



Empowering Citizens. Smarter Societies.

Insight

Centre for Data Analytics



Moving Well-Being Well

Getting Ireland's Children Moving

Stephen Behan

A World Leading SFI Research Centre

Introduction

Stephen Behan – PhD Candidate

DCU School of Health and Human Performance

The Insight Centre for Data Analytics

Supervised by Dr. Johann Issartel, Dr. Sarahjane Belton and Prof. Noel O'Connor



Project is in collaboration with the GAA's Research and Games Development Centre and Dublin GAA

Previous role as a full time coach for Dublin GAA





The
Problem



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Moving Well Being Well

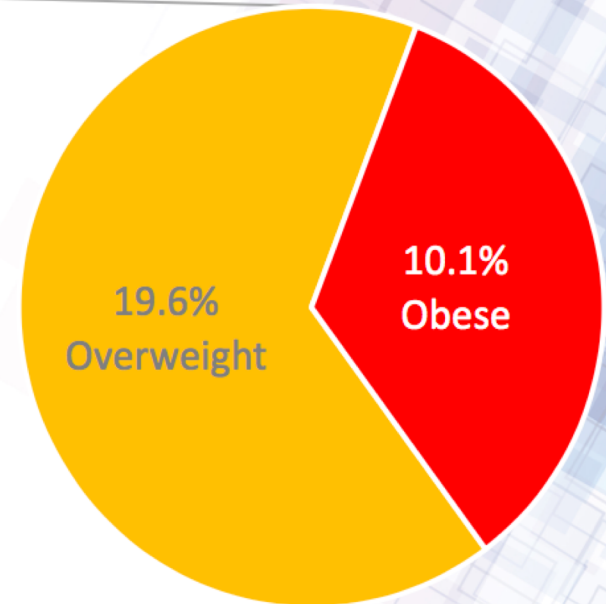
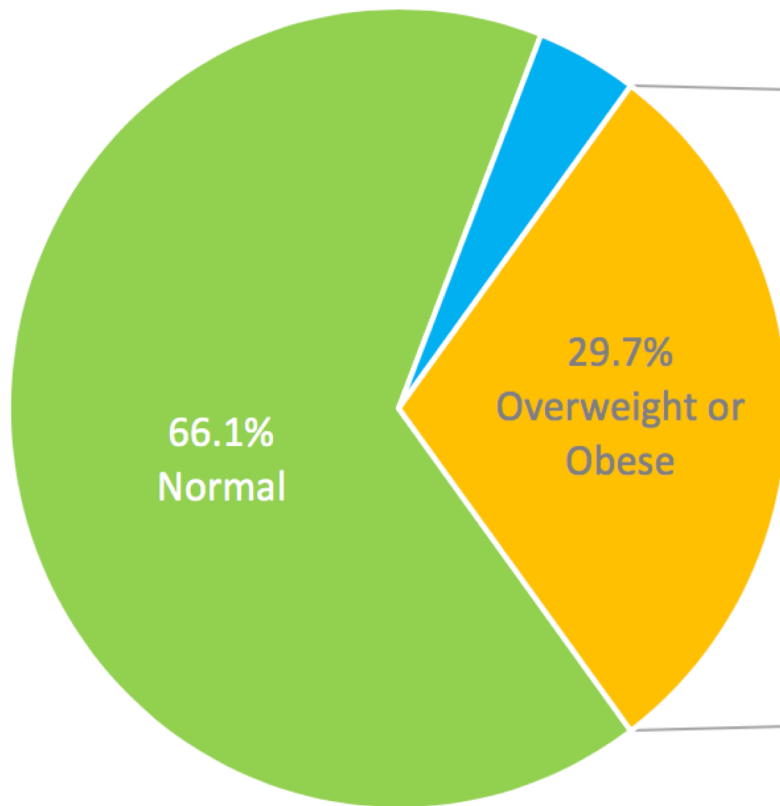




“Ireland to be the most obese nation in Europe by 2030”

- World Health Organisation

Irish Children's BMI





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



It's not working



The
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Why



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Why are we physically active?

