Motor assessment of children at school: Pupils' opinion about MOBAK-1

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CIAPSE-2 – Jyväskylä, Finland
January 26-28, 2017

A critical situation in youth

- All around the world, studies show that youth are not enough physically active
- They spend also too much time in sitting activities

ACTIVE HEALTHY KIDS GLOBAL ALLIANCE
Global Matrix 2.0

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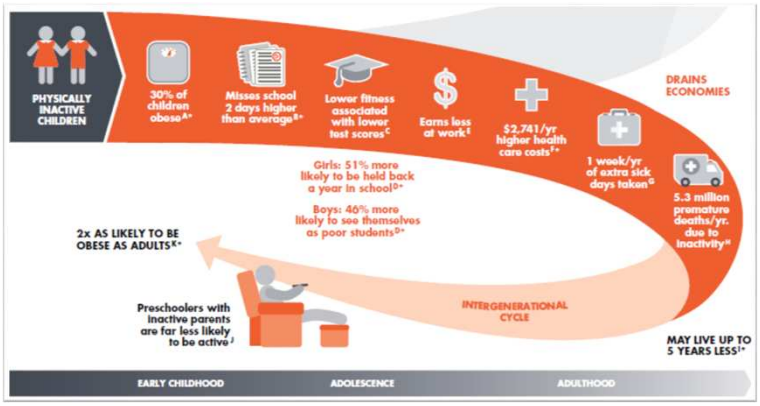
Today's children may live up to 5 years less than their parents!



www.designedtomove.org (2012)

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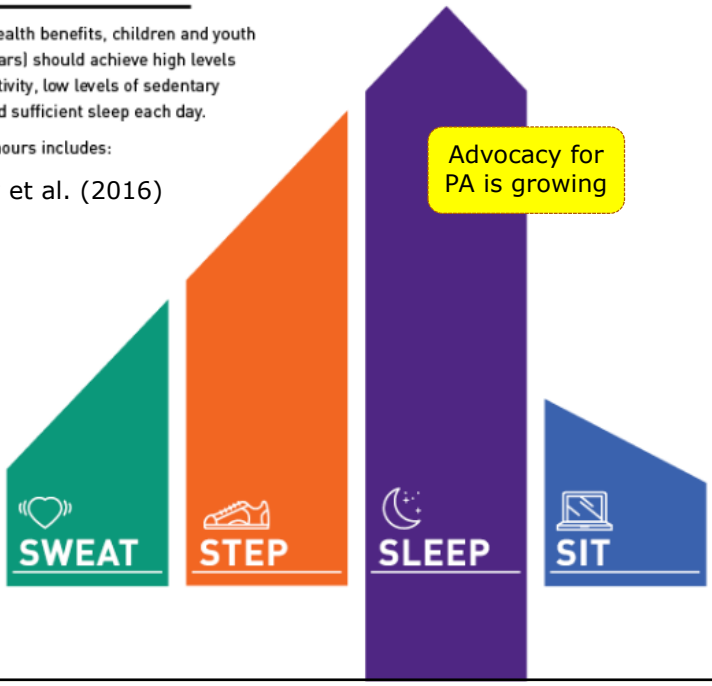
GUIDELINES

For optimal health benefits, children and youth (aged 5–17 years) should achieve high levels of physical activity, low levels of sedentary behaviour, and sufficient sleep each day.

A healthy 24 hours includes:

Tremblay et al. (2016)



Advocacy for PA is growing

What's make them active?

Individual

Social

Environmental

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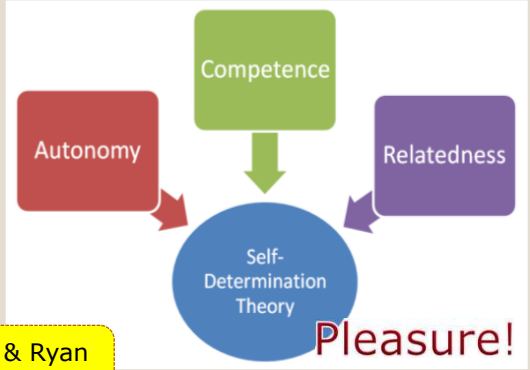
Individual determinants → self perceptions

- Self-determination theory underlines the important role of the perception of competence



Deci & Ryan (2000)

