



# Moving Well-Being Well

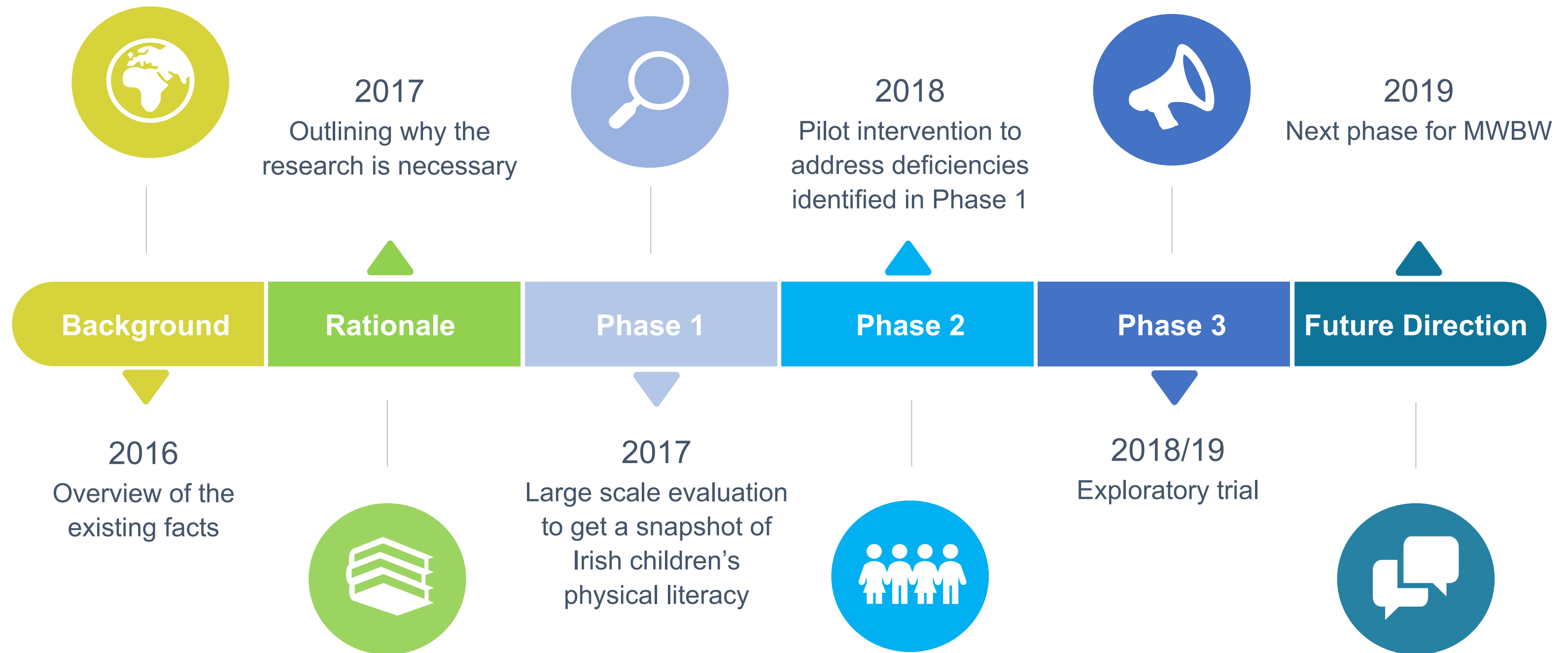
## Getting Ireland's Children Moving

Stephen Behan - PhD Candidate

Supervisors: Dr. Johann Issartel, Dr. Sarahjane Belton & Prof. Noel O'Connor



# THE STORY SO FAR





# Background

**“Ireland to be the most obese nation in Europe by 2030”**

World Health Organisation

**“One in four children overweight or obese”**

Growing up in Ireland Report







## Background

Lots of initiatives to promote  
physical activity.....



It's not working



# Background

**School of Health and Human Performance -  
Dublin City university**

**Coaching background**

**Worked for the GAA  
Ireland's National Sports**

DCU

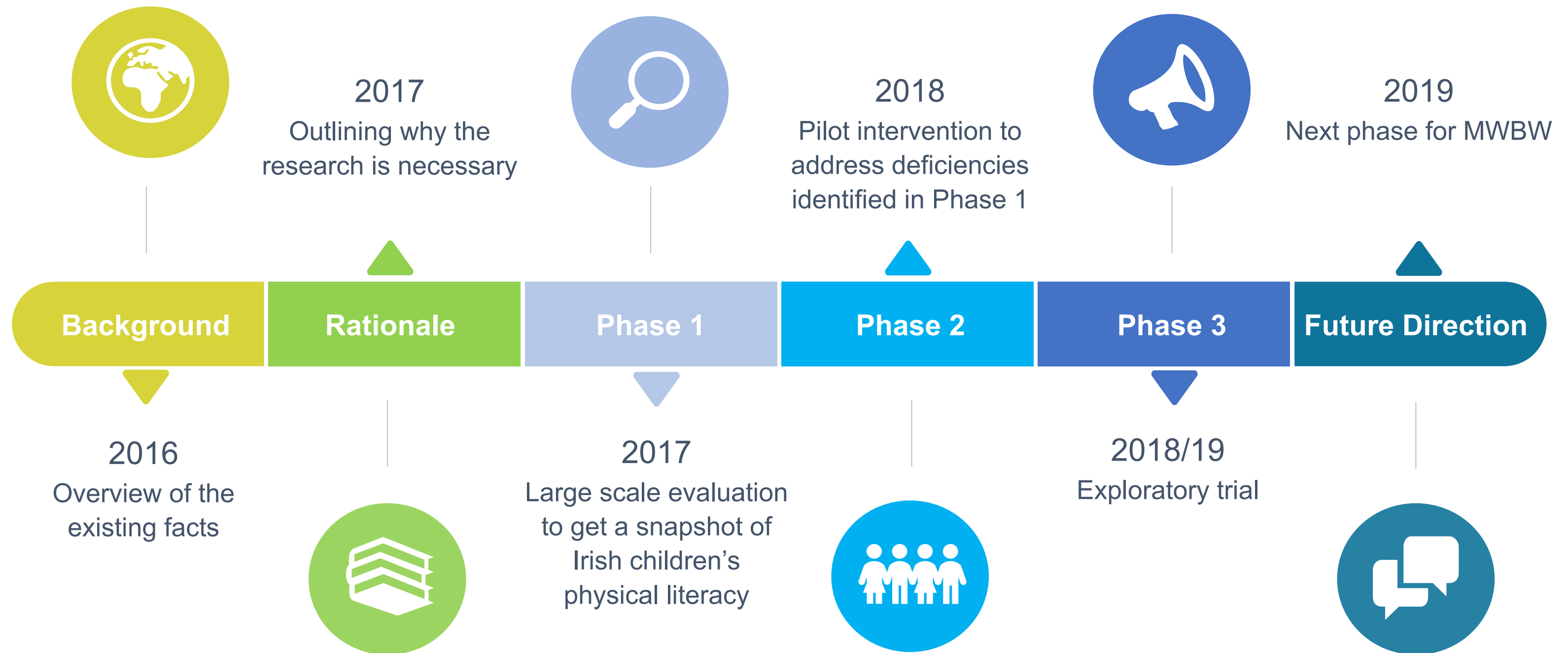


## Background

HURLING: THE FASTEST GAME ON GRASS



# THE STORY SO FAR





## Rationale

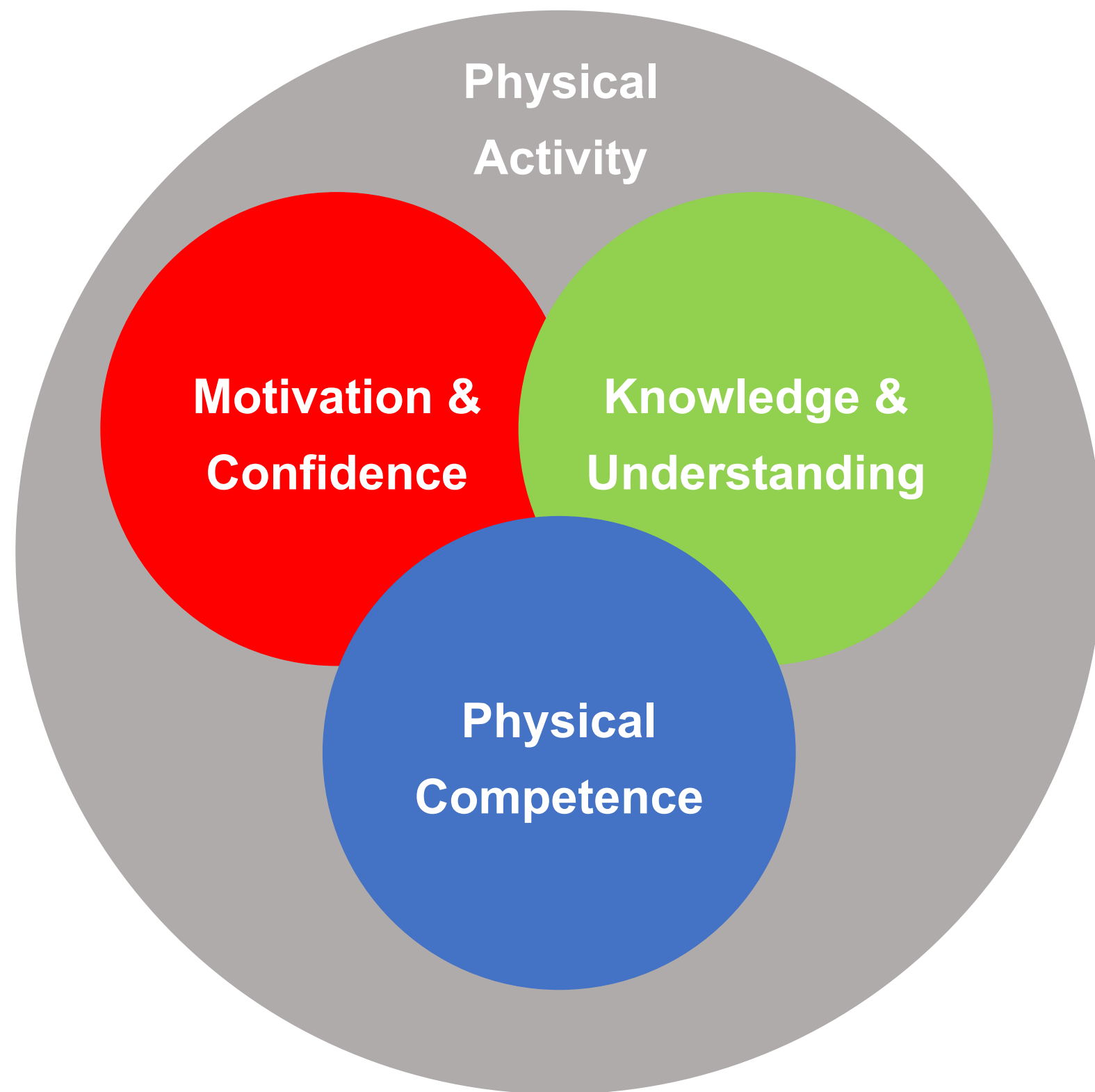
**What motivates children to be physically active?**