What motivates us to be physically active?

Physical Literacy

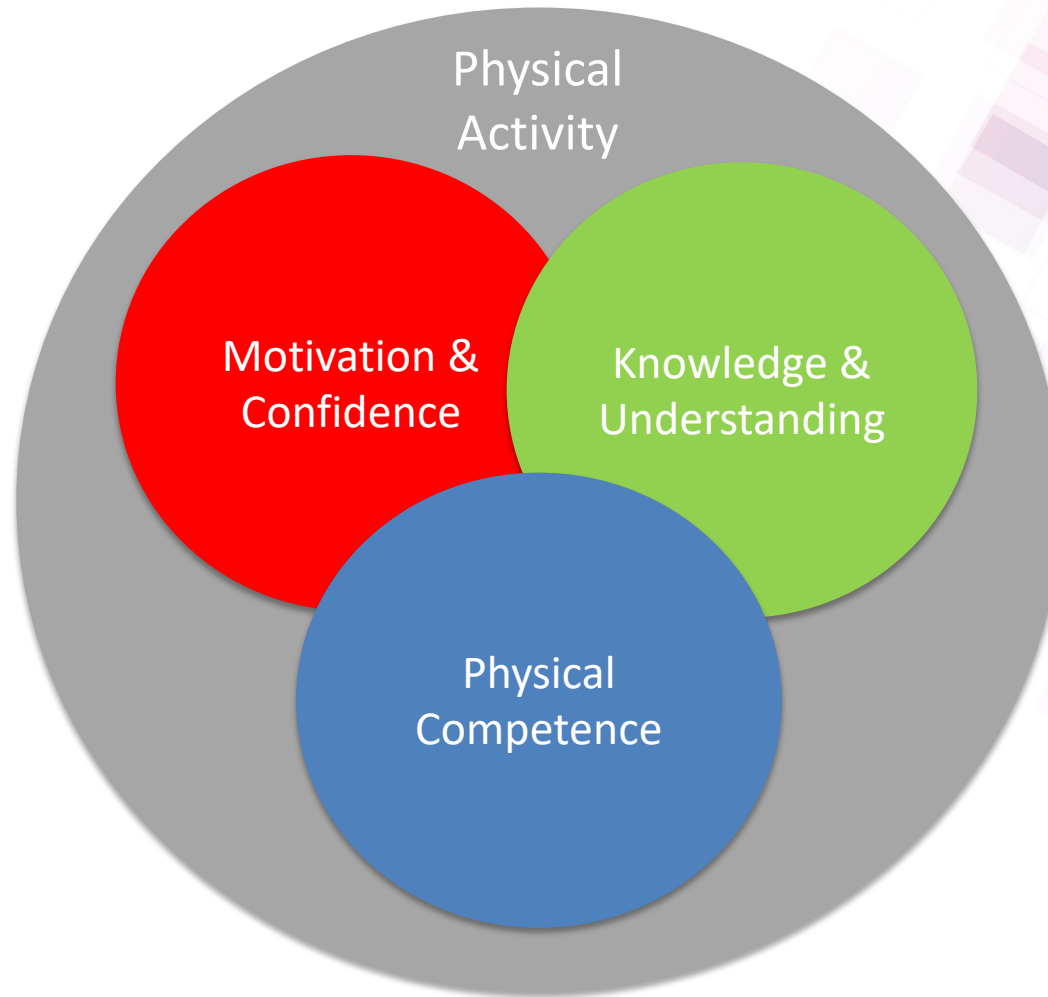
Motivation &
Confidence

Knowledge &
Understanding

Physical
Competence



The Physical Literacy Model



Fundamental Movement Skills

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





The
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Why

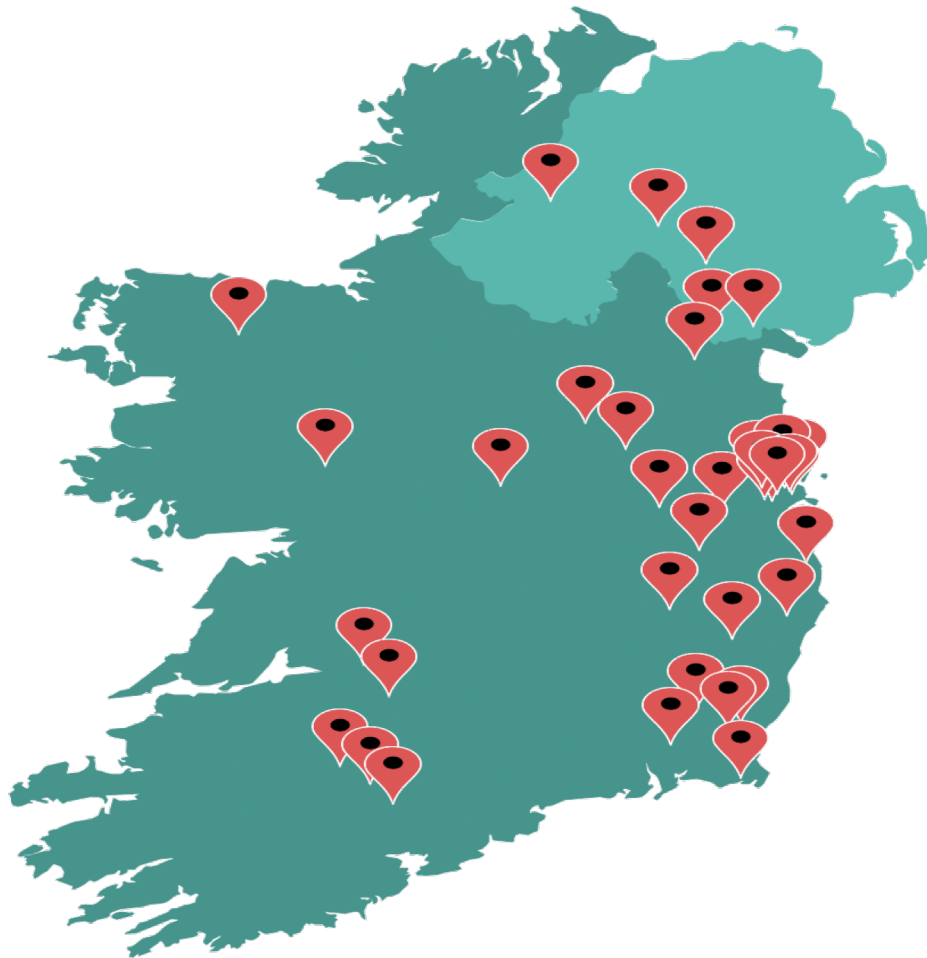
What



Getting Ireland's Children Moving

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2,148
children assessed
throughout the country

12 counties across
all four
provinces

44 schools

100 classes
from Junior
Infants to
Sixth Class

10,000+
kilometres travelled

What we measured

- FMS Proficiency
- Perceived Competence
- BMI & Waist circumference
- Strength – Grip and plank Test
- Flexibility
- Cardiovascular Fitness
- Motivation
- Confidence
- Wellbeing
- Body Image
- Knowledge and understanding*
- Physical activity – Self reported, parent reported and pedometers (sample)
- Neuro-cognitive assessment (sample)
- Teacher questionnaire
- Parents questionnaire



How we measured

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 type="checkbox"/>	<input type="checkbox"/>	2
Brief period where both feet are off the surface	<input type="checkbox"/>	<input 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 type="checkbox"/>	<input type="checkbox"/>	2
	Total Score		6

Candidate No. = 050.01.01.02
Save Score



Children who have better
movement skills are....

