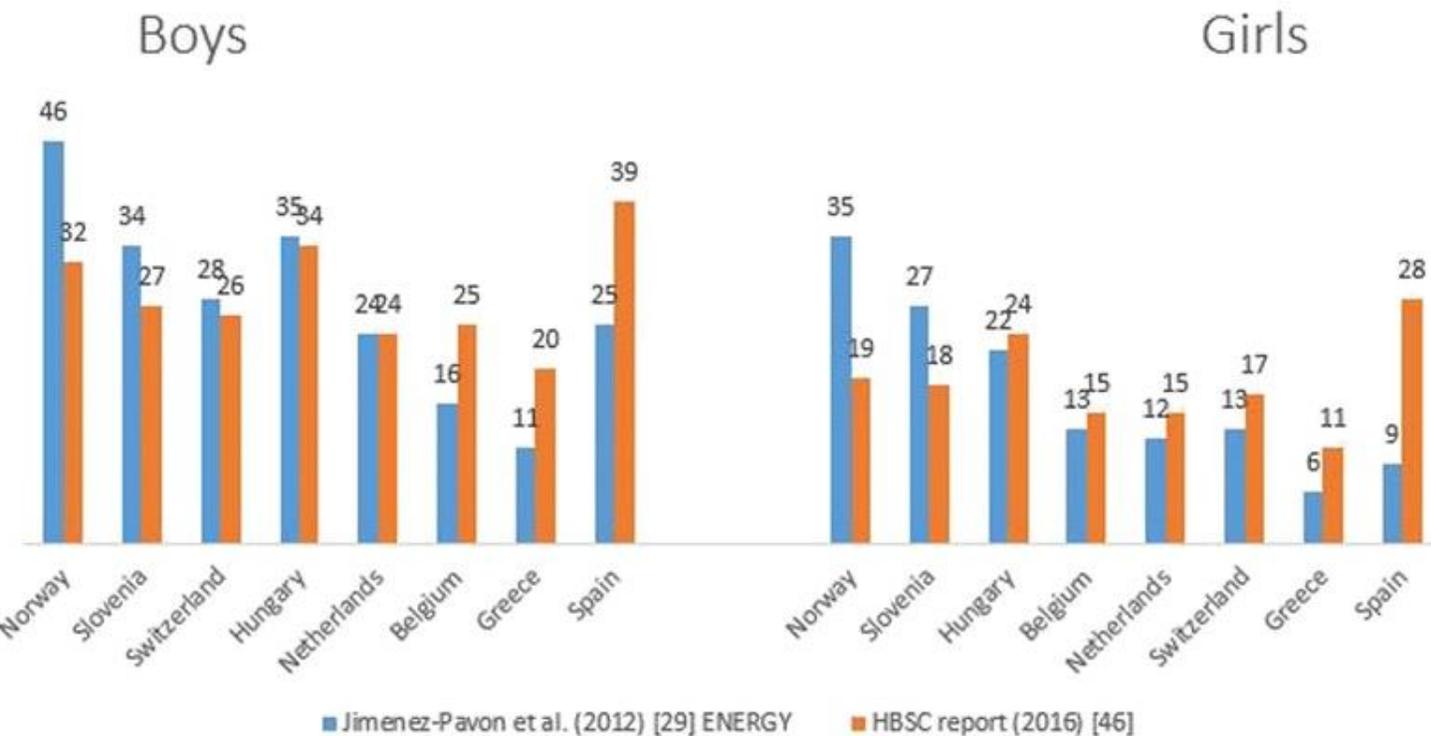
ge of boys and girls engaging in MVPA for ≥ 60 min daily in 8 countries across Europe. ENERGY = E

weight gain among youth; HBSC = health behaviour in school-aged children

Variation in population levels of physical activity in European children and adolescents according to cross-European studies: a systematic literature review within DEDIPAC

Linde Van Hecke,[1,2] Anne Loyen,[⊠3] Maïté Verloigne,[4] Hidde P. van der Ploeg,[5,6] Jeroen Lakerveld,[3] Johannes Brug,[3] Ilse De Bourdeaudhuij,[4] Ulf Ekelund,[7] Alan Donnelly,[8] Ingrid Hendriksen,[9,10] Benedicte Deforche,[1,2] and on behalf of the DEDIPAC consortium

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Greece

adolescents (Tables 2 and 3). Moreover, in most European countries, less than 50% of children and adolescents complied with the recommended levels of physical activity, regardless of the measurement met However, there was a large variation between countri The HBSC study was arguably the best option to compare PA levels in youth between European count because it included data from 36 countries. Self-repo data from HBSC 2016 [46] indicated that among 11-year-olds Italy (13 %), Denmark (15 %) and Greece (16 %) had the lowest prevalence of children meeting recommended physical activity levels, while Finland

Our Response:
Physical Education (PE)

IMPACT-PE PROJECT : Promote Physical Activity through PE

☐ **Implemented by :**

1. **University of Thessaly (coordinator)**
2. **University of Barcelona**
3. **University of Birmingham**
4. **University of Grenoble-Alpes**
5. **Hacettepe University**
6. **University of Padova**
7. **Greek Ministry of Education**
8. **Greek Institute of Educational Policy**
9. **Ankara Ministry of Education**
10. **Grenoble Regional Educational Authority**
11. **European Physical Education Association**
12. **Association of Physical Education Teachers in Germany**
13. **Association of Physical Education Teachers in Italy**
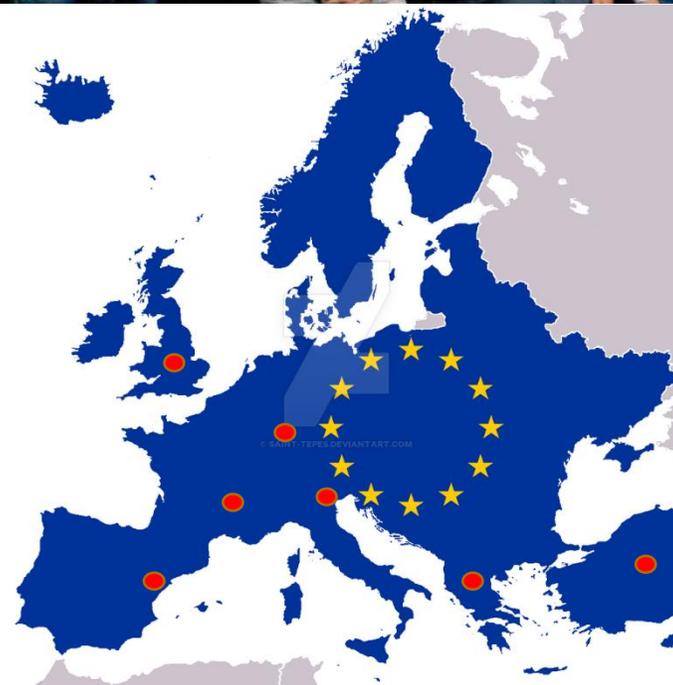
The problem of healthy/unhealthy behavior

☐AN ASSUMPTION

☐Often we don't monitor ourselves (or our students),

☐we don't use clear scales to measure behavior and be aware of the health risks.

Method:
Online Monitoring system

Social Cognitive Theories:
   __Self-regulation processes__
   Self-Monitoring → Goal setting → **Sport/Exercise Behavior**

At different levels of generalization

Level 5: Country

Level 4: Neighborhood/Town   **Policies in Neighborhood/town**
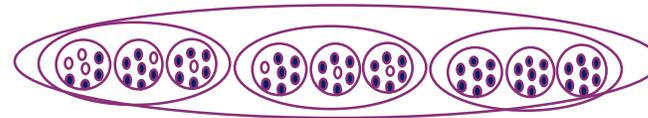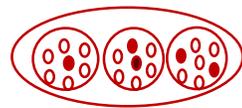
Level 3: School   **Policy makers support schools (e.g, with after-school PA programs)**

Level 2: PE teacher/Class   **PE teacher identifies & supports inactive students**

Level 1: Student   **Students monitor themselves & set exercise goals**

Education is MUCH more than goal setting

It mainly intervenes in the process of human development.

It promotes wellness cultivating characters,

E.g., cultivates intrinsically motivated students,

helps students smoothly internalize the important and enjoyable nature of structured/planned physical activity

Why & how to smoothly adopt:

Self-regulation processes   and   behaviors

Self-Monitoring   Goal setting **Sport/Exercise Behavior**

A motivational process

School–PE class

Teacher
Class environment

Student
Internalization of motives &
formation of goal orientations

Class Motivational Climate

Teaching supporting
students needs' for

☐ Competence/Mastery

☐ Autonomy

☐ Relatedness/support

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

Mastery goals

Positive Affect in Physical Education Class
Happiness-Wellness, Vitality

A motivational process

School – PE class

Out-of-School Physical Activity

Teacher
Class environment

Student
Internalization of motives & formation of goal orientations

Specification of intentions/goals
Formation of Self-efficacy

Class Motivational Climate

Teaching supporting students needs' for

☐ Competence/Mastery

☐ Autonomy

☐ Relatedness/support

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

Mastery goals

Self-Monitoring

Intention/Goal-setting to be active

Perceived Control/

Self-efficacy to participate in

extracurricular physical activity

Behavior

Extracurricular Physical Activity

Positive Affect in Physical Education
Well-being

IMPACT methodology

Environment

PUPIL

1. Country & Cultural environment

2. Governmental & regional policies (including HEPA curricula)

3. Physical Education (PE) Environment
Physical & **Social-Psychological climate** determined by PE teacher, Peers, a **HEPA PE curriculum**: Emphasis on pupils' **personal progress, need satisfaction & self-determination**

7. After-School Physical Activity (PA) Environment
(sport, exercise, dance, etc.)
Determined by
Local physical environment, 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**

4. Pupils' **personal progress goals, intrinsic motivation, positive thoughts, positive affect**

concerning PA **in PE,** including psychological **Well-Being**

5. Pupils' **positive attitudes, self-monitoring, intentions, self-efficacy**

to participate **in after-school sport & PA settings**

8. Pupils' **personal progress goals, intrinsic motivation, positive thoughts & affect**

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

6. Students' PA behaviour & positive affect in PE

9. Students' PA behavior in after-school PA settings

Based on IMPACT methodology
We developed IMPACT-related invariant measures

Participants in pilot study (n = 2124)

country

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	France	481	22,6	22,6	22,6
	Greece	308	14,5	14,5	37,1
	Italy	360	16,9	16,9	54,1
	Spain	478	22,5	22,5	76,6
	Turkey	497	23,4	23,4	100,0
	Total	2124	100,0	100,0	

Gender

Boys 1046
Girls 987
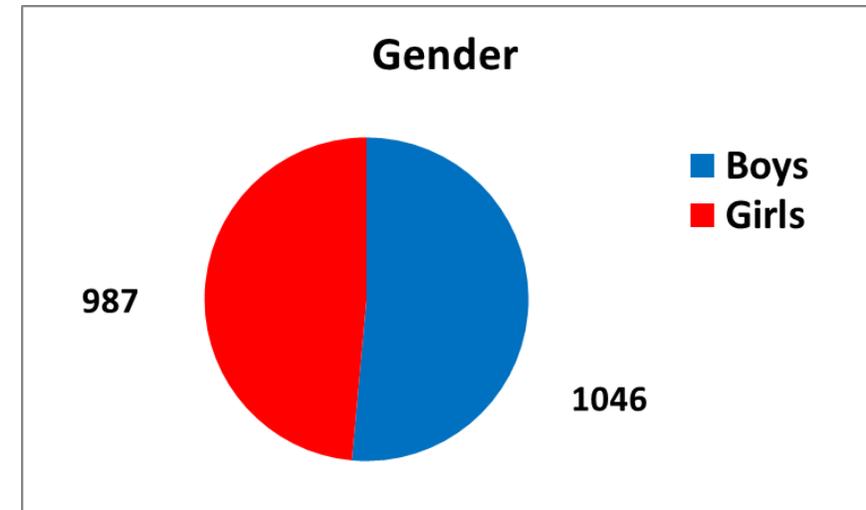
Plus N = 147 UK students who were added later

age

N	Valid	2032
	Missing	92
Mean		13,75
Std. Deviation		1,570
Minimum		10
Maximum		18

age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	10	10	,5	,5	,5
	11	161	7,6	7,9	8,4
	12	274	12,9	13,5	21,9
	13	444	20,9	21,9	43,8
	14	507	23,9	25,0	68,7
	15	351	16,5	17,3	86,0
	16	203	9,6	10,0	96,0
	17	71	3,3	3,5	99,5
	18	11	,5	,5	100,0
	Total	2032	95,7	100,0	
Missing	System	92	4,3		
Total		2124	100,0		

Co-funded by the
Erasmus+ Programme
of the European Union

P.E. Promotes
IMPACT
Identifying and Motivating youth who
mostly need Physical ACTivity

CFAs Invariance Analysis - 5 Countries

Variables	Items	Latent Variables	TLI	CFI
Motivational Climate	13 (-5)	3	.916	.933
Basic Needs	13 (-2)	3	.924	.940
Behavioral Regulations	19 (-1)	5	.899	.916
Achievement Goals	12 (-1)	2	.921	.936
Affect	16	2	.937	.946

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CFAs Invariance Analysis - 5 Countries

Variables	Items	Latent Variables	TLI	CFI
Enjoyment	4	1	.958	.986
Intention, PBC, Attitudes	12	3	.953	.969
Self-efficacy	5 (-1)	1	.944	.972
Social Support	8	2	.946	.963
Planning & Monitoring	9	2	.967	.976
Vitality	5	1	.922	.961

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Reliabilities - 5 Countries

Variables	FRANCE	GREECE	ITALY	SPAIN	TURKEY	TOTAL
Mastery Climate	.81	.82	.90	.79	.91	**.87**
Performance Approach	.68	.71	.74	.72	.71	**.69**
Performance Avoidance	.67	.68	.51	.57	.69	**.66**
Autonomy need satis	.73	.63	.77	.69	.87	**.80**
Competence need satis	.90	.88	.92	.85	.94	**.90**
Relatedness need satis	.74	.77	.79	.77	.90	**.82**
Intrinsic	.81	.85	.86	.88	.92	**.88**
Identified	.82	.79	.86	.82	.91	**.86**
Introjected	.77	.83	.70	.82	.82	**.79**
Extrinsic	.75	.87	.80	.80	.87	**.82**
Amotivation	.90	.88	.89	.83	.77	**.86**
Task orientation	.90	.83	.91	.88	.93	**.90**
Ego orientation	.83	.85	.88	.83	.86	**.86**

Reliabilities - 5 Countries

Variables	FRANCE	GREECE	ITALY	SPAIN	TURKEY	TOTAL
PACES positive	.95	.91	.93	.91	.97	**.94**
PACES negative	.90	.87	.89	.89	.92	**.90**
Enjoyment	.89	.86	.91	.90	.90	**.86**
Intention	.95	.93	.95	.93	.92	**.94**
Perc. Behavioral Control	.81	.79	.87	.79	.86	**.83**
Attitudes	.94	.92	.94	.94	.94	**.94**
Self-efficacy	.80	.77	.73	.82	.82	**.79**
Friend support	.80	.81	.79	.79	.84	**.81**
Family support	.81	.81	.74	.77	.85	**.79**
Action planning	.92	.87	.91	.92	.94	**.92**
Monitoring	.91	.82	.90	.88	.88	**.89**
Vitality	.88	.89	.89	.86	.92	**.89**

Correlations of students' Out-of-school PA with out of school PA predictors

Variables	Physical Activity (PA) standardized (PA frequency + YAP out of school PA)
Intention	.53**
Perc. Behavioral Control	.49**
Attitudes	.41**
Self-efficacy	.36**

** $p < .001$

Variables	Standardized PA (PA frequency + YAP out of school PA)
Friend support	.43**
Family support	.43**
Action planning	.50**
Monitoring	.49**
Vitality	.36**

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Correlations of students' Affect in PE with PE-related predictors

Variables	Positive Affect PE	Negative Affect PE
Mastery Climate	.52**	-.31**
Performance Approach	.14**	.15**
Performance Avoidance	.03	.27**
Autonomy need satis	.42**	-.14**
Competence need satis	.59**	-.34**
Relatedness need satis	.56**	-.28**

** *p* < .01

Variables	Positive Affect in PE	Negative Affect PE
Intrinsic	.78**	-.52**
Identified	.71**	-.43**
Introjected	.14**	.18**
Extrinsic	-.10**	.43**
Amotivation	-.24**	.57**
Task orientation	.73**	-.39**
Ego orientation	.17**	.19**
Positive affect in PE	-	-.50**
Negative affect in PE	-.50**	-
Enjoyment in PE	.76**	-.47**

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Determinants of out-of-school Physical Activity, Vitality & Affect in PE
Hierarchical Regression Analysis - Step 1 Standardized beta
Predictors Entry   Step 1: Motivational Climate

Climate → Outcomes

Steps	Variables	Out of sch. PA	R² Change	Vitality	R² Change	Positive Affect PE	R² Change	Negative Affect PE	R² Change
		Dependent Variables							
1	**Mastery Climate**	**.084***	.025**	**.290****	.106**	**.504****	.268**	**-.335****	.187**
	Performance Approach	**.102***		.087*		.068*		.080	
	Performance Avoidance	.034		.036		-.025		**.258****	
R²		.025**		**.106****		**.268****		**.187****	

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Hierarchical Regression Analysis - Step 2 Standardized beta Predictors Entry   Step 1: Climate,   Step 2: Basic needs

Climate → Need Sat → Outcomes

Steps	Variables	Out of Sch PA	R^2 Change	Vitality	R^2 Change	Positive Affect PE	R^2 Change	Negative Affect PE	R^2 Change
		Dependent Variables							
2	Mastery Climate	-.083*	.119**	**.080***	.111**	**.257****	.183**	**-.190****	.071**
	Performance Approach	.050		.039		.002		**.121****	
	Performance Avoidance	.057		.033		-.032		**.253****	
	Autonomy need satis	-.026		.024		**.101****		-.032	
	Competence need satis	**.365****		**.260****		**.356****		**-.253****	
	Relatedness need satis	.056		**.172****		**.127****		-.060	
R^2		**.144****		**.217****		**.452****		**.259****	

Hierarchical Regression Analysis - Step 3 Standardized beta Predictors Entry   Step 3: Achievement Goals in PE

Climate → Need Sat → Goals → Outcomes

Steps	Variables	Dependent Variables							
		Out of Sch PA	R^2 Change	Vitality	R^2 Change	Positive Affect PE	R^2 Change	Negative Affect PE	R^2 Change
3	Mastery Climate	-.095*	.018**	.015	.042**	**.119****	.175**	**-.075***	.065**
	Performance Approach	.033		.042		.011		.069*	
	Performance Avoidance	.043		.031		-.033		**.225****	
	Autonomy need satis	-.039		.014		.082		-.040	
	Competence need satis	**.303****		**.169****		**.172****		**-.206****	
	Relatedness need satis	.044		**.148****		.078*		-.029	
	Task Orientation in PE	**.121****		**.256****		**.530****		**-.281****	
	Ego Orientation in PE	.083*		.001		-.017		**.204****	
R^2		.162**		**.259****		**.627****		**.324****	

Hierarchical Regression Analysis - Step 4 Standardized beta Predictors Entry   Step 4: Behavioral Regulations

Climate → Need Sat → Goals → Motiv. Regul → Outcomes

Steps	Variables	Out of Sch PA	R² Change	Vitality	R² Change	Positive Affect PE	R² Change	Negative Affect PE	R² Change
4	Mastery Climate	-.124*	.015**	-.023	.014**	.051*	.094**	-.001	.191**
	Performance Approach	.031		.033		-.011		.017	
	Performance Avoidance	.078*		.044		.029		.056*	
	Autonomy need satis	-.069		-.019		-.009		-.004	
	Competence need satis	.255**		.130**		.051*		-.049	
	Relatedness need satis	.032		.134*		.050		-.012	
	Task Orientation	.025		.157**		.304**		-.028	
	Ego Orientation	.102*		.021		.016		.110**	
	Intrinsic in PF	.154*		.089		.444**		-.369**	
	Identified in PE	.041		.131*		.072*		-.044	
	Introjected in PE	.015		.000		.014		-.026	
	Extrinsic in PE	-.023		-.010		-.008		.122**	
	Amotivation in PE	-.039		.003		-.036		.326**	
R²		.177**		.273**		.721**		.515**	