**Motivation &  
Confidence**

**Knowledge &  
Understanding**

**Physical  
Competence**

# Physical Literacy



**“Physical Literacy is the motivation, confidence, physical competence, knowledge and understanding to value and take responsibility for engagement in physical activities for life”**

# Fundamental Movement Skills

The foundational movements  
needed to progress to the more  
specialised and complex skills  
used in play, games and  
specific sports

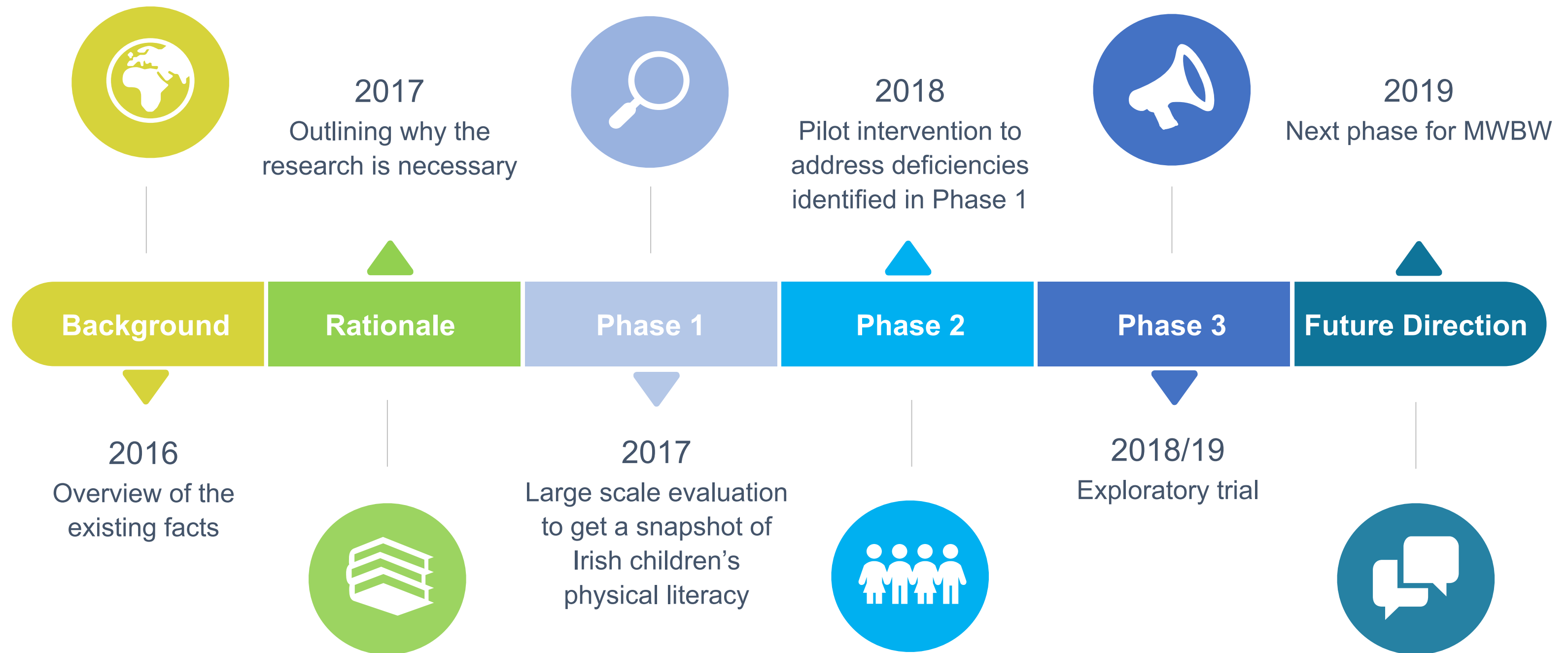




# Rationale

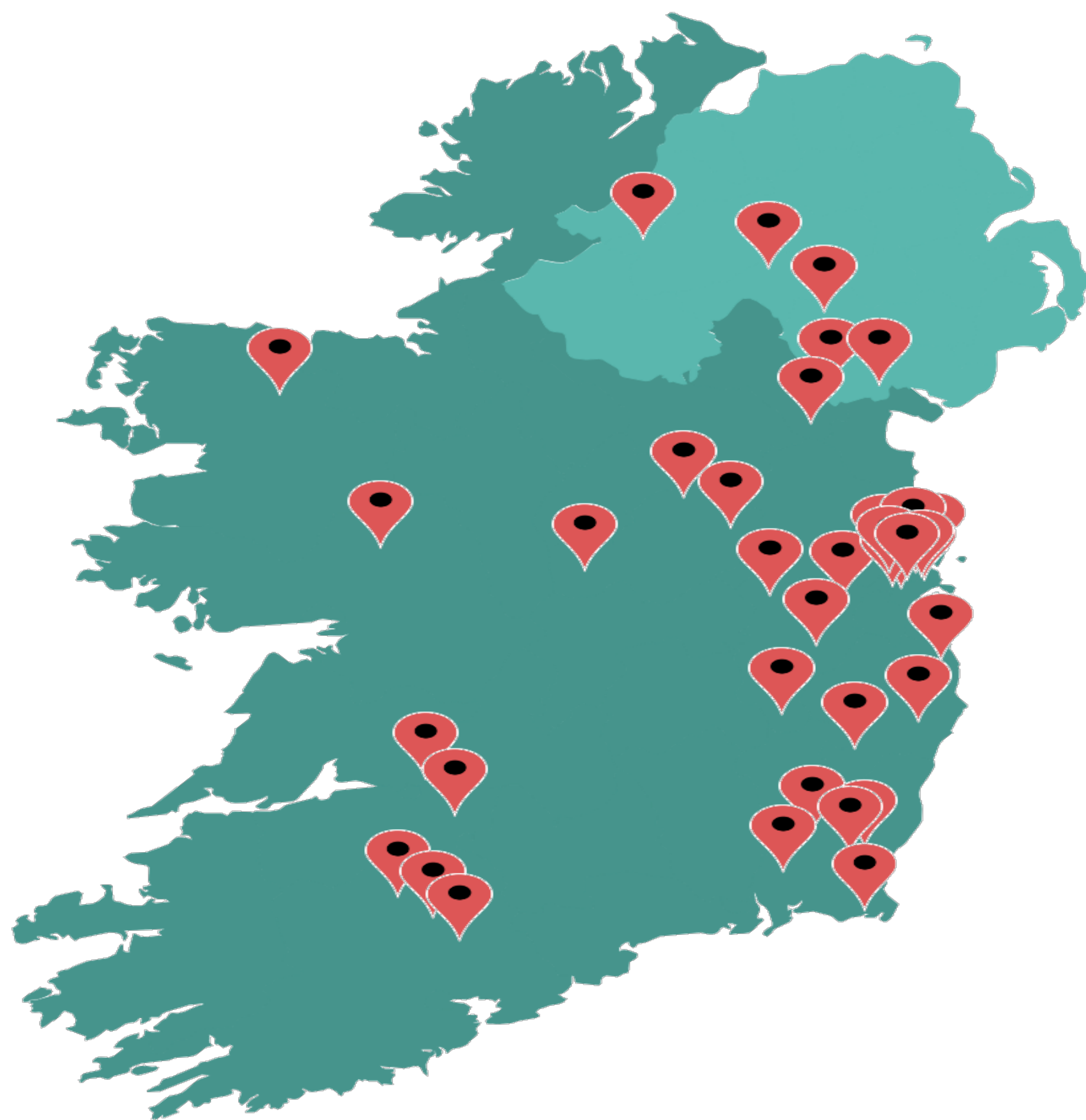


# THE STORY SO FAR





## Phase 1 - Data Collection



**2,148**

children assessed

**12** counties across all  
four provinces

**44** schools

**100** classes from Junior  
Infants to 6<sup>th</sup> Class

**10,000+**  
kilometres travelled





# Phase 1 - Data Collection

## What we measured:

- FMS Proficiency
- Perceived FMS Competence
- Height, Weight (BMI) and Waist Circumference
- Strength – Grip and Plank
- Flexibility
- VO2 Max
- Physical activity – Self reported, parent reported and pedometers (sample)
- Motivation
- Self Efficacy
- Knowledge and understanding\*
- Wellbeing
- Body Image
- Neurocognitive assessment
- Teacher questionnaire
- Parents questionnaire