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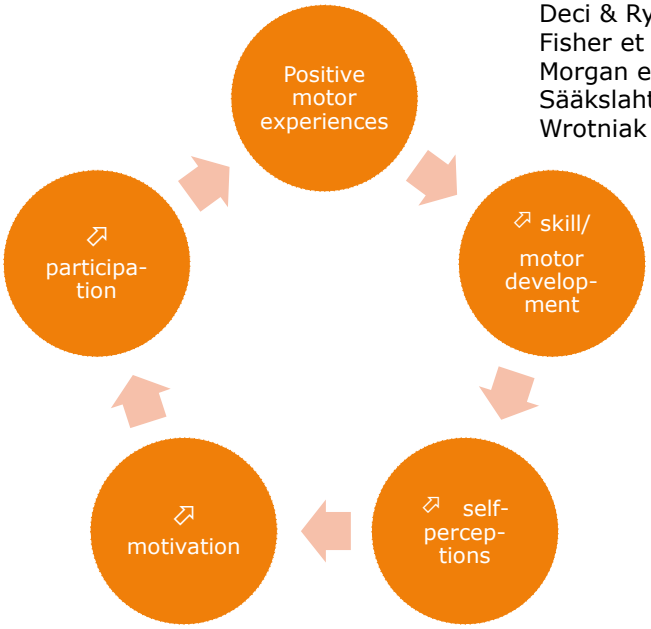
Role of motor competence

Deci & Ryan (2008)
Fisher et al. (2005)
Morgan et al. (2010)
Sääkslahti et al (1999)
Wrotniak et al. (2006)



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Evaluating children's physical and motor competencies

- At school, tests are often used for educational and/or research purposes
  - Identifying the teaching goals
  - Determining teaching effectiveness
  - Assessing !!!!
  - Comparing children's development
  - Measuring effects of interventions

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Evaluating children's physical and motor competencies

- Adults collect the data but do not verify how children experience these evaluations that can be perceived as difficult moments

Naughton et al (2006)

- Even if tests are supposed to motivate pupils, they may also decrease the self-perception and limit the participation

Cale et al (2007)

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Evaluating children's physical and motor competencies

- Several test batteries have been developed in order to measure motor development of young children
  - M-ABC, KTK, TGMD …
  - Based on the assessment of performances
- What about the acquisition of motor competencies?

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Evaluation of motor competencies

M O B A K - 1

Basic motor competencies in first grade

Herremann & Seelig (2014)

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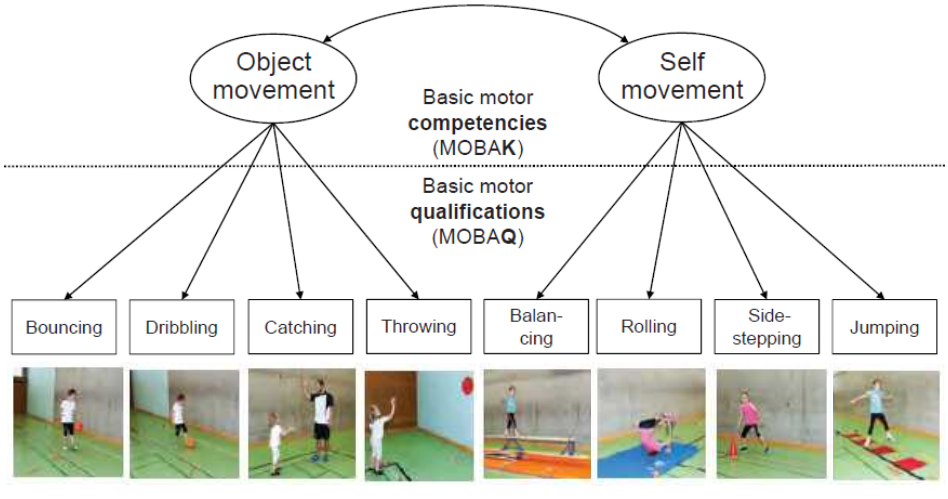
MOBAK

- Built to assess basic motor competencies



MOBAK

- The *MOBAQ test items* can be evaluated separately due to their point scores (0–2 points)
- The *MOBAK areas* are calculated as the sum of the results of the four MOBAQ test items
- 6-8 year-old children (MOBAK-1)
- 8-9 year-old children (MOBAK-3)
- Supposed to be used by PE teachers

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Purpose of the presentation

- Determine how the pupils passing these tests feel about their experience

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Methods

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- Seven primary school PE teachers administrated the MOBAK-1 tests to their classes
- 149 1st and 2d grades (6-8 year-old)
- Pupils fulfilled an adapted questionnaire based on pictograms