.... than those who are
less skilled



25%
more
active

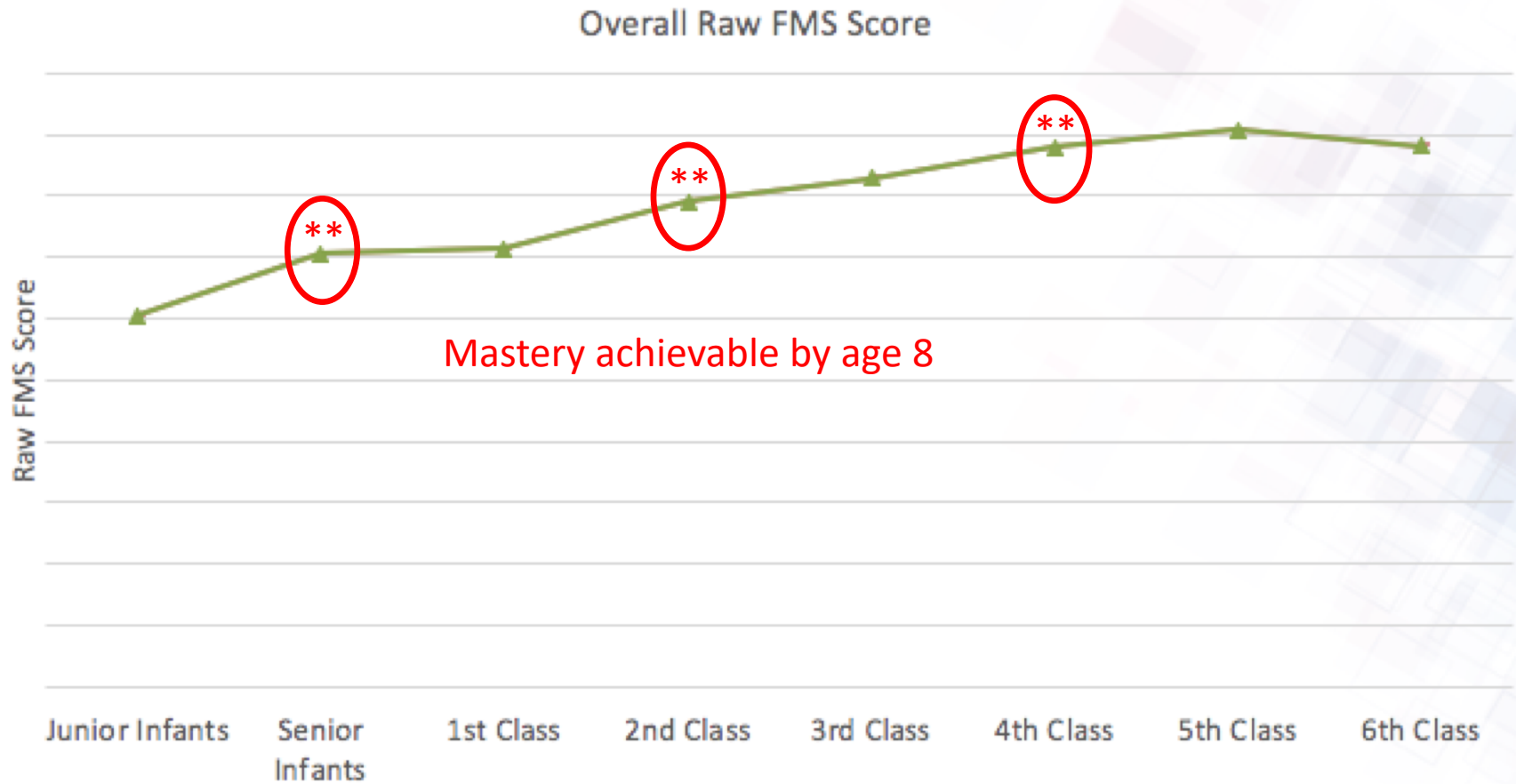
12%
fitter

39%
stronger

15%
more
confident

15%
more
motivated

FMS Progression



Gender Gap in FMS

Locomotor Skills

Girls outperformed the boys significantly

Object Control Skills

Boys outperformed the girls significantly

Stability Skills

Girls outperformed the boys significantly



The
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What

How

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Pilot Intervention

8 Week Intervention with 1st & 2nd Class children

- 30 mins FMS based class, coach led, for 6 weeks
 - Coach to lead and upskill teacher
- 30 mins Repeat class, teacher led for 8 weeks
 - Teacher repeats the coach led class each week
- 5 min active learning every morning – classroom based
- Approx 10 mins home activity once a week

LESSON 1 - LITTERBUG

10 MINS

Learning Intention:

Child is learning to overhand throw by stepping with opposite foot and throwing a light object multiple times

Key Questions:

How could we improve our throw?