Predictors Entry   Step 5: Social Support

Climate → Need Sat → Goals → Motiv. Regul → Fam/fr supp → Outcomes

Steps	Variables	Out of Sch PA	R² Change	Vitality	R² Change	Positive Affect PE	R² Change	Negative Affect PE	R² Change
5	Mastery Climate	-.094*	.146**	.003	.097**	.054*	.004	-.001	.000
	Performance Approach	-.002		.005		-.015		.016	
	Performance Avoidance	.056		.024		.024		.054*	
	Autonomy need satis	-.071*		-.028		-.009		-.004	
	Competence need satis	**.161**		.052		.036		-.053	
	Relatedness need satis	-.014		**.102***		.043		-.014	
	Task Orientation	-.007		**.130**		**.299**		-.029	
	Ego Orientation	**.106**		.022		.018		**.111***	
	Intrinsic	**.096***		.040		**.434**		**-.372**	
	Identified	.027		**.122***		.070*		-.044	
	Introjected	.013		.000		.014		-.026	
	Extrinsic	-.040		-.017		-.010		**.121**	
	Amotivation	-.048		-.010		-.038		**.325**	
	Friend Support	**.213**		**.235**		.026		.002	
	Family Support	**.277**		**.165**		.050*		.023	
R²		**.323**		**.370**		**.725**		**.515**	

Hierarchical Regression Analysis - Step 6 Standardized beta Predictors Entry   Step 6: Action Planning & Monitoring (Page 1)

Steps	Variables	Out of Sch PA	R² Change	Vitality	R² Change	Positive Affect PE	R² Change	Negative Affect PE	R² Change
6	Mastery Climate	-.068*	.066**	.023	.042**	.060*	.003	.000	.000
	Performance Approach	.000		.005		-.015		.016	
	Performance Avoidance	.052		.020		.023		.054*	
	Autonomy need satis	-.103*		-.053		-.017		-.005	
	Competence need satis	**.117****		.016		.029		-.055	
	Relatedness need satis	.004		**.114***		.044		-.014	
	Task Orientation	-.022		**.120****		**.296****		-.030	
	Ego Orientation	**.110****		.022		.021		**.112****	
	Intrinsic	.095*		.040		**.433****		**-.372****	
	Identified	-.025		.079		.061		-.046	
	Introjected	.007		.000		.012		-.027	
	Extrinsic	-.003		-.014		-.010		**.121****	
	Amotivation	-.032		.004		-.036		**.326****	

Hierarchical Regression Analysis - Step 6 Standardized beta Predictors Entry   Step 6: Action Planning & Monitoring (Page 2)

Climate → Need Sat → Goals → Motiv. Reg → Fam/fr supp → Plan. Monit. → Outcomes

Steps	Variables	Dependent Variables							
		Out of Sch PA	R^2 Change	Vitality	R^2 Change	Positive Affect PE	R^2 Change	Negative Affect PE	R^2 Change
6	Friend Support	.092*	.066**	.133**	.042**	.009	.003	-.001	.000
	Family Support	.197**		.105**		.037		.021	
	Action Planning	.161**		.153**		-.006		-.003	
	Monitoring	.211**		.146**		-.070		.013	
R^2		.389**		.412**		.727**		.515**	

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Hierarchical Regression Analysis - Step 7 Standardized beta Predictors Entry   Step 7: Planned Behavior Vars. & Self-efficacy (Page 1)

Steps	Variables	Out of Sch PA	R² Change	Vitality	R² Change	Positive Affect PE	R² Change	Negative Affect PE	R² Change
7	Mastery Climate	-.081*	.073	.016	.010	.057*	.007	.001	.002
	Performance Approach	.003		.004		-.017		.016	
	Performance Avoidance	.083*		.022		.017		.055*	
	Autonomy need satis	-.071*		-.045		-.018		-.004	
	Competence need satis	**.066***		.013		.031		-.060	
	Relatedness need satis	.017		**.110****		.042		-.015	
	Task Orientation	-.045		.097		**.292****		-.029	
	Ego Orientation	**.084***		.030		.022		**.108****	
	Intrinsic	.061		.029		**.421****		**-.379****	
	Identified	.004		.084		.058*		-.043	
	Introjected	-.002		.002		.009		-.028	
	Extrinsic	-.008		-.010		-.018		**.122****	
	Amotivation	-.014		.011		-.043		**.320****	

Climate → Need Sat → Goals → Motiv. Reg → Fam/fr supp → Plan. Monit. → TPB → Outcomes

Steps	Variables	Out of Sch PA	R^2 Change	Vitality	R^2 Change	Positive Affect	R^2 Change	Negative Affect	R^2 Change
7	Friend Support	.087*	.073**	.124**	.010**	.006	.007*	-.001	.002
	Family Support	.169**		.102**		.041*		.017	
	Action Planning	.039		.128**		-.004		-.009	
	Monitoring	.119**		.138**		.070		.008	
	Self-efficacy	.053		.003		.092		.037	
	Intention	.254**		-.039		-.027		-.014	
	Perc. Behavioral Control	.098*		.002		-.059*		.044	
	Attitudes	.031		.134**		.028		-.033	
R^2		.462**		.422**		.735**		.517**	

Self-Monitoring & Goal-setting/intention → Out-of-School PA

Application of the measure to a large European sample of students (Time 1)

COUNTRY	PARTIALLY COMPLETED	FULL COMPLETED	TOTAL	GOAL
FRANCE	393	887	1280	2000
GREECE	721	2892	3613	2000
ITALY	724	2291	3017	2000
SPAIN	76	900	976	2000
TURKEY	1109	3038	4147	2000
UK	468	538	1006	2000
TOTAL	3491	10548	14039	12000

Accelerometer data (Time 1)

COUNTRY	TOTAL	CLEANED	GOAL
FRANCE	70	60	50
GREECE	75	75	50
ITALY	56	53	50
TOTAL	201	188	150

Accelerometer data (Time 2)

COUNTRY	TOTAL	CLEANED	GOAL
FRANCE	42	35	50
GREECE	56	56	50
ITALY	45	37	50
TOTAL	201	188	150

Application of the measure to a large European sample of students (Time 2)

COUNTRY	PARTIALLY COMPLETED	FULL COMPLETED	TOTAL	GOAL
FRANCE	181	312	493	2500
GREECE	420	2080	2500	2500
ITALY	246	1464	1710	2500
TURKEY	351	1323	1674	2500
TOTAL	1198	5179	6377	10000
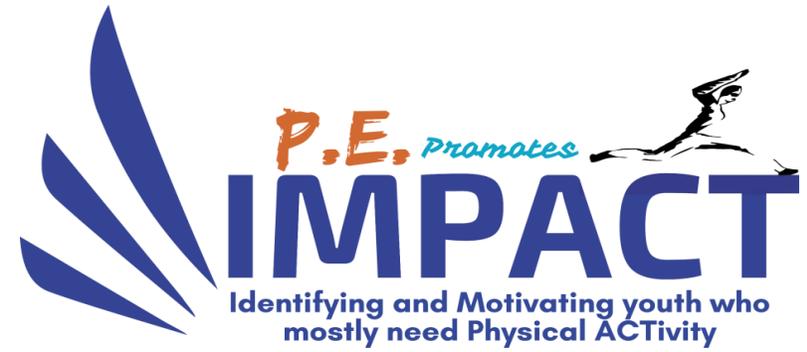
Identifying and Motivating youth who mostly need Physical ACTivity (IMPACT)

Final Webinar June 2019

We had predicted that a large % of our students don't exercise daily

While they should, cause it is an instruction of the World Health Organization

But is it true?

What did we find in the schools that participated in our research?

Pupils from 4 countries (n = 8813)

4 countries

country

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	France	798	9,1	9,1	9,1
	Greece	2803	31,8	31,8	40,9
	Italy	2199	25,0	25,0	65,8
	Turkey	3013	34,2	34,2	100,0
	Total	8813	100,0	100,0	

Gender
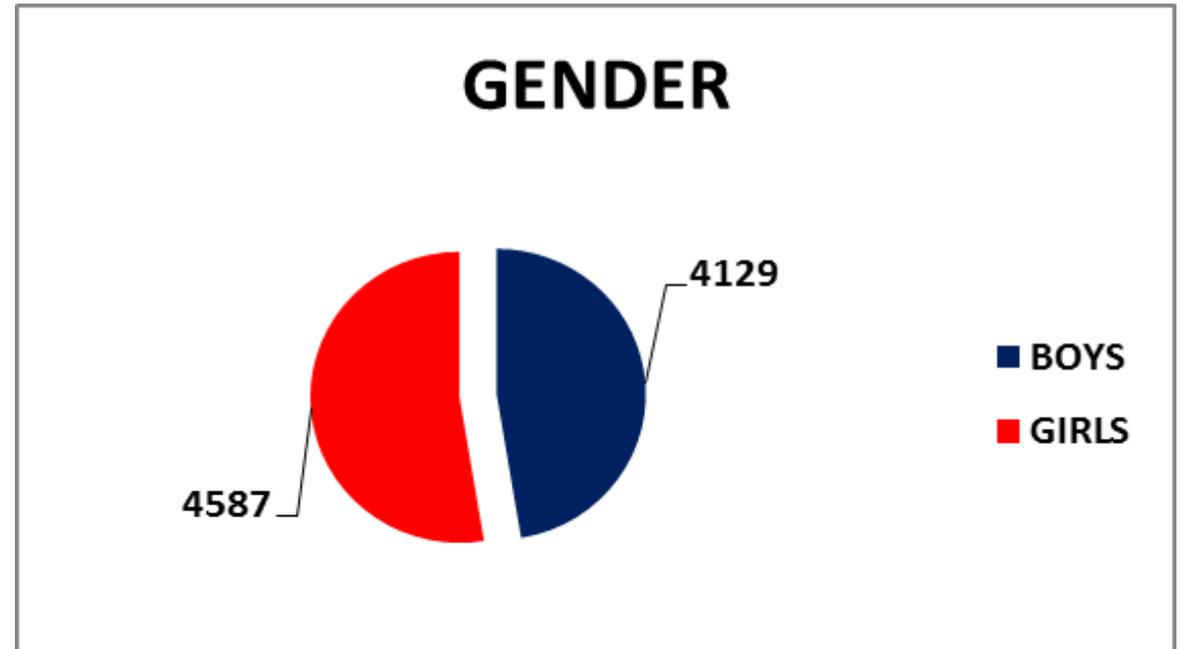
Age

age_y

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	10	382	4,3	4,4	4,4
	11	1459	16,6	16,7	21,0
	12	972	11,0	11,1	32,1
	13	1037	11,8	11,8	43,9
	14	1478	16,8	16,9	60,8
	15	1493	16,9	17,0	77,9
	16	1051	11,9	12,0	89,9
	17	649	7,4	7,4	97,3
	18	240	2,7	2,7	100,0
	Total	8761	99,4	100,0	
Missing	System	52	,6		
Total		8813	100,0		

Co-funded by the
Erasmus+ Programme
of the European Union

Hours per Week in Out of School Physical Activity

	Pupils	%	% Cumulative	
7 hours/week	1072	12,3	100,0	
4-6 hours/week	1707	19,6	87,7	
2-3 hours/week	2526	29,1	68,0	Moderate – improvement potential
1 hour/week	1396	16,1	**38,9**	**Extremely low – inactive**
0.5 hour/week	906	10,4	22,9	
0 hours/week	1082	12,5	12,5	

■ 0 h/w ■ 0,5 h/w ■ 1 h/w ■ 2-3 h/w ■ 4-6 h/w ■ 7 h/w
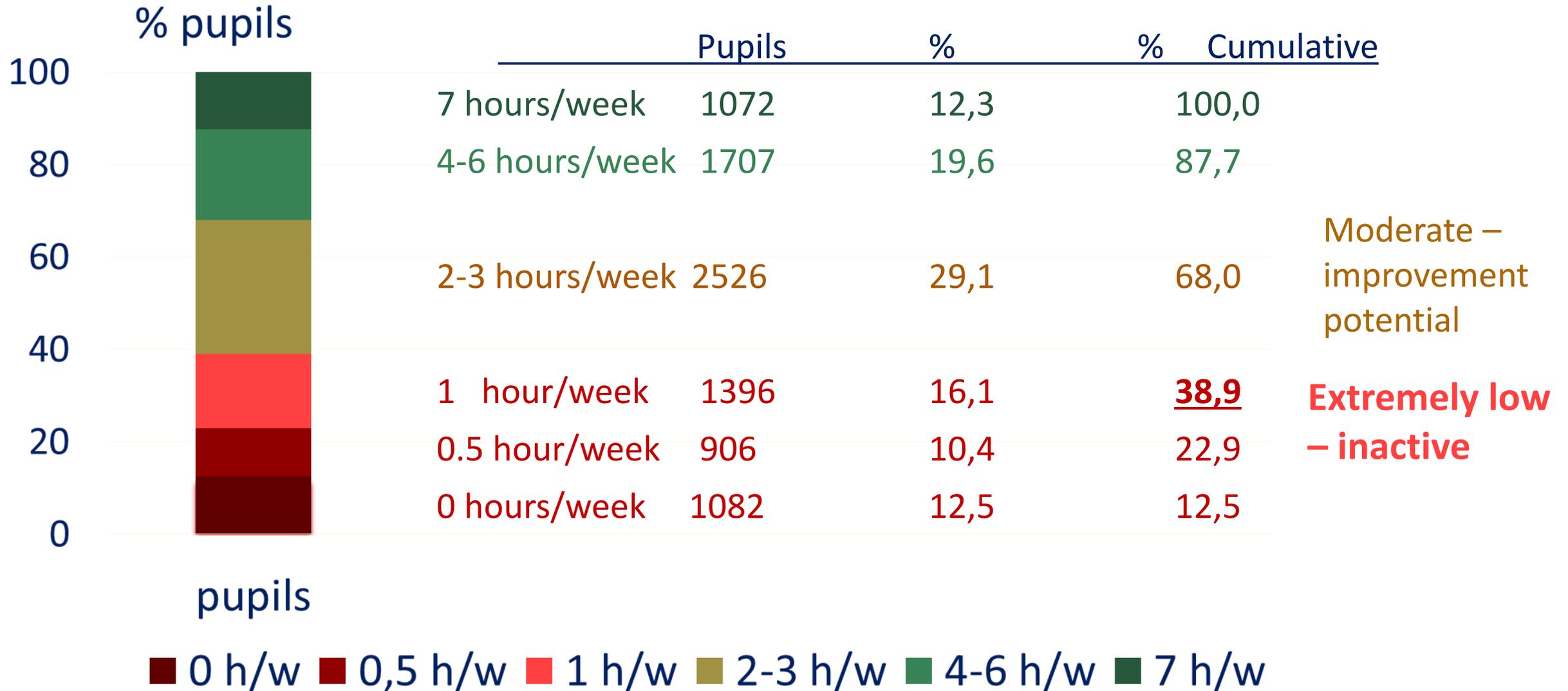
Girls do less out of school Physical Activity

% of boys-girls that exercise 0-1 or 2-3 or 4-7 hours/ week
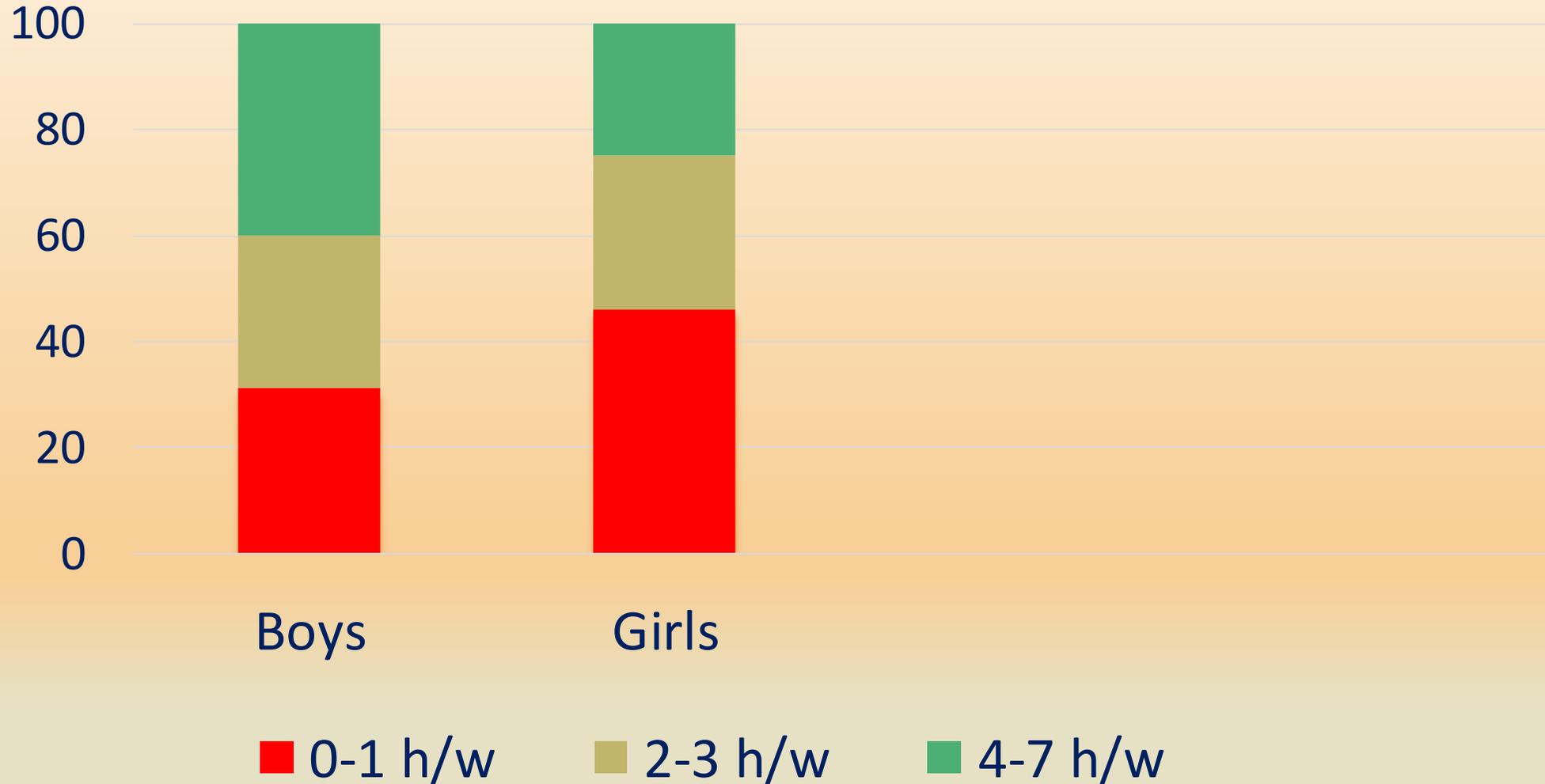
The girls and high school students are more inactive outside of school

% boys/ girls who exercise 0-1 or 2-3 or 4-7 hours/week
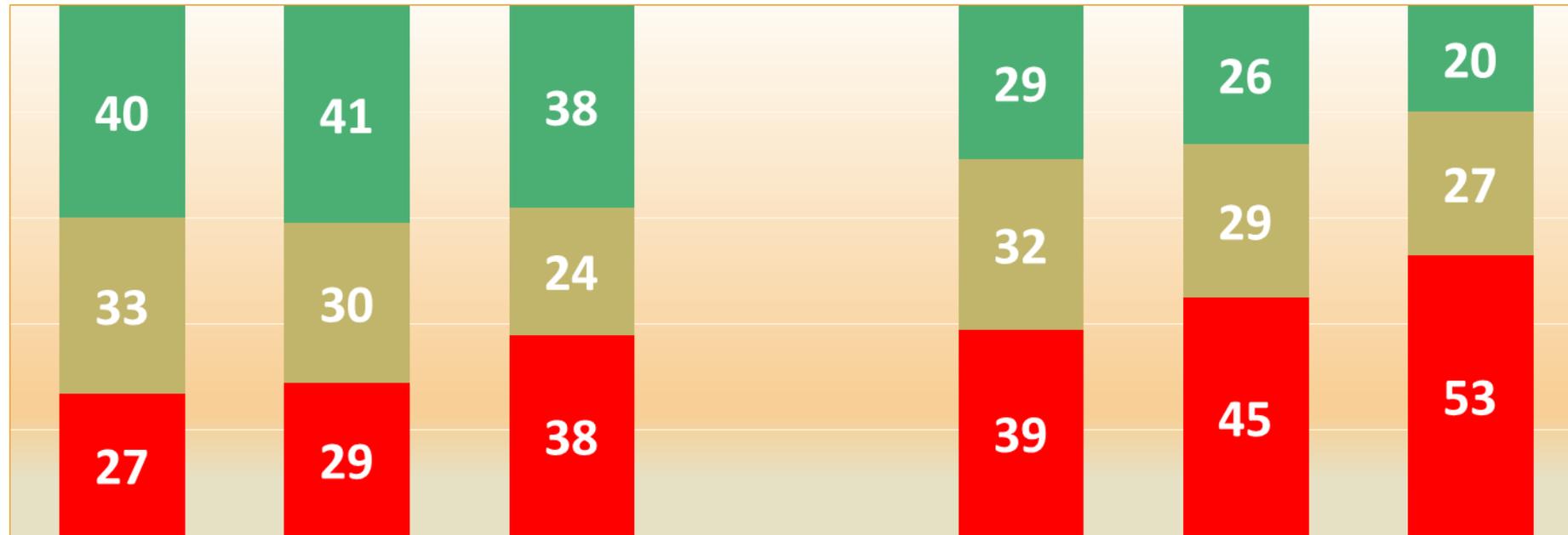
Category	0-1 hr/week	2-3 hr/week	4-7 hr/week
Boys 10-12 years	27	33	40
Boys 13-15 yeas	29	30	41
Boys 16-18 years	38	24	38
Girls 10-12 years	39	32	29
Girls 13-15 years	45	29	26
Girls 16-18 years	53	27	20

