



**Drowning
Prevention
Auckland**



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Prevention
Aotearoa**

Evaluating Effectiveness of Public Rescue Equipment in Moving Inland Water Environments

Josh Carmine

Methodology and Study Design



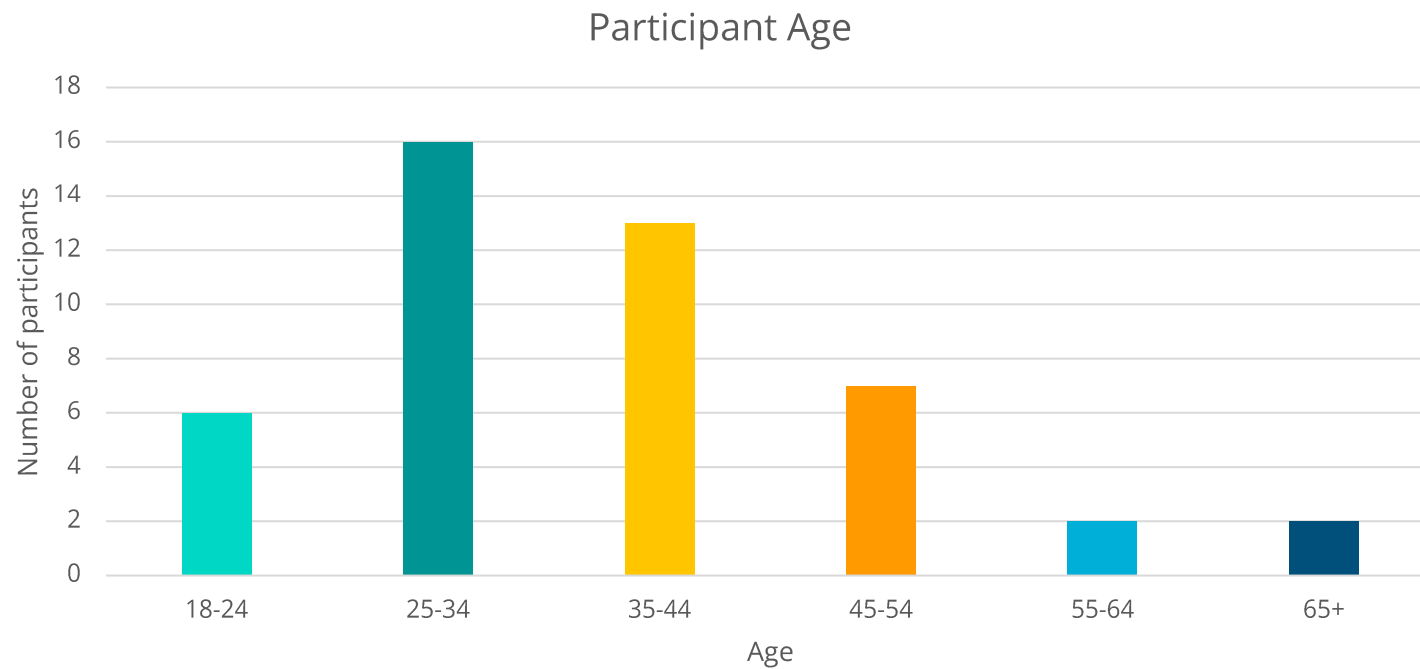
- Mixed methods
- Practical examination and post interview
- Blind to device type
- Successful rescue definition – bring patient to riverbank
- More than one device may be used
- PRE found in New Zealand used

