WORLD CONFERENCE ON DROWNING PREVENTION

Every Body Floats

Individuals of African, Caribbean and Asian heritage

'Find Their Float'

Black Swimming Association (BSA), University of Portsmouth and Royal National Lifeboat Institution (RNLI.)

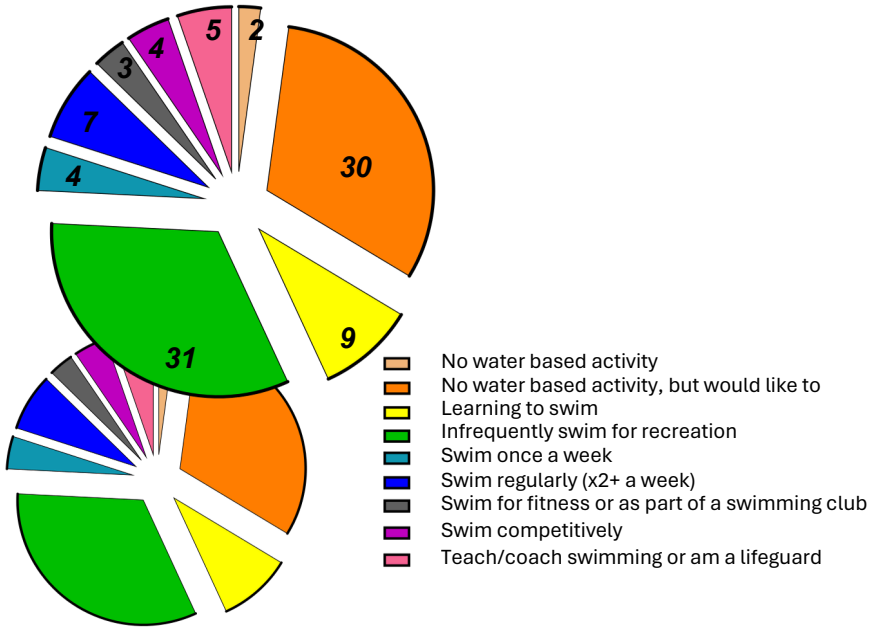
PARTICIPANTS

Attended data collection session N=101

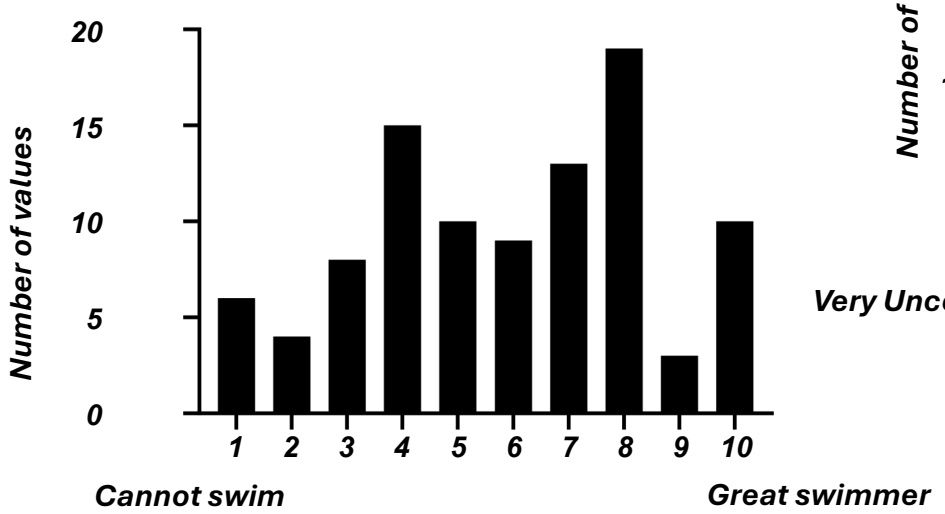
→ 5 - Improved float technique but not comfortable to float in deep water