Legend: ■ 0-1 hr/week   ■ 2-3 hr/week   ■ 4-7 hr/week

Estimated Marginal Means of PA_freq

Days of PA/week

Count

Participants: No of students
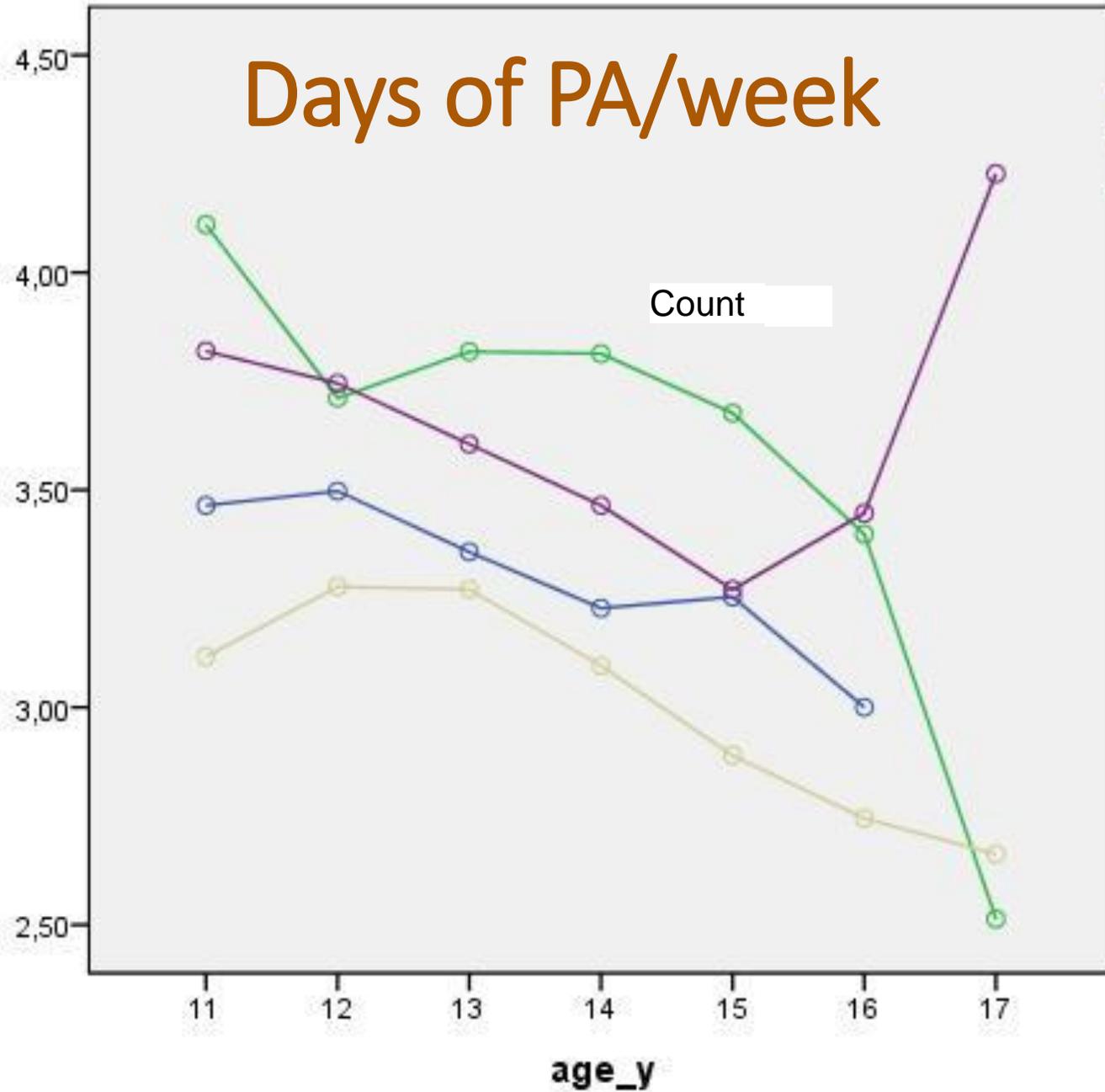
		France	Greece	Italy	Turkey	Total
age_y	10	0	170	24	188	382
	11	18	947	215	279	1459
	12	200	245	178	349	972
	13	251	222	320	244	1037
	14	260	401	270	547	1478
	15	63	527	329	574	1493
	16	3	198	307	543	1051
	17	0	85	351	213	649
	18	0	2	202	36	240
	Total	795	2797	2196	2973	8761

This research confirmed the important role of extracurricular physical activity for the motivation in PE

At the 1° webinar we had mentioned the benefits of regular physical activity for students:

☐ in health,

☐ in the quality of life,

☐ in psychological development,

☐ In the overall school performance,

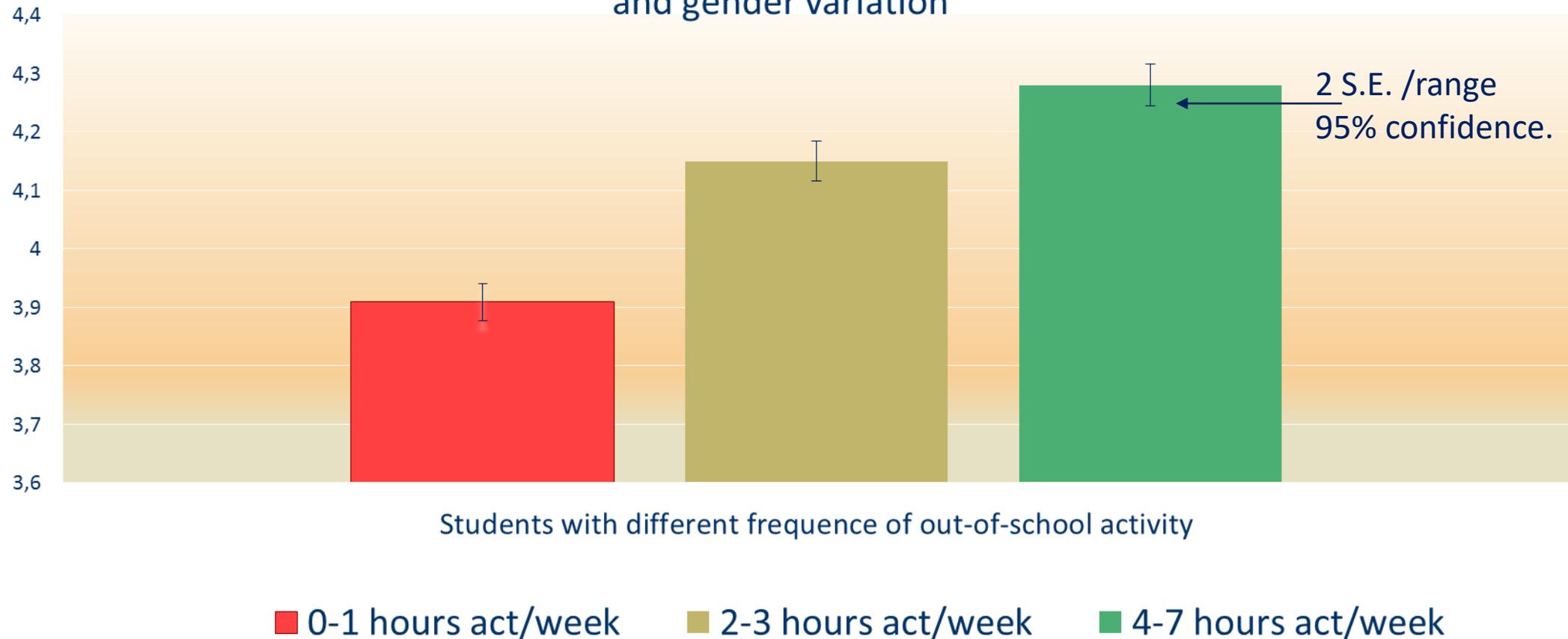☐ in their pleasure in school and especially in the PE lesson.

Motivation in School Physical Education (PE) is connected with participation in out-of-school sport and exercise

Unfortunately, participation in out-of-school sport and exercise has **much bigger impact** on students' motivation in Physical Education than the opposite
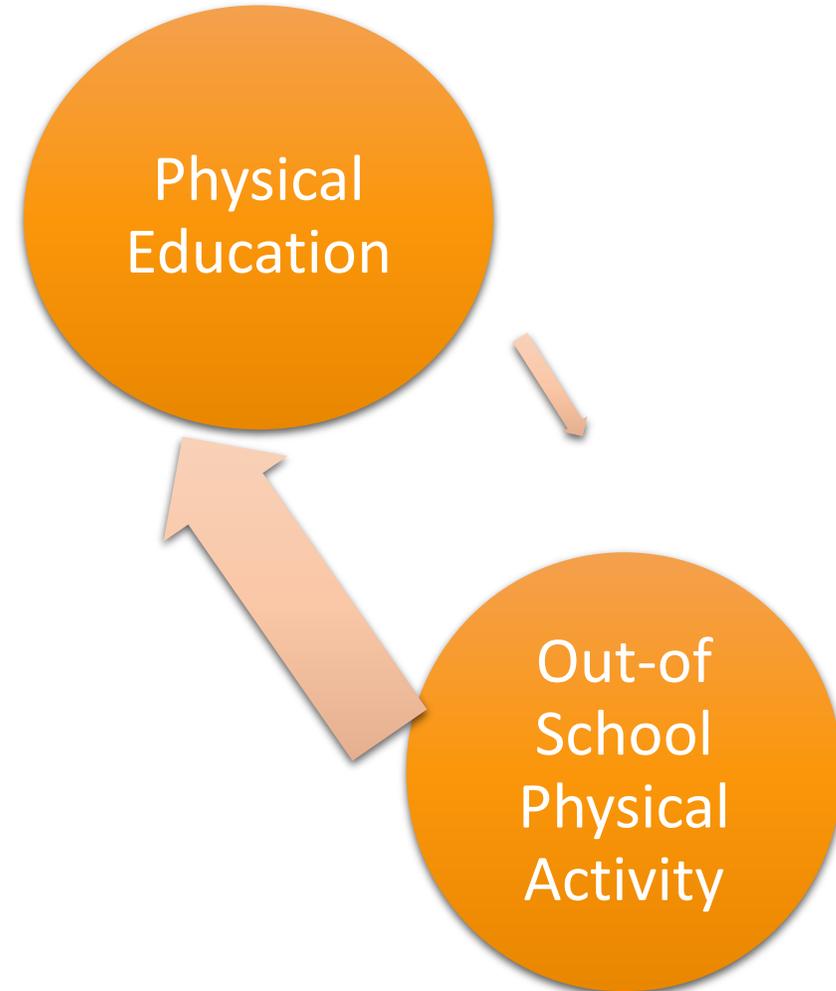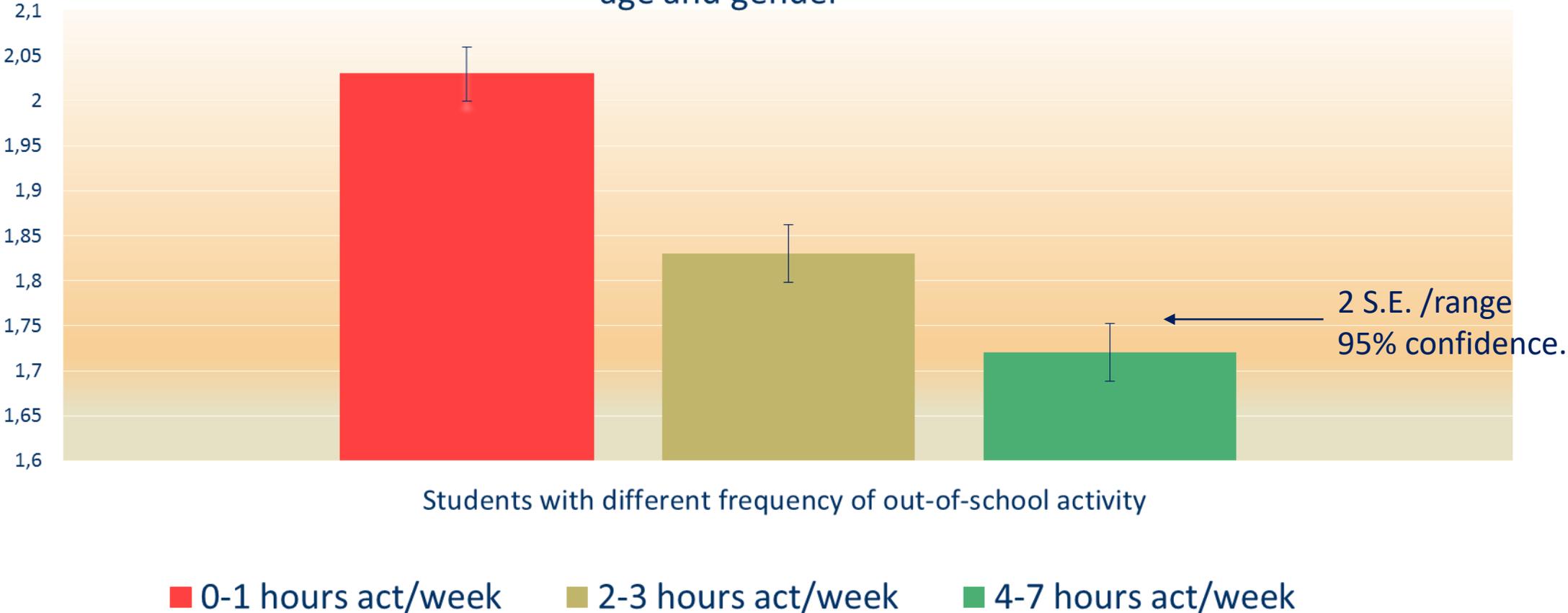
The more students are physical active outside of school, the more they <u>enjoy</u> Physical Education (PE).

Pleasure / Positive feelings in PE - adjusted values after having removed age and gender variation
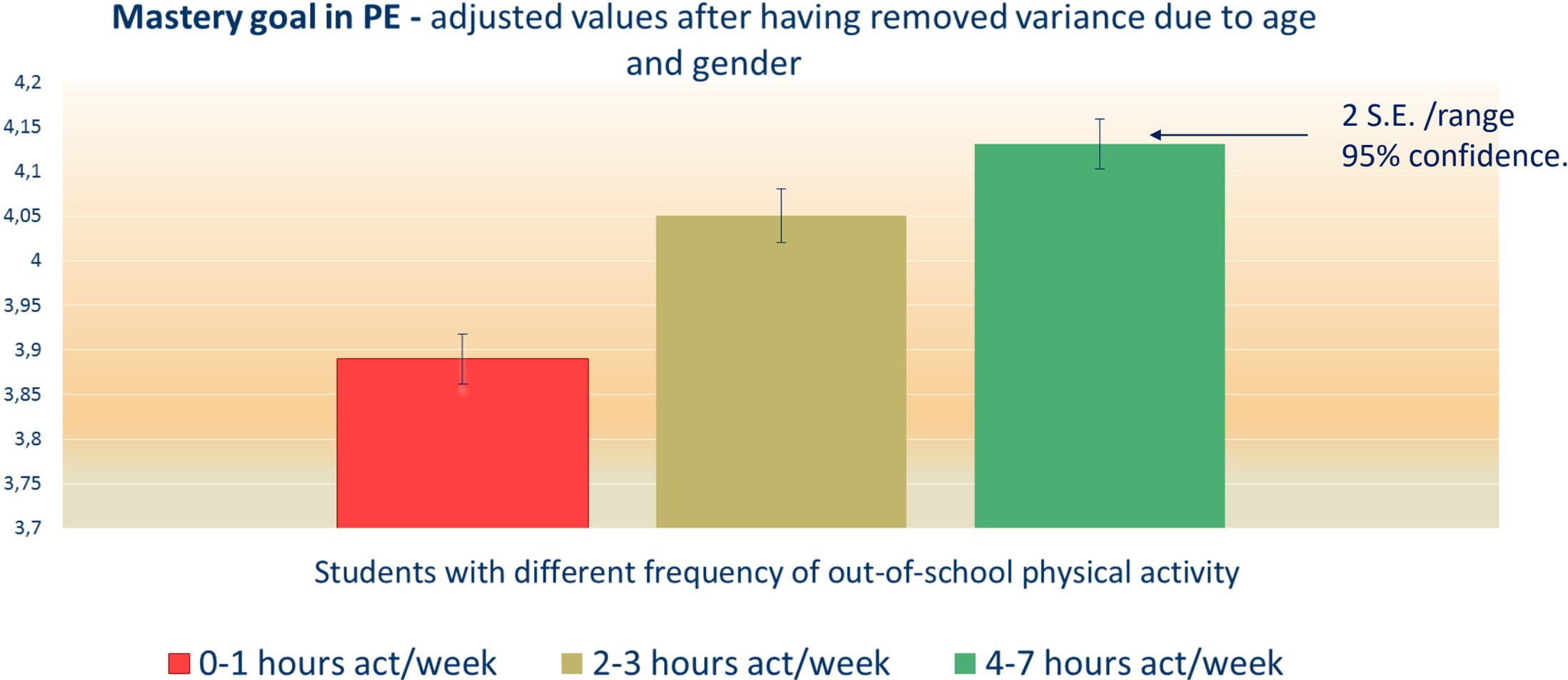
2 S.E. /range
95% confidence.

