



**Drowning
Prevention
Auckland**



**Drowning
Prevention
Aotearoa**

***Researching
Water
Competence:
A Future
Indicative?***

Dr Kevin Moran, ONZM

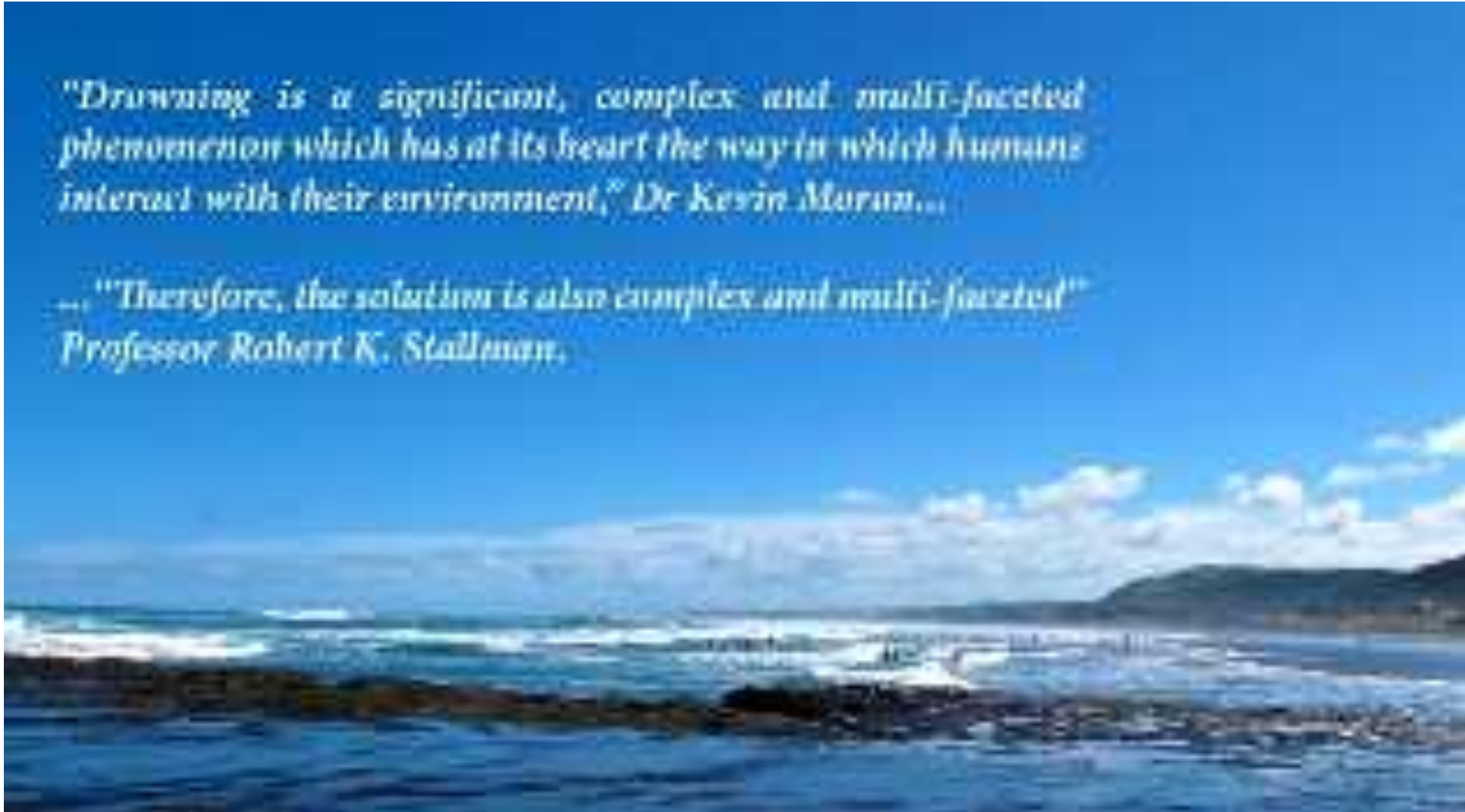
Future Indicative?

