

PRESENTER: MICHAEL GRAHAM

THE EFFECT OF FUNDAMENTAL MOVEMENT SKILL INTERVENTIONS ON MODERATE TO VIGOROUS PHYSICAL ACTIVITY LEVELS IN 5 TO 11 YEAR OLDS: A SYSTEMATIC REVIEW AND META-ANALYSIS

INTRO:

The effectiveness of FMS interventions in primary school aged children is not fully understood. Does better FMS competency lead to higher daily levels of MVPA?

METHODS:

- 8 electronic databases searched
- “Children”, “fundamental movement skills”, “controlled” and “physical activity”
- RCT’s and NON-RCT’s with a FMS intervention with objectively measured, MVPA in 5 to 11 year olds were included
- Study quality was assessed using ROB2.0 & ROBINS-I
- Random effects Meta-analysis = pooled mean difference with meta-regression for
 - 1) FMS measured as outcome
 - 2) multicomponent
 - 3) instructor type
- MCID = 3.9 minutes

RESULTS

Pooled mean effect = 4.2

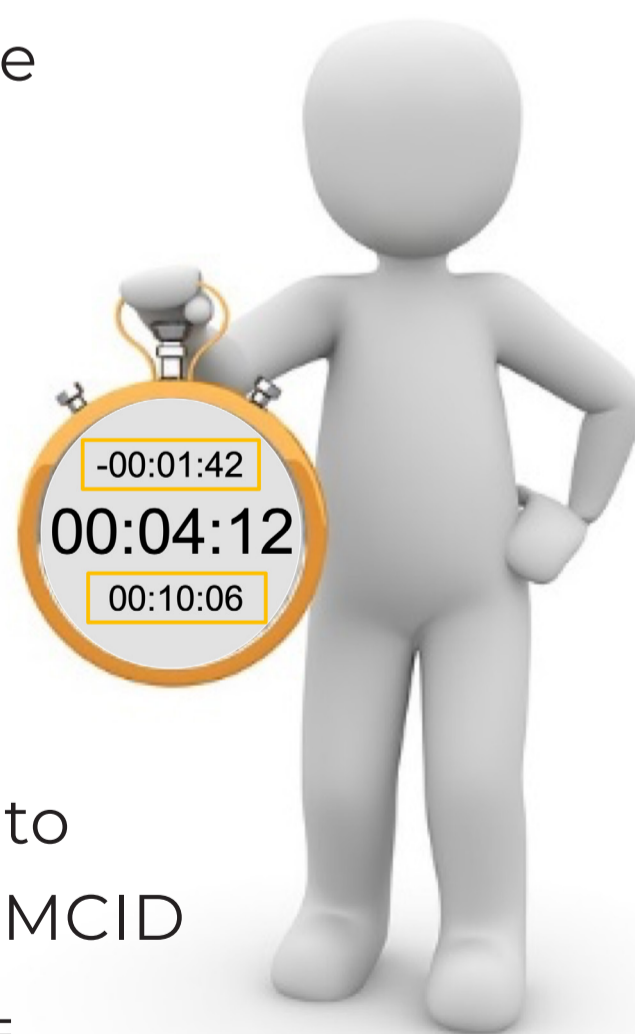
(95%CI; -1.7 to 10.1) daily MVPA

52% of future studies are likely to find an effect greater than the MCID

Wide prediction intervals 95% =

-16.3 to 24.7 mins Tau = 8.6 mins

Meta-regression for studies including a measure of FMS explained 80% of this variance (**R² = 0.80; T = 3.8 minutes**) resulting in a **coefficient of 12 mins**



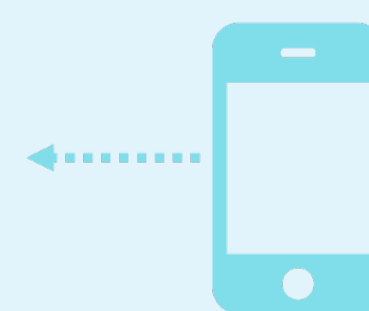
TO STRENGTHEN THE FMS & MVPA RELATIONSHIP IN CHILDREN...

FMS DELIVERY SHOULD:

