

# DROWNING PREVENTION: STILL RISKY BUSINESS FOR YOUNG PEOPLE

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## BACKGROUND

Drowning is a significant cause of unintentional death in Australia. Young people are at greater risk of drowning than other age groups partly because of social influences and attitudes towards risk taking.

The relative role of individual and sociocultural factors contributing to drowning risk for young Australians is complex and poorly understood. Despite careful design and implementation of youth-focused drowning prevention programs, young people remain overrepresented in drowning events.

We set out to explore the complex interaction between factors affecting the behaviour of young Western Australians (WA) aged 15-24 years in and around waterways: alcohol consumption; perception of risk; sensation seeking; and peer influence.

## METHODS

A cross-sectional online survey was conducted at three time points (Oct. 2019: T1; Feb. 2020: T2 and March 2021: T3) with a convenience sample of young people. Inclusion criteria were: English speaking, aged 15 - 24 years and residing in WA.

A sub-set of data were derived from self-reported responses. The variables collected were: age; gender; location; education attainment; Alcohol Use Disorder Identification Test Consumption (AUDIT\_C); Resistance to Peer Influence scale, The Brief Sensation Seeking Scale and nine items from Benthin's Perception of Risk scale:

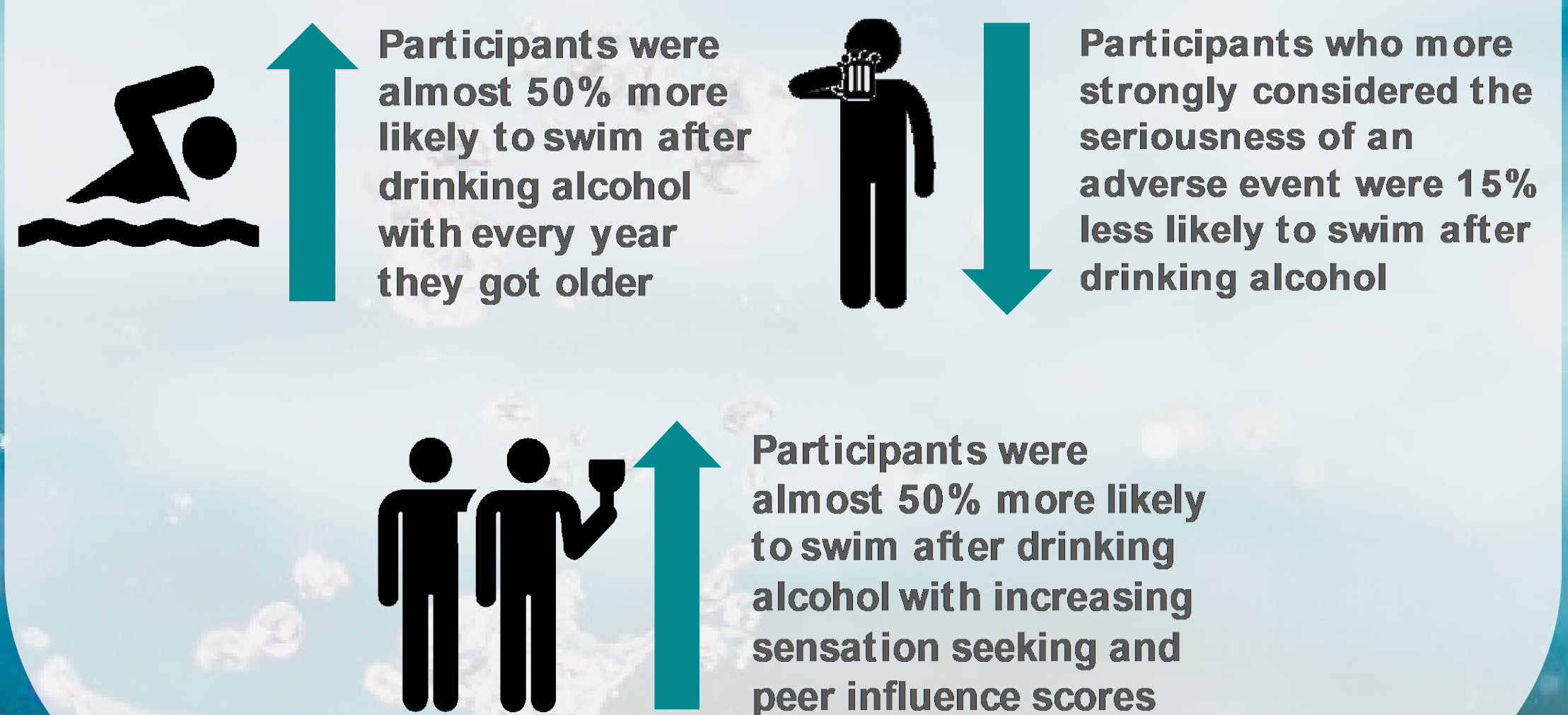
- |                          |                     |
|--------------------------|---------------------|
| 1) Personal risk         | 6) Personal control |
| 2) Risk to peers         | 7) Peer influence   |
| 3) Benefit vs risk       | 8) Admiration       |
| 4) Seriousness of effect | 9) Avoidance        |
| 5) Information value     |                     |

