Real and perceived swimming competence among young adults in Australia: The Can you swim? Project

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Young adult drowning deaths (Australia)

• 314 Drowning deaths in Australia in 12 months to June 30th 2010 (RLSS-A, 2010)

• Young adults aged 15-34 years accounted for 28% of these deaths (RLSS-A, 2010)
Why do they drown?

Risk Factors

- Alcohol
- Gender
- Risk taking behaviour
Risk factors

• Alcohol
• Gender
• Risk taking behaviour

• SKILL LEVEL?
Risk factors

- Alcohol
- Gender
- Risk taking behaviour
- SKILL LEVEL?
- PERCEPTION OF SKILL LEVEL?

Can you swim?

- New Zealand research study conducted by Kevin Moran
- University of Ballarat joined for Australian component
Study Aims

• To establish whether young adults’ self reported swimming abilities match their actual swimming ability

• To determine actual swimming ability among young adults

Method

• Participants: 260 1st year University students
  • Physical Education or Exercise & Sports Science
  • 75% aged 17-19
  • 25% aged 20-24
  • 54% male

• Survey

• Skills assessment
Survey instrument

- Based on NZ survey (test-retest reliability)
- Extra questions:
  - swim lessons experience
  - qualifications

**CAN YOU SWIM?**

To ensure confidentiality, please do not write your name on this survey, use your student number

This questionnaire is designed to gather information about your knowledge of water safety and previous swimming behaviors. DO NOT CONSULT WITH OTHERS. Some of the questions ask for your views and feelings about your risk of drowning. Please do not take too long over each question – normally your first answer is the best. If you have any queries about the questionnaire please ask the researcher who will be happy to assist you.

Survey Validity & Reliability

- **Validity**
  - Used ‘experts’ in the field of water safety

- **Reliability**
  - Test-retest, with 21 same aged, same population
  - Perfect (2 Qs); Near perfect (11); Substantial (8), with 1 Q Moderate
Skills assessment

- Continuous swim
- Swim on back
- Float / tread-water / scull
- Dive
- Surface dive
- Swim underwater
- Rescue

Consistency in skills assessment

- Set criteria for each skill
- 4 assessors worked together initially
- Then independently and compared
- Once consistent, one assessor took over
Findings

• Did they over-estimate their skills?
  NO

• Were males different in self report from females?
  Mostly – NO

Self-report ability vs Self-report laps
Self-report ability vs Self-report laps

Association:
"very strong" for F
"substantial" for M

Self-reported Swimming Ability
Self-report ability vs Self-report laps

- Males: Non to weak swimmer, Cannot complete and/or complete ≤ 100m
- Females: Non to weak swimmer, Cannot complete and/or complete ≤ 100m

- Males: Average swimmer, Can complete between 101-300m
- Females: Average swimmer, Can complete between 101-300m

- Males: Good to excellent swimmer, Can complete between 301-400m+
- Females: Good to excellent swimmer, Can complete between 301-400m+

Self-reported Swimming Ability

Unrealistic

Self-report laps vs Actual laps

- Males: Did not complete and/or completed ≤ 100m
- Females: Did not complete and/or completed ≤ 100m

- Males: Completed between 101-300m
- Females: Completed between 101-300m

- Males: Completed between 301-400m+
- Females: Completed between 301-400m+
Self-report laps vs Actual laps

Lots under-estimated

Self-categor. vs Actual swim distance

Self-reported Swimming Ability
Self-categ. vs Actual swim distance

Examples for some other prac skills

- Swim 100 m on back – low relationship
  - 2/3 said ‘with difficulty’ but completed with good form and pace
- Float 15 min – low relationship
  - Most completed – even if contrary to self-report
- Dive – trivial relationship
  - For self-report ‘easy/v. easy’, 24% actually poor
  - But self-report ‘great difficulty’, 1/3 good form
- Rescue
  - Rescue skills extremely poor
Possible reasons?

• Climate in Victoria, and especially Ballarat?
• Football?
• Commencement of University course?

Conclusion

• Self-awareness of skill level appears extremely poor.
• Actual skill levels vary widely
• Challenge to us
  • Find ways to enhance awareness of actual skill level
  • Find ways to enable young adults to appreciate the meaning of their actual skill level