**All validated instruments for measurement**





# Phase 1 - Data Collection

## How we measured:

15:05

100%

< Back

Skill

Logout

Skill:Run

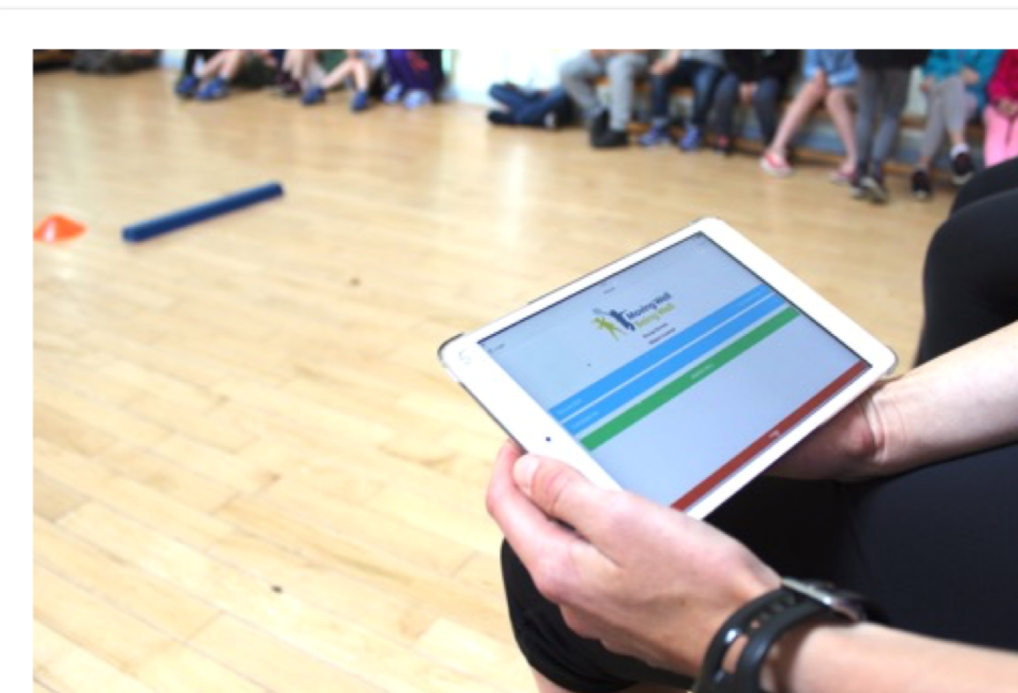
ABSENT

Counter:1/30

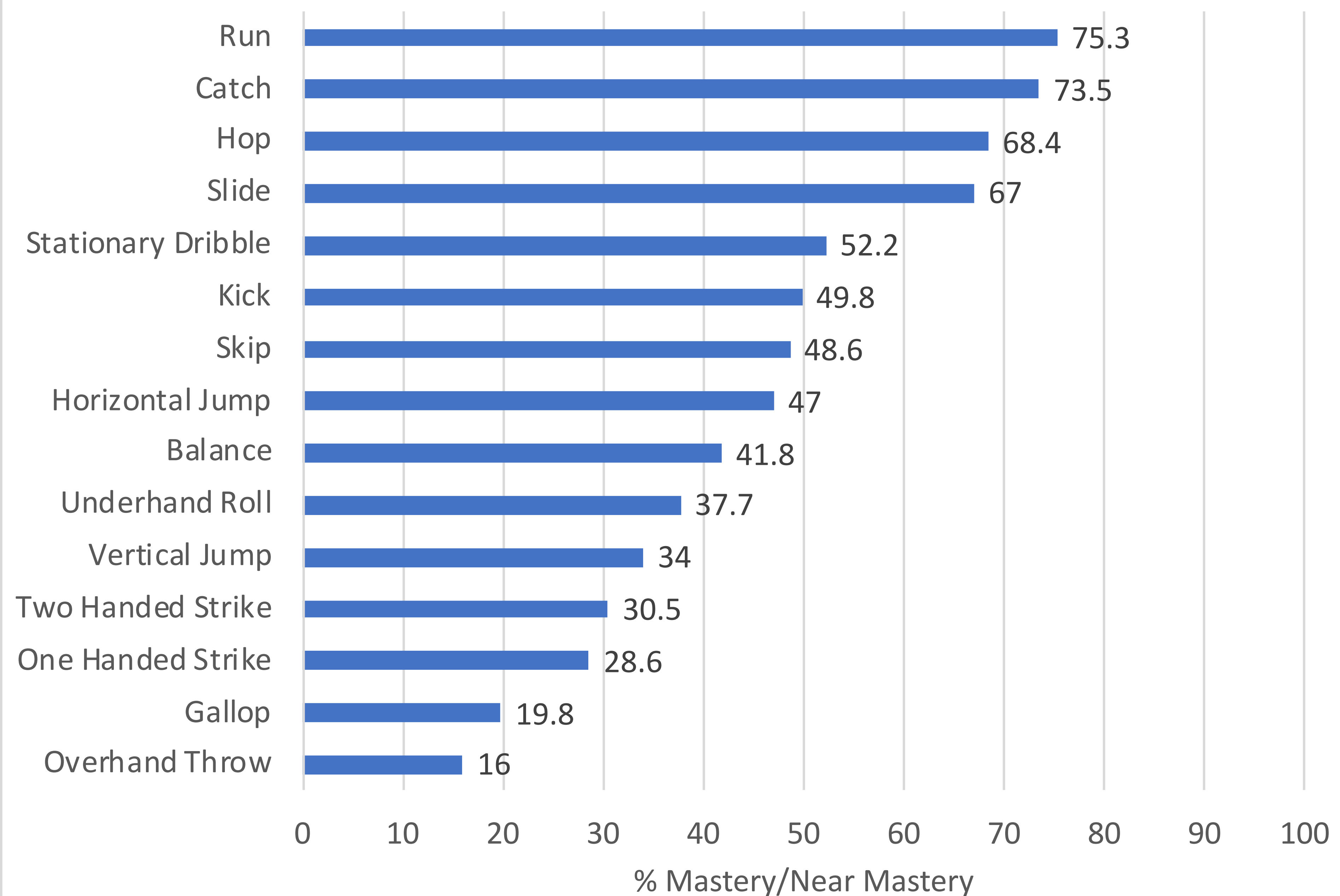
Criteria	Trial 1	Trial 2	Total Score
Arms move in opposition to legs, elbows bent	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	2
Brief period where both feet are off the surface	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	2
Narrow foot placement landing on heels or toes (not flat footed)	<input type="checkbox"/>	<input type="checkbox"/>	0
Non-support leg bent about 90 degrees so foot is close to their buttocks	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	2
	Total Score		6