- The future indicative is a verb form that indicates an action that has not yet happened but is expected to happen in the future.
- The future **active** indicative verbs usually describe actions that will happen from the author's perspective.

Researching Water Competence – A Future Indicative?

"Drowning is a significant, complex and multi-faceted phenomenon which has at its heart the way in which humans interact with their environment," Dr Kevin Moran...

... "Therefore, the solution is also complex and multi-faceted" Professor Robert K. Stallman.

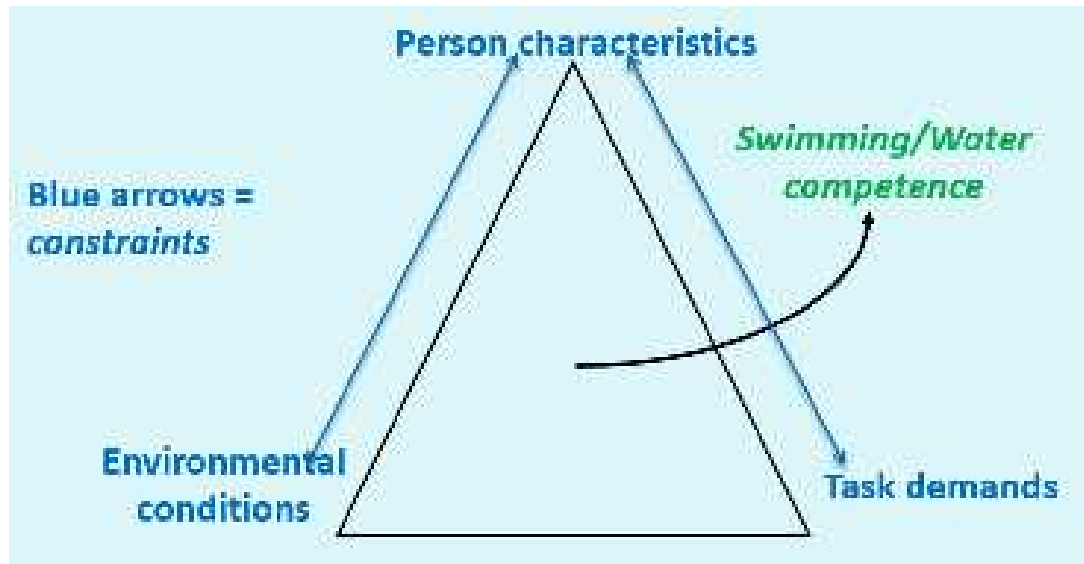


What is water competence?

“In a drowning prevention context, water competence is defined as the sum of all personal aquatic movements that help prevent drowning as well as the associated water safety knowledge, attitudes, values, judgment and behaviours that facilitate safety in, on and around the water.”

(Moran, 2013)

Theoretical guide to future research



- Newell's dynamic constraints model (1986)

Situational applications

Water competency is a more inclusive, reflective, and comprehensive construct that addresses the constraints model of the person-task-environment interaction.



