



# Numeracy in Sports and Exercise **Science**

2016

2021

Problem Identification

Solutions & Interventions

Effects

→ other Science cohorts

# Project Team

- Science/Health and MESH
- A/Prof Simon Green (**physiologist**)
- Dr Peter Clothier (**biomechanist**)
- Ms Susan McGlynn (**maths teacher & educator**)
- Dr Jim Pettigrew (**mathematician & educator**)
- Dr Paul Fahey (**statistician & mathematician**)
- Dr Deidre Stuart (**scientist & biochemical engineer**)

***Sept 2015***

*Oct*

SES Discussions  
MESH

*Nov*

Numeracy Survey Design

*Feb*  
*2016*

HREC Approval

*March*

Student Testing

*May*

CILT Application

*June*

CILT Funding (\$9600)

UNSW Analysis

RA Appointment

*July*

Meetings

*Nov-Feb*

Numeracy Survey Refinement

*March*

Student Testing

Manuscript to IJMEST

***June 2017***

# Numeracy Survey

## Multiple Choice

### Background (4)

Maths education  
Perception of ability  
Seek support  
Attitude to maths



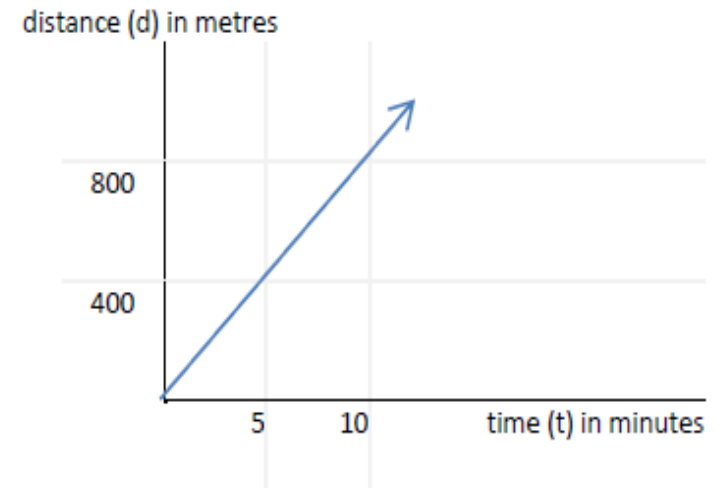
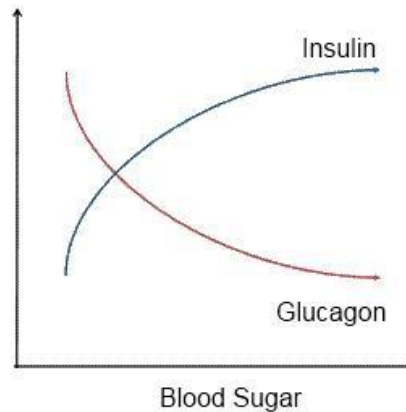
0.8 versus 0.653