Candidate No. = 050\_01\_01\_02

Save Score

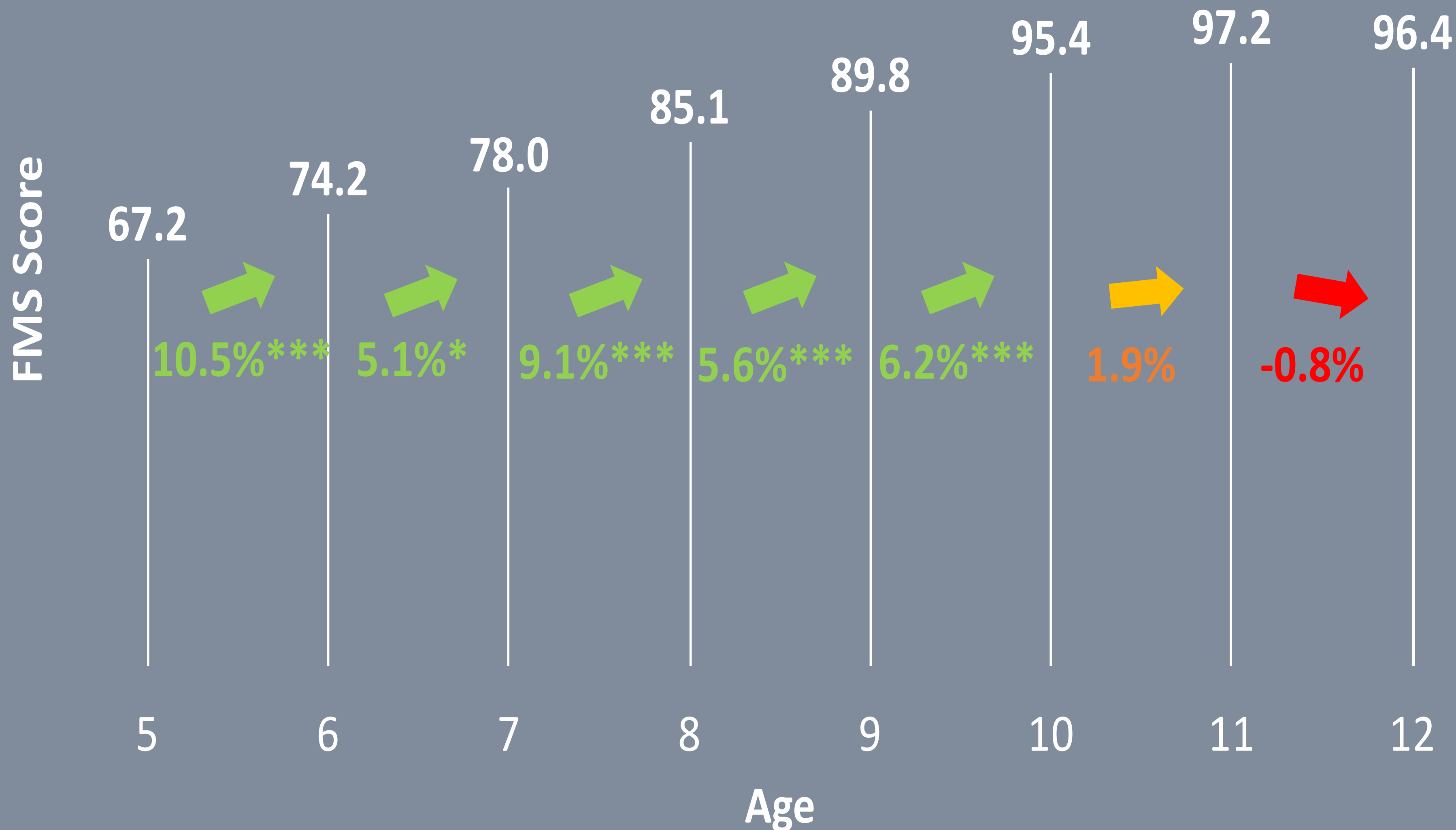


## FMS Skills Mastery or Near Mastery



# OVERALL FMS SCORE ACROSS AGE

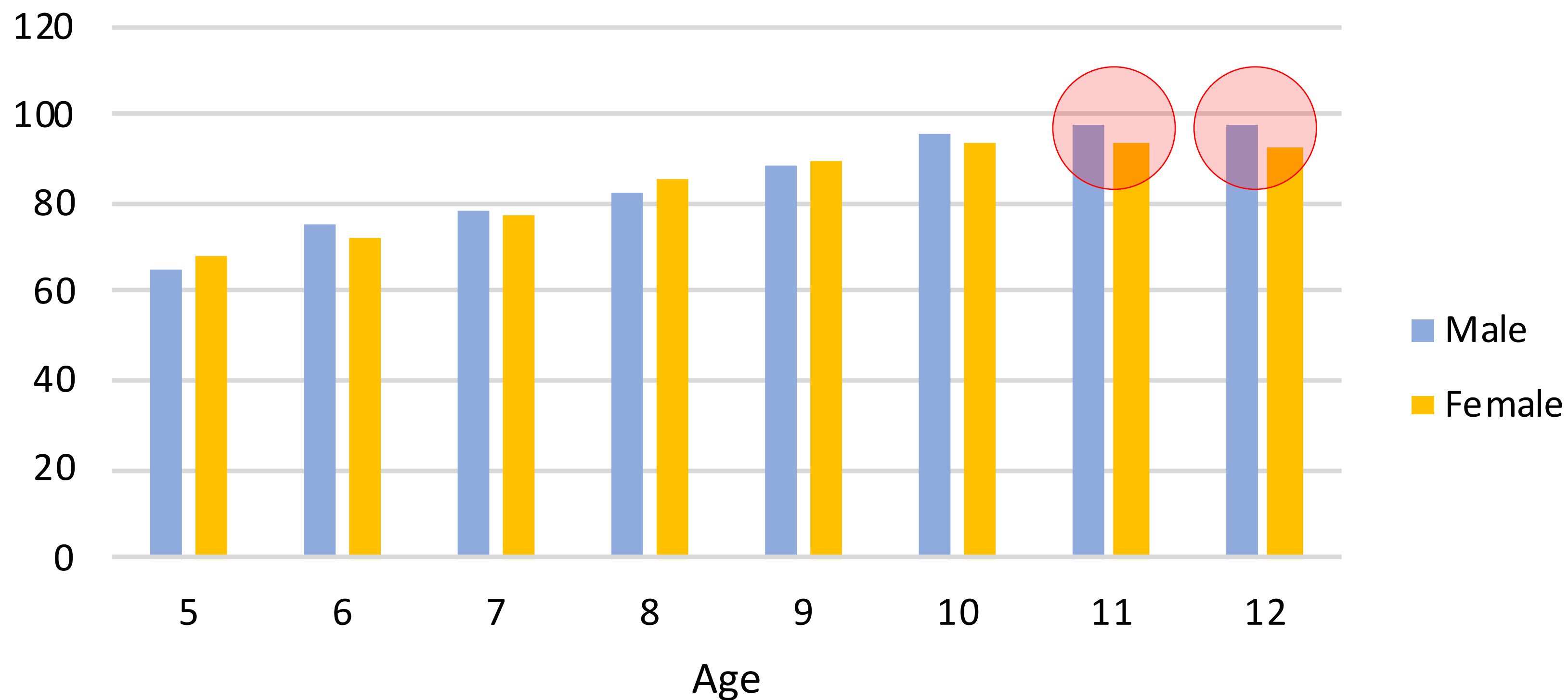
## INCLUDING PERCENTAGE CHANGE AND SIGNIFICANCE





## Phase 1 – FMS Results

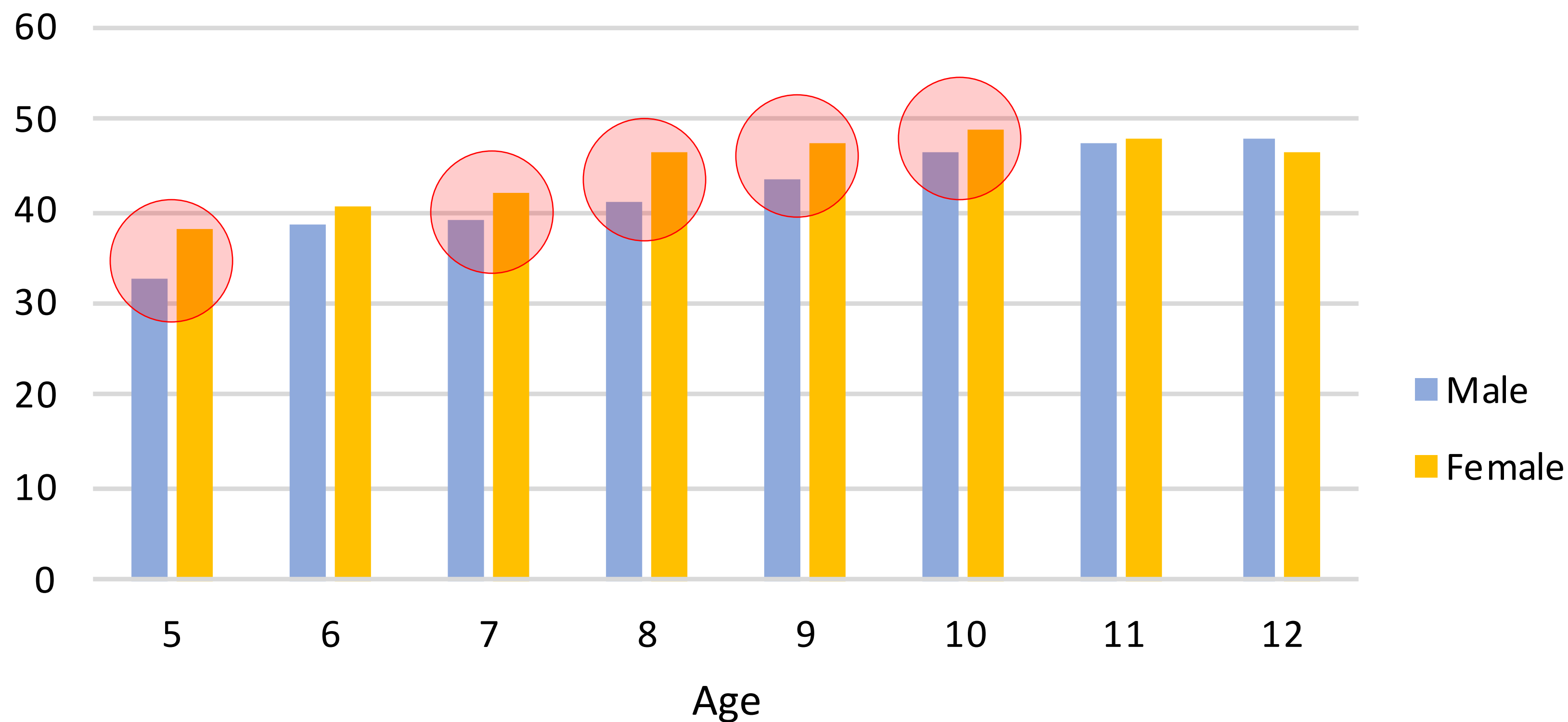
### Overall FMS Score Comparisons across Gender and Age