BE DEVELOPMENTALLY APPROPRIATE

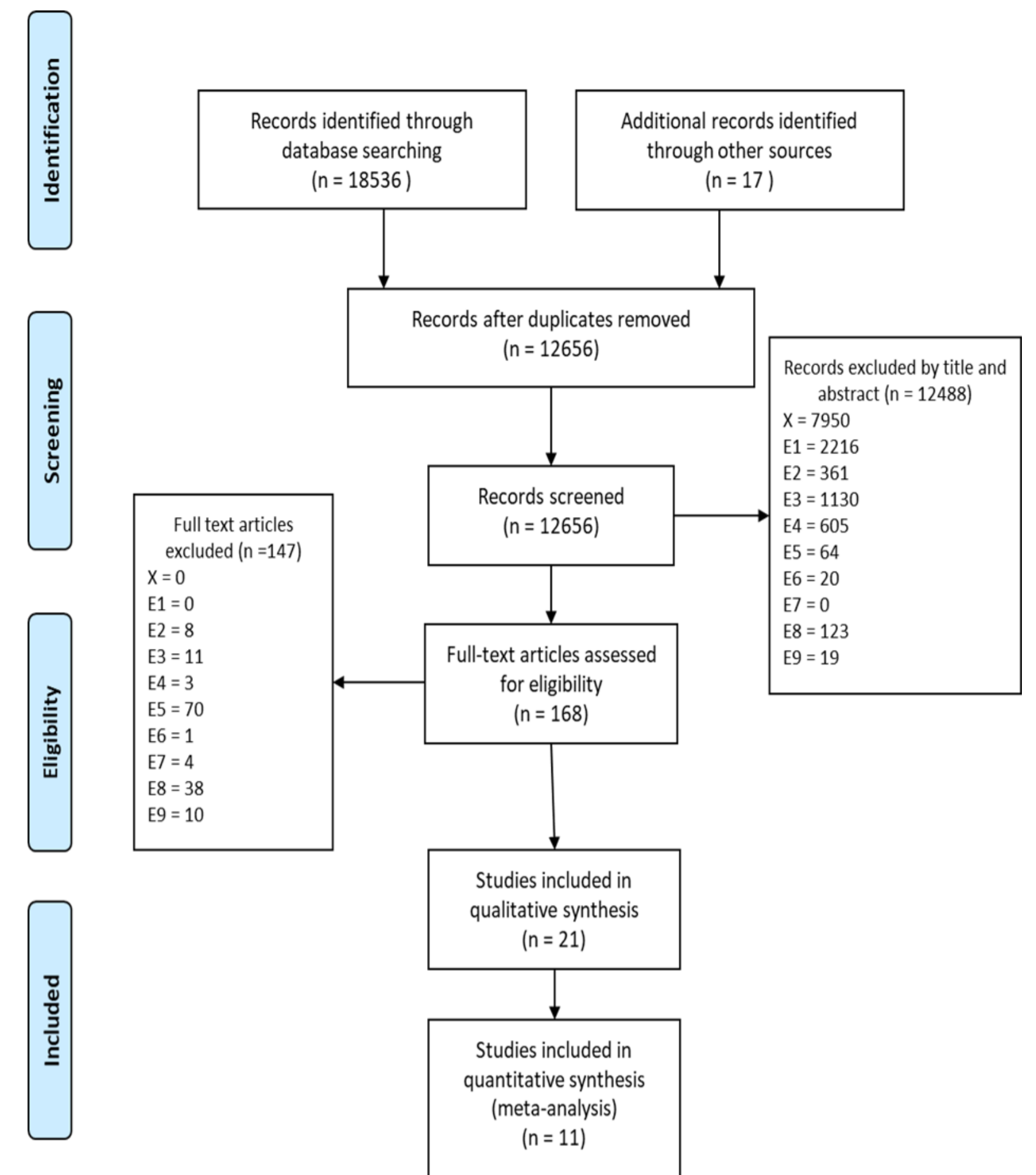
BE COACHED AND/OR INSTRUCTED

INCLUDE A MEASURE OF FMS COMPETENCE



Take a picture to access more details

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FUNDAMENTAL MOVEMENT SKILLS: A CHECKLIST

@JOE_EISENMANN

LOCOMOTOR	STABILITY	MANIPULATIVE
<input type="checkbox"/> WALK	<input type="checkbox"/> BALANCE	<input type="checkbox"/> THROW
<input type="checkbox"/> RUN	<input type="checkbox"/> LAND	<input type="checkbox"/> CATCH
<input type="checkbox"/> HOP	<input type="checkbox"/> TURN	<input type="checkbox"/> STRIKE
<input type="checkbox"/> SKIP	<input type="checkbox"/> TWIST	<input type="checkbox"/> KICK
<input type="checkbox"/> BOUND	<input type="checkbox"/> BEND	<input type="checkbox"/> DRIBBLE
<input type="checkbox"/> LEAP	<input type="checkbox"/> STRETCH	<input type="checkbox"/> BOUNCE
<input type="checkbox"/> JUMP	<input type="checkbox"/> EXTEND	<input type="checkbox"/> PUSH
<input type="checkbox"/> ROLL	<input type="checkbox"/> FLEX	<input type="checkbox"/> PULL
<input type="checkbox"/> GALLOP	<input type="checkbox"/> HANG	<input type="checkbox"/> CARRY
<input type="checkbox"/> SLIDE	<input type="checkbox"/> BRACE	<input type="checkbox"/> TRAP
<input type="checkbox"/> DODGE	<input type="checkbox"/> ROTATE	<input type="checkbox"/> COLLECT

- FAROOQ ET AL (2018)
- REILLY (2016)
- DENG ET AL (2018)
- CORDER ET AL (2013)

- MATHUR (2019)
- INTROUT ET AL (2016)

