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## Reducing rip current drownings – learning from the experiences of rip current survivors



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## PROBLEM

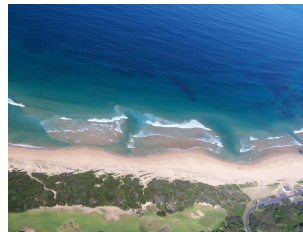


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Rip currents are common features on Australian surf beaches



In 2008 – 2009, SLS reported: **94 people drowned** on Australian beaches and more than **25,000 people were rescued**

Good scientific understanding of rip current flow behaviour, BUT very little is known about **swimmers' experiences in rip currents**



# KEY AIM

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Conduct a **pilot study** to assess the **demographics, surf knowledge** and **behavioural responses** of rip current survivors



Assist in the further development of **appropriate rip current safety messages and education** in Australia and overseas.

# METHODOLOGIES

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**A 'mixed methods' approach was used involving:**

**1. Quantitative research component:**

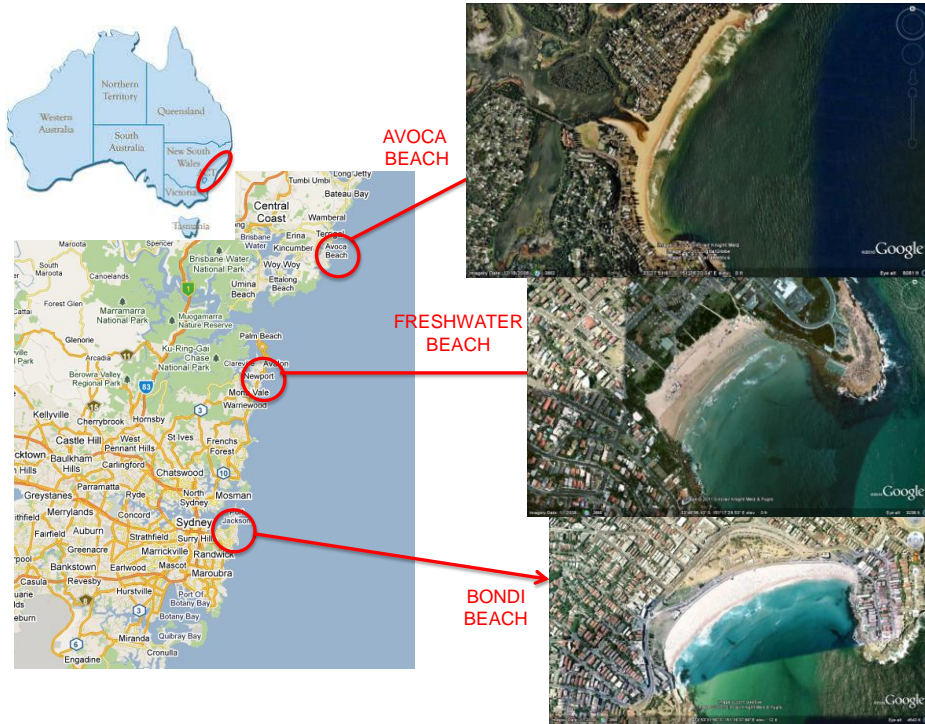
Questionnaire Survey Instrument (QSI)



Two distribution methods:

- 1 – online (Aquabumps, [www.scienceofthesurf.com](http://www.scienceofthesurf.com), [beachsafe.org](http://beachsafe.org))
- 2 – printed version of QSI administered face-to-face

**2. Qualitative research component:**

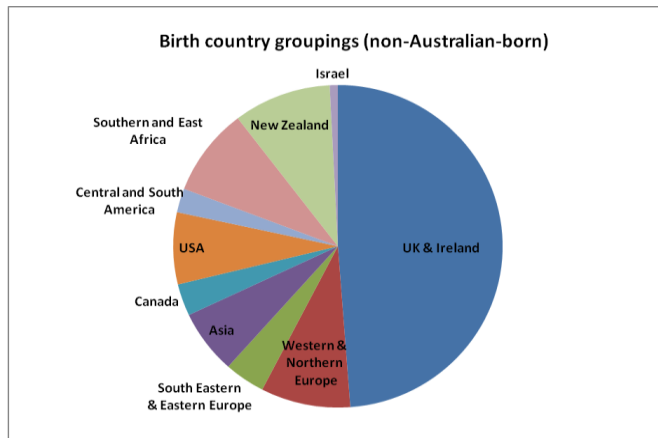
Face-to-face semi-structured interviews were used so that participants could narrate their experiences (in their own words)