1) Test 1 : Throwing

a) Did you well this test? Circle the smiley corresponding to your opinion


You di did very well


You did it well


You didn't it well


You didn't it well at all

b) Did you like this test ? Circle the smiley corresponding to your opinion


You liked it very much


You liked it


You didn't like it


You didn't like it at all

Pupils' achievement

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	% max (2/2)	Mean score/2
Balancing	67.1	1.59
Catching	73.2	1.67
Sidestepping	45.0	1.15
Rolling	44.3	1.11
Dribbling	27.5	0.89
Jumping	9.4	0.46
Bouncing	31.5	0.85
Throwing	10.7	0.50

2 tests quite well done

2 tests almost well done

2 tests not so well done

2 tests badly done

Question about the difficulty level of the tests
Many failures because the pupils do not follow some instructions
Need of comparative studies

Pupils' self-perception

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	Did very well (%)	Compe-tence (/4)
Balancing	83.2	3.79
Catching	70.5	3.62
Sidestepping	70.5	3.59
Rolling	68.5	3.52
Dribbling	57.0	3.36
Jumping	60.4	3.35
Bouncing	56.4	3.32
Throwing	43.6	3.25

Except for throwing, a majority of the pupils considered that they did very well

First conclusion is that high positive self-perceptions would be a positive aspect

Pupils' achievement and self-perception

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	% max (2/2)	Mean score/2	Did very well (%)	Compe-tence (/4)
Balancing	67.1	1.59	81.9	3.79
Catching	73.2	1.67	72.5	3.62
Sidestepping	45.0	1.15	71.5	3.59
Rolling	44.3	1.11	68.4	3.52
Dribbling	27.5	0.89	65.0	3.36
Jumping	9.4	0.46	61.3	3.35
Bouncing	31.5	0.85	57.7	3.32
Throwing	10.7	0.50	51.7	3.25

r = .90

High overestimation

Pupils' appraisal

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Good levels of appraisal are interesting for pupils' intrinsic motivation (pleasure) ➔ ++

	Appraise very well (%)	Appraisal (/4)
Balancing	77.9	3.74
Catching	74.5	3.66
Sidestepping	69.1	3.51
Rolling	69.8	3.49
Dribbling	64.4	3.50
Jumping	63.8	3.42
Bouncing	63.8	3.40
Throwing	72.5	3.64

For each test, at least 6 pupils out of 10 liked very well doing it
Few pupils declared that they did not like a test
(12 for bouncing; 11 for rolling; 10 for jumping Vs 1 for balancing)

Pupils' appraisal

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Gamelike status of some tests would be more determinant for their appraisal by the pupils

	% max (2/2)	Mean score/2	Ap ve (%)	
Balancing	67.1	1.59	77.9	3.74
Catching	73.2	1.67	74.5	3.66
Sidestepping	45.0	1.15	69.1	3.51
Rolling	44.3	1.11	69.8	3.49
Dribbling	27.5	0.89	64.4	3.50
Jumping	9.4	0.46	63.8	3.42
Bouncing	31.5	0.85	63.8	3.40
Throwing	10.7	0.50	72.5	3.64

The correlation between appraisal of the tests and perceived competence is less than expected (r=0.59)

Pupils' appraisal

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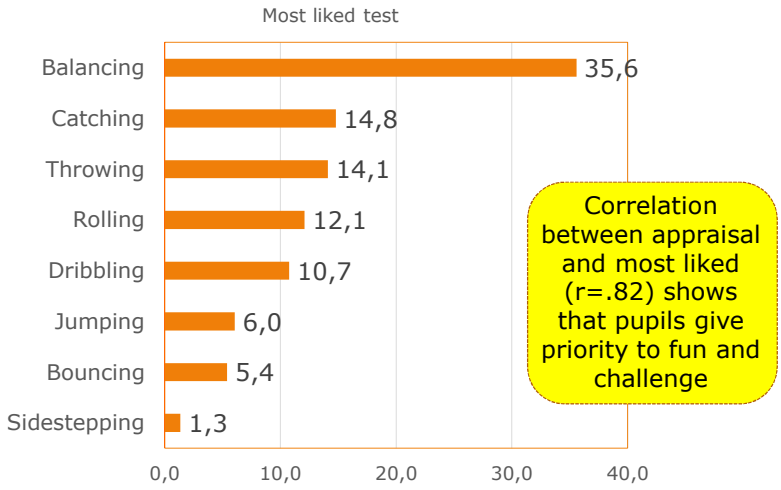

Balancing is definitely the test that pupils appreciated
Ranking of bouncing is surprising

Conclusion

- The pupils seem to meet difficulties to achieve the tests
- They are not necessary aware about their low level of achievement
- Globally, they like to do these measurement activities
- Gamelike situations were better appreciated

- Comparison according to age and gender should be implemented

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Pictures

http://physicalactivityproslez.blogspot.be/2015/04/youth-physical-activity.html

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