Students with different frequence of out-of-school activity

■ 0-1 hours act/week   ■ 2-3 hours act/week   ■ 4-7 hours act/week

The more students are physically active outside of school, the less negative feelings they have in PE

Negative emotions in PE-adjusted values after having removed variance due to age and gender

2 S.E. /range 95% confidence.

Students with different frequency of out-of-school activity

- ■ 0-1 hours act/week
- ■ 2-3 hours act/week
- ■ 4-7 hours act/week

The more students are physically active outside of school, the more goals for learning they set in PE

Mastery goal in PE - adjusted values after having removed variance due to age and gender

2 S.E. /range 95% confidence.

Students with different frequency of out-of-school physical activity

■ 0-1 hours act/week   ■ 2-3 hours act/week   ■ 4-7 hours act/week

The more students are physically active outside of school, <u>the more intrinsically motivated</u> they are in PE

Intrinsic motivation – adjusted values after having removed the variance due to age and gender

2 S.E. /range
95% confidence.

Students with a different frequency of out-of-school activity

■ 0-1 hours act/week   ■ 2-3 hours act/week   ■ 4-7 hr act/week
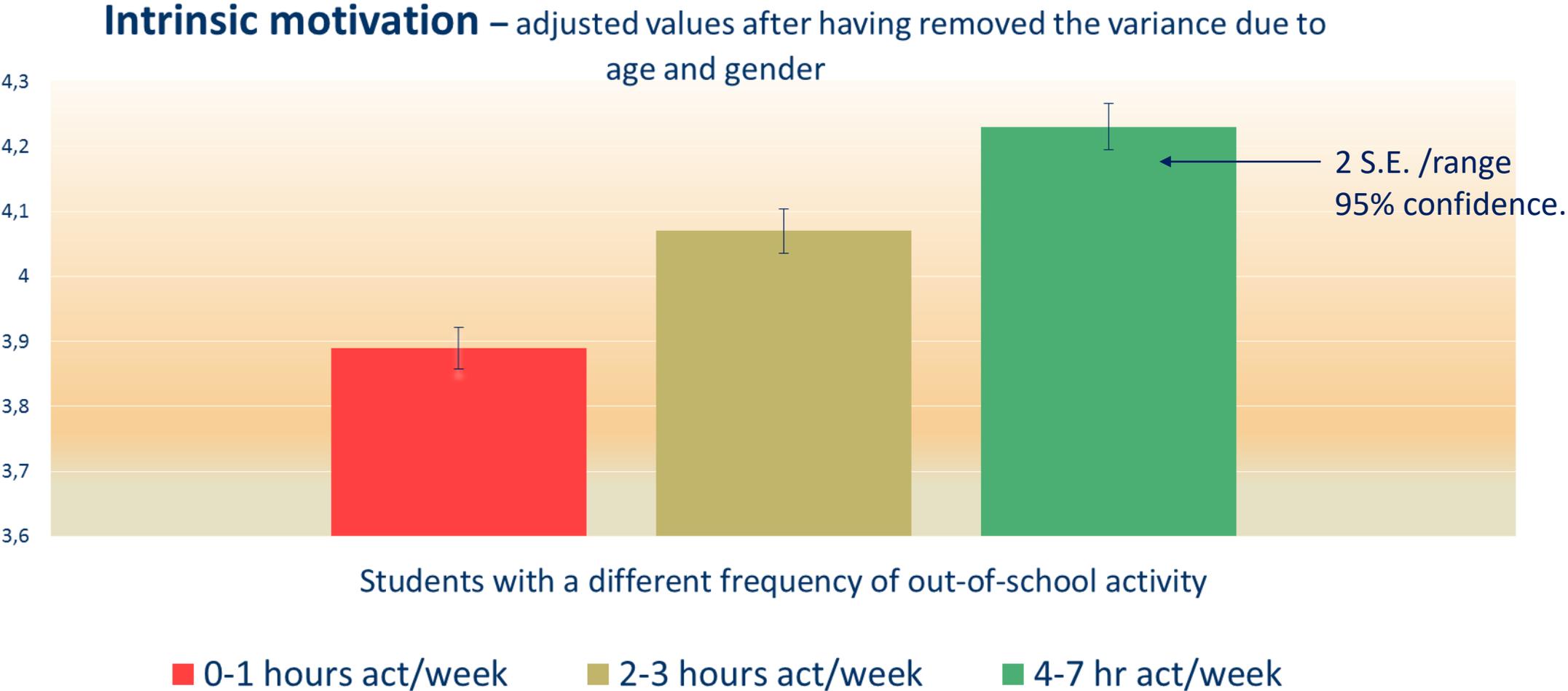
The more students are physically active outside of school, the less extrinsically motivated they are in PE

**External motivation** - adjusted values after having removed variance due to age and gender
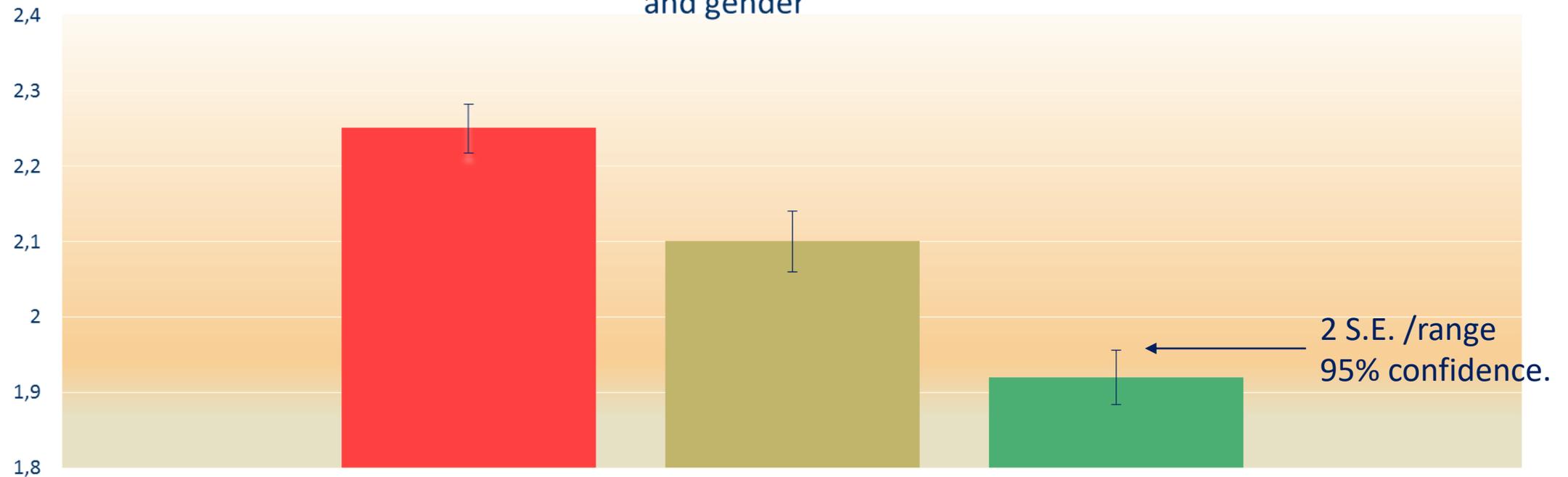
Students with a different frequency of out-of-school activity

2 S.E. /range 95% confidence.

■ 0-1 hr act/week ■ 2-3 hr act/week ■ 4-7 hr act/week

The more students are physically active outside of school, the less amotivation they have in PE

Amotivation - adjusted values after having removed variance due to age and gender

Students with a different frequency of out-of-school activity

2 S.E. /range 95% confidence.

■ 0-1 hr act/week   ■ 2-3 hr act/week   ■ 4-7 hr act/week
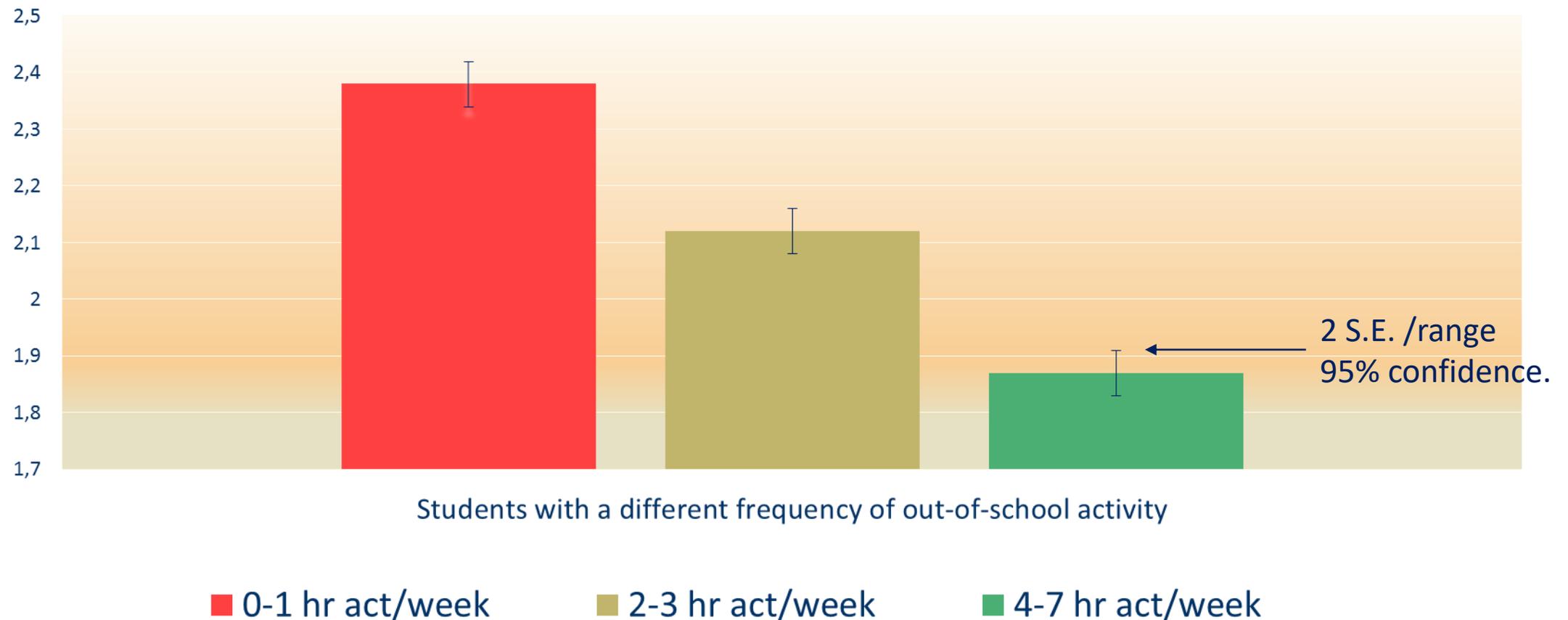
The more students are physically active outside of school, the more physically active (moving and running) they are in PE

Physical activity in PE - adjusted values after having removed variance due to age and gender

2 S.E. /range 95% confidence.

Students with a different frequency of out-of-school activity

- 0-1 hr act/week
- 2-3 hr act/week
- 4-7 hr act/week
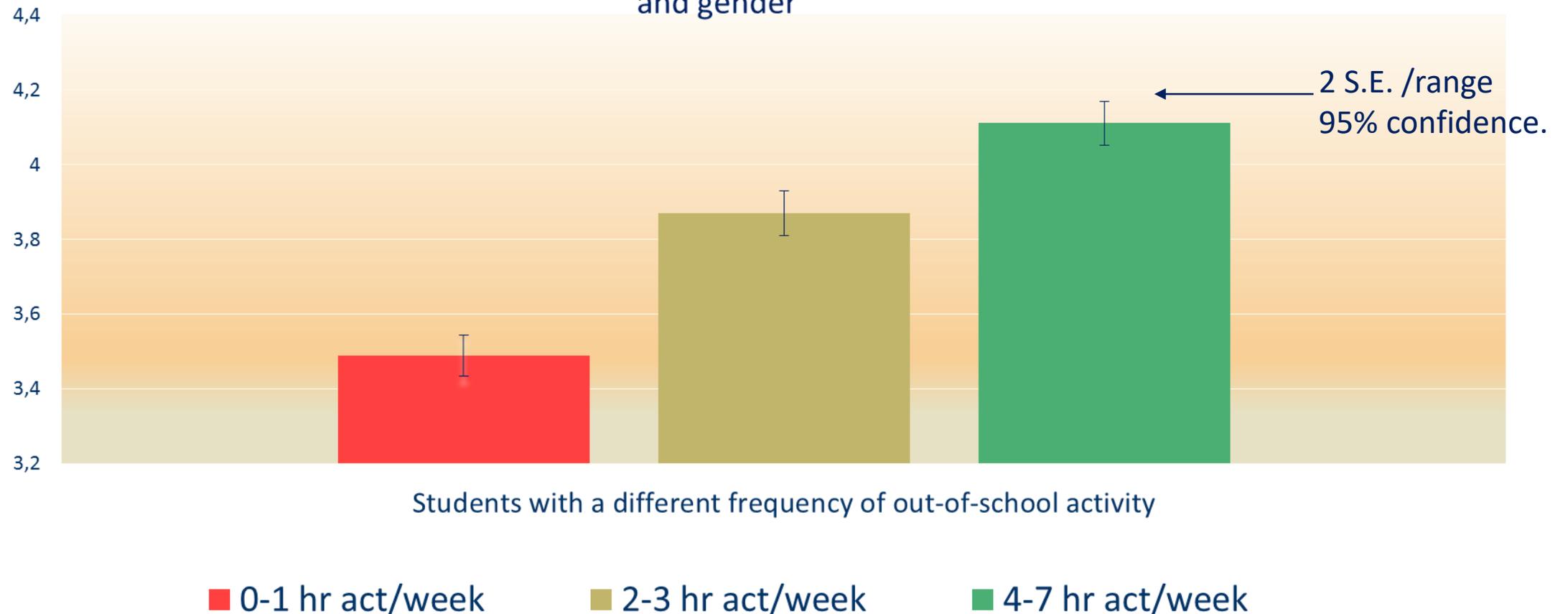
The more students are physically active outside of school, the greater vitality they feel in their life

Vitality

adjusted values after having removed variance due to age and gender

2 S.E. /range
95% confidence.

Students with a different frequency of out-of-school activity
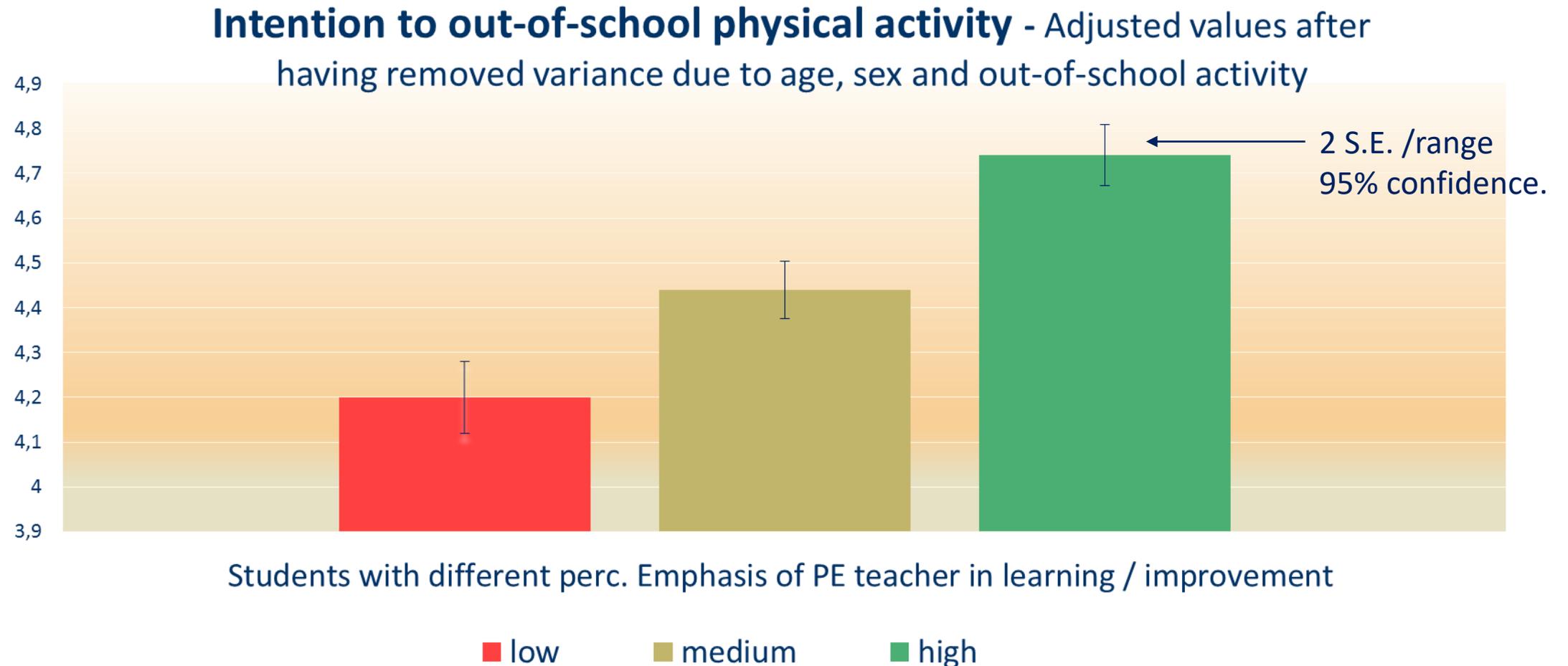
- 0-1 hr act/week
- 2-3 hr act/week
- 4-7 hr act/week
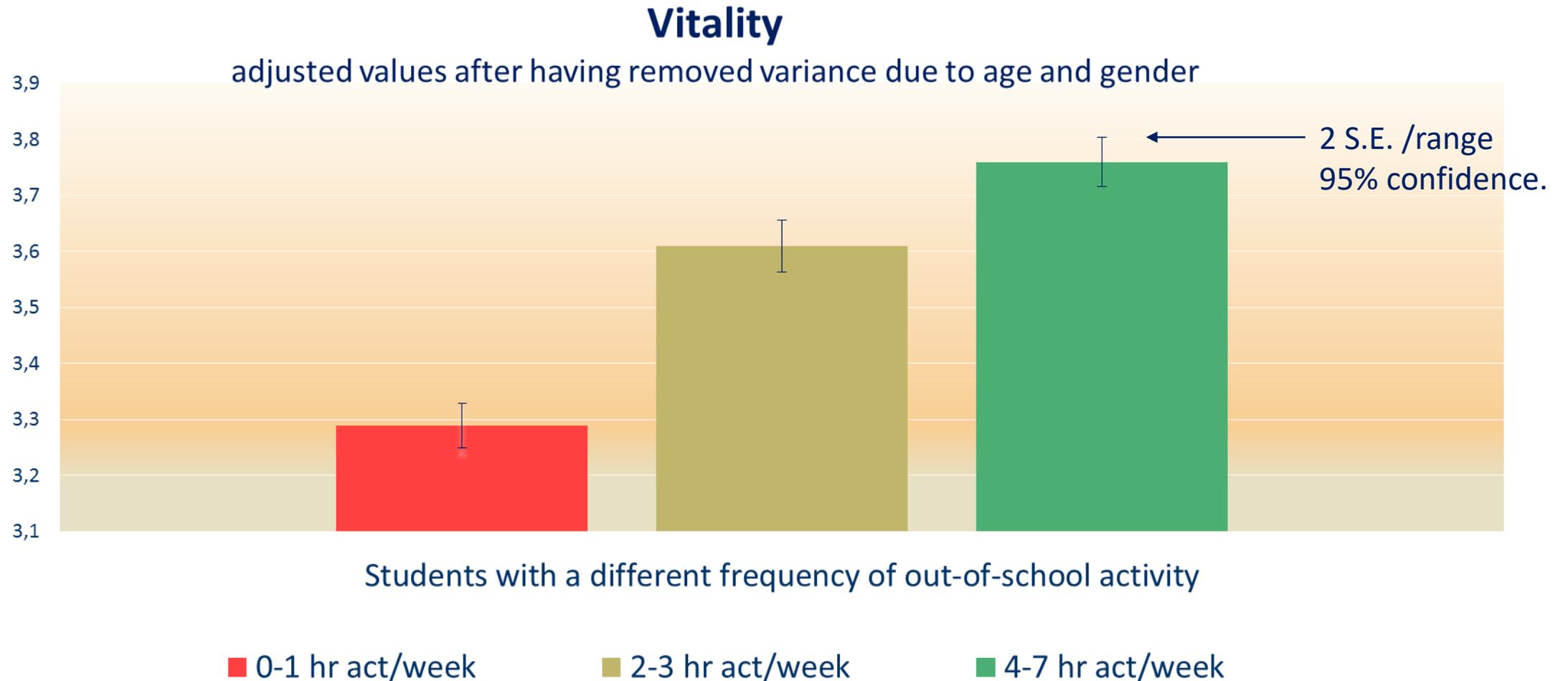
What can we do in the lesson of PE in order to promote out-of-school physical activity?

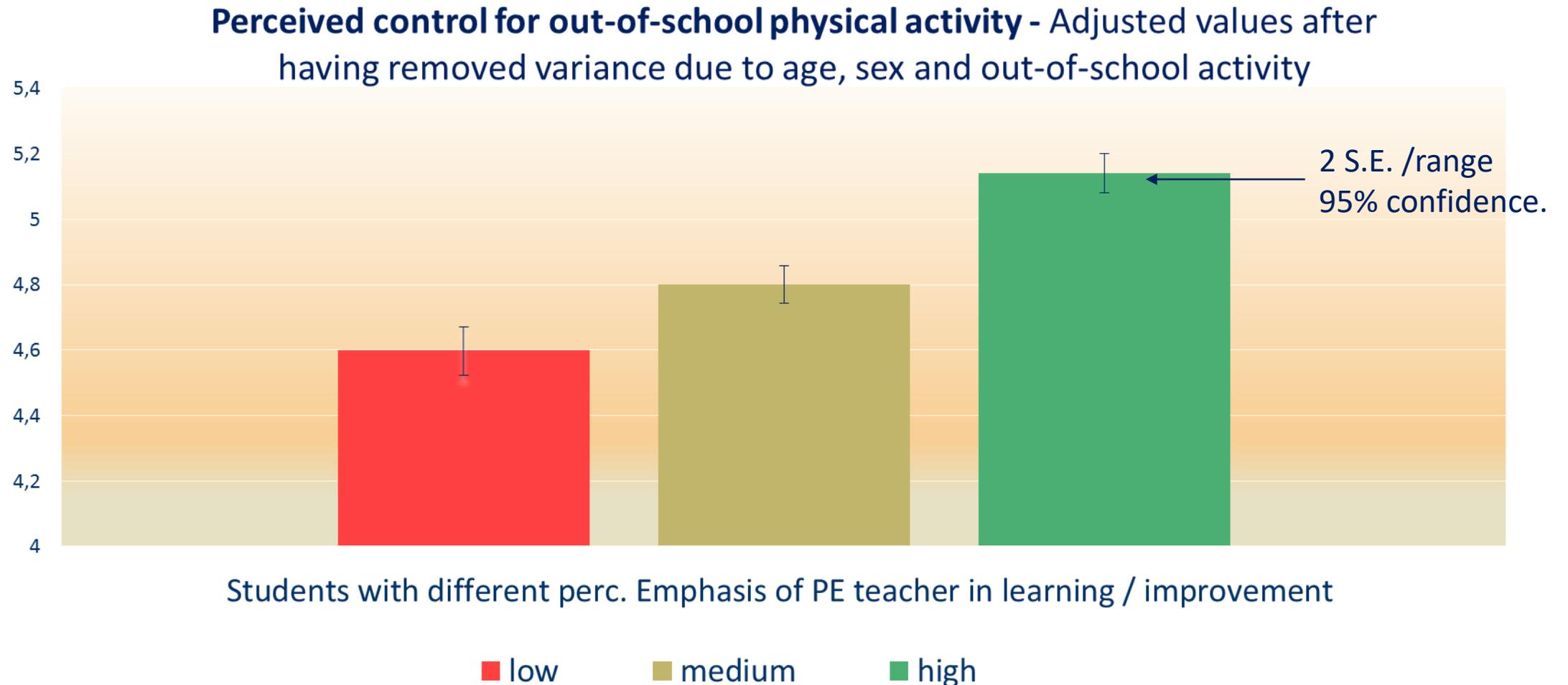At the 2nd Webinar we mentioned <u>how we create</u> a positive motivational climate in PE:

- Emphasizing students' learning-improvement-progress

- Satisfying their needs for autonomy, ability, good relationships with others

□ We explained that with a positive motivational climate like the above, then for all students, whether they are athletes or not:

➢ We strengthen their intrinsic motivation and enjoyment in the PE lesson.