Data analysed N = 96	African & Caribbean	Asian	Mixed
	47	24	25

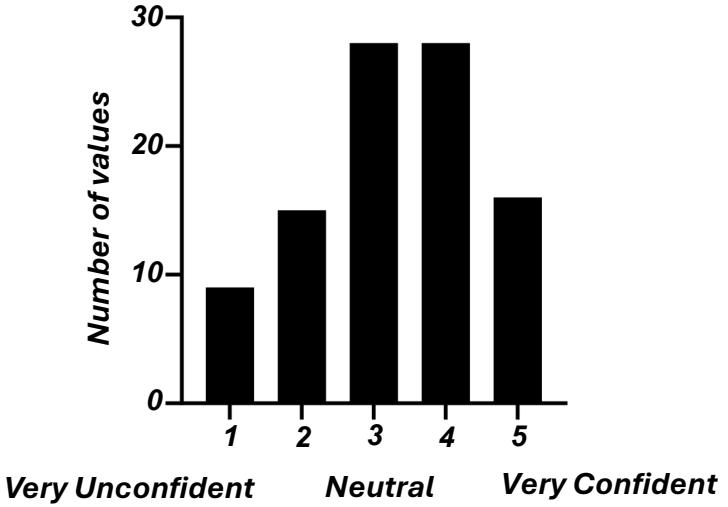
Current participation



Self-reported swimming capability



Float confidence

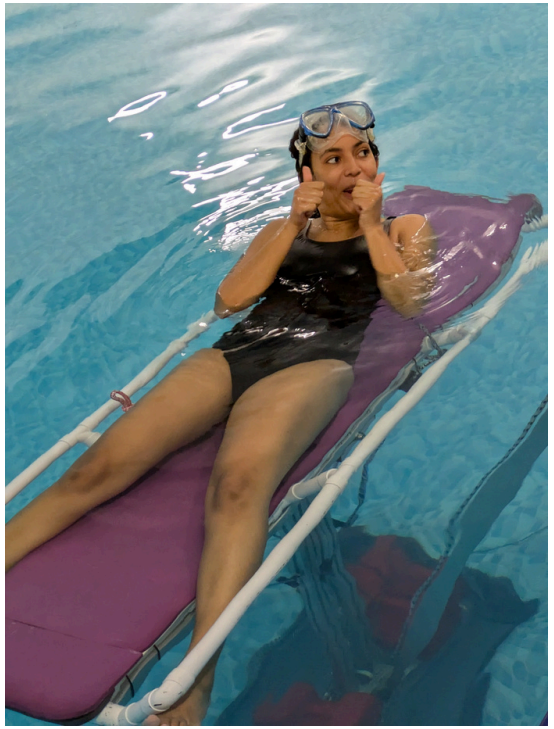


METHODS

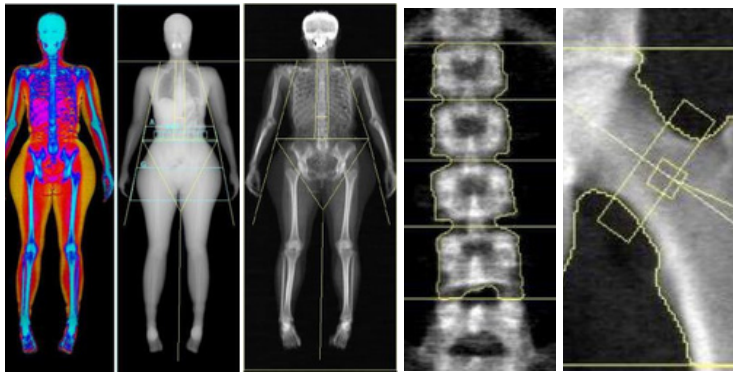
FLOAT

- Post float perceptions
- Filmed 2 min float
- Heart rate & RPE
- Instruction, Practice, Support