Descriptive statistics summarised participant demographics. Associations were determined using Pearson chi-squared tests and t-tests ( $p$ -value =  $<0.05$ ). Separate forced entry binary logistic regression models explored the influence of potential predictor variables on the outcome: Behaviour (0= Never swum after drinking alcohol, 1= Have swum after drinking alcohol).

The final logistic regression (LR) identified the impact of age, together with the predictor variables alcohol consumption, sensation seeking, peer influence and seriousness of effect (risk perception items) on predicting swimming after consuming alcohol.

## RESULTS

- Participants ( $n=730$ ) were female ( $n=537$ , 74.5%), lived in metropolitan Perth ( $n=616$ , 84.4%) and attended university ( $n=410$ , 56.9%)
- Mean age of participants 19.9 years ( $SD=2.13$ )
- Significant association with those who reported they had swum after drinking alcohol compared with those that had not by age ( $p=0.000$ ), gender ( $p=0.021$ ) and current education ( $p=0.001$ ) (Table 1).
- Final LR was significant for all predictor variables  $p < 0.05$ .



Demographic characteristics	p-value	Have swum after drinking alcohol	Never swum after drinking alcohol
		n (%)	n (%)
ALL n (%) (n=730)		294 (36.5)	436 (54.2)
Age M (SD)	0.000	20.54 (2.02)	19.48 (2.1)
Gender n (%) n=(721)	0.021		
Male		88 (47.8)	96 (52.2)
Female		205 (38.2)	332 (61.8)
Place of residence n (%) (n=730)	NS		
Metropolitan		240 (39.0)	376 (61.0)
Regional		54 (47.4)	60 (52.6)
Current education n (%) (n=721)	0.001		
Not currently studying		98 (43.0)	130 (57.0)
High school		7 (13.5)	45 (86.5)
Technical school		11 (35.5)	20 (64.5)
University		170 (41.5)	240 (58.5)

Table 1: Demographics and associations with behaviour

## CONCLUSIONS

We set out to explore the complex interactions influencing behaviour of young Western Australians, in and around waterways. For many young Australians, alcohol and risk-taking is an inherent part of identity formation environment occurring in a pervasive 'aquatic alcogenic environment'.

- Alcohol consumption was significantly associated with activities in and around the water; consistent with other WA research, citing it as a cultural norm, despite acknowledging the risks.
- Peer influence & sensation-seeking influenced swimming after drinking, a practice participants felt would be admired by their peers.
- A serious side effect or something bad happening was more likely to be front of mind for those who did not drink and swim in our study.

Findings may be used to contribute to and improve youth water safety strategies in Australia and other locations with vast coastlines such as Canada and New Zealand. Understanding the significant influence of alcohol, sensation seeking, peers and the perceived seriousness of an injury amongst young people may help develop future prevention efforts and reduce the significant social burden associated with drowning.