$1/3$  versus  $1/4$

$1 \times 0.8$  versus  $1 \div 0.8$

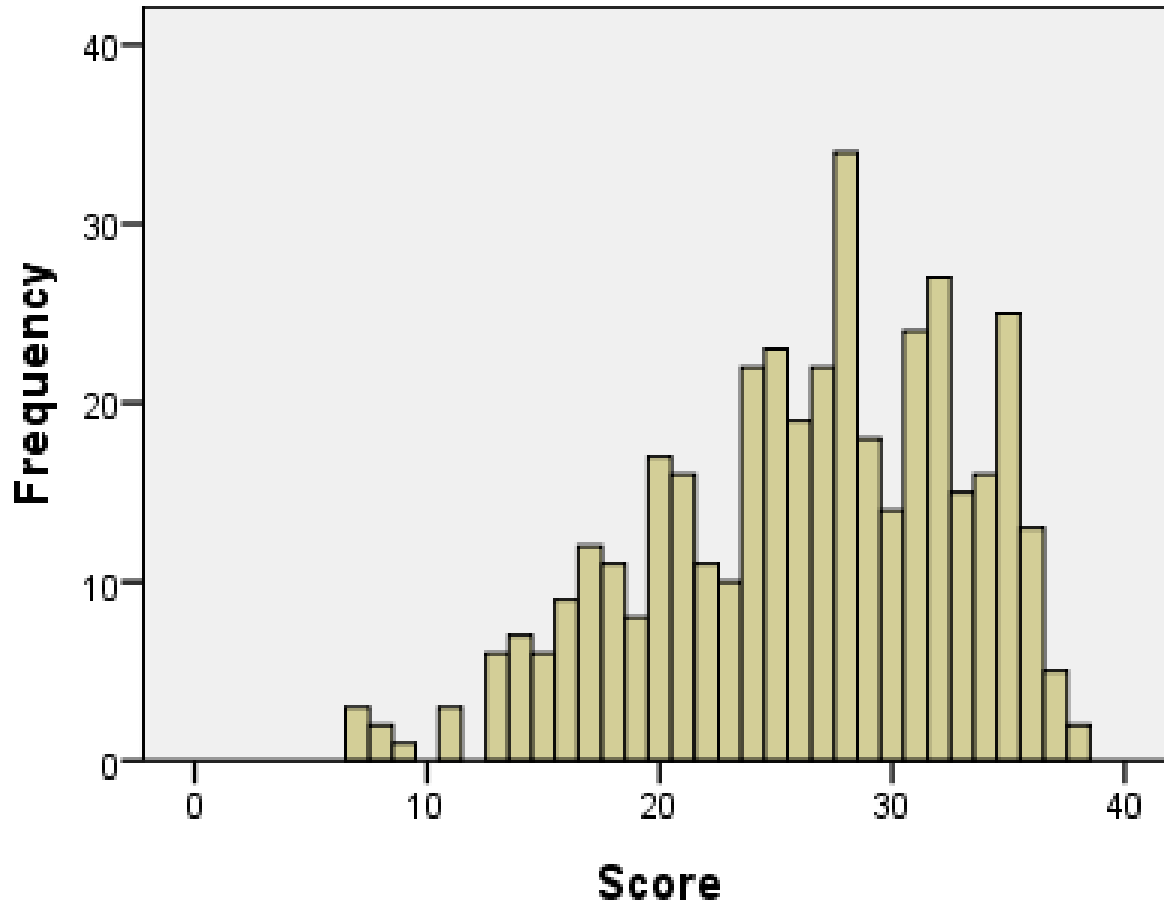
### Numeracy (39)

Size & proportion  
Fractions, percentages  
Arithmetic & Algebra  
Rates and change  
Graph interpretation