## Phase 1 – FMS Results

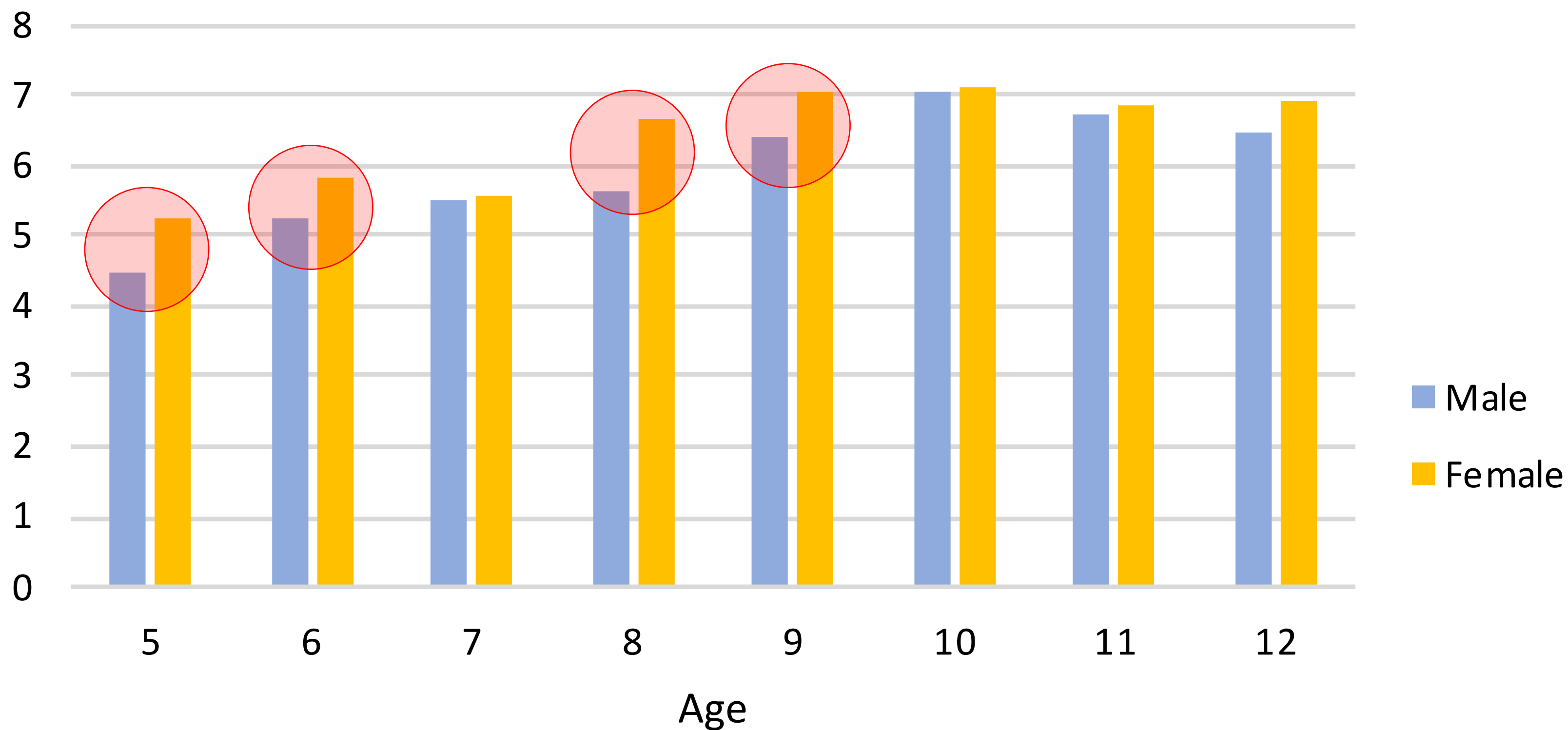
### Locomotor Skills Comparisons across Gender and Age





## Phase 1 – FMS Results

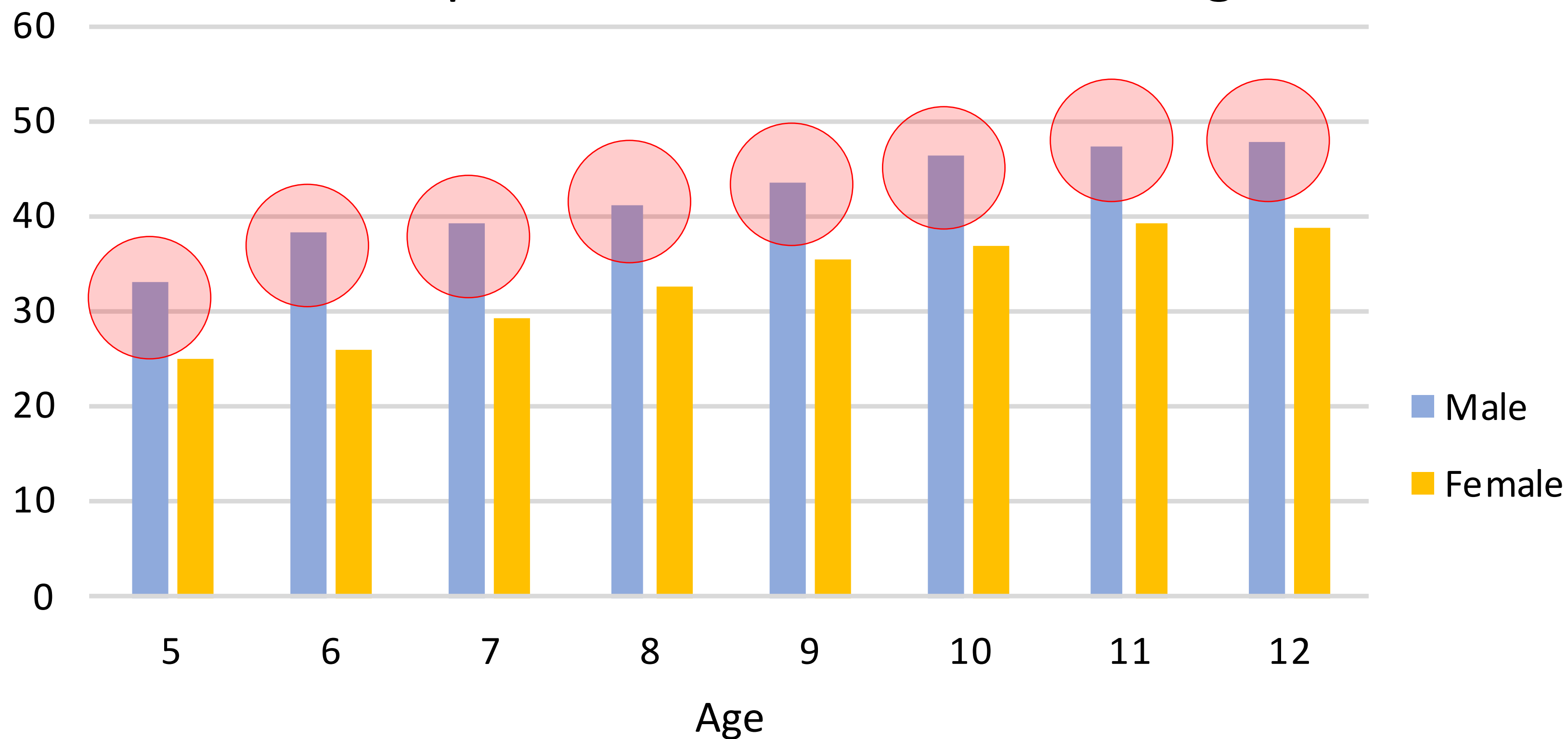
### Balance Skills Comparisons across Gender and Age





## Phase 1 – FMS Results

### Object Control Skills Comparisons across Gender and Age





## Phase 1 – HRF Results

Health Related Fitness components measured;