BUOYANCY



BODY MEASUREMENTS



BMI, Waist:Hip ratio, Relative fat equation

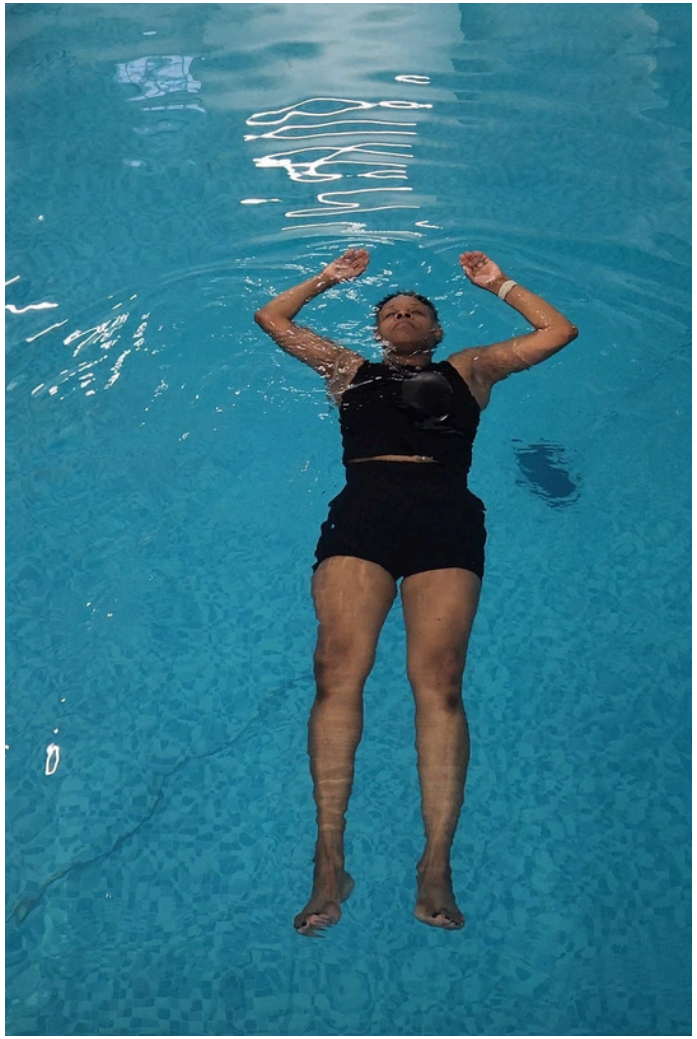
RESULTS

89 participants successfully floated

Passive float: 45 female, 14 male

Active float: 8 female, 29 male

***Passive float:** *Floats with little or no movement*
***Active float:** *Requires movement or activity to stay a float*



RESULTS

	Did not float	Males that did float
n	7; 0 f, 7 m	36
BMI (kg.m-2)	21.2 (16.7-25.4)	26.6 (17.4-35.3)
BF(DXA) (%)	20.9 (16.3-30.1)	25.5 (16.0-36.0)
Lean Mass(DXA) (kg)	49.6 (41.60-53.34)	61.6 (37.7-85.4)
BMD$^{(DXA)}$ (g.cm-2)	1.18 (1.03-1.31)	1.29 (1.02-1.5)
Buoyancy (N)	1.0 (-7.7-15.0)	9.6 (-16.5-30.6)
Heart rate (bpm)	103 (89-130)	106 (67-158)
Rate of perceived exertion	4 (2-7)	3 (0-6)
Float trunk angle (°)	52.8 (44.2-69.3)	53.0 (16.6-84.8)