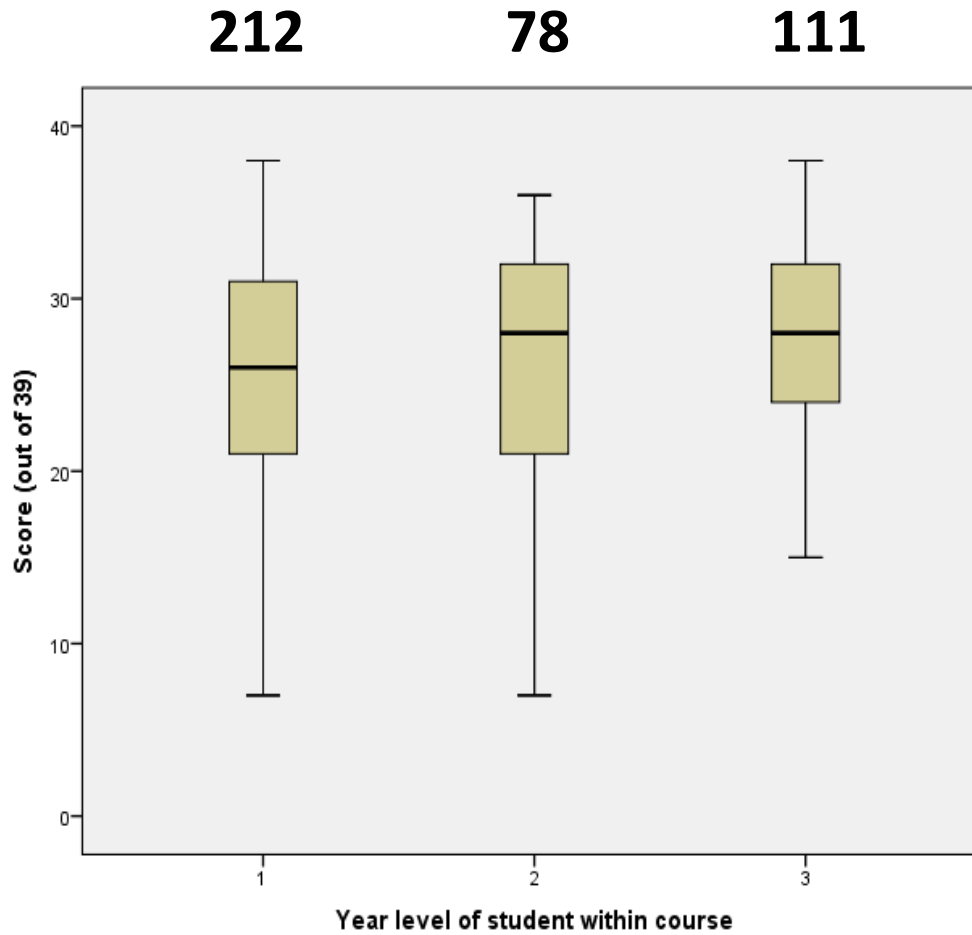


# Overall numeracy performance

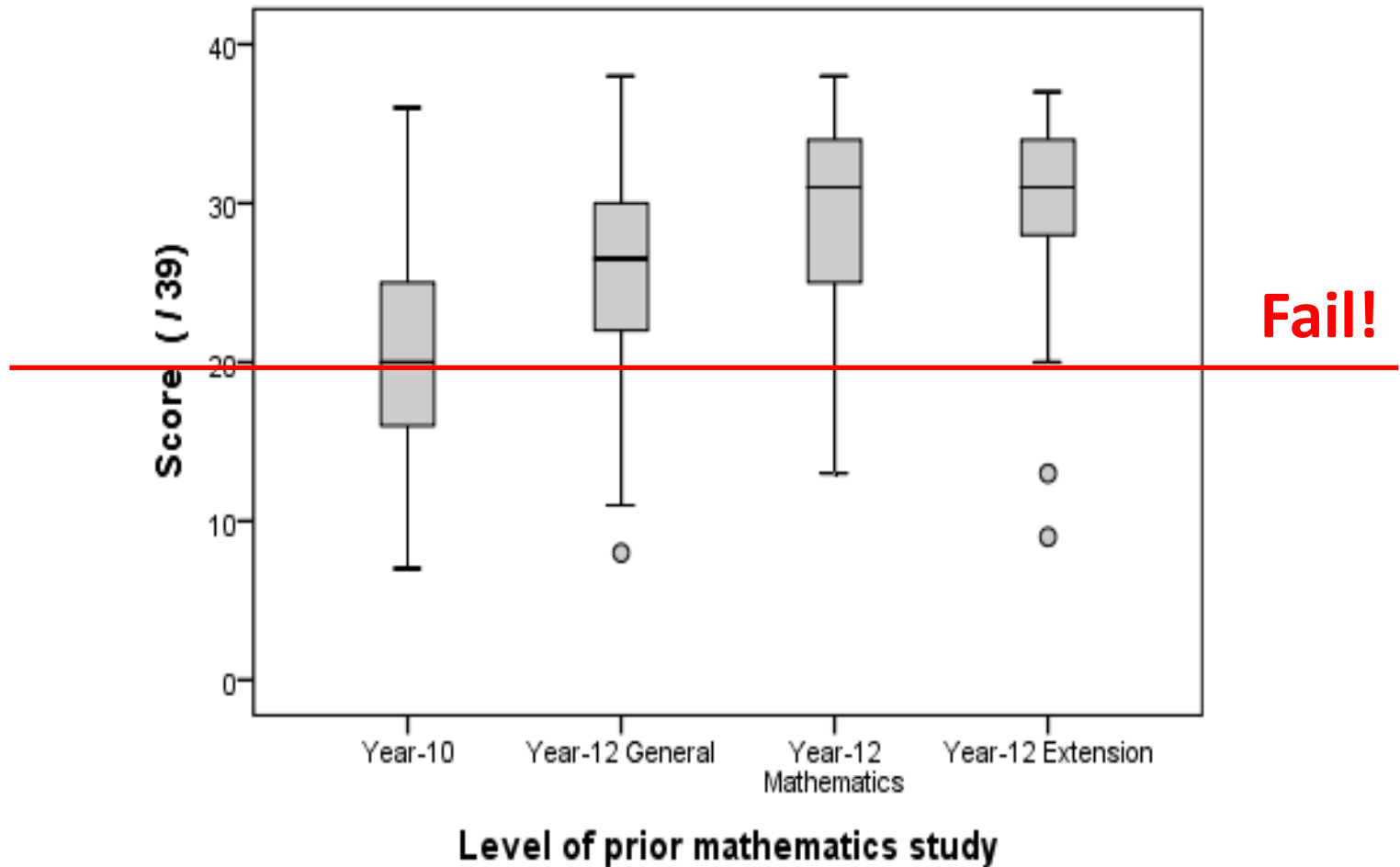