**PRELIMINARY RESULTS**  
**Demographics**


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**78% respondents were Australian. The rest were:**



**66% respondents were male; mode age 35-44 years old**

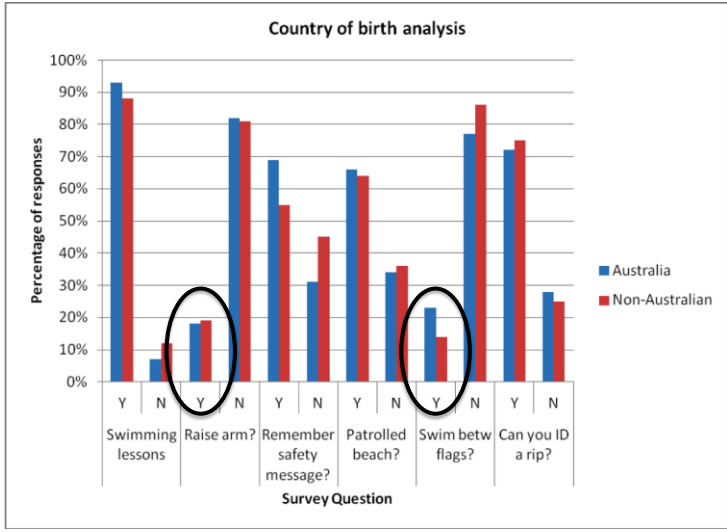


# PRELIMINARY RESULTS

## Surf Knowledge/Ability



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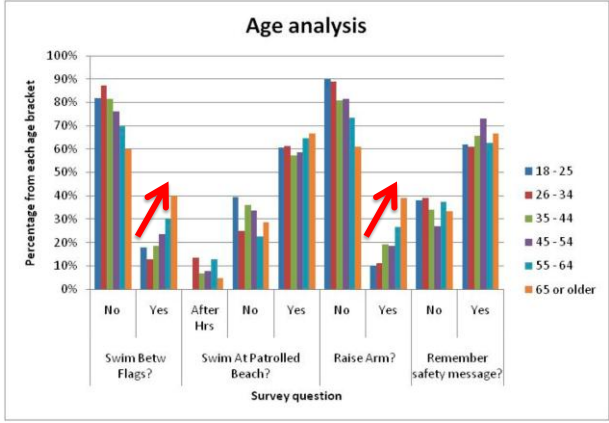


# PRELIMINARY RESULTS

## Trends by Age



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**Younger** swimmers more likely to be caught in rips **outside the flags**; less likely to raise arm for help



# PRELIMINARY RESULTS

## Getting caught in a rip



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	Yes	No		
Can you identify a rip?	87%	13%		
Test of rip identification via 3 photos:	0 out of 3 correct	1 out of 3 correct	2 out of 3 correct	3 out of 3 correct
	0%	0.2% (1 answer)	15.8%	84%

Can you ID a rip?	Did you raise your arm?		TOTALS
	No	Yes	
No	54	22	76
Yes	407	81	488
TOTALS	461	103	564