➢ We strengthen their intension to be physically active

➢ We help them monitor their progress including how often they exercise.

➢ We encourage them to believe that if they want to do sports & physical activities they can overcome obstacles and find ways how, where, when, with whom to get physically active.

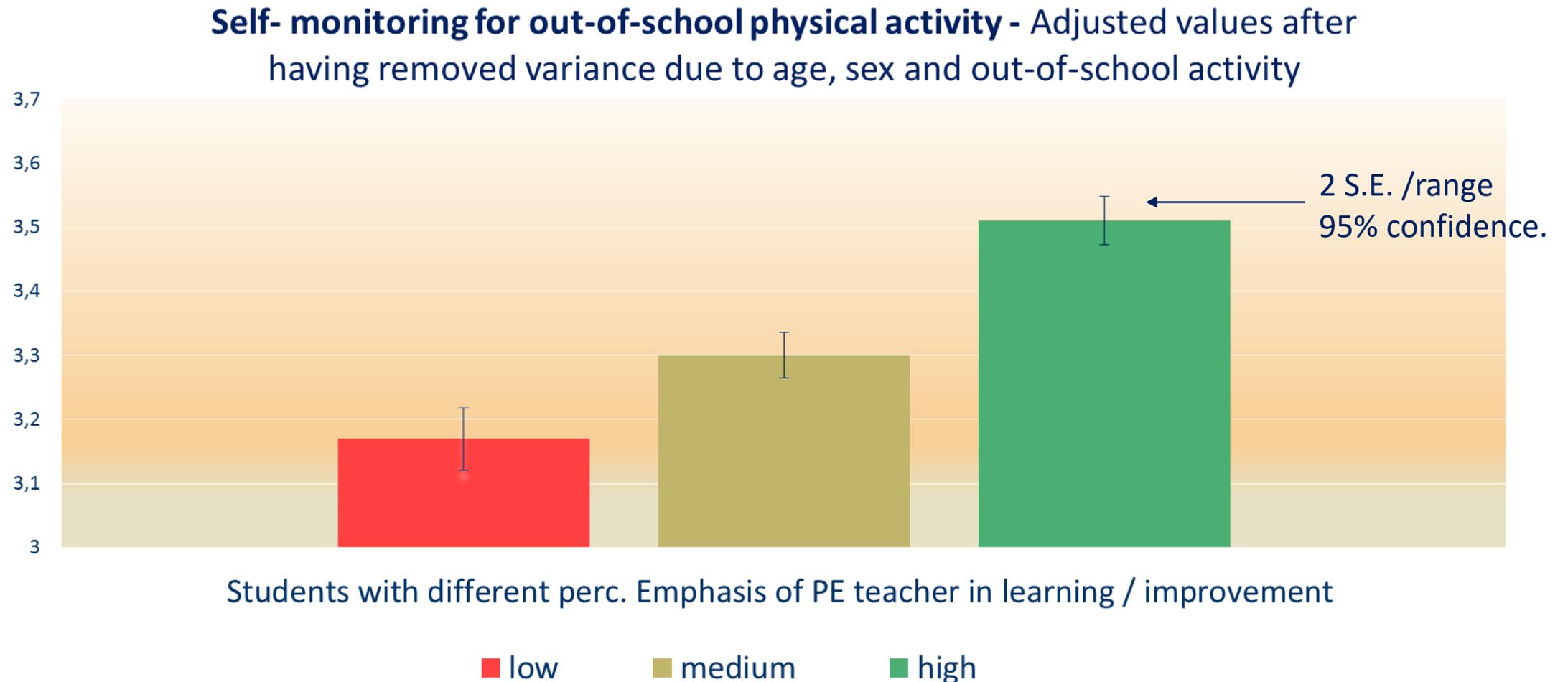# The results with the present pupils confirm the hypotheses!

The more students perceive that the PE teacher emphasizes learning / improving, the stronger intention they have to do outside of school physical activity.
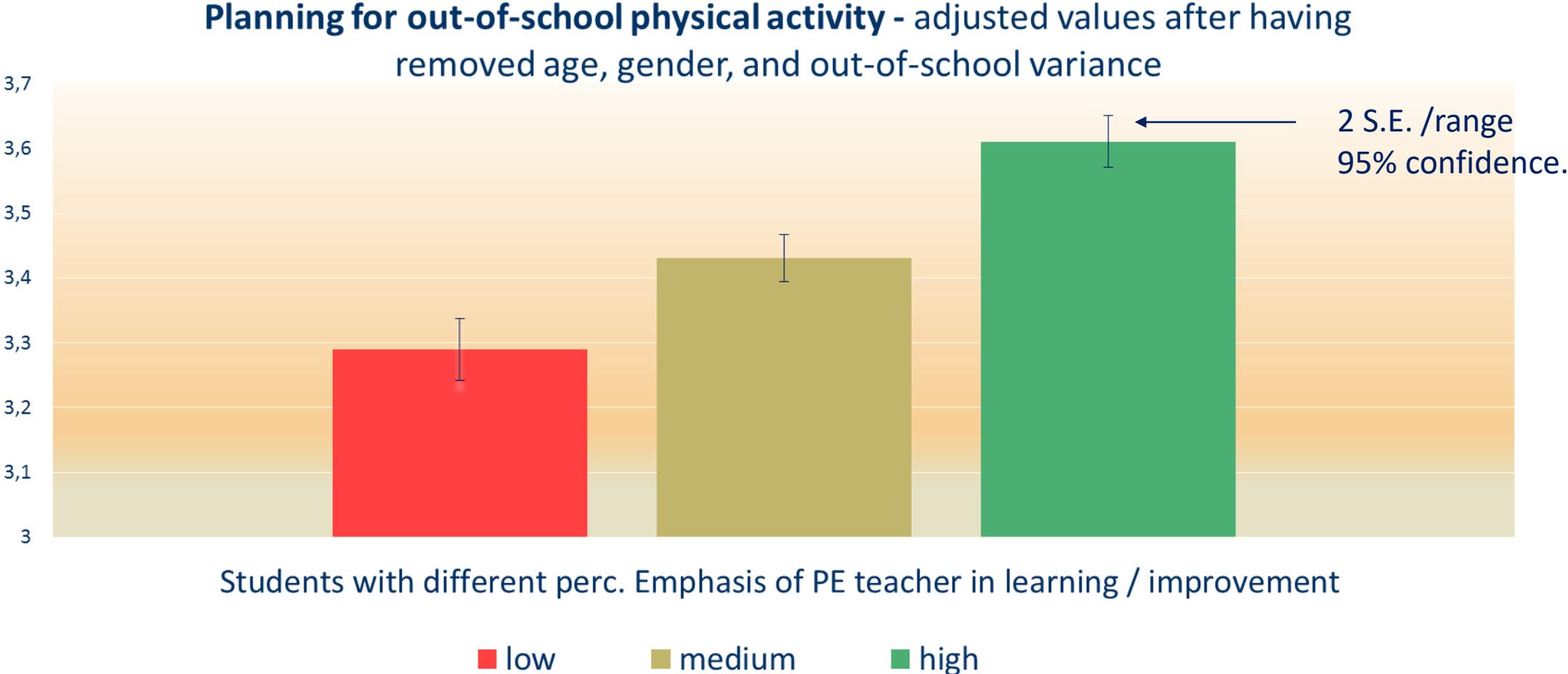

Intention to out-of-school physical activity - Adjusted values after having removed variance due to age, sex and out-of-school activity

2 S.E. /range 95% confidence.

Students with different perc. Emphasis of PE teacher in learning / improvement

■ low   ■ medium   ■ high

The more students perceive that the PE teacher emphasizes learning / improving, the more they monitor themselves how often they do out-of-school physical activity.

Self- monitoring for out-of-school physical activity - Adjusted values after having removed variance due to age, sex and out-of-school activity

2 S.E. /range 95% confidence.

Students with different perc. Emphasis of PE teacher in learning / improvement
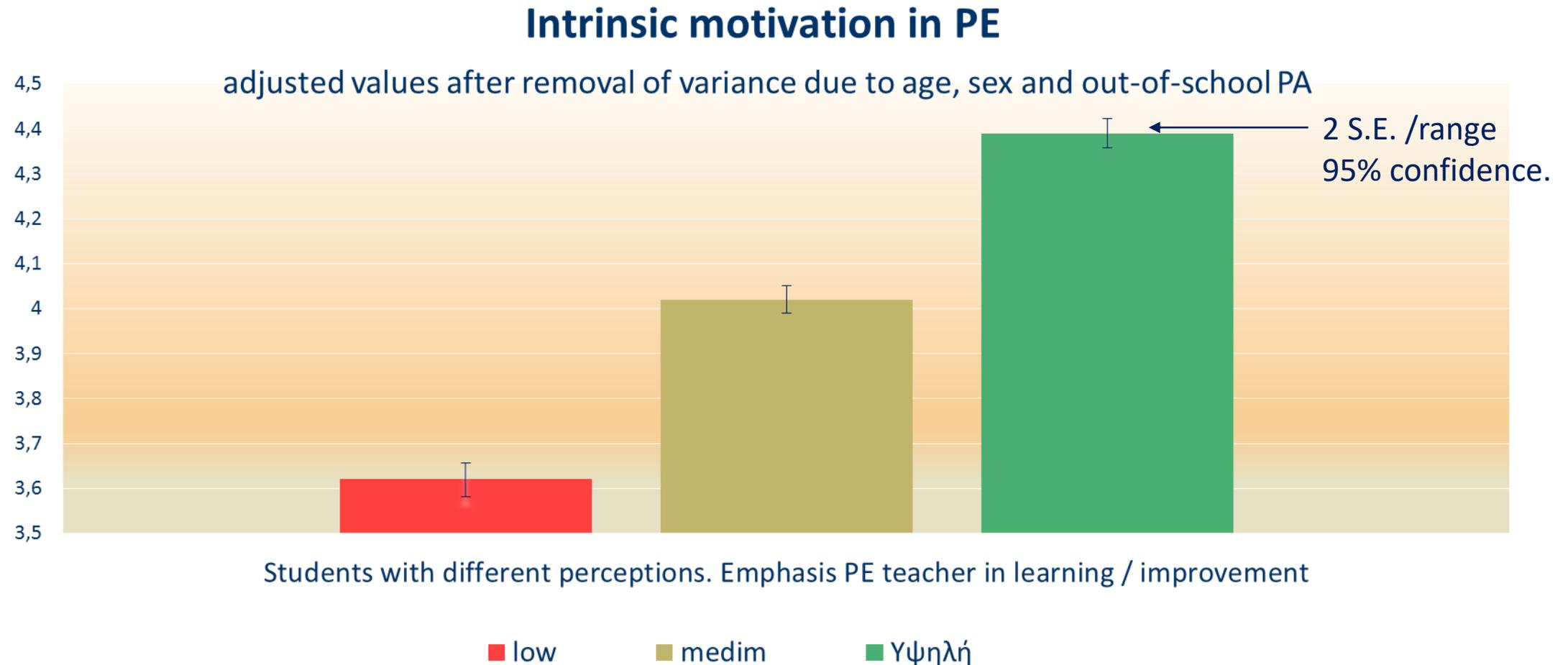
■ low   ■ medium   ■ high

The more students perceive that the PE teacher emphasizes learning / improving, the more they schedule with specific plans (when/where/with who/how/how often) to be out-of-school physically active.
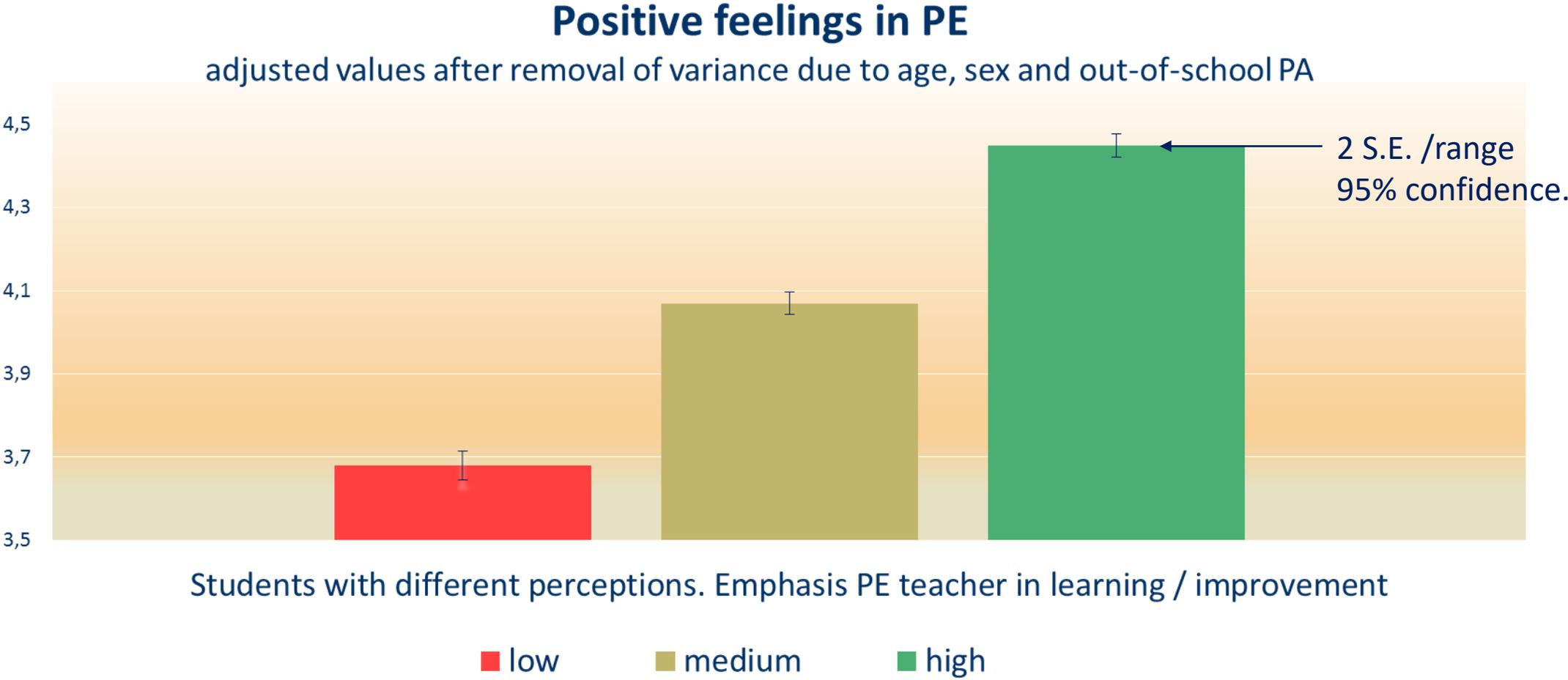

Planning for out-of-school physical activity - adjusted values after having removed age, gender, and out-of-school variance

2 S.E. /range 95% confidence.

Students with different perc. Emphasis of PE teacher in learning / improvement

■ low   ■ medium   ■ high

And, of course, emphasis on learning / personal improvement mainly promotes students' Motivation within Physical Education (PE) classes
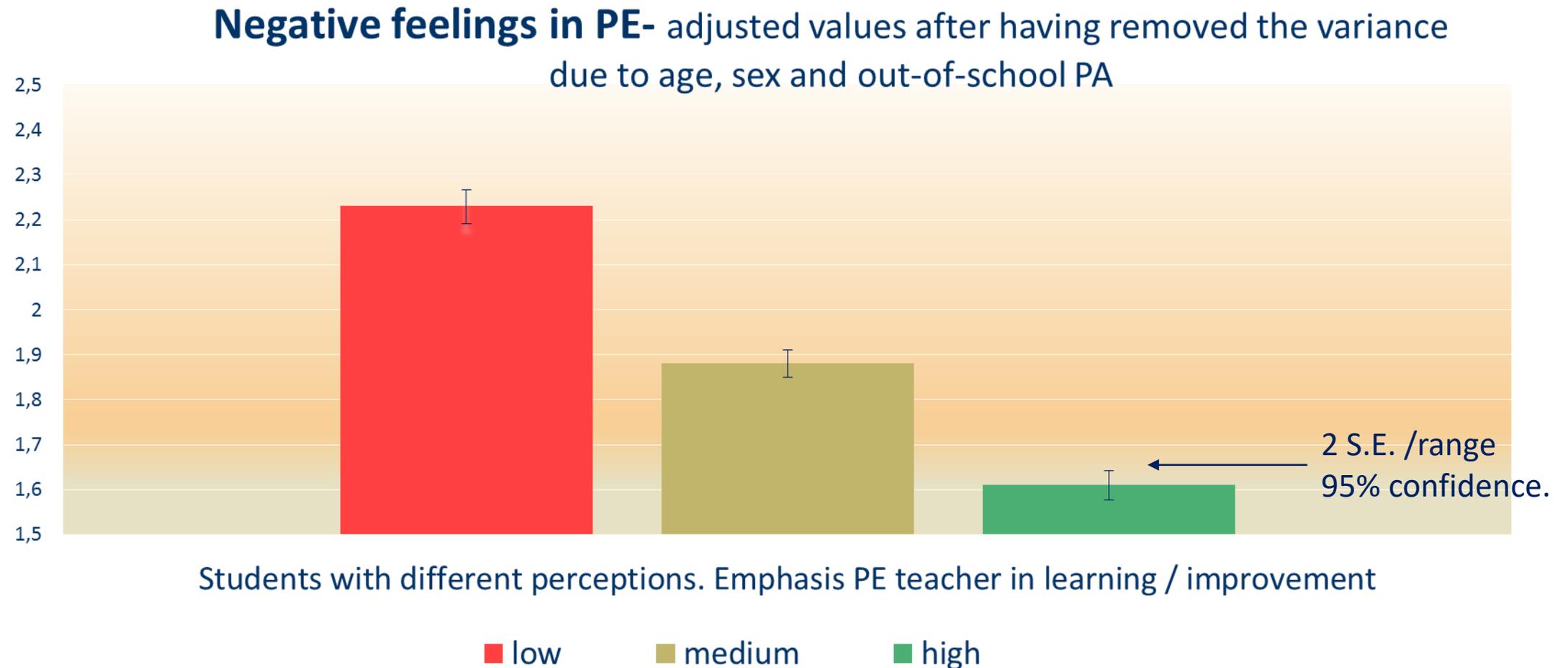
The more students perceive that the PE teacher emphasizes learning / improvement, the stronger their intrinsic motivation in the PE lesson.