FMS Differentiation and Success Criteria



W1



W2



W3



W4



W5



W6



W7



W8





Frog Hunches

- Start standing up straight
- Hunch down like a frog , bending your knees and touching the floor with your hands
- Go from standing to hunched position and back 10 times
- What else could you do like a frog?



DESCRIPTION OF ACTIVITY

Ask someone at home to join in

1. Get any ball and throw it against a wall. (Top tip: If you can't find a ball, roll up a pair of socks and use them! Just make sure they are clean and not smelly!!)
2. Do you bring your arm backwards first to help you throw? (Tip: look at the picture for help!)
3. Can you throw with your other hand? Does it feel different?
4. Ask someone to throw with you. Who can throw it the furthest
5. Can you think up a throwing game? Play for 1 minute with someone



BRAINY BITS

Fun Good Stronger

This story about Sally is missing some words.

Fill in the missing words below.

Each word can only be used to fill one blank space in the story.



Sally tries to be active every day.

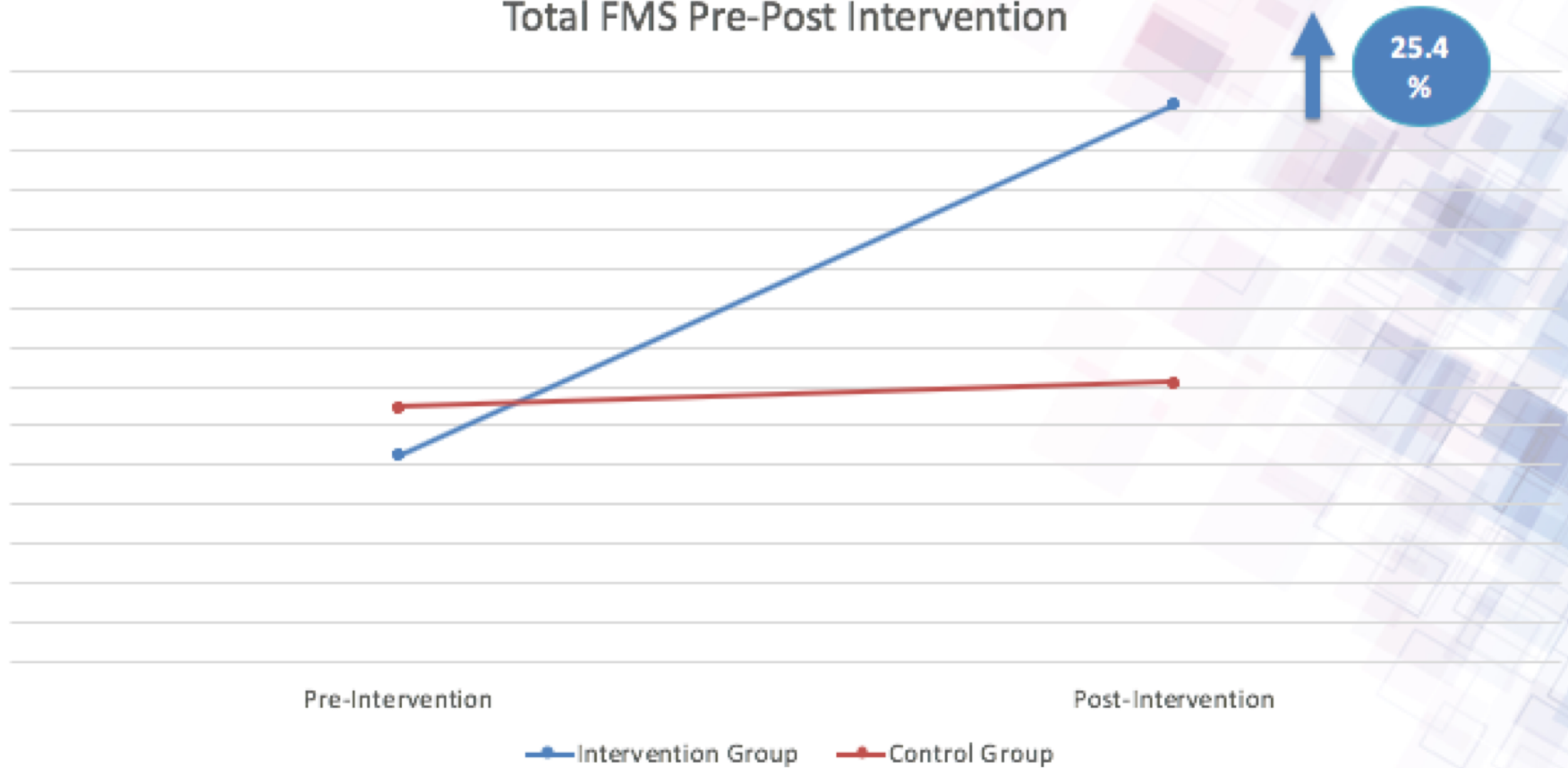
Running every day is good for her heart and lungs.

