

Rock fishing and incident analysis: increasing insight

A Scenario

- Several incidents that seem similar have been occurring for a while now.
- Everyone knows that these outcomes are bad.
- There is some data (especially counts and categorization) around the incidents.
- There is a mandate to reduce the number of these negative outcomes.
- What do you do?

Rock Fishing

- Fishing from rocks that jut into the ocean to reach deeper water and more fish
- Often said to be Australia's most deadly sport
- Between 2004 and 2018 there were 164 reported drownings related to rock fishing

The government perspective

- Data around these events exists in the National Coronial Information Systems (NCIS).
- It categorizes about 200 incidents into:
 - Inexperience
 - Overtopping waves
 - Slips and falls
 - Freak Weave
 - Unknown

Decision making in the real world

- Many decision making studies are useless for understanding real world work
- Use simplistic "example" scenarios
- Participants are usually students getting paid some small amount to participate

A mix of qualitative and quantitative

- Numeric data and other metrics exist for these incidents
- But this data tells us very little about what is helping fishers create safety
- In order to understand what the real work is, we need qualitative data

The fisher perspective

- Inexperienced
- Swimming back
- Retrieving snagged lines or large fish
- Panicking and running from waves
- Unknown

Experts managing safety

- The fishers, the "experiential experts" are managing their own safety.
- Spiked cleats
- Swim away

Multiple Perspectives

- We need multiple perspectives in order to get a clear picture
- Every view highlights some things and obscures others

Our Version

- We don't have to run a formal academic study
- Talk the people closest to the work
- Ask them about their experience
- Repeat the story you heard, make sure you have it right

Questions to ask

- Were you reminded of anything else you've experienced before?
- What were the limitations that you were facing?
- Are there any rules or procedures that applied clearly here?
- How did the world look to you at the time?

References

- <https://ResilienceRoundup.com/srecon22>
- Kamstra, Peter, et al. "Drowning 'Truths': contrasting experiential-experts' perceptions with official-experts drowning reports on Australia's hazardous coasts." International journal of disaster risk reduction 47 (2020)
- The Field Guide To Understanding Human Error by Sidney Dekker
- [Naturalistic Decision Making \(NDM\)](#)