Intrinsic motivation in PE

adjusted values after removal of variance due to age, sex and out-of-school PA

2 S.E. /range
95% confidence.

Students with different perceptions. Emphasis PE teacher in learning / improvement
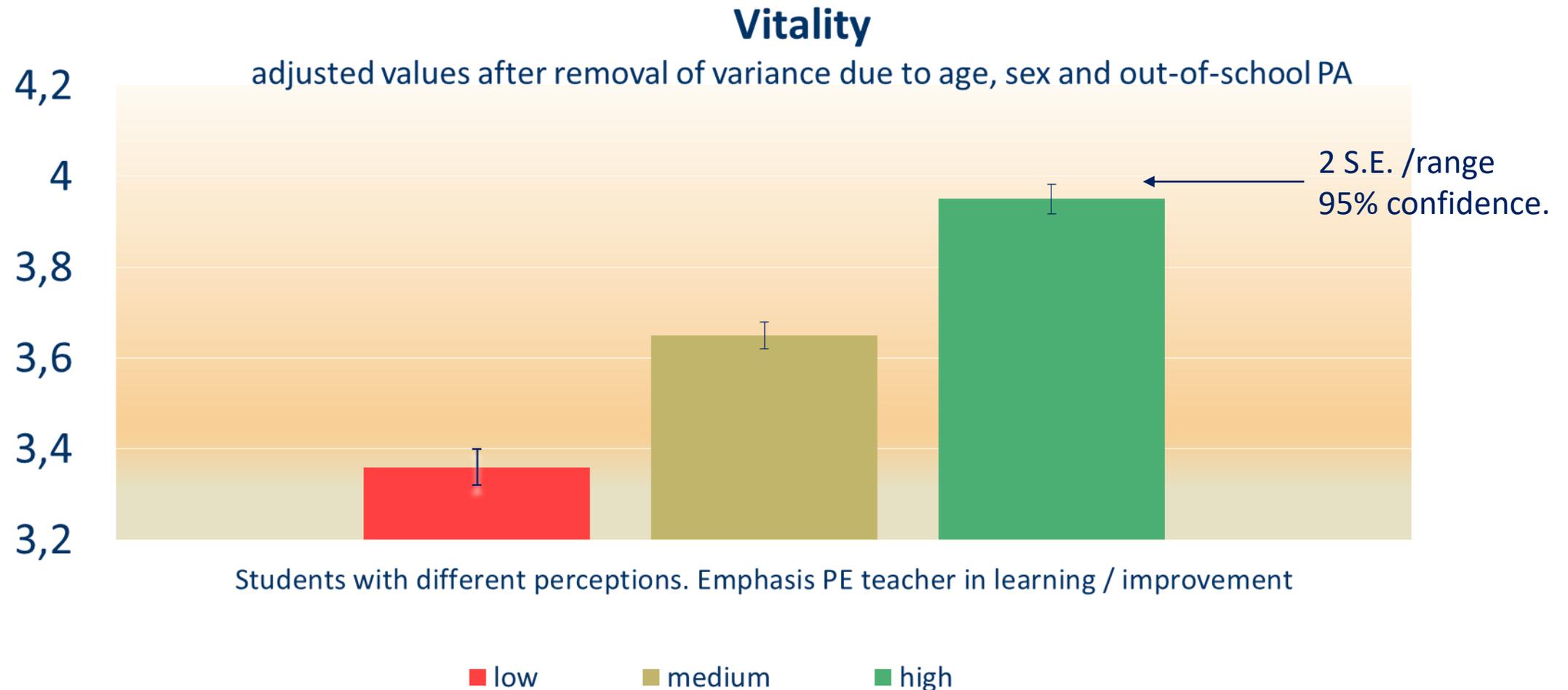
■ low   ■ medim   ■ Υψηλή

The more students perceive that the PE teacher emphasizes learning / improvement, the more positive emotions & enjoyment they have in PE

Positive feelings in PE
adjusted values after removal of variance due to age, sex and out-of-school PA

2 S.E. /range
95% confidence.

Students with different perceptions. Emphasis PE teacher in learning / improvement

■ low   ■ medium   ■ high

The more students perceive that the PE teacher emphasizes learning / improvement, the less negative emotions they have in PE

Negative feelings in PE- adjusted values after having removed the variance due to age, sex and out-of-school PA

Students with different perceptions. Emphasis PE teacher in learning / improvement

2 S.E. /range 95% confidence.

■ low ■ medium ■ high

The more students perceive that the PE teacher emphasizes learning / improvement, the greater the vitality and joy they feel in their life.
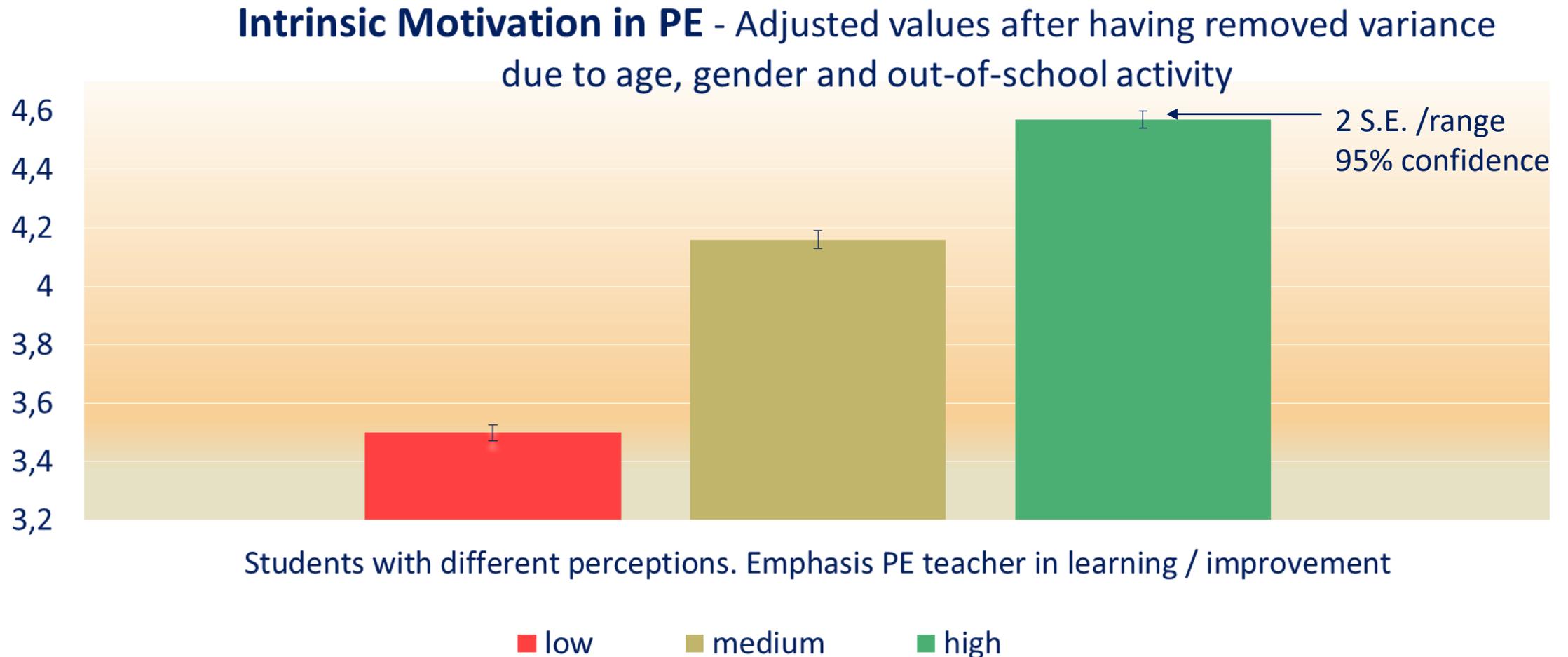

Vitality
adjusted values after removal of variance due to age, sex and out-of-school PA

2 S.E. /range
95% confidence.

Students with different perceptions. Emphasis PE teacher in learning / improvement

■ low   ■ medium   ■ high

Similarly, the more pupils perceive that their PE teacher satisfy their basic needs for
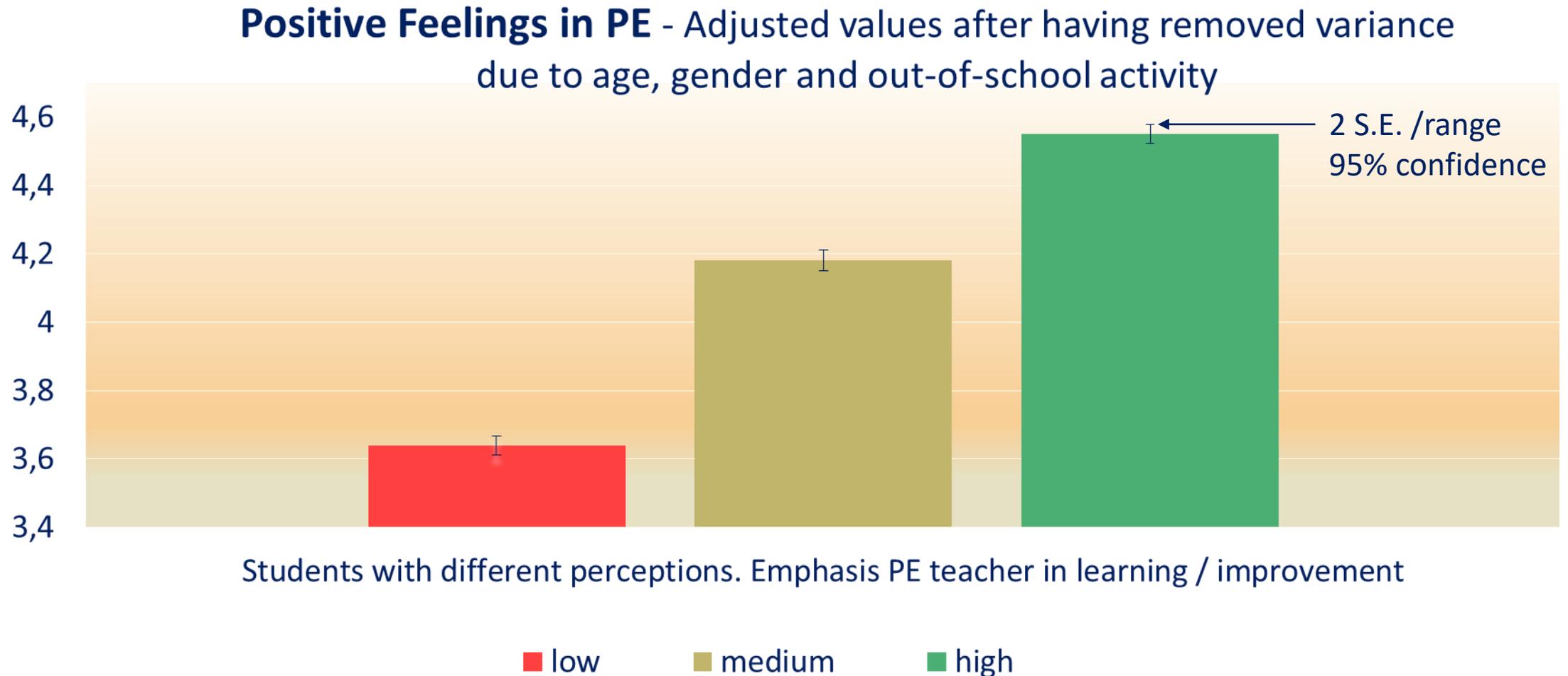
- Autonomy
- Competence
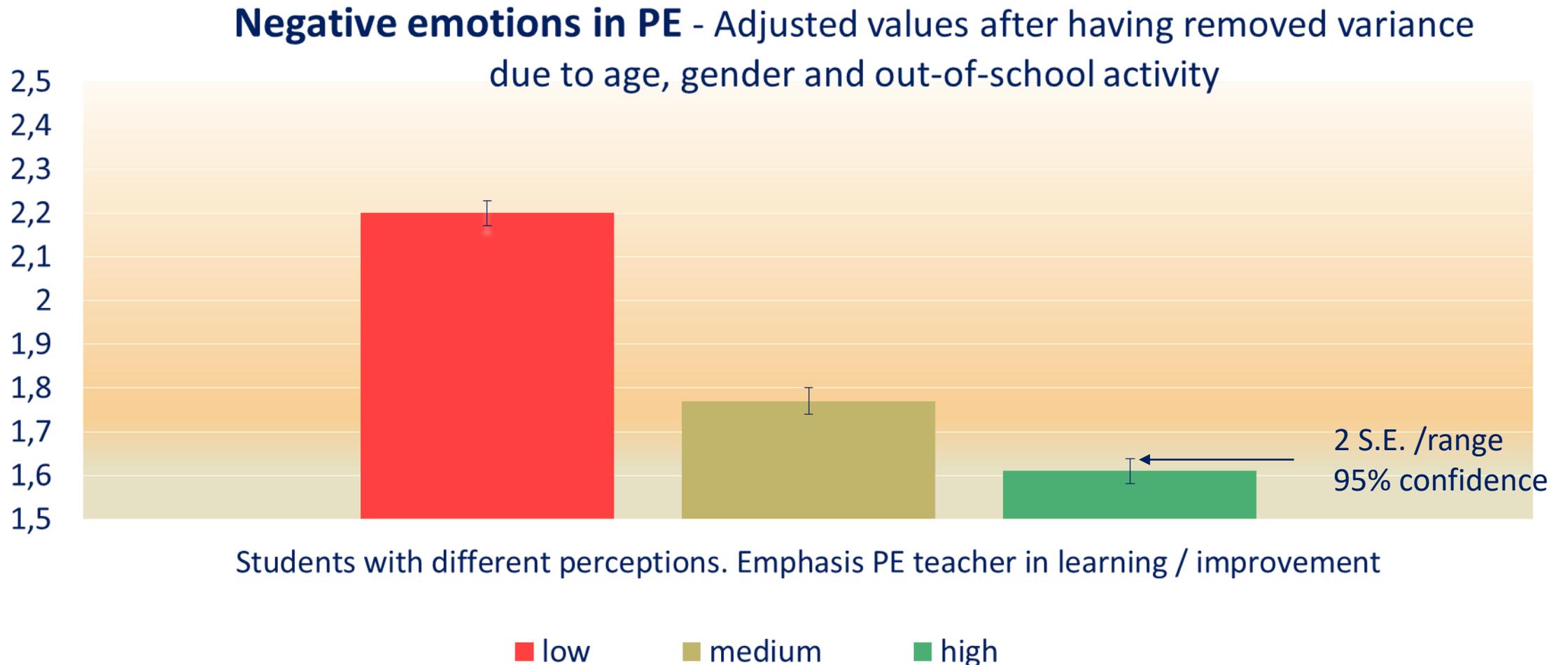- Relatedness

The more…

The more students perceive that the PE teacher satisfies their basic needs for Autonomy / competence / relatedness, the stronger their intrinsic motivation in PE

Intrinsic Motivation in PE - Adjusted values after having removed variance due to age, gender and out-of-school activity

2 S.E. /range
95% confidence

Students with different perceptions. Emphasis PE teacher in learning / improvement
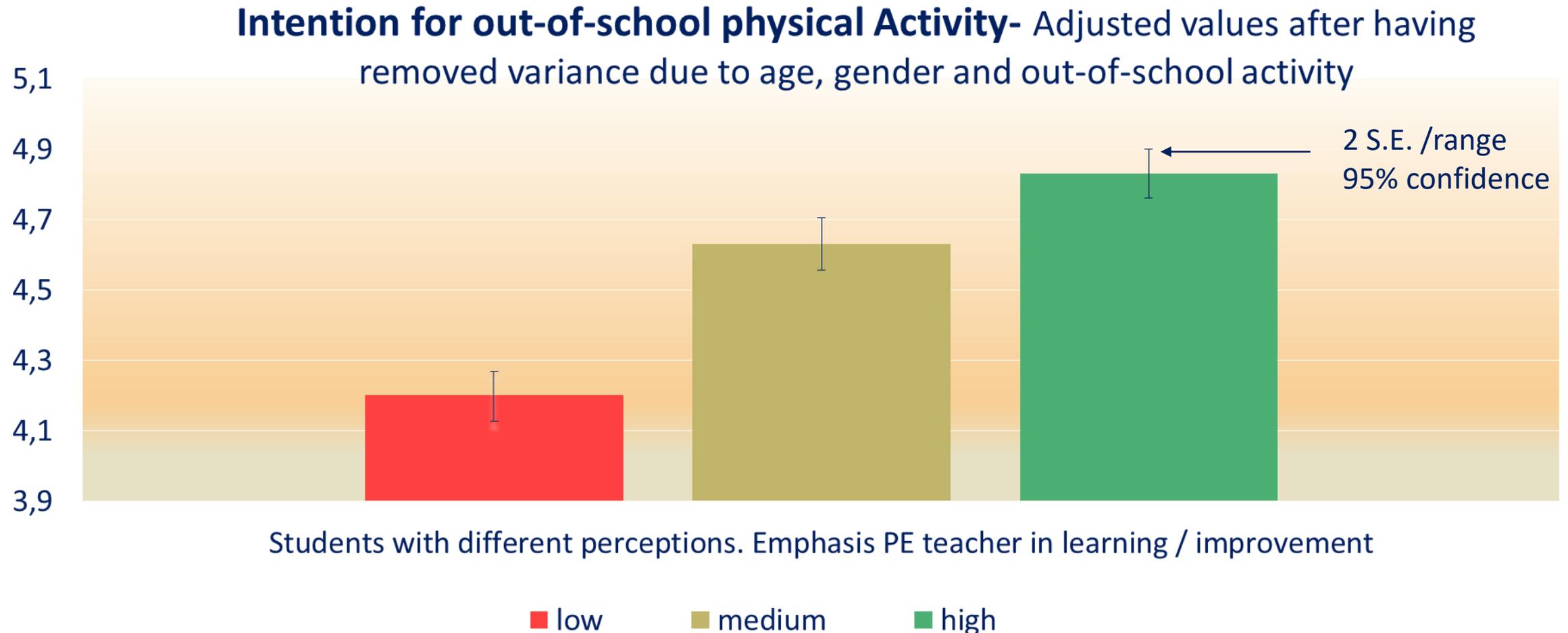
■ low ■ medium ■ high

The more students perceive that the PE teacher satisfies the basic needs for Autonomy / competence / relatedness, <u>the more positive feelings they have in PE</u>

Positive Feelings in PE - Adjusted values after having removed variance due to age, gender and out-of-school activity

2 S.E. /range
95% confidence

Students with different perceptions. Emphasis PE teacher in learning / improvement
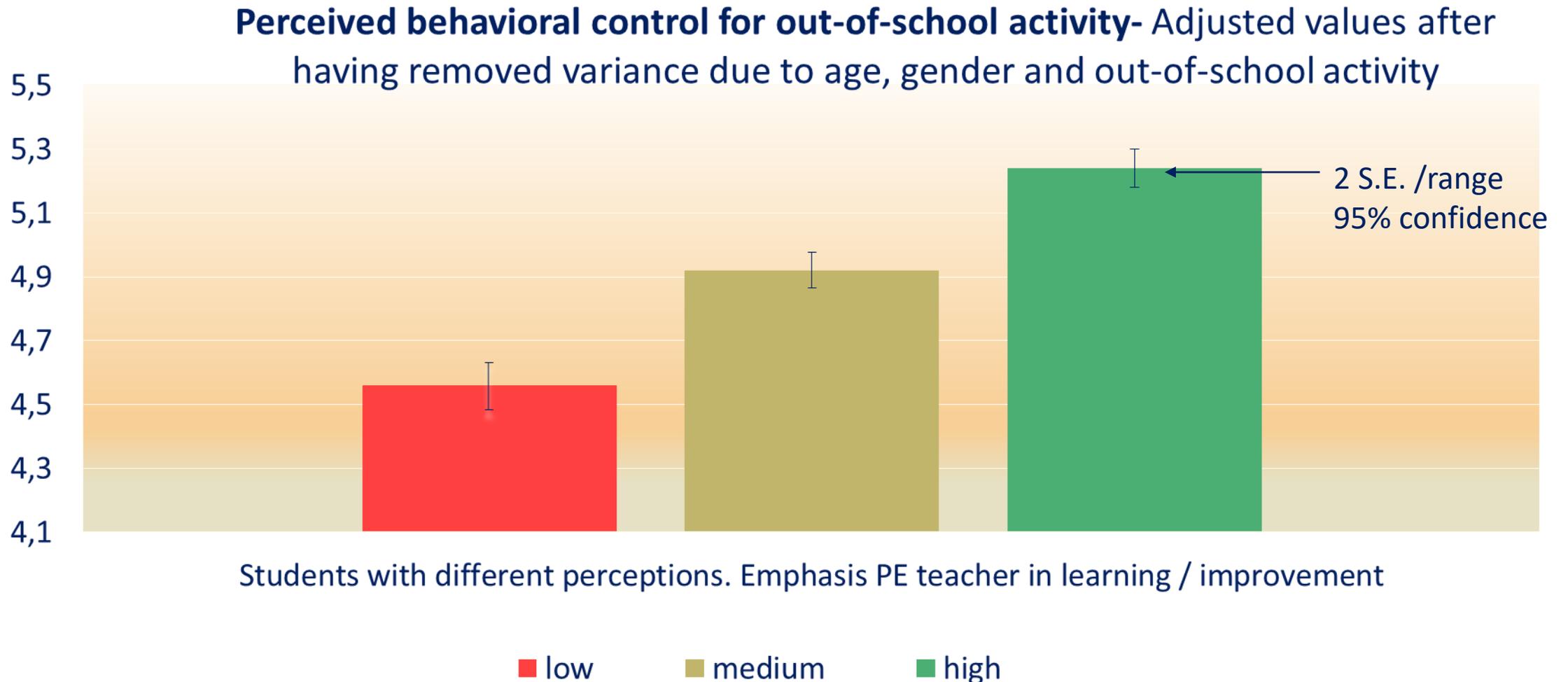
■ low   ■ medium   ■ high

The more students perceive that the PE teacher satisfies the basic needs for Autonomy / competence / relatedness, <u>the less negative feelings they have in PE</u>

Negative emotions in PE - Adjusted values after having removed variance due to age, gender and out-of-school activity