Methodology and Study Design

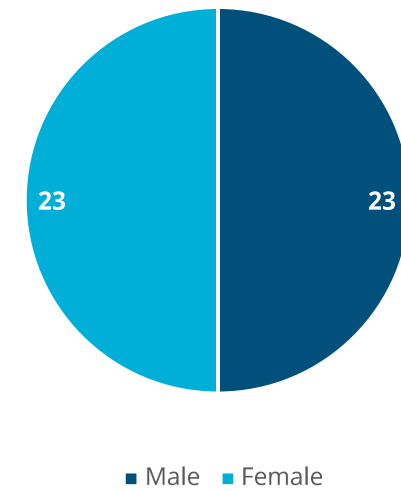


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Results

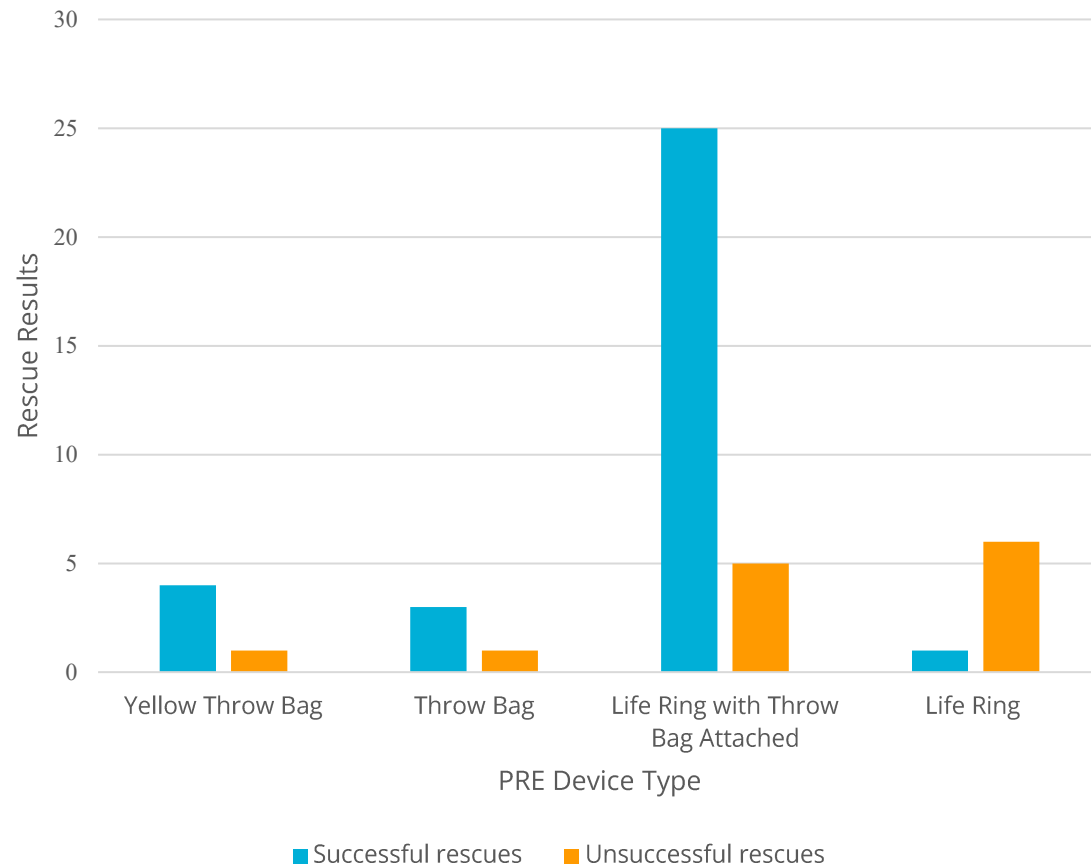


Participant Gender

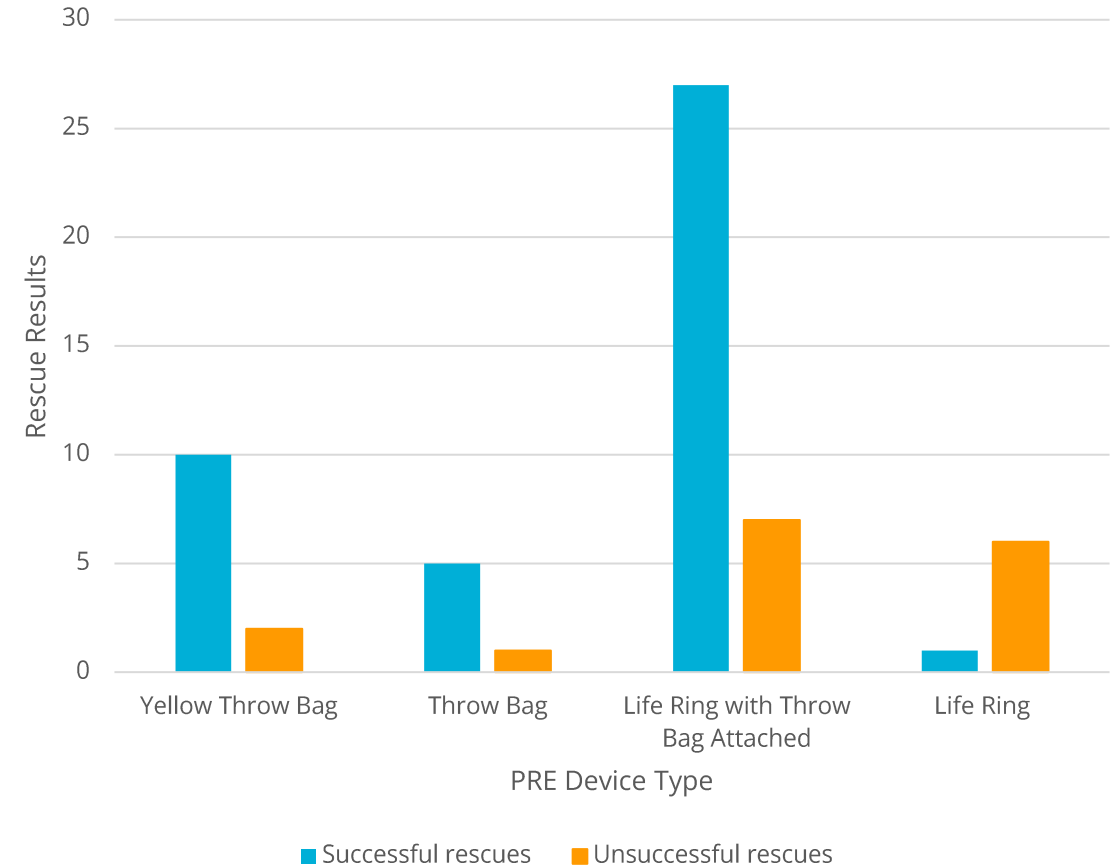


Results

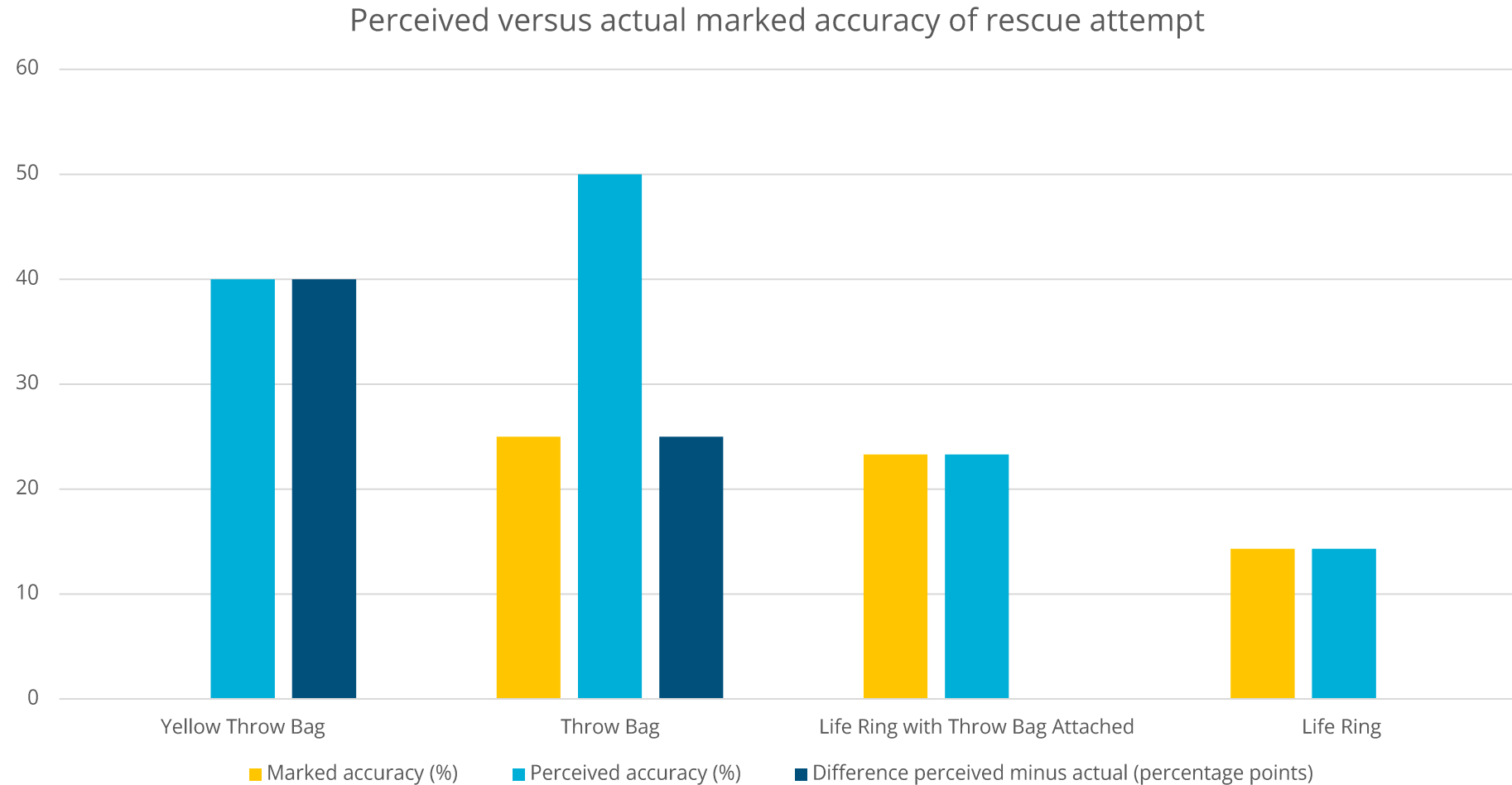
First PRE device chosen



Device chosen at all



Results



Results

Question Asked		Could learn with minimal instruction			Would choose the same device again			Would enter the water with the device		
PRE device type	Total responses	Yes	No	Conditional/ambiguous	Yes	No	Conditional/ambiguous	Yes	No	Conditional/ambiguous
Small life ring with throw bag attached	34	91.2% (n=31)	2.9% (n=1)	5.9% (n=2)	100.0% (n=34)	0.0% (n=0)	0.0% (n=0)	47.1% (n=16)	41.2% (n=14)	11.8% (n=4)
