The early primary years: developmental changes in factors affecting physical activity



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Significance of Study

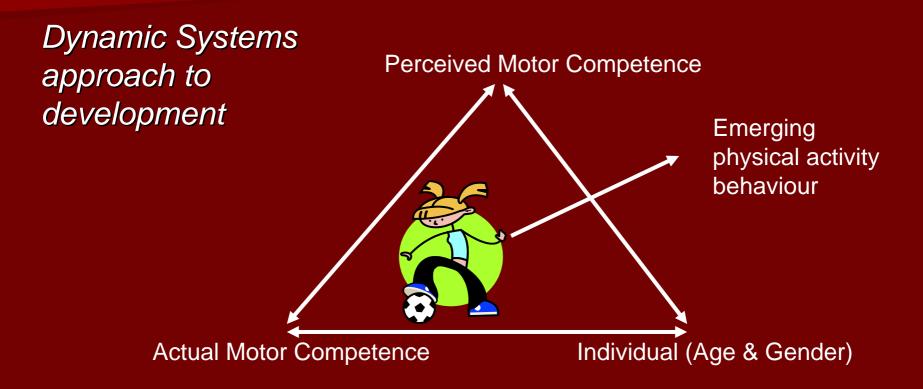
- Importance of physical activity
- Determinants of physical activity (PA)
 - Actual motor competence (AMC)
 - Perceived motor competence (PMC)



Research questions

- Are there significant differences between males and females at different ages for PMC, AMC, and PA?
- Is there a relationship between PMC and AMC?
- How well does perceived motor competence and actual motor competence predict physical activity?

Theoretical Framework



Longitudinal Study



All 6, 7 or 8 years of age between
January – June 2005.



Data Collection

- Physical activity
 - Pedometers and physical activity diaries.
- Perceived motor competence
 - Self Description Questionnaire (Marsh, 1988).
- Actual motor competence
 - 4 motor skills (run, throw, standing broad jump, balance).

Results – Gender differences

	Physical Activity	Actual Motor Competence	Perceived Motor Competence
	Mean daily step counts	/26	/120
6yo Girls	11,544*	15.1**	103
6yo Boys	14,021*	17.5**	98
7yo Girls	11,385**	16.6**	99.8
7yo Boys	14,094**	18.2**	98.4
8yo Girls	12,072**	16.8**	95.5
8yo Boys	15,023**	19**	96.5
9yo Girls	12,296**	17.4**	93.8
9yo Boys	15,455**	20**	96.8

^{*}p ≤ .05 **p ≤ .01

Results – Correlation with Actual Motor Competence

	Perceived Motor Competence	
6yo Girls	.06	
6yo Boys	.02	
7yo Girls	.02	
7yo Boys	.24**	
8yo Girls	.23*	
8yo Boys	.36**	
9yo Girls	.52**	
9yo Boys	.30*	

^{*}p ≤ .05 **n < 01

Results – AMC & PMC as predictors of PA

	Actual AND Perceived Motor Competence		Actual Motor Competence	Perceived Motor Competence
	AMC	PMC		
6yo Girls				
6yo Boys				
7yo Girls				
7yo Boys	.002**		.001**	
8yo Girls				
8yo Boys			.041*	
9yo Girls			.027*	
9yo Boys	.000**		.000**	.035*

^{*}p ≤ .05

^{**}p ≤ .01

What does it all mean?

- For this particular sample.....
 - Boys had significantly higher physical activity levels and actual motor competence than girls at all ages.
 - Accuracy of perceptions about motor competence are developing earlier for boys than girls.
 - Actual motor competence makes a significantly larger contribution to physical activity levels and this is apparent earlier in boys than girls during the early primary years.

Implications



- Younger children, particularly young girls, are highly inaccurate in their selfperceptions.
 - Does this matter?
 - Do young children really need a reality-check?
- Or should the focus continue on actual motor competence as that is a larger and more significant predictor of PA?
 - Why is the contribution of AMC to PA apparent earlier in boys than girls?

Influences?

- Young people learn about their bodies, health, physical activity, and sport from a variety of sources, certainly not limited to school PE class (Tinning, 2006).
- What are the physical activities and motor competencies that children deem valuable and important?
- Different for boys and girls? And what context are they learning them in?