2 S.E. /range
95% confidence

Students with different perceptions. Emphasis PE teacher in learning / improvement
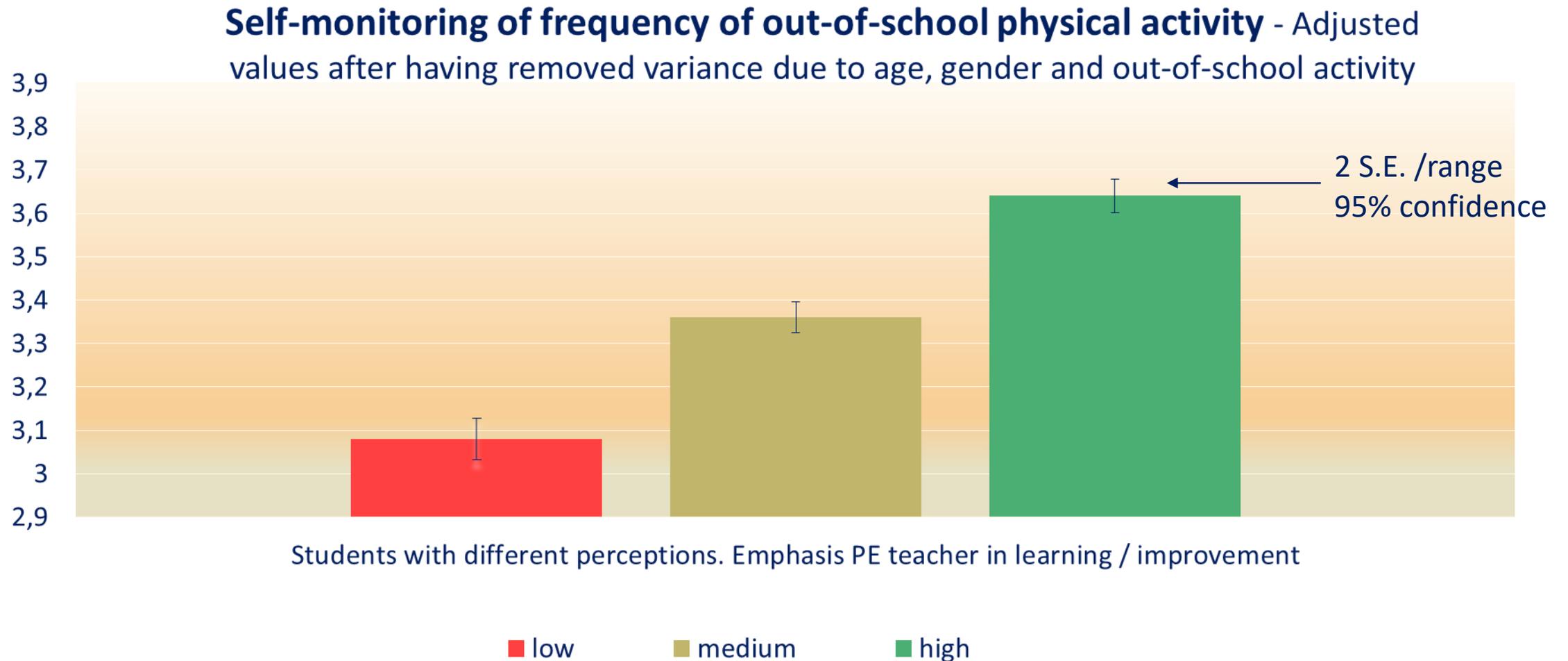
■ low   ■ medium   ■ high

The more students perceive that the PE teacher satisfies the basic needs for Autonomy / competence / relatedness, the greater intention they have to be physically active outside of school

Intention for out-of-school physical Activity- Adjusted values after having removed variance due to age, gender and out-of-school activity

2 S.E. /range
95% confidence

Students with different perceptions. Emphasis PE teacher in learning / improvement
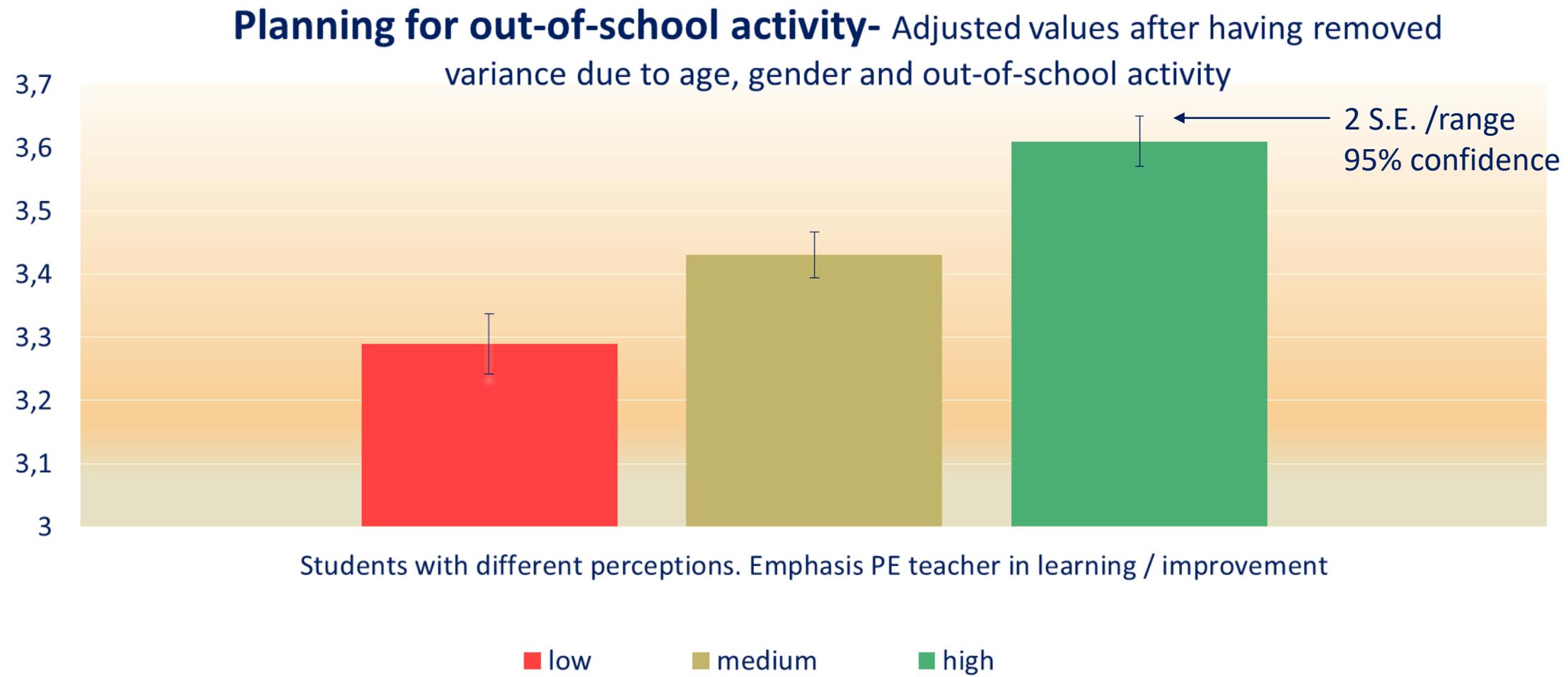
■ low   ■ medium   ■ high

The more students perceive that the PE teacher satisfies the basic needs for Autonomy / competence / relatedness, the more are encouraged and believe that they CAN/IT'S UP TO THEM to be physically active outside of school.

Perceived behavioral control for out-of-school activity- Adjusted values after having removed variance due to age, gender and out-of-school activity

2 S.E. /range
95% confidence

Students with different perceptions. Emphasis PE teacher in learning / improvement

■ low   ■ medium   ■ high

The more students perceive that the PE teacher satisfies the basic needs for Autonomy / competence / relatedness, the more they monitor themselves about frequency of their out-of-school physical activity.

Self-monitoring of frequency of out-of-school physical activity - Adjusted values after having removed variance due to age, gender and out-of-school activity

2 S.E. /range
95% confidence

Students with different perceptions. Emphasis PE teacher in learning / improvement

■ low   ■ medium   ■ high

The more students perceive that the PE teacher satisfies their basic needs for Autonomy / competence/ relatedness, the more they get organized with specific plans (when / where / with whom / how / how often) to be physically active outside of school.

Planning for out-of-school activity- Adjusted values after having removed variance due to age, gender and out-of-school activity

2 S.E. /range
95% confidence

Students with different perceptions. Emphasis PE teacher in learning / improvement

■ low   ■ medium   ■ high

In order to have immediate outcomes in promoting out-of-school PA.

☐ The positive motivation climate that we create needs to aim:

(1) in developing students' cognitive abilities regarding their ability to self-regulate their behavior and physical activity.

(2) In gaining positive experiences from out-of-school physical activity.

☐In the third webinar we focused on how the students can (self)monitor themselves as to whether they regularly exercise and how to set goals in order to improve the frequency of out-of-school PA.

In other words, to develop high-level self-regulated students in sports.

The results with the present students have confirmed that this kind of students are much more physically active.

Number of pupils in different levels of self-monitoring in terms of Exercise Frequency

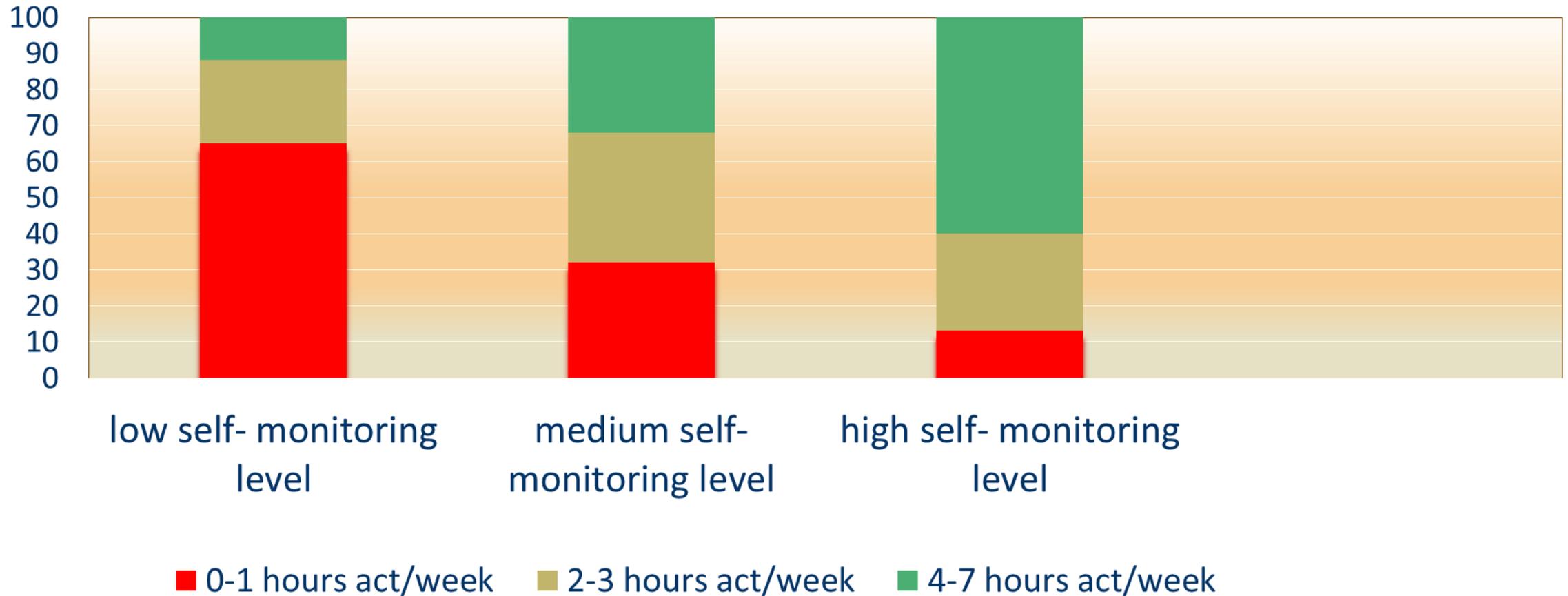Level of pupils' self-monitoring in terms of Exercise Frequency

Age	Low	Moderate	High	TOTAL
10	85	139	120	344
11	257	558	461	1276
12	235	359	252	846
13	313	367	227	907
14	479	520	316	1315
15	457	539	298	1294
16	364	349	191	904
17	234	215	128	577
18	94	74	48	216
Total	2518	3120	2041	7679

The higher the level of self-monitoring of the student's frequency of physical activity, the more days they are physically active outside of school

Days of sport/physical activity out-of-school /week - adjusted values
after having removed age and gender variation

2 S.E. /range
95% confidence

Students with different level of self-monitoring

■ low ■ medium ■ high
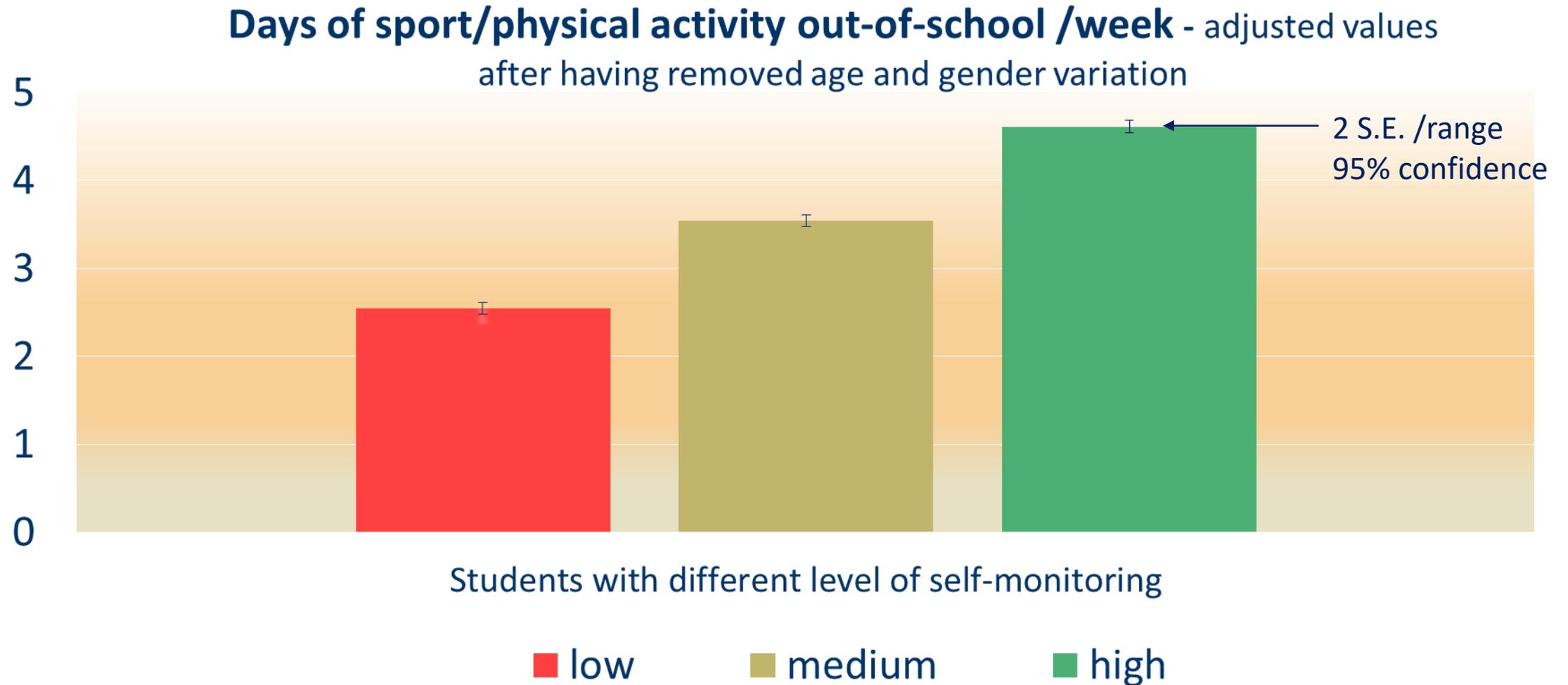
% of students' physical activity hours per week depending on their self-monitoring level

% of students' <u>physical activity hours per week</u> depending on their level of <u>planning</u> for out-of-school PA

% of students who exercise 0-1 or 2-3 or 4-7 hours per week

- 0-1 hours act/week
- 2-3 hours act/week
- 4-7 hours act/week

low level of planning

medium level of planning

high level of planning
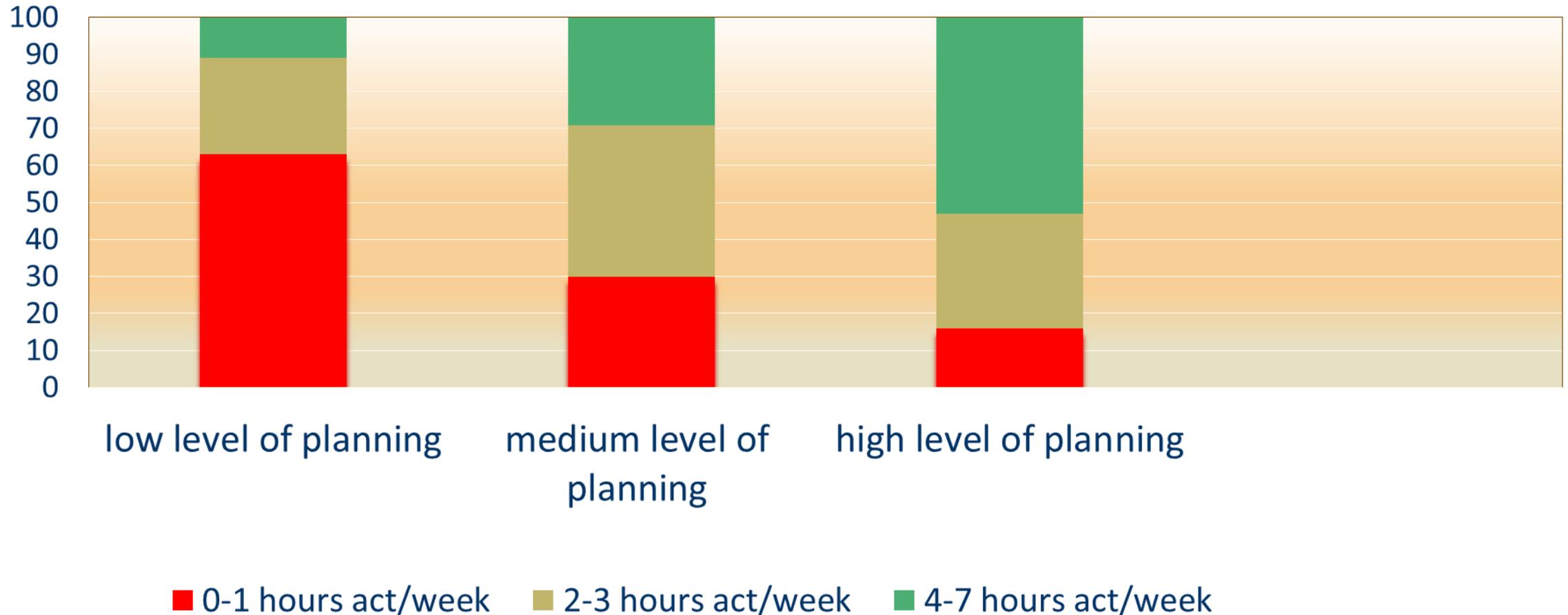
For these reasons in the 3rd & 4th webinars, we focused on increasing student's self-monitoring ability & planning/goal-setting

Teaching them how to monitor their past 7-day physical activity

& adopt a goal-setting program in order to increase frequency of PA

We also suggested to set both individual and group goals, motivating students to help/motivate each other to increase their physical activity.

Of course applying these strategies within a positive motivational climate!

We have not completed yet data analyses regarding the effects of this intervention.

Our future goals

Investigate

☐ How to develop self-determination and self-regulation / self-monitoring/planning and cooperation **skills** of our pupils related to PA participation (because just few classes are not enough)

☐ How to develop **a developmental-based PE curriculum** focused on the development of the skills/competences for self-monitoring/planning and cooperation for PA promotion (because students have different competences, challenges & needs across different ages)

☐ With the application of a goal-setting program in just one PE class, pupils become aware how to set goals, but they do not develop stable self-regulation skills

European Social network in The Identification and Motivation of inAcTivE children (*ESTIMATE* network)

How can we sustain this network of PE teachers and researchers interested in the promotion of physical activity through PE ?

(focused particularly to those students who mostly need physical activity!)

A little later we would like your suggestions

Next year, IMPACT will be re-introduced to the colleagues of the control group

Who of you are interested in participating again, applying once again the IMPACT/PENTATHLON to get even better results for your pupils, and to improve IMPACT / PENTAHLON?

☐YES I'm interested

☐YES and NO

☐NO I'm no interested

Την επόμενη χρονιά το IMPACT θα ξαναγίνει στους συναδέλφους της ομάδας ελέγχου

- Ποιοι από εσάς ενδιαφέρονται να συμμετέχουν ξανά, εφαρμόζοντας και πάλι το IMPACT-ΑΘΛΟΣ για να πετύχουμε ακόμη καλύτερα αποτελέσματα στους μαθητές σας, για να βελτιώσουμε το IMPACT/ΑΘΛΟΣ;

- Α. ΝΑΙ Ενδιαφέρομαι

- Β. Και ΝΑΙ και ΟΧΙ

- Γ. ΟΧΙ Δεν ενδιαφέρομαι

A	32	76%
B	9	21%
C	1	2%

Recorded with BigBlueButton.