**N = 401, median = 27**



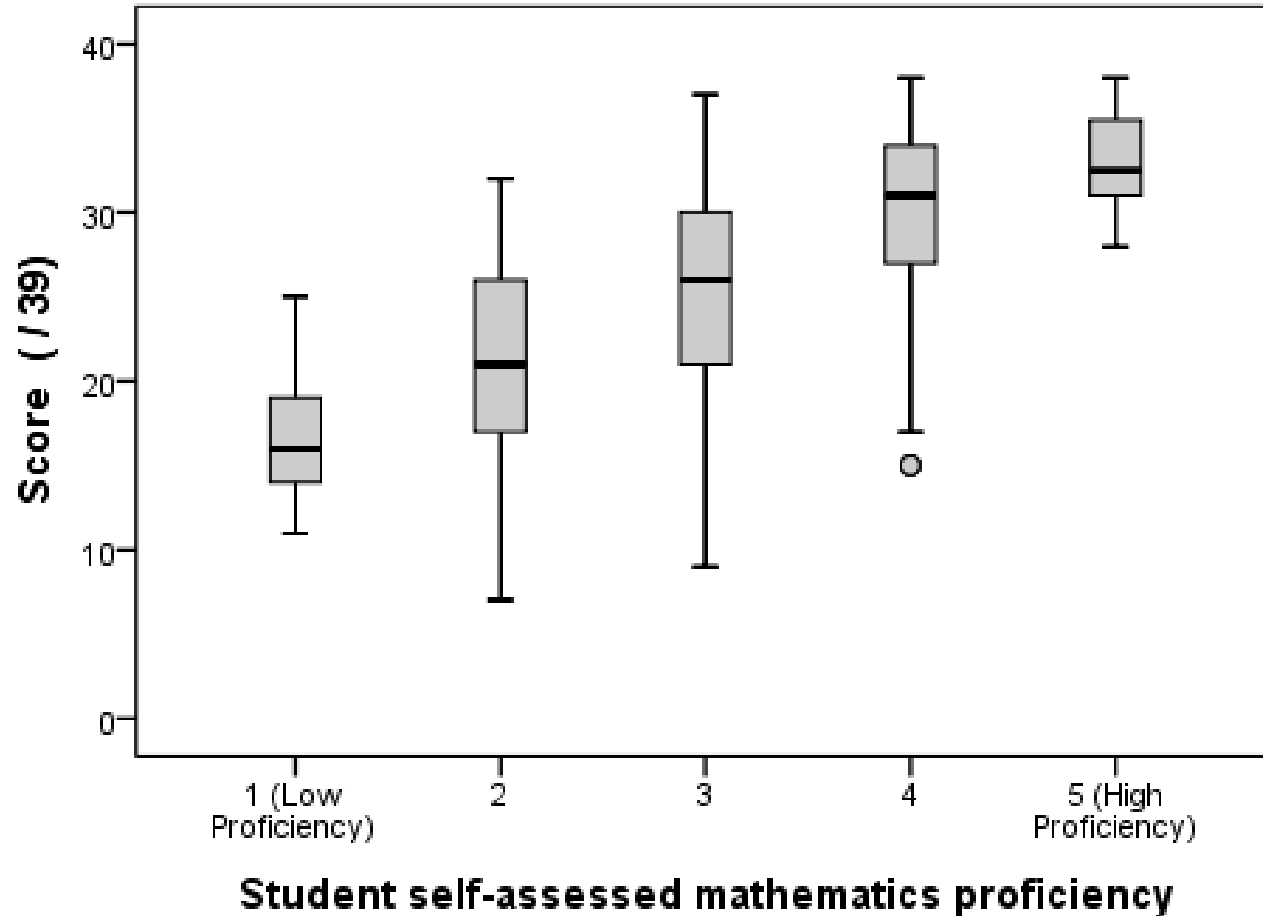
# By degree year



# Maths education at school