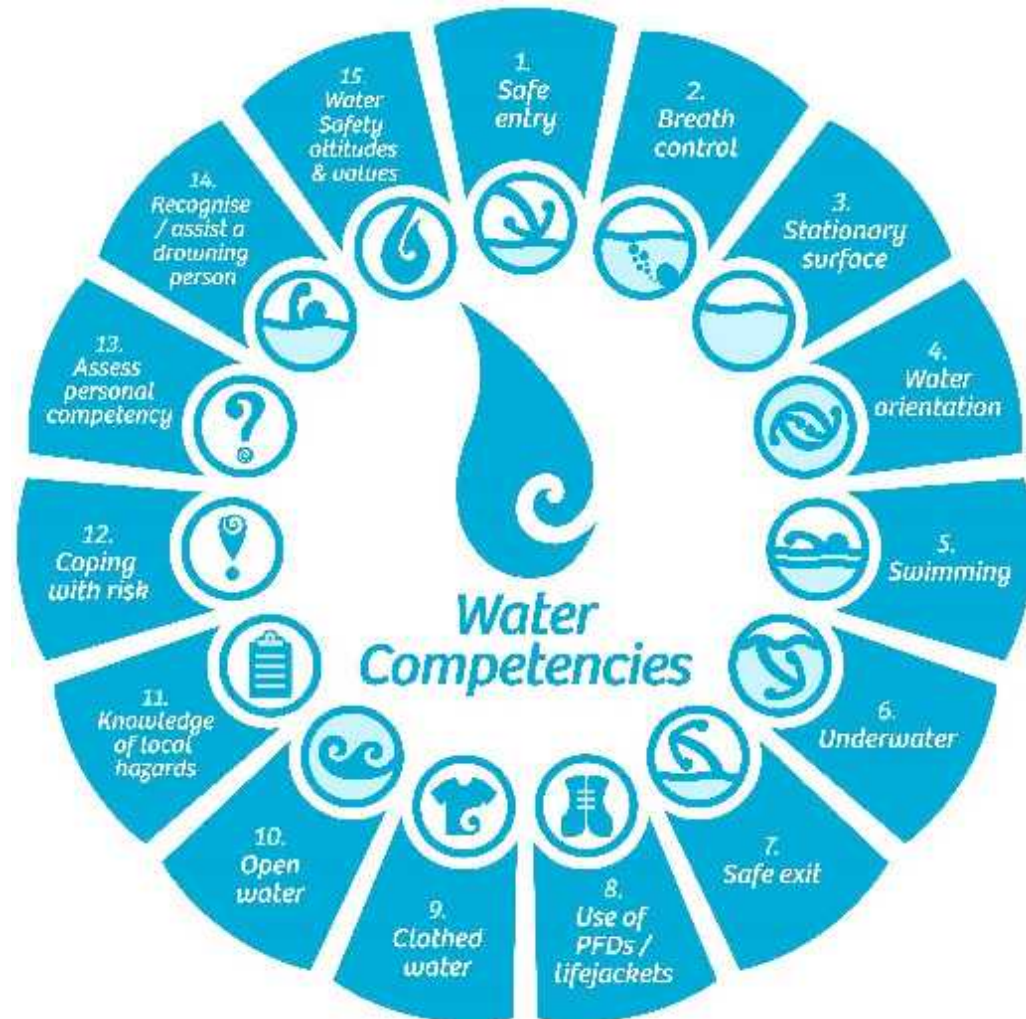
Consider this photo:

- **Person**
- **Task**
- **Environment**

Inter-relational applications



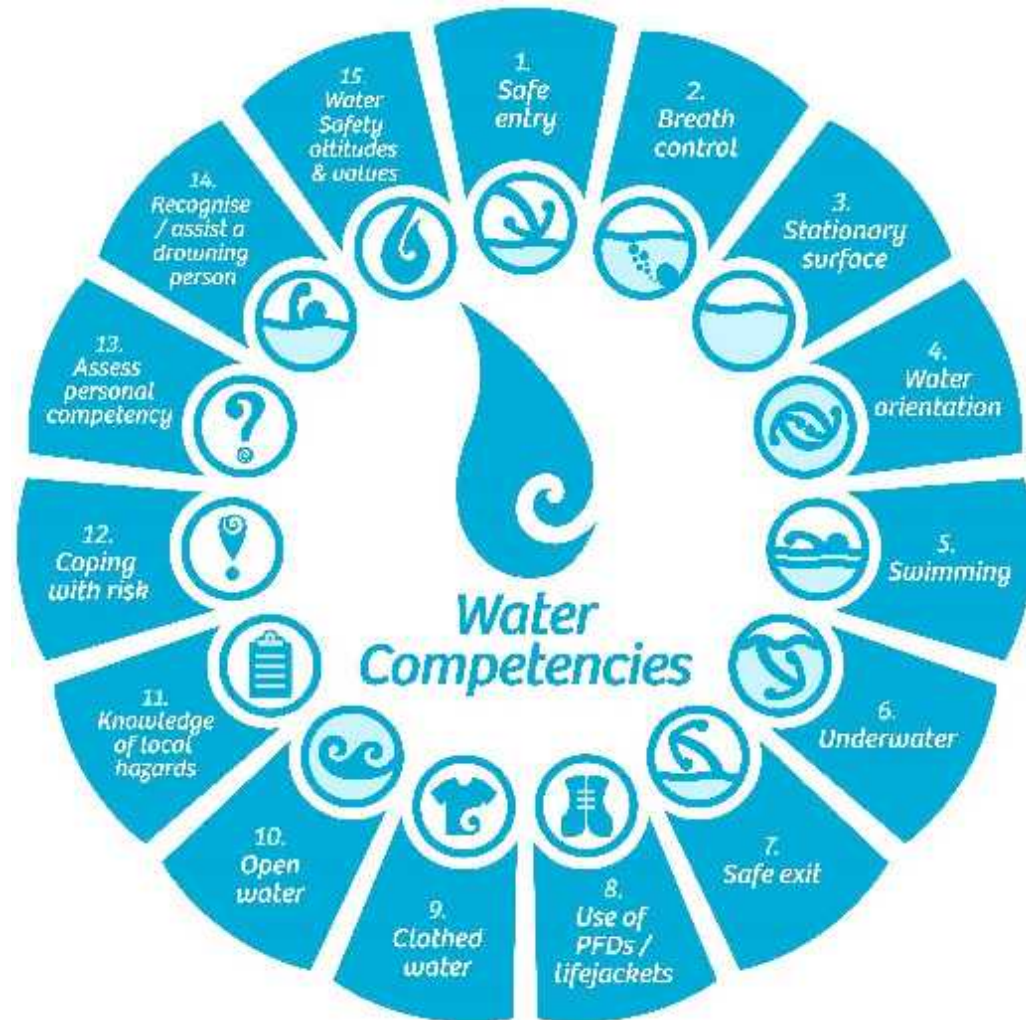
What research evidence do we have?



Research Focus

- 1) Safe Entry
- 3) Stationary
- Flotation
- Treading
- 5) Swimming
- 7) Safe Exit
- 8) PFDs/Lifejackets
- 9) Clothed
- 10) Open water

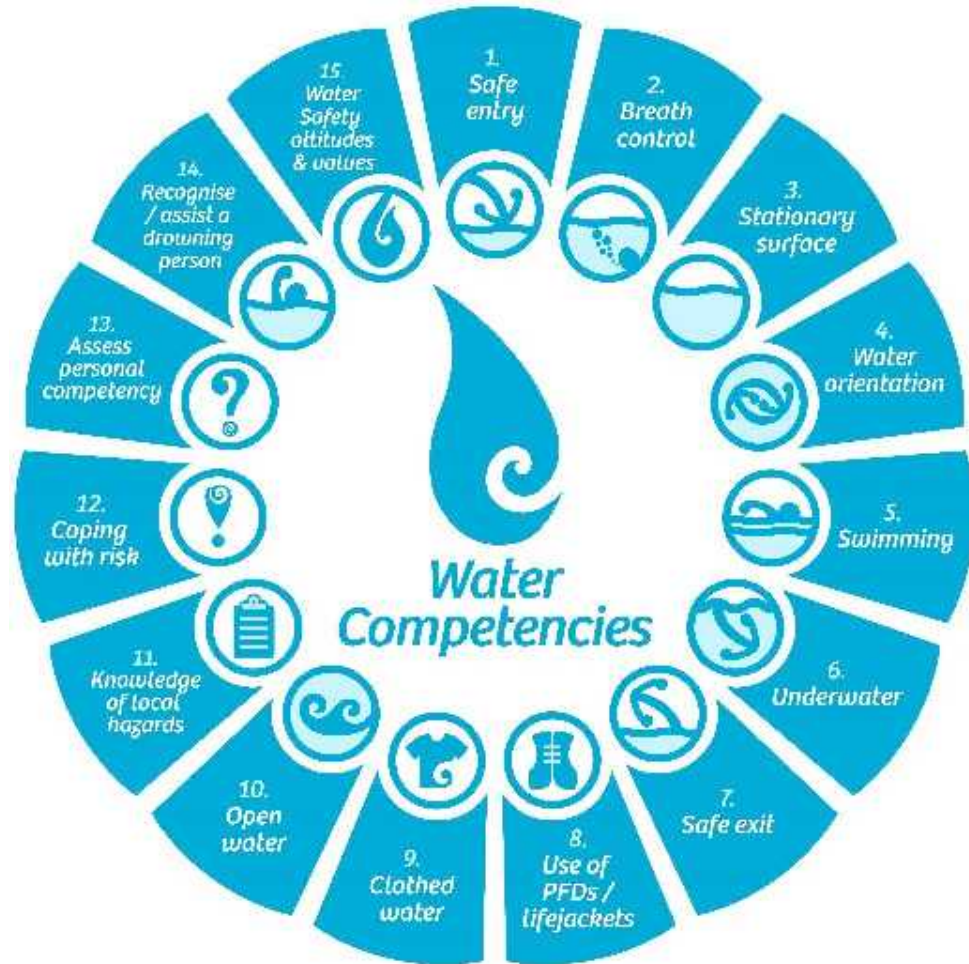
What research evidence is lacking?