Yellow throw bag	12	91.7% (n=11)	8.3% (n=1)	0.0% (n=0)	75.0% (n=9)	25.0% (n=3)	0.0% (n=0)	33.3% (n=4)	50.0% (n=6)	16.7% (n=2)
Small life ring	7	57.1% (n=4)	28.6% (n=2)	14.3% (n=1)	42.9% (n=3)	57.1% (n=4)	0.0% (n=0)	0.0% (n=0)	85.7% (n=6)	14.3% (n=1)
Throw bag	6	83.3% (n=5)	0.0% (n=0)	16.7% (n=1)	100.0% (n=6)	0.0% (n=0)	0.0% (n=0)	0.0% (n=0)	100.0% (n=6)	0.0% (n=0)
Overall device responses	59	86.4% (n=51)	6.8% (n=4)	6.8% (n=4)	88.1% (n=52)	11.9% (n=7)	0.0% (n=0)	33.9% (n=20)	54.2% (n=32)	11.9% (n=7)

Results

A rope meant I could do something after the throw

"Because it provided both something for the person you need to rescue something to hold onto to prevent them from getting into more immediate danger from drowning. The rope also helps me do something about it (pull them to the riverbank)."

I picked what made sense under pressure

"It was immediately obvious that I could recognise how to use this device (small life ring and throw bag attached) as it had a rope attached to it which meant that I could pull them safely to the side of the riverbank."

The water was faster than expected

"I just made notes of the panic and the theoretical mathematical calculation of how fast he (drowning victim) was going and where I needed to throw because I hadn't used anything like this before. I feel like it was almost a fluke that I managed to get it where it needed to be in time."

Trying it made me realise what I did not know

"More people need to be trained in places around the country, people should all know how to use them properly and be trained on how to use them."



Ngā mihi

Final thought