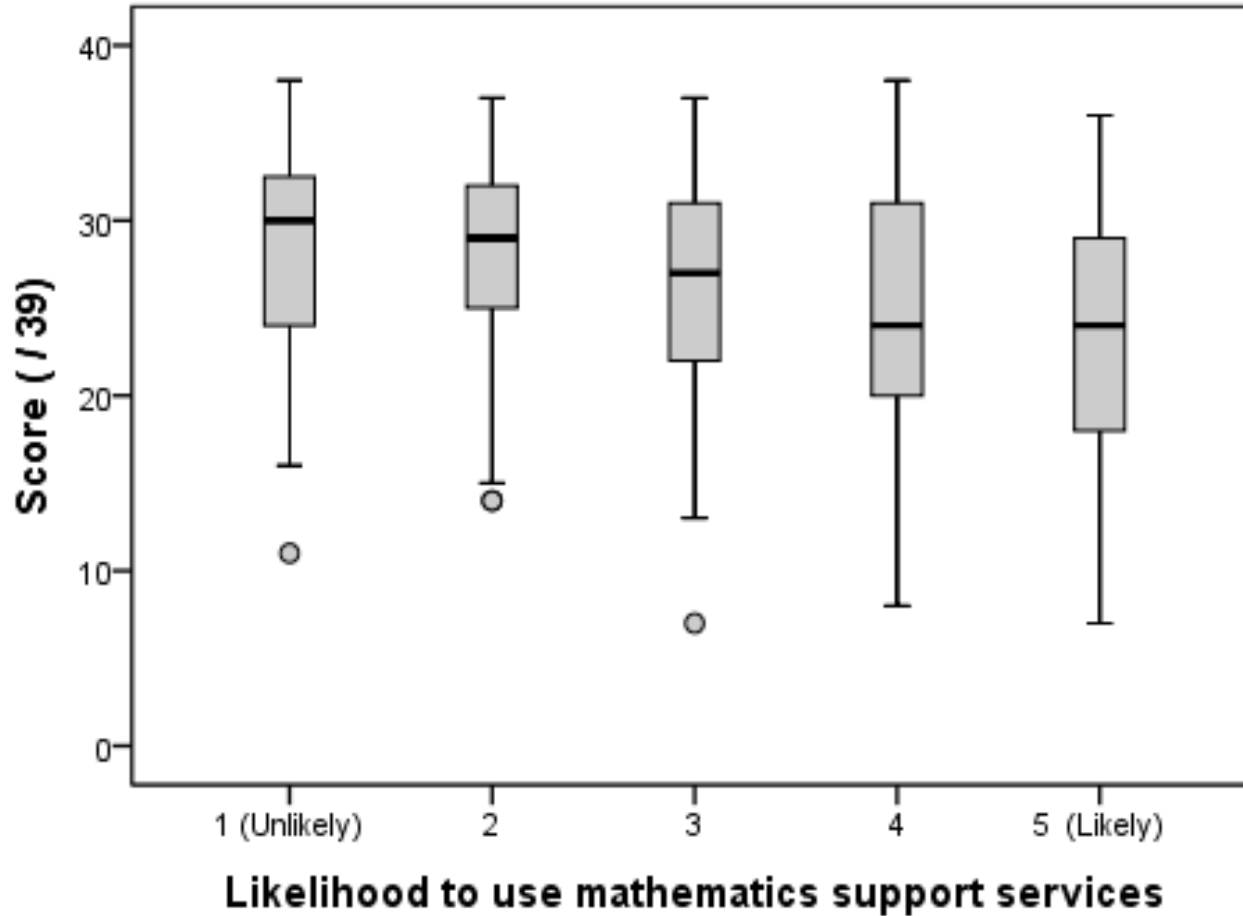


# Self-perception of proficiency





# Seeking support



# Importance of mathematics