1 person lower than floaters

Within range

Within range

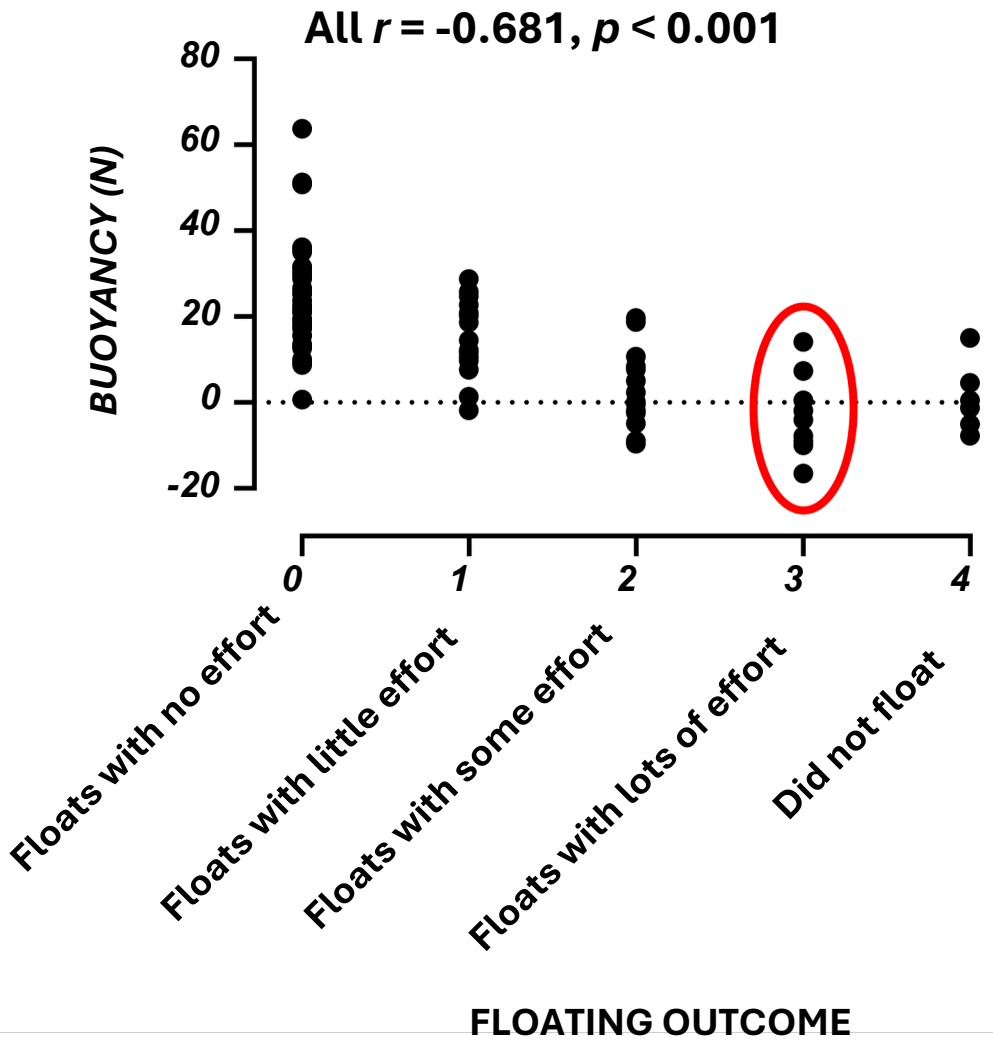
1 person above the range

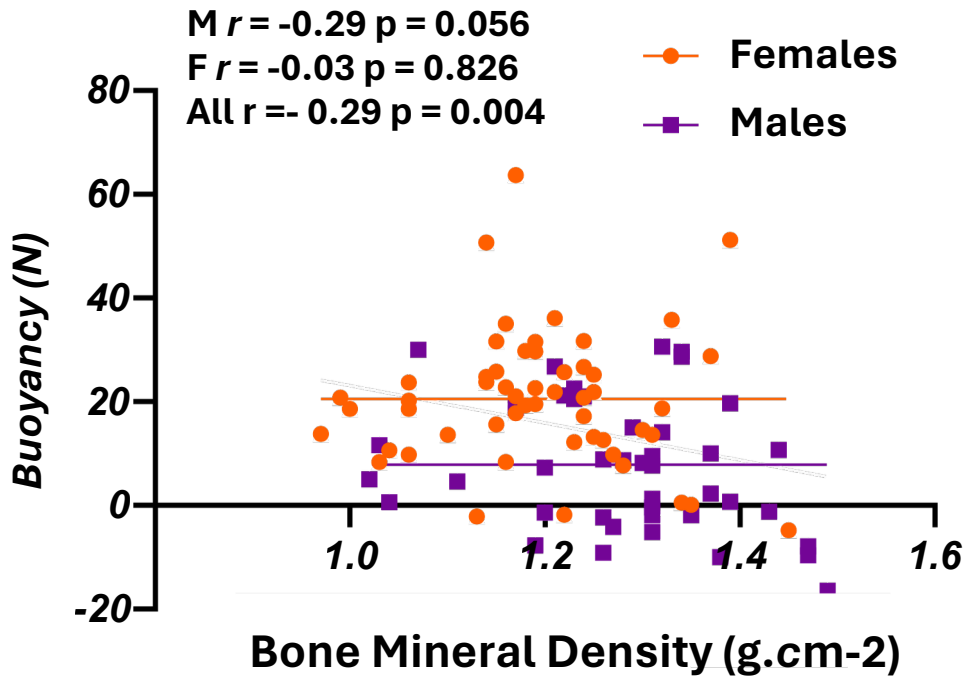
Within range

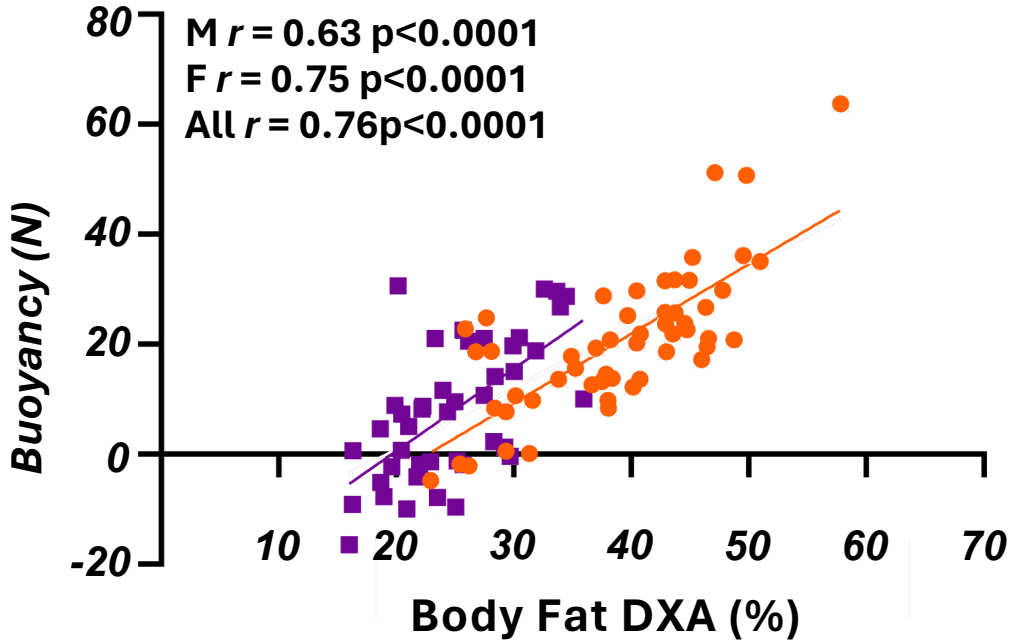
No anthropometric reason preventing floating

BMI = Body Mass Index, BF = Body fat, DXA = DEXA, RFE = Relative Fat Equation,
BIA = Bioelectrical Impedance, BMD = Bone mineral density.