# PRELIMINARY RESULTS

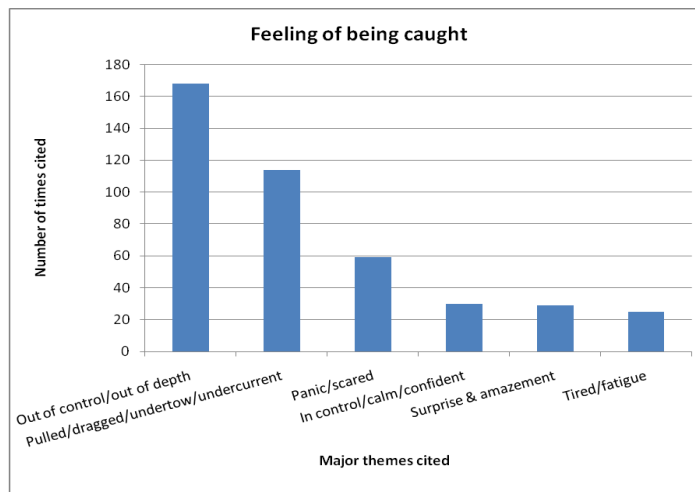
## Feeling of being caught



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## PRELIMINARY RESULTS

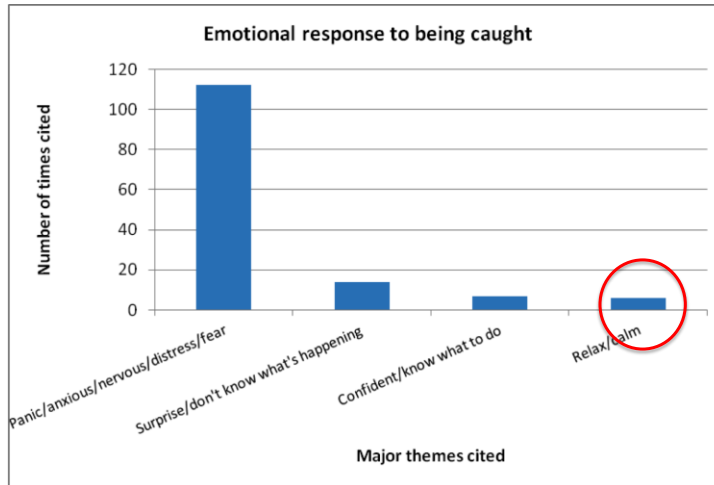
### *Emotional Response*



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## PRELIMINARY RESULTS

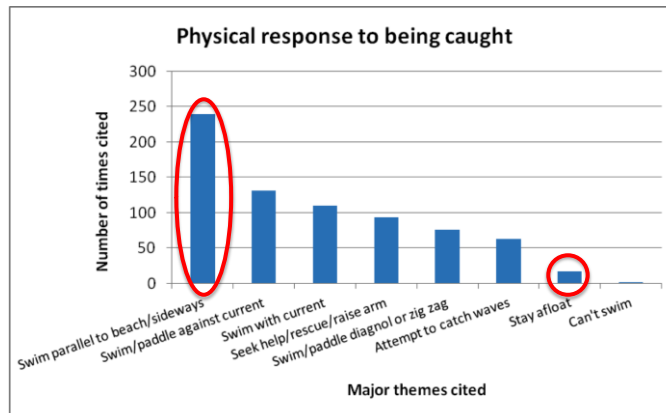
### *Physical response*



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## PRELIMINARY RESULTS

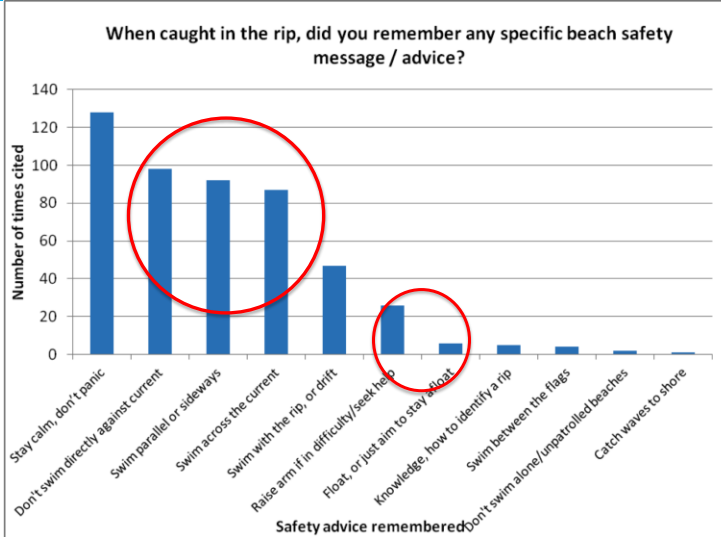
### What was remembered?