Body Composition – BMI and Waist Circumference

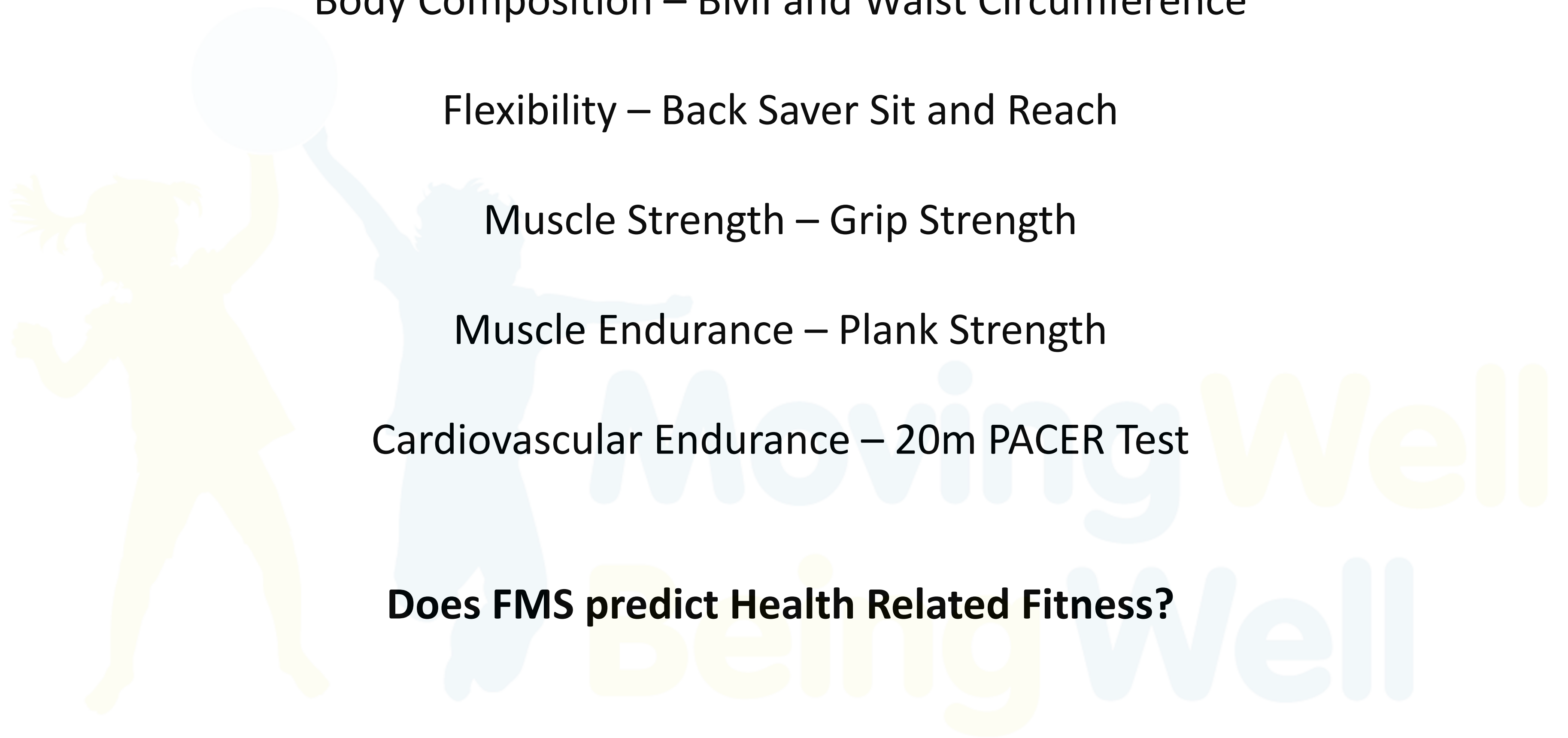
Flexibility – Back Saver Sit and Reach

Muscle Strength – Grip Strength

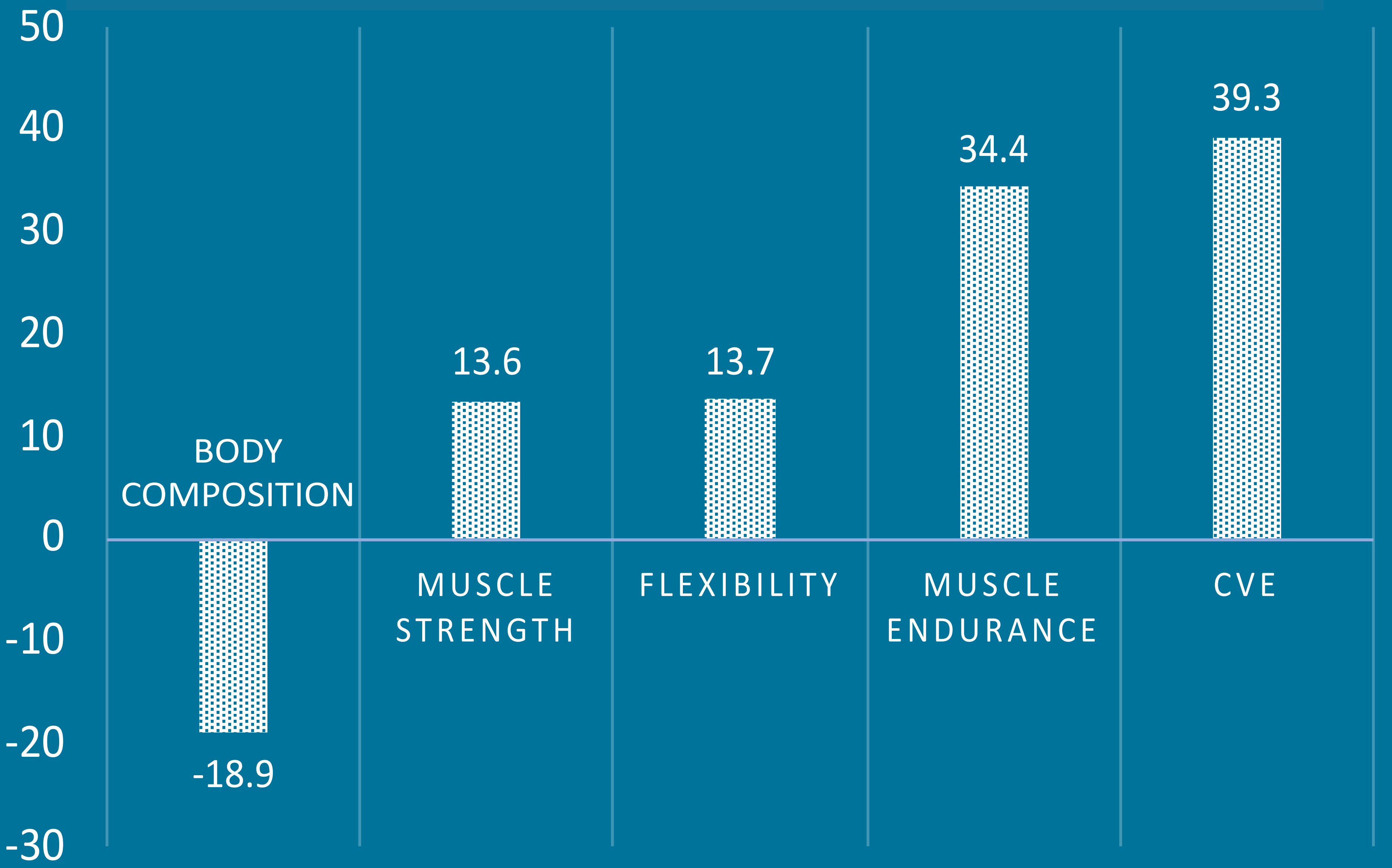
Muscle Endurance – Plank Strength

Cardiovascular Endurance – 20m PACER Test

**Does FMS predict Health Related Fitness?**



# FMS AS A PREDICTOR TO HEALTH RELATED FITNESS COMPONENTS





# Phase 1 – Motivation Results

## **Intrinsic**

- We do because we want to
- Internally driven

## **Identified**

- We do because we know we should
- Driven by knowledge

## **Introjected**

- We do because we feel we have to
- Feel guilty otherwise