RESULTS

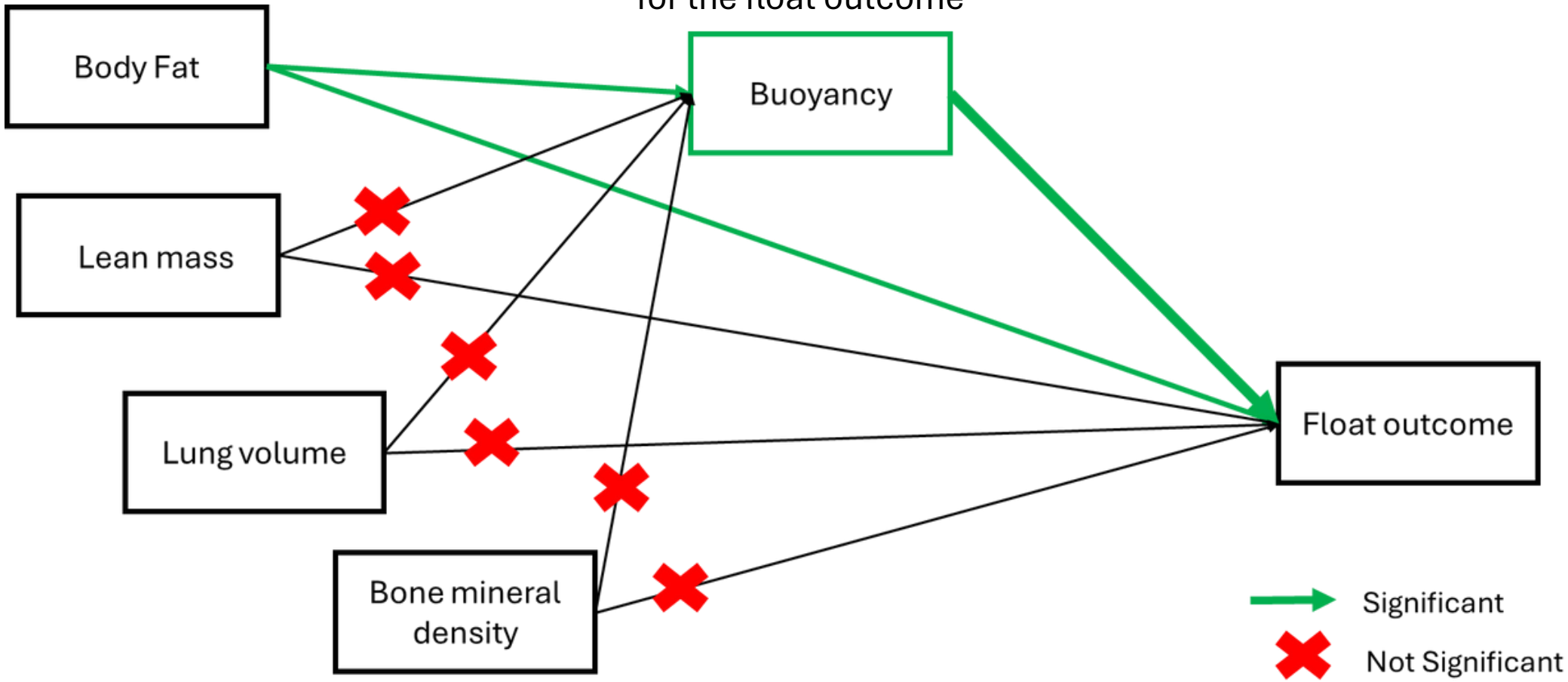

All r = -0.681, p < 0.001
BUOYANCY (N)
80
60
40
20
0
-20
0
1
2
3
4
Floats with no effort
Floats with little effort
Floats with some effort
Floats with lots of effort
Did not float
FLOATING OUTCOME


M r = -0.29 p = 0.056
F r = -0.03 p = 0.826
All r =- 0.29 p = 0.004
Females
Males
Buoyancy (N)
80
60
40
20
0
-20
1.0
1.2
1.4
1.6
Bone Mineral Density (g.cm-2)


M r = 0.63 p<0.0001
F r = 0.75 p<0.0001
All r = 0.76p<0.0001
Buoyancy (N)
80
60
40
20
0
-20
10
20
30
40
50
60
70
Body Fat DXA (%)