ΚΩΝΣΤΑΝΤΙΝΟΣ ΜΠΑΡΑΚΟΣ:Ωστόσο η στατιστικές πιθανόν να επιβεβαιώσουν την άσχημη κατάσταση

N.Digelidis:Σχετικά με τους μαθητές λυκείου, τα αποτελέσματα ήταν παρόμοια με αυτά των μικρότερων μαθητών - φυσικά και εξετάζουμε όλες τις ηλικίες. Περισσότερα όταν θα έχουμε και όλα τα δεδομένα από την τελική μέτρηση
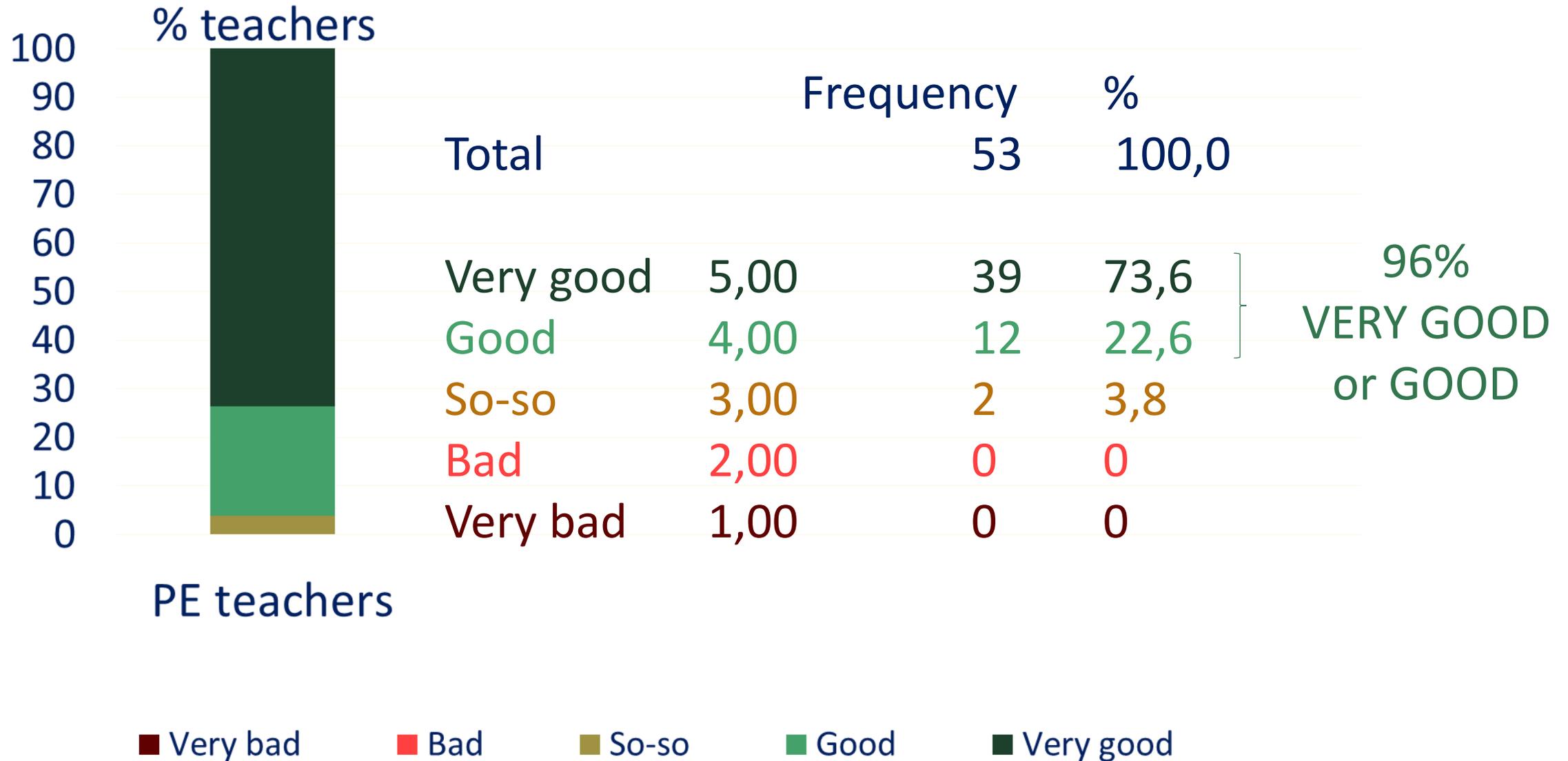
Κωσταντίνος Τσακλίδης:ΝΑΙ

57:51

Greek Experimental PE teachers: Intention to participate next year in training/webinars to promote students' PA

% teachers

	Frequency	%	Cumulative %
Total	54	100,0	100,0
Definitely yes	7,00	18	33,3	100,0
	6,50	4	7,4	66,7
Yes	6,00	8	14,8	59,3
	5,50	6	11,1	44,4
Rather yes	5,00	10	18,5	33,3
	4,50	2	3,7	14,8
Yes & No	4,00	1	1,9	11,1
	3,50	2	3,7	9,3
Rather No	3,00	2	3,7	5,6
	2,50	1	1,9	1,9
No	2	0	0	0
Definitely No	1	0	0	0

85% YES

PE teachers

Legend:
- Definetely No
- No
- 2,5
- Rather No
- 3,5
- Yes & No
- 4,5
- Rather yes
- 5,5
- Yes
- 6,5
- Definetely YES
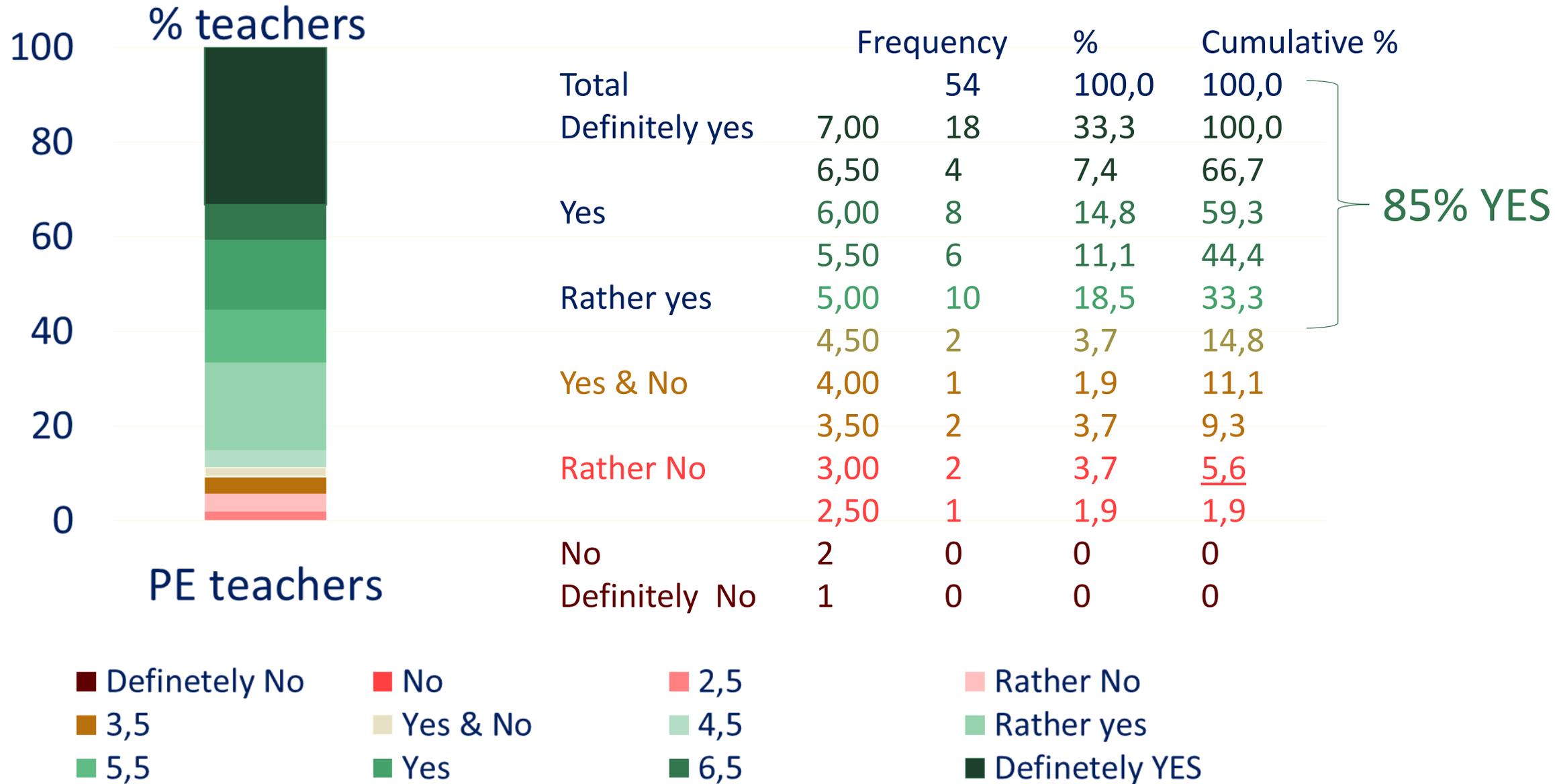
Greek Experimental PE teachers:
"In general, I found the IMPACT project…"

% teachers

		Frequency	%
Total		53	100,0
Very good	5,00	39	73,6
Good	4,00	12	22,6
So-so	3,00	2	3,8
Bad	2,00	0	0
Very bad	1,00	0	0

96% VERY GOOD or GOOD

PE teachers

■ Very bad   ■ Bad   ■ So-so   ■ Good   ■ Very good

📢 **Welcome to ImpactPE Project forum.**

Note that the <u>max upload file size is 5MB</u>

It is currently Sat Jul 13, 2019 5:34 am

GREEK	TOPICS	POSTS	LAST POST
General Discussion	7	76	**Re: Περιγράψτε την εμπειρία σ...** by elpiniki ⊠ Mon Mar 25, 2019 6:56 pm
Upload Files	8	8	**Links to recodred Greek webin...** by APapaioannou ⊠ Thu Feb 14, 2019 12:06 pm

ITALY	TOPICS	POSTS	LAST POST
General Discussion	2	2	**ciao a tutti!** by Francesca Bergamini ⊠ Wed Jan 30, 2019 7:16 pm
Upload Files	4	4	**Webinar 4** by erica ⊠ Mon Feb 04, 2019 12:15 pm

TURKEY	TOPICS	POSTS	LAST POST
General Discussion	1	1	**Create ESTIMATE network - Eng...** by APapaioannou ⊠ Tue Jan 15, 2019 9:19 pm
Upload Files	2	2	**Pentatlon Takımı Uygulama Dos...** by Gokce Erturan ⊠ Thu Jan 17, 2019 2:36 pm

FRANCE	TOPICS	POSTS	LAST POST
General Discussion	1	1	**Create ESTIMATE network - Eng...** by APapaioannou ⊠ Tue Jan 15, 2019 9:20 pm
Upload Files	6	10	**Dernier webinaire présentatio...** by Geraldine ⊠ Wed Jun 26, 2019 5:33 am

Περιγράψτε την εμπειρία σας ως τις 31-1-2019

Re: Περιγράψτε την εμπειρία σας ως τις 31-1-2019

🔖 by **elisavet** » Sun Feb 10, 2019 5:55 pm

Αγαπητοί κ. Καθηγητές και αγαπητοί συνάδελφοι, χαίρετε!
Ονομάζομαι Ελισάβετ Ταϊγανίδου και εργάζομαι στο 1ο Γενικό Λύκειο Γιαννιτσών. Σε δύο τμήματα της Α' Λυκείου εφάρμοσα το πρόγραμμα με διαφορετικό τρόπο. Στο ένα αφιέρωσα αρκετό χρόνο στην προετοιμασία των μαθητών με συζήτηση μετά από παρουσίαση σε Power Point των όρων φυσική δραστηριότητα, άσκηση, άθληση και των ωφελειών από την κινητική δραστηριοποίηση του ατόμου και στο άλλο απλά εξήγησα τι έπρεπε να κάνουν. Η συμμετοχή στο πρώτο τμήμα ήταν προαιρετική ενώ στο δεύτερο υποχρεωτική για όλους τους μαθητές. Επειδή είχαμε προβλήματα λόγω καταλήψεων το πρόγραμμα θα έχει διάρκεια τέσσερις εβδομάδες.
Η αλήθεια είναι πως δεν έχω λάβει θετική ανατροφοδότηση από τους μαθητές. Κάποιοι το κάνουν επειδή πρέπει (υγεία), άλλοι για να ευχαριστήσουν εμένα, άλλοι από υπακοή και άλλοι αμελούν ή ψεύδονται. Δεν το κρύβω πως από την αρχή, όταν προτείνατε την εφαρμογή του, είχα τους ενδοιασμούς μου. Μπορεί η μέτρηση της εβδομαδιαίας φυσικής δραστηριοποίησης του ατόμου να του δίνει μια πληροφορία για την κατάσταση του και την εναρμόνιση με όσα προτάσσει ο Παγκόσμιος Οργανισμός Υγείας, αλλά ποια θα είναι τα μακροχρόνια αποτελέσματα αυτής;
Νομίζω πως το κίνητρο είναι εξωτερικό και θα σβήσει με το τέλος του προγράμματος. Όλοι γνωρίζουμε στο περίπου τι πρέπει να κάνουμε για τη διατήρηση της υγείας μας όσον αφορά την κίνηση, τη διατροφή, τις σχέσεις μας με τους άλλους ανθρώπους και με τον εαυτό μας και όμως αδιαφορούμε ή πιστεύουμε πως δεν μπορούμε να αλλάξουμε κάτι από όλα αυτά.
Το μάθημα της φυσικής αγωγής δεν εστιάζει μόνο στο θέμα υγεία. Η υγεία είναι το φυσικό αποτέλεσμα. Πιστεύω πως το μάθημα της φυσικής αγωγής μπορεί και να ζημιωθεί αν προσανατολιστεί στο "φυσική δραστηριότητα για υγεία". Μάλιστα το πρόγραμμα αυτό θα μπορούσε να εφαρμοστεί και από καθηγητές άλλων ειδικοτήτων για πολλούς λόγους τους οποίους για λόγους συντομίας δεν παραθέτω εδώ.
Η μέχρι τώρα συμμετοχή μου στο συγκεκριμένο ερευνητικό πρόγραμμα με στήριξε στο έργο μου και με βοήθησε να ξεκαθαρίσω πως οφείλω να οδηγήσω με τις μεθόδους και τα εργαλεία που χρησιμοποιώ τους μαθητές μου σε συμμετοχή με προσανατολισμό το έργο και να ενισχύσω την αυτονομία και την αυτορρύθμιση τους. Στο πλαίσιο αυτό το πρόγραμμα "ΑΘΛΟΣ" δεν νομίζω πως λειτουργεί υποστηρικτικά.
Περιμένω την επόμενη συνάντηση μας για να λάβω ανατροφοδότηση από εσάς και τους συναδέλφους μου.
Καλή συνέχεια!

elisavet
Posts: 1
Joined: Tue Jan 15, 2019 10:27 pm

Re: Περιγράψτε την εμπειρία σας ως τις 31-1-2019

🔖 by **Podos** » Sun Feb 10, 2019 6:31 pm

Στο δικό μου σχολείο δήλωσαν συμμετοχή 13 άτομα από τα 25 της Στ τάξης. Μετά τη συμπλήρωση των αρχικών ηλεκτρονικών ερωτηματολογίων ήθελαν όμως και άλλα να συμμετέχουν. Έτσι, την πρώτη φορά που τους μοίρασα την κάρτα για την καταγραφή της εβδομαδιαίας δραστηριότητάς τους την πήραν όλοι. Ακολούθησε τη μεθεπόμενη εβδομάδα συζήτηση για τις δυσκολίες που αντιμετώπισαν στην καταγραφή των δραστηριοτήτων και ειπώθηκαν λύσεις από τους ίδιους τους μαθητές. Έναν εμπλουτισμένο πίνακα διάρκειας 3 εβδομάδες με συνδυασμό καταγραφής του τι τρώγανε - όχι ποσότητες - τους μοίρασα πριν τις διακοπές των Χριστουγέννων. Τους είχα ζητήσει μάλιστα να μετρήσουν όσοι μπορούν το βάρος τους την μέρα που έκλεισε το σχολείο και να το μετρήσουν ξανά μια μέρα πριν ανοίξει. Ακολούθησε συζήτηση και την επόμενη εβδομάδα ξαναμοίρασα την εβδομαδιαία κάρτα καταγραφής. Μόνο που αυτή τη φορά είχα προσθέσει μια πρόταση, στην οποία τους ζητούσα να συγκρίνουν τη συνολική δραστηριότητα της εβδομάδας με αυτή της πρώτης φωτοτυπίας που τους μοίρασα και να γράψουν το συμπέρασμά τους.
Στην πρότασή μου να φτιάξουν ομάδες και να θέσουν στόχους, μπόρε γενική άρνηση. Έτσι τους πρότεινα να κατεβάσουν μια εφαρμογή fitness

Podos
Posts: 1
Joined: Tue Jan 15, 2019 5:17 pm

ESTIMATE network goal on IMPACT II

☐We want to improve IMPACT & make a better application based on our experiences

Our European partners asked if any of you (i.e., IMPACT teachers) would like to collaborate with them & us

Requirements:

- Your intrinsic motivation to promote students' physical activity

- You are able to communicate effectively (both speaking and writing) in English in future European meetings

On Greek IMPACT PE teacher accepted to start a PhD on :

the development of **skills/competences** for self-monitoring/planning and cooperation for PA promotion.

Can we collaborate with EUPEA in relation to this?

IMPACT Final Meeting

☐ Organized by the Greek Institute of Educational Policy: **Athens 28-29 November 2019 Live-streaming**

☐ Physical or online participation: ALL **Live-streaming**

☐ We would be pleased if some of you would like to make a brief presentation of your experiences / application in your school

☐ Physical/ on-site presentation, or online

☐ Because it will be broadcasted in Europe, as a priority we would like to have speakers who can present in English language

Presentation of IMPACT on September 2019 in Larisa. How many of you can be there?

European Social network in The Identification and Motivation of inAcTivE children (*ESTIMATE* network)

How can we sustain this network of PE teachers and researchers interested in the promotion of physical activity through PE ?

(focused particularly to those students who mostly need physical activity!)

Any suggestions?

Next issues

Use of IMPACT tools by Policy makers

Large variations in PA
across Schools
at the same age group

within the same country

Large variations across Schools/ Teachers

within the same country

Each school/teacher> 15 students

Large between-school significant differences
Partial $\eta^2 s$ between .12 - .21
most $\eta^2 s$ around .19

		PA days/week at school level		
	Age group	Min	Mean	Max
Greece	**11-12**	1.96	3.95	6.30
	13-15	2.40	3.42	5.02
	16-17	1.47	3.36	4.00
Italy	**11-12**	2.61	3.12	4.22
	13-15	2.02	3.11	5.45
	16-17	2.19	2.62	4.00
Turkey	**11-12**	1.98	3.83	4.58
	13-15	1.50	3.37	5.01
	16-17	2.06	3.66	5.19
(France: No teacher ID)				

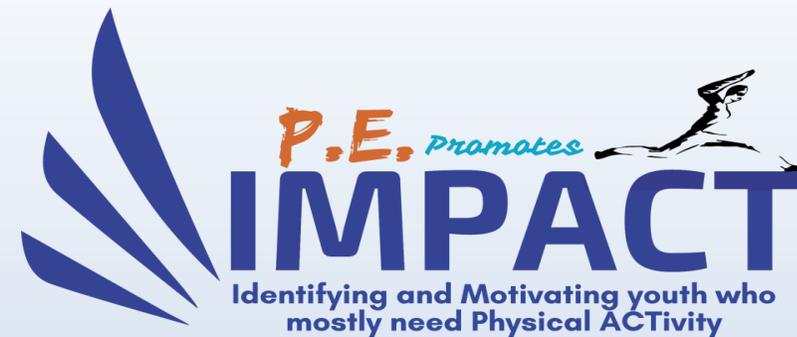# The IMPACTPE tool allows us to Identify schools with high/low levels of PA

☐ Using this information …

☐ Policy makers can adopt policies at school/neighborhood/town level …

☐ to promote PA

Next, Nikos Digelidis about IMPACT webinars

Ευχαριστούμε πολύ!

Merci beaucoup!

Grazie mille!

Muchas gracias!

Çok teşekkür ederim!

Vielen Dank!

Thank you very much!