Research Focus

- 11) Knowledge of hazards
- 12) Coping with risk
- 13) Assessing competency
- 14) Assist others
- 15) Attitudes, Values

What research evidence is lacking?

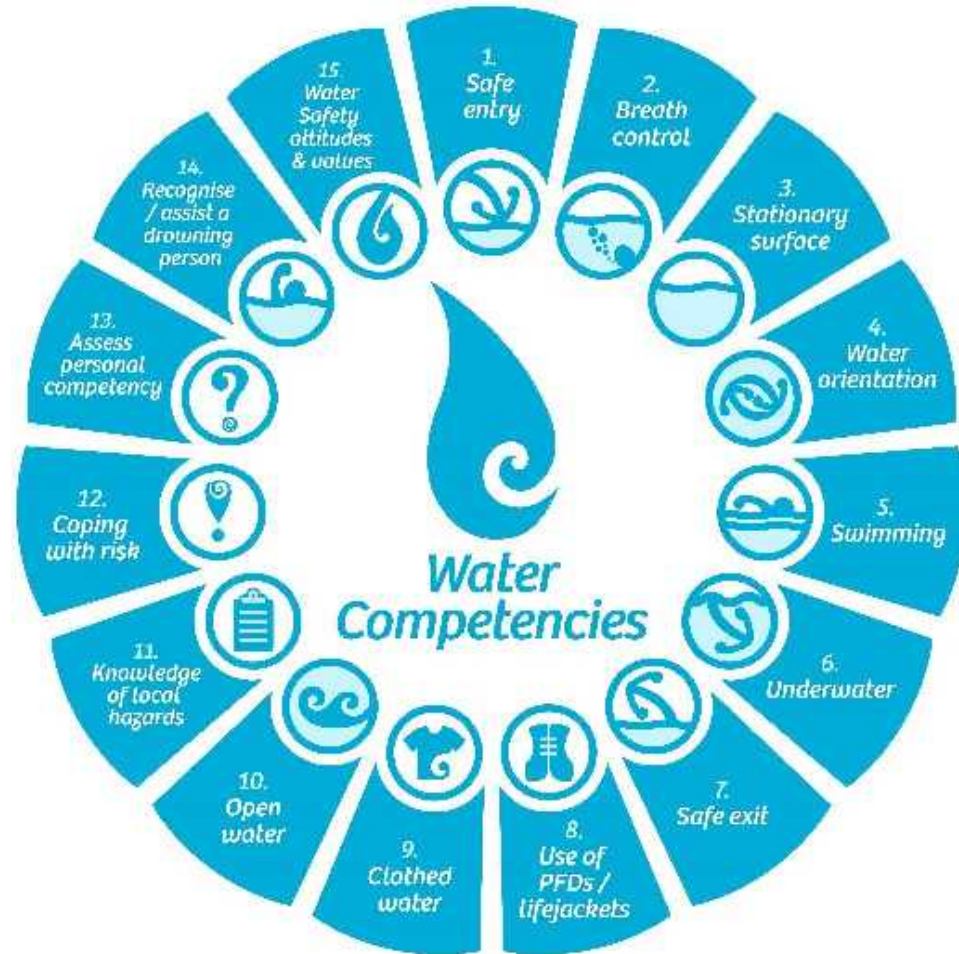


Research Focus

– Physical competencies

- 2) Breath control
- 4) Water orientation
- 6) Underwater competence

What research evidence is lacking?