RESULTS

Body fat % accounted 42-58%
for the float outcome



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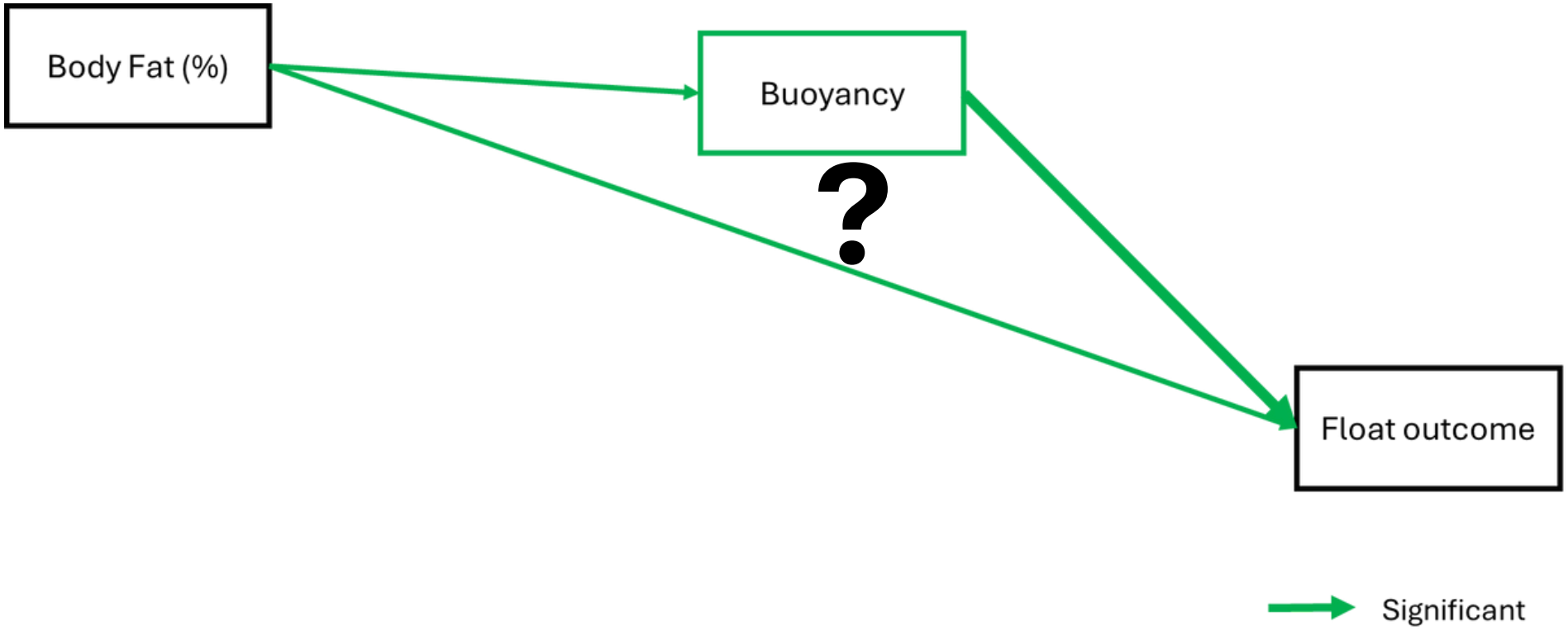
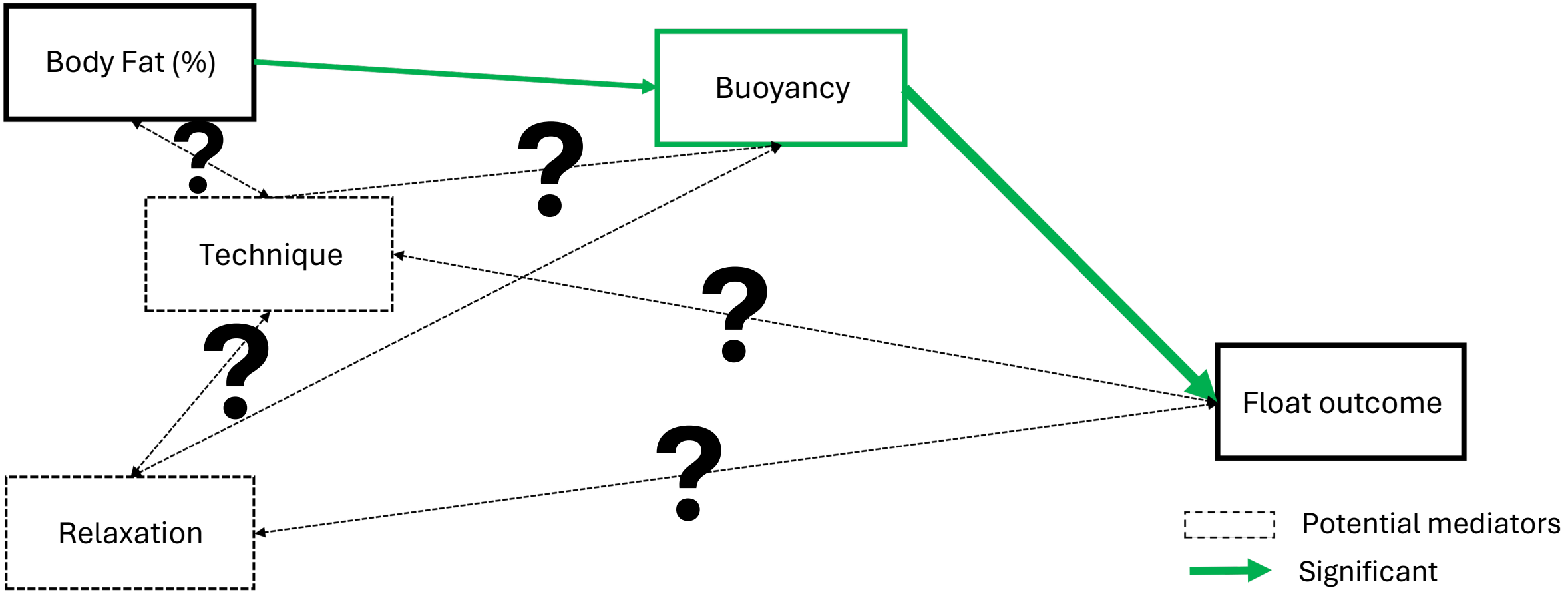