Sally thinks that physical activity is _____ and is also _____ for her.

She also does push-ups and sit-ups that make her _____.

Initial Findings

Total FMS Pre-Post Intervention





The
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Impact

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Potential Impact

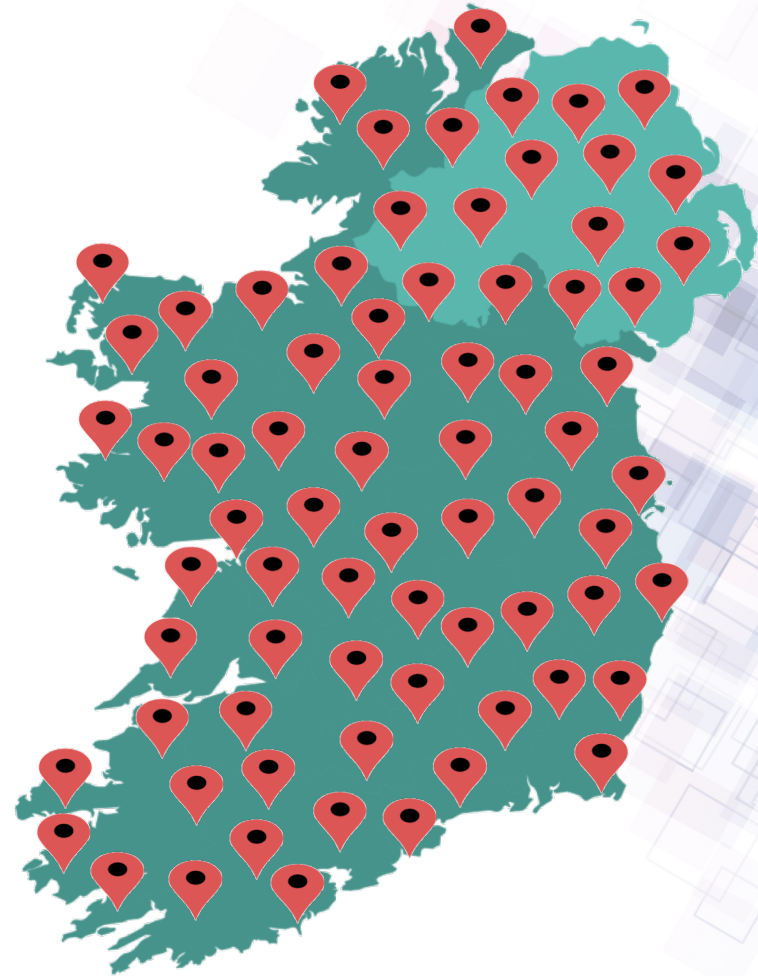
Pilot Intervention success?

Potential for developed programme to have a nationwide roll out through GAA coaches

GAA – 92% of primary schools

20% Nationwide - **100,000 children**

50% Nationwide - **250,000 children**





The
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