## **External**

- We do because we have to
- Outside force exerted



# QUALITY OF MOTIVATION AS A PREDICTOR OF FMS



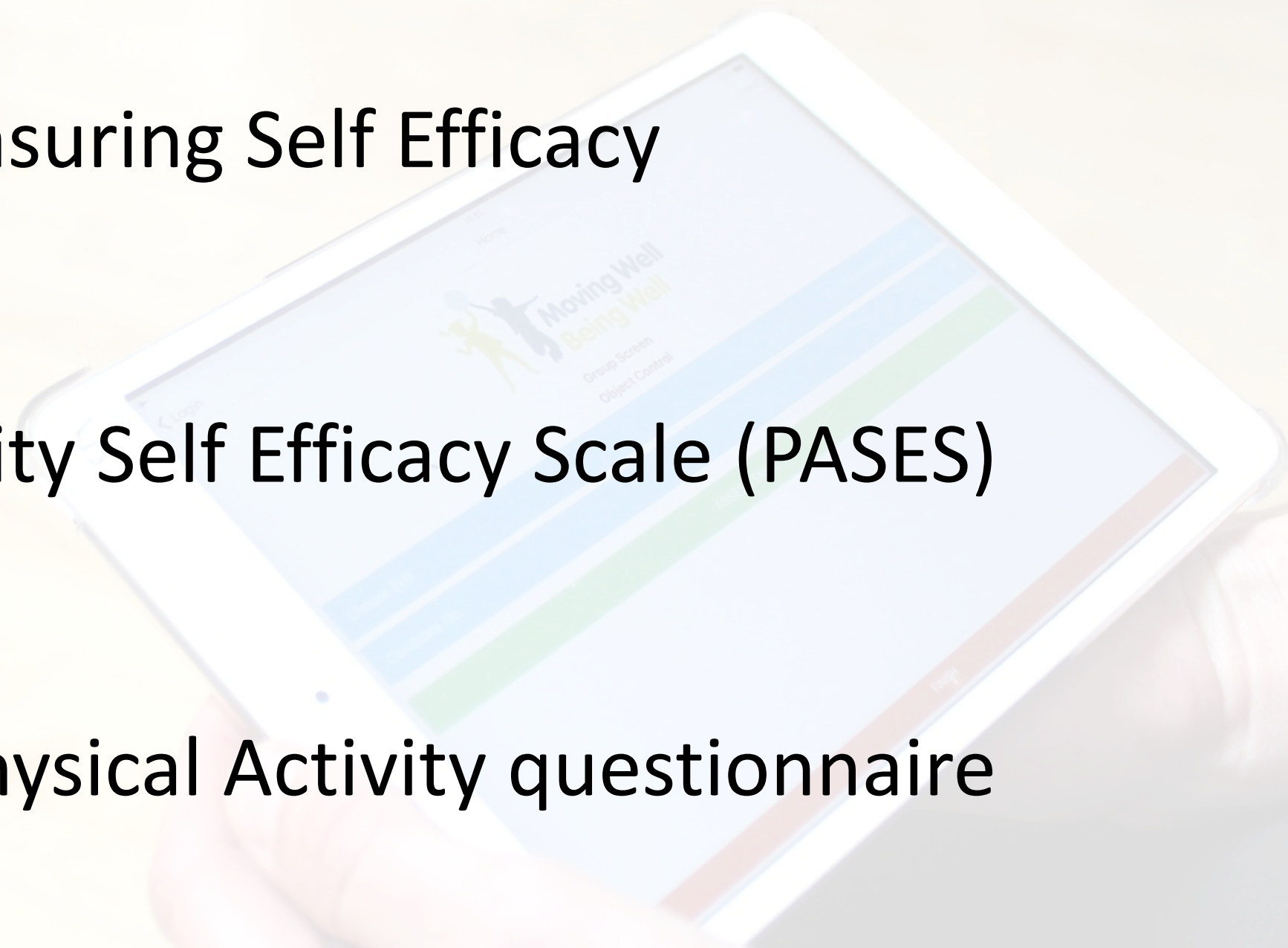


# Phase 1 – Confidence Results

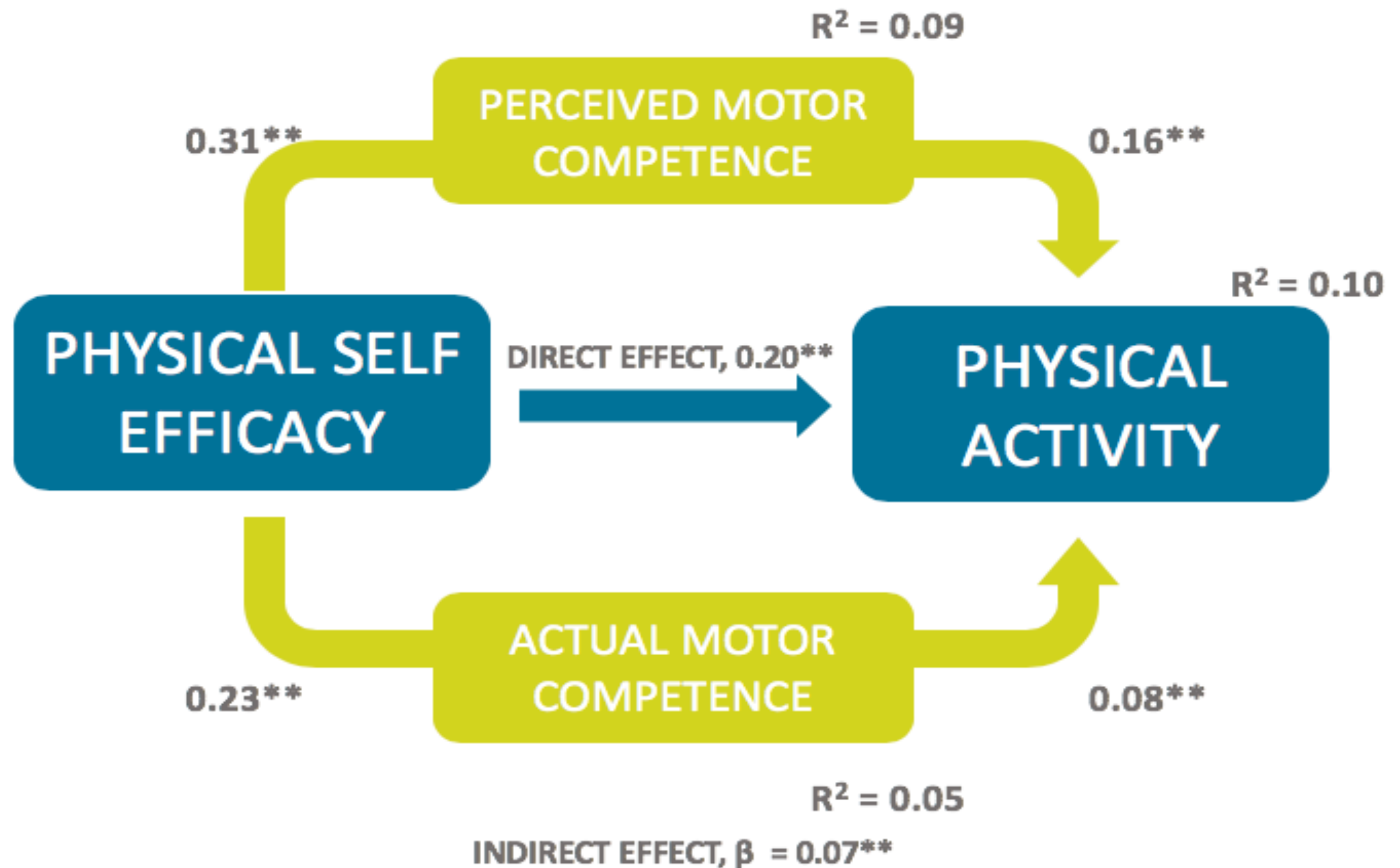
Measuring Self Efficacy

Physical Activity Self Efficacy Scale (PASES)

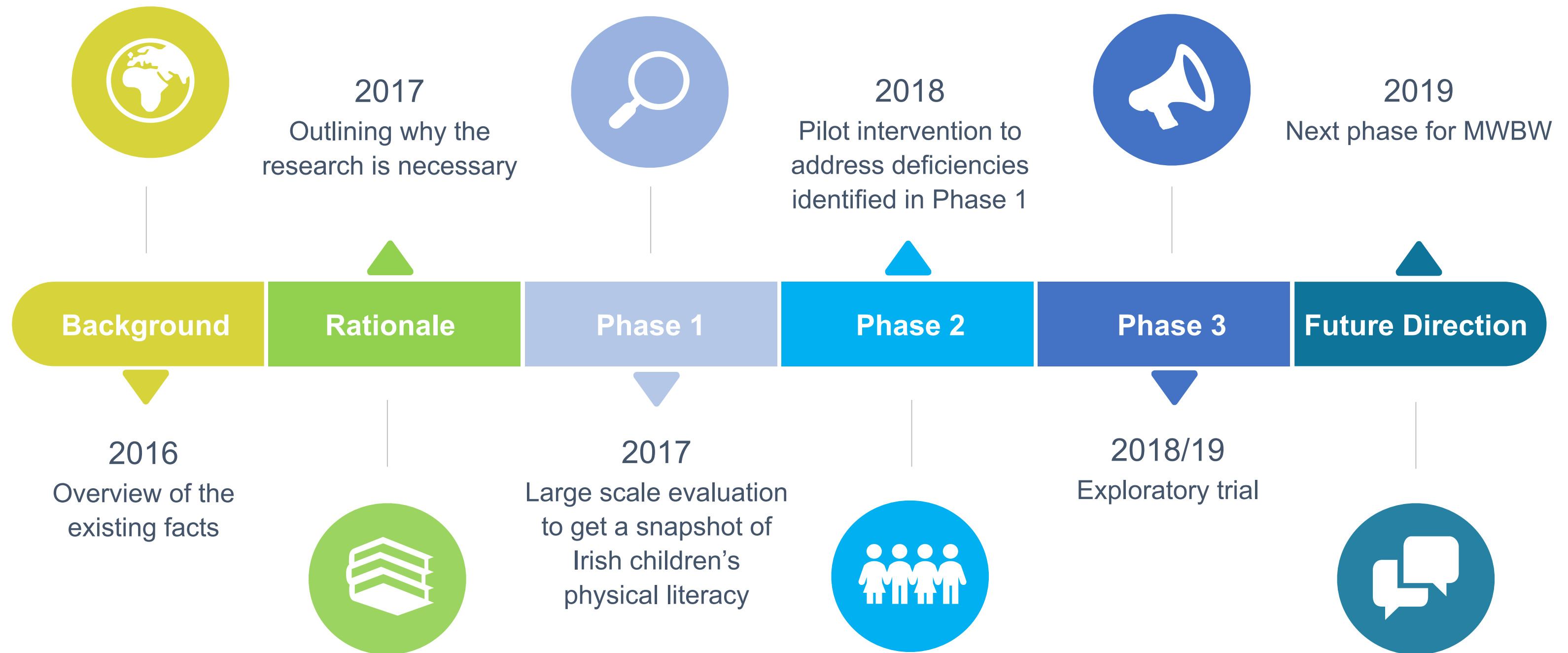
Self Report Physical Activity questionnaire



# PERCEIVED AND ACTUAL MOTOR COMPETENCE AS MEDIATORS FOR PHYSICAL ACTIVITY



# THE STORY SO FAR





## Phase 2 – Pilot Intervention



30 minute FMS based class led by coach  
Teacher repeats the same class  
Coach upskills teacher on the job