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## PRELIMINARY RESULTS

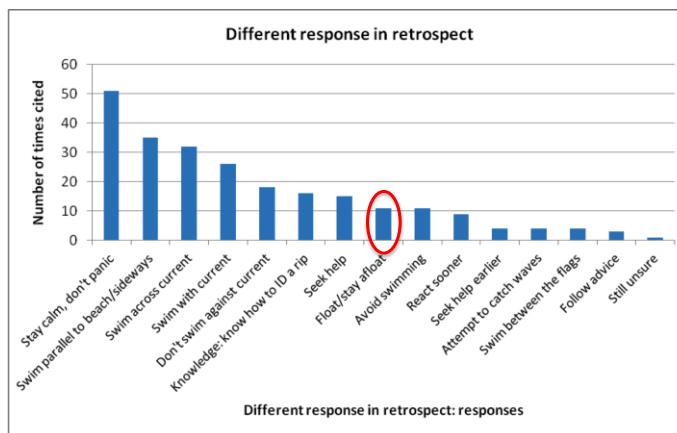
### Response in retrospect



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**56%** respondents indicated they would **not react differently** if caught in a rip current again.



# PRELIMINARY RESULTS



## Qualitative info

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Theme	Quote
Better informed / more knowledge	<p><i>"I didn't know how to check for rips before, now I have a better idea how to identify them from the beach (but probably need more practice). So in retrospect I'd avoid swimming there in the first place."</i></p> <p><i>"I wouldn't go into the water if I saw rip."</i></p> <p><i>"[I am] more experience now, I would not swim in an area with a rip."</i></p> <p><i>"I am more knowledgeable about the ocean now. When the incident occurred we lived in the Blue Mountains and had limited surf experience. Now we live near the ocean and we have ensured that we have gained more knowledge about the ocean."</i></p>
Seek help	<p><i>"If it was a strong rip, I'd put my hand up earlier."</i></p> <p><b><i>"Might wave for help as it's not worth the risk."</i></b></p> <p><i>"I would have swum all the way around to the next beach or I would have kept frantically waving until someone came and got me."</i></p>
Don't swim against the current	<p><i>"Swim across the rip instead of against it."</i></p> <p><i>"I wouldn't try and swim against it like I initially did. I'm not as young and dumb now."</i></p> <p><b><i>"I would immediately swim parallel to shore and get out of it instead of trying to fight it."</i></b></p>
Swim between the flags	<p><i>"Swim along the shoreline. Not swim anywhere that is not patrolled. Always swim between the flags."</i></p>

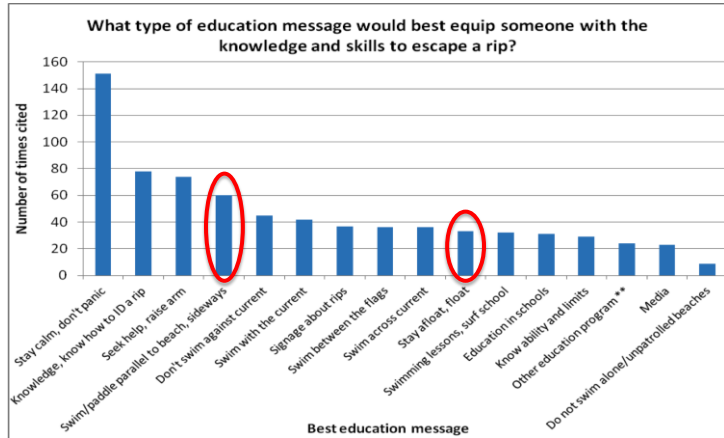


# Most achievable safety message?



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**The majority of respondents cited 'stay calm and don't panic' as the most achievable rip safety message.**





## CONCLUSIONS



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- Most people caught in rip currents are swimming outside of flags
- Despite good rip identification, they still got caught in a rip! Complacency?
- The main messages about rip current safety encouraged by respondents were:
  - stay calm and don't panic
  - rip identification
  - raise your arm for help
- These 3 main messages were more commonly cited than traditionally recognised methods of 'SWIM PARALLEL' and 'STAY AFLOAT'
- With some modifications, the research methodologies were deemed appropriate to the task of meaningful data generation for future research



## NEXT STEPS



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- Detailed interview transcript analyses under way
- Awaiting result of larger research grant application
- Recommendations to SLSA
- Publication of results underway



## ACKNOWLEDGEMENTS



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**Thanks to rip current survivors for providing potentially life-saving data.**

**THANK YOU**