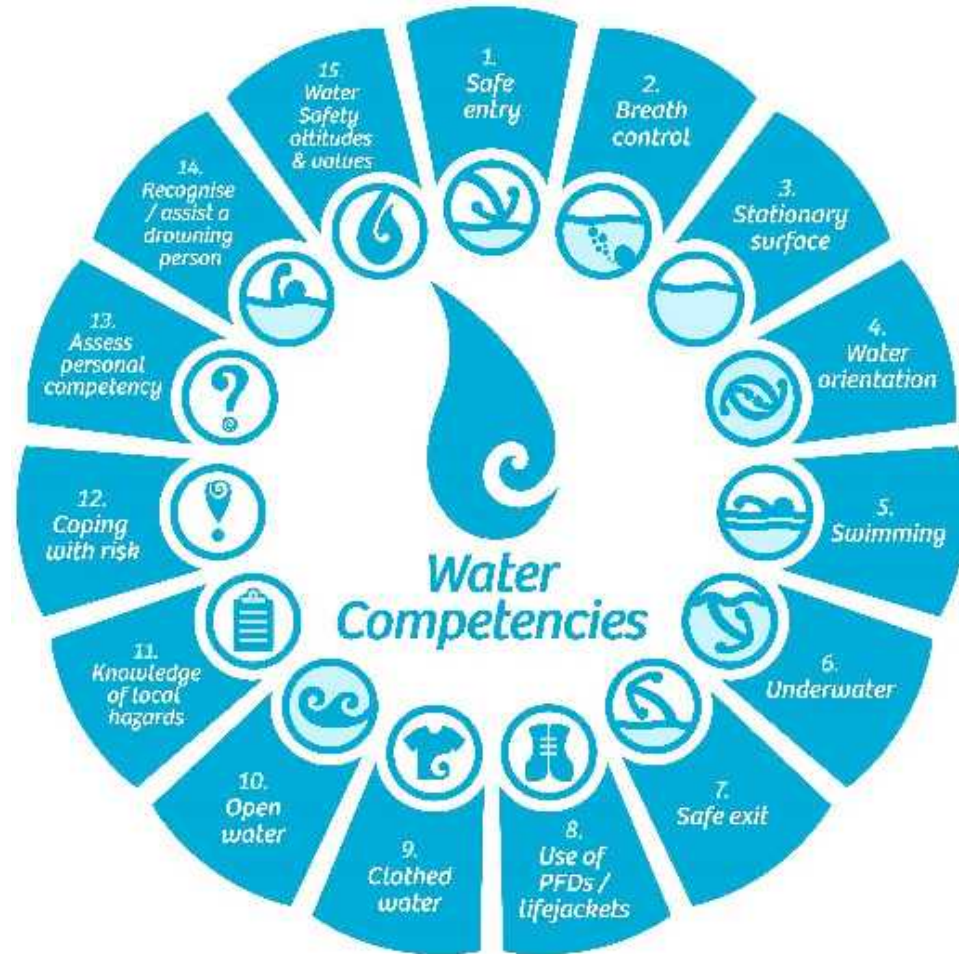


Research Focus

– Cognitive & affective competencies

- 11) Local hazards
- 12) Coping with risk
- 13) Assessing personal competency
- 14) Recognise/assist others
- 15) Attitudes & values

What research evidence is lacking?