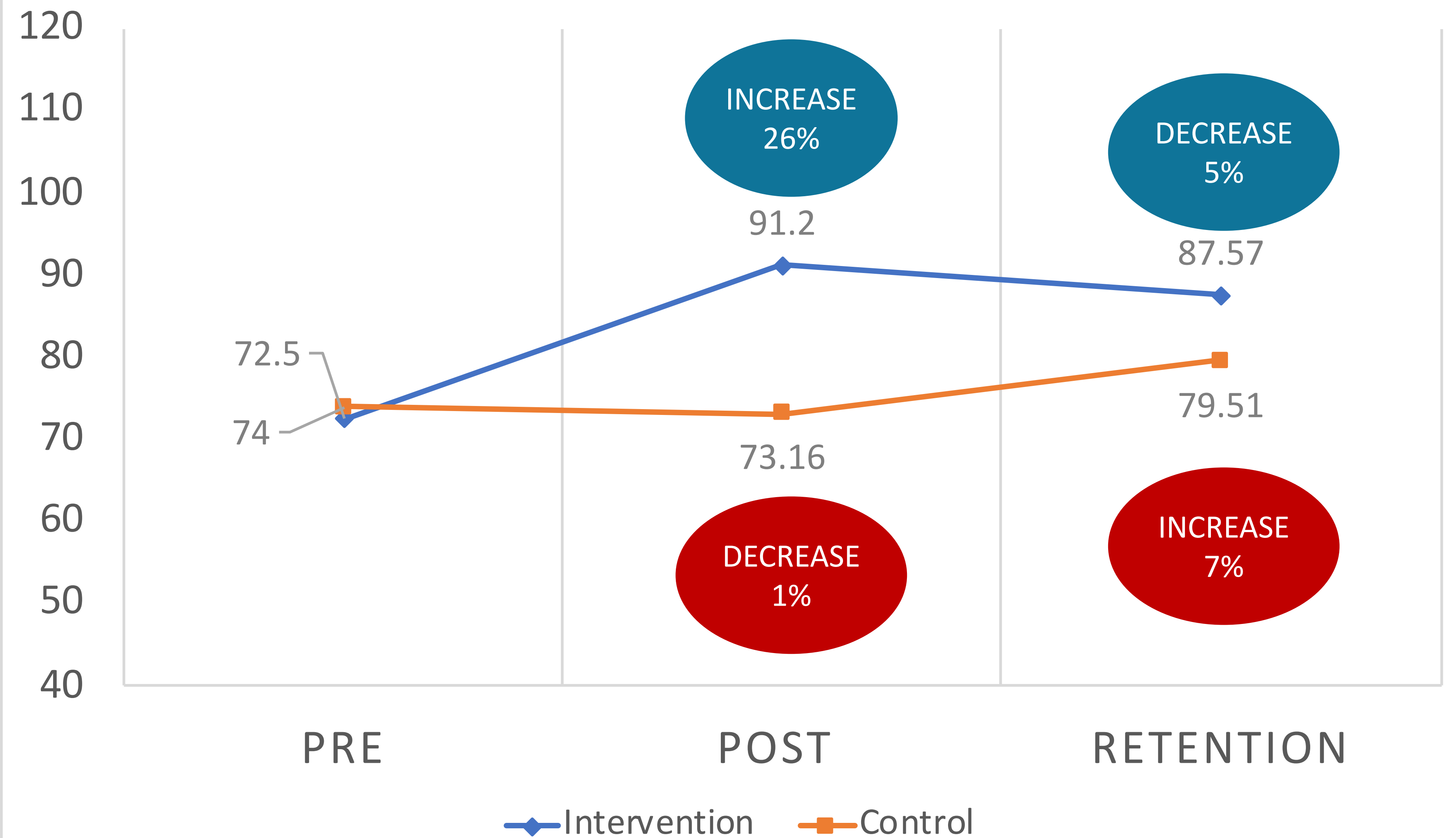


Active learning in classroom  
5 minutes every day  
Skills and activity complexity gradually increases

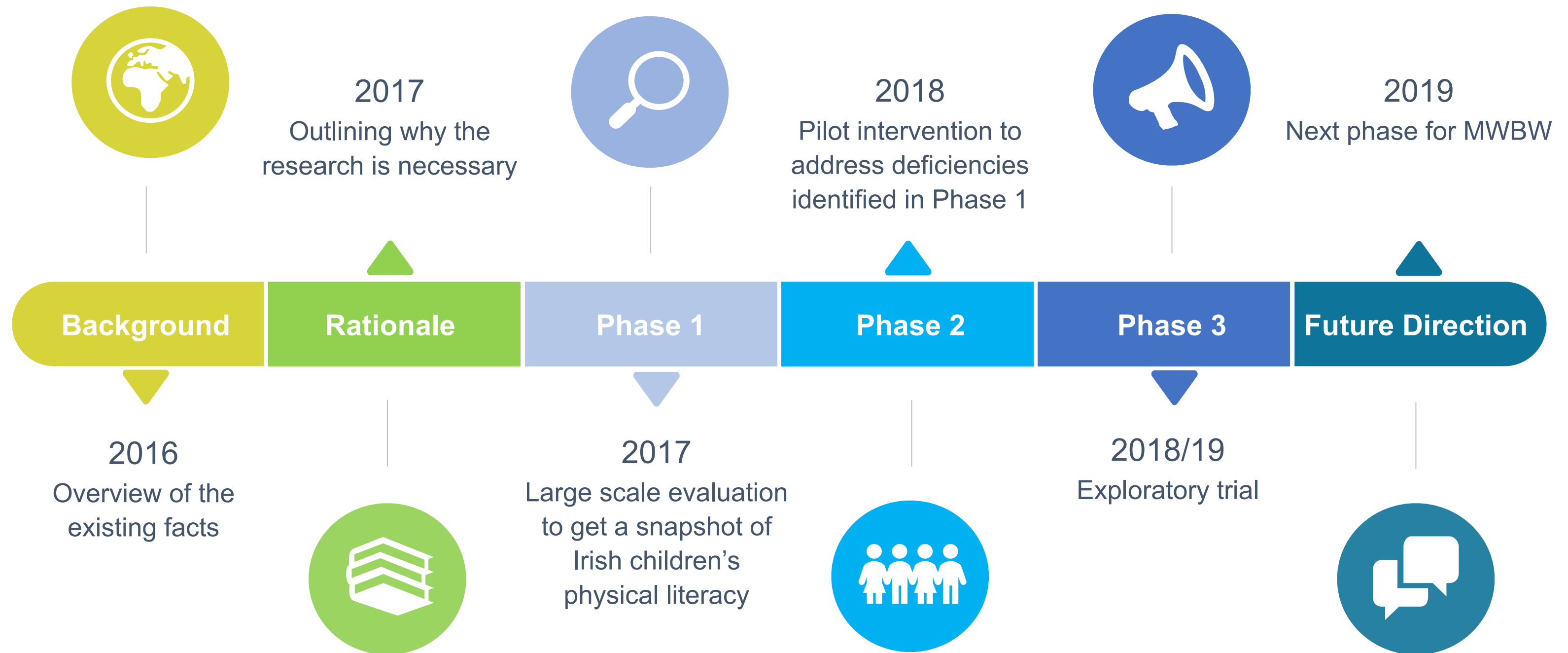


Home activity once a week  
Worksheet to be completed with parent/guardian  
Activity and knowledge components

## PRE, POST AND RETENTION OVERALL FMS SCORES



# THE STORY SO FAR



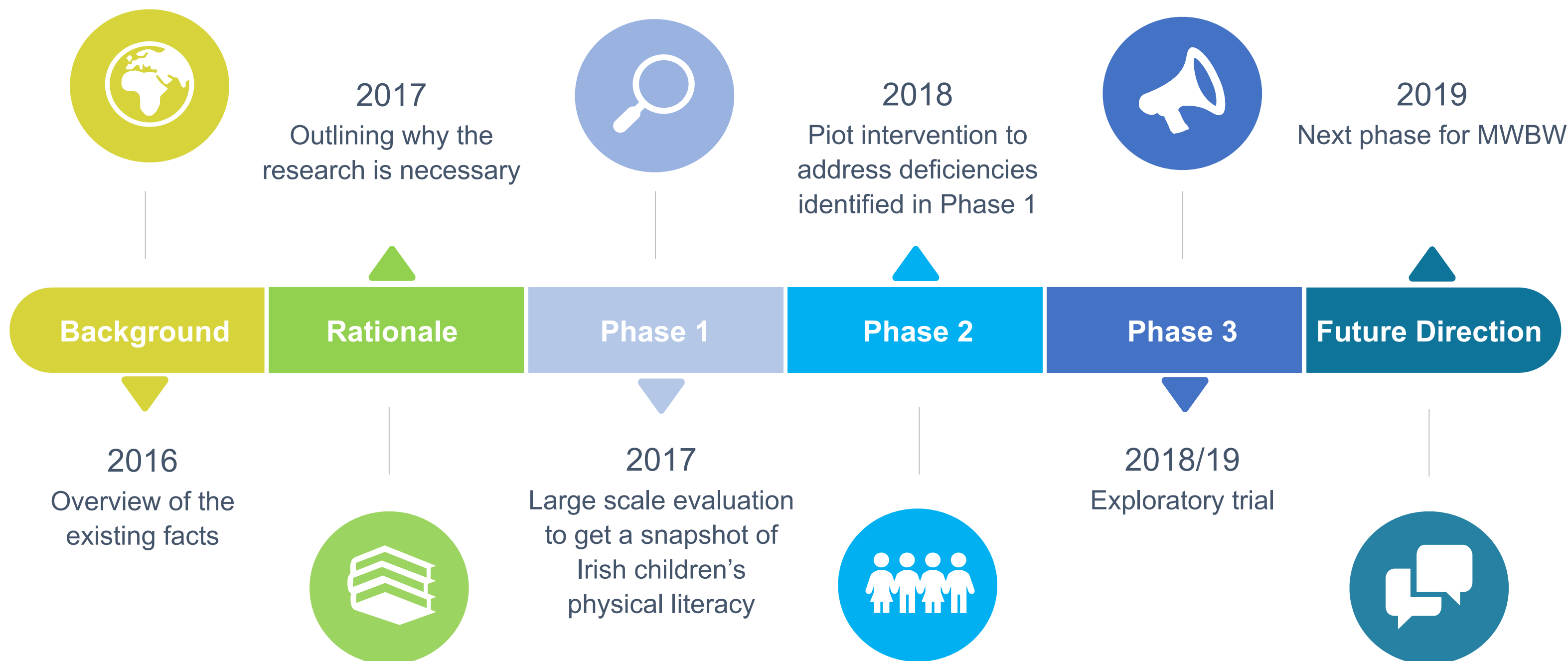


## Phase 3 – Exploratory Trial

Currently ongoing

Approx 1000 children receiving the intervention at present  
through Dublin GAA coaches

CPD for Dublin GAA coaches





# Moving Well-Being Well

## Getting Ireland's Children Moving

**Stephen Behan - PhD Candidate**

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**@behan\_s**

**Supervisors: Dr. Johann Issartel, Dr. Sarahjane Belton & Prof. Noel O'Connor**

**School of Health and Human Performance**  
**The Insight Centre of Data Analytics**  
**Dublin City University**