RESULTS


Body Fat (%)
Buoyancy
Technique
Relaxation
Float outcome
?
?
?
?
Potential mediators
Significant

KEY PRELIMINARY FINDINGS

- Individuals of African, Caribbean and Asian heritage can float

- No anthropometric reason preventing floating
  - BMD was not associated with float outcome (e.g. effort required to stay afloat)
  - *Body fat % positivity contributed to float outcome

- Relaxation, floating technique and practice contribute to float competence

**Although body fat percentage is considered a factor that can determine floating, the results showed that floating ability to float is not solely dependent body fat percentage.*

OUR CALL TO ACTION

“You have seen the science, but science does not save lives unless we act on it. This research shows something decisive:

There is no physiological barrier preventing anyone from floating.
The limitation was never the body - it was the story.
And now that the story has changed, what we do next must change with it.

Finding Your Float is not just a technique: It is the first breath, the first moment of calm, the first chance a person has to orient themselves instead of panic. In the minute where most drownings occur, *Finding Your Float* is the bridge between fear and survival. This evidence now calls all of us forward.”

OUR CALL TO ACTION

To practitioners:
Teach presence before propulsion. Floating, breath control, and orientation are not add-ons, they are foundational.

To policymakers:
Water safety must begin with stillness, not strokes. *Finding Your Float* belongs in the national curriculum.

To lifesaving organisations:
Your Float To Live message now has culturally relevant scientific backing; Use it. Amplify it. Adapt it.

To the community and the public:
Every body floats. Your body can float. Your children's bodies can float. Water is not something you stand apart from, it is something you can belong to - safely.

This research ends a myth, and **implementing change is our shared responsibility.**


THANK YOU