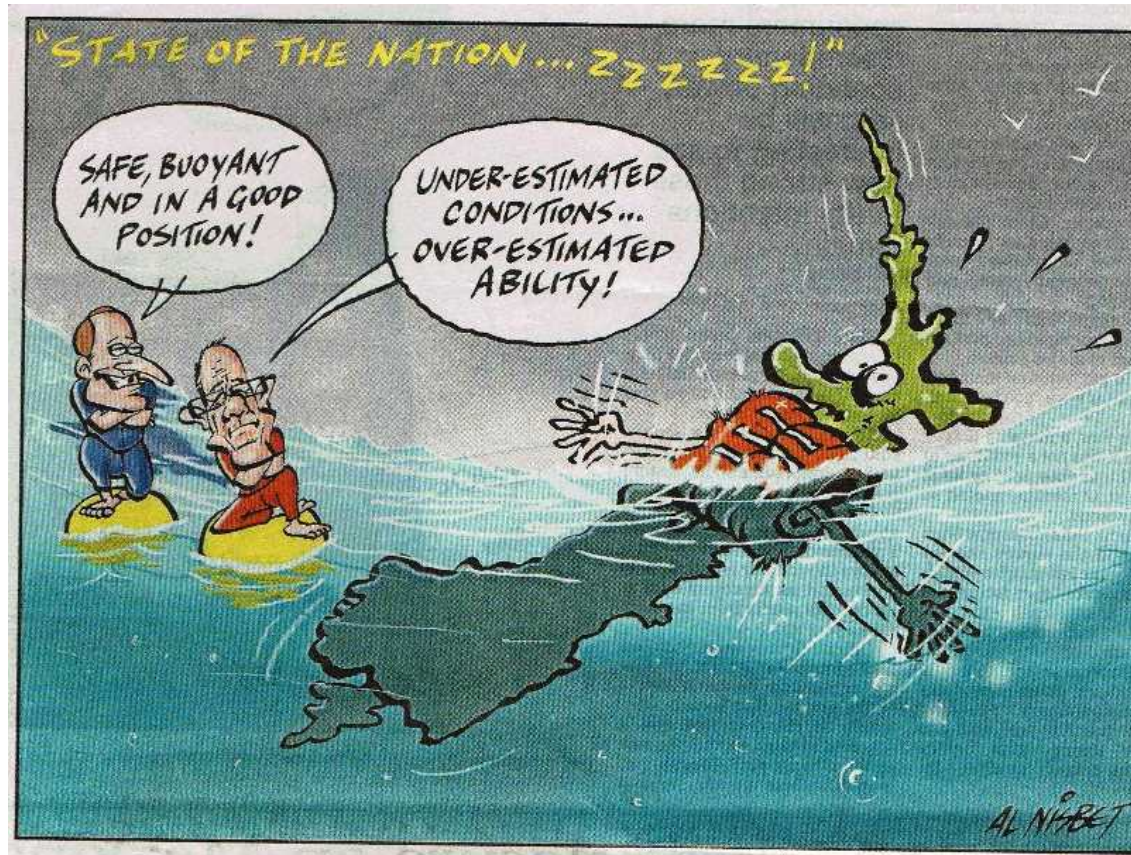


Research Focus

– Cognitive & Affective competencies

- 11) Local hazards
- 12) Coping with risk
- 13) Assessing personal competency
- 14) Recognise/assist others
- 15) Attitudes & values

What research evidence is lacking?



Risk and Hazard Perception (Competencies 11 & 12)

"The twin towers of drowning"

- Underestimation of risk
- Overestimation of ability

Take Home Resource





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Ngā mihi

dpanz.org.nz

References

Stallman, R.K., Moran, K., Quan, L., & Langendorfer, S. (2017). From swimming skill to water competence: Towards a more inclusive drowning prevention future. *International Journal of Aquatic Research and Education*, 2(3), 1–35.

Moran, K. (2019). Can You Float? Part I - Perceptions and practice of unsupported flotation competency among young adults. *International Journal of Aquatic Research and Education*, 10(4), Article 5. DOI: 10.25035/ijare10.04.04

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Moran, K. (2013). Defining “swim and survive” in the context of New Zealand drowning prevention strategies: A discussion paper. Auckland: WaterSafe Auckland. Available at: <http://watersafe.org.nz/educators/research-and-information/research-reference/>