Developing a Measure of Psychological Preparedness

A PhD research project by Jessica Boylan

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Research Advisory Forum
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The current issue

High levels of stress ⟶ unpredictable response

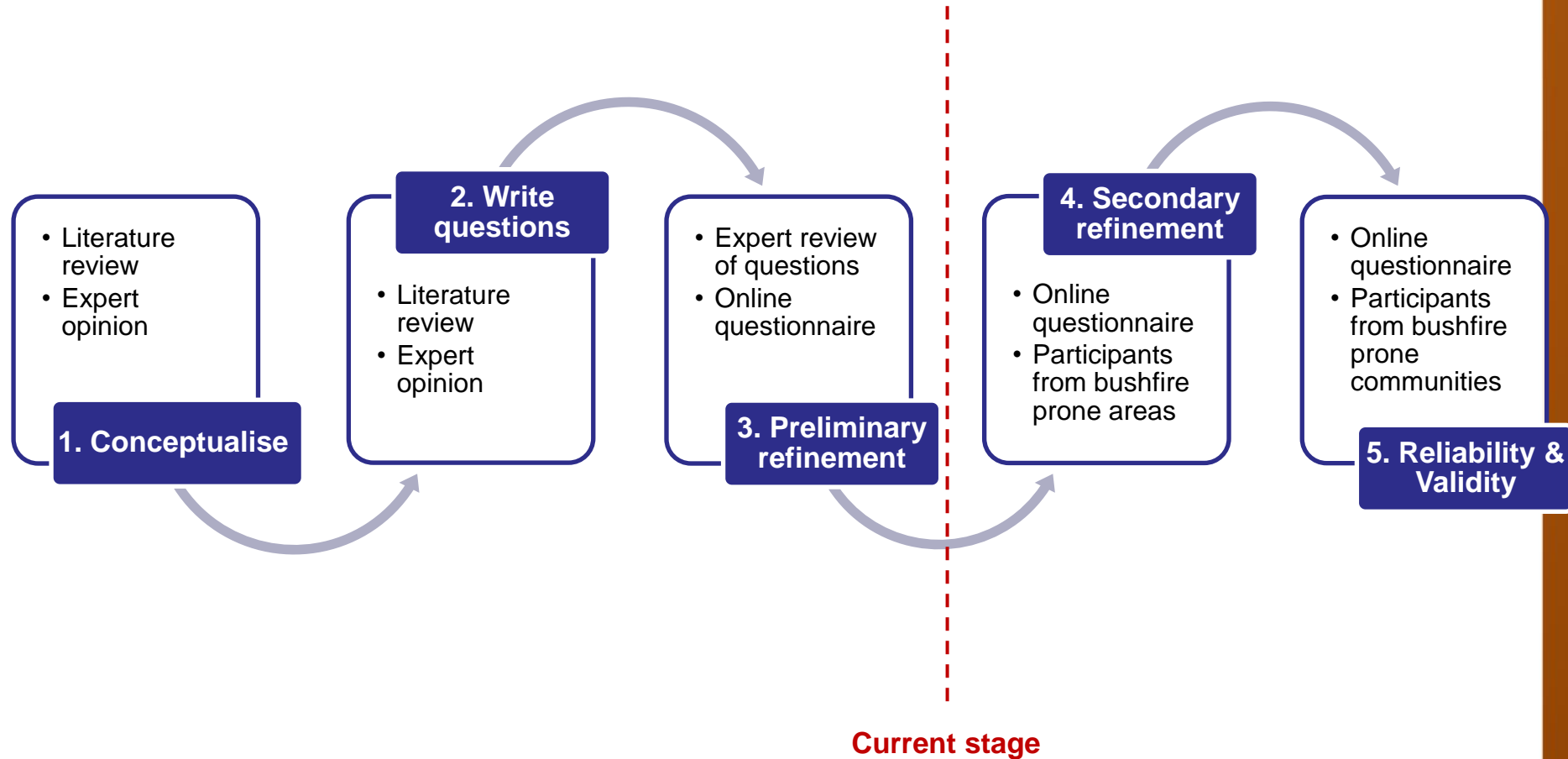| Effects of stress…	
…on your mind	…on your emotions
Poor decision making	Anxiety
Poor judgement	Depression
Memory problems	
Concentration problems	
Confusion	
Disorientation	

PhD aim

- **To:** develop a valid measure of psychological preparedness for a bushfire.

- **For:** researchers to assess the impact of their applied research **AND** for fire agencies to improve public safety.

Research approach

1. Conceptualise
- Literature review
- Expert opinion

2. Write questions
- Literature review
- Expert opinion

3. Preliminary refinement
- Expert review of questions
- Online questionnaire

4. Secondary refinement
- Online questionnaire
- Participants from bushfire prone areas

5. Reliability & Validity
- Online questionnaire
- Participants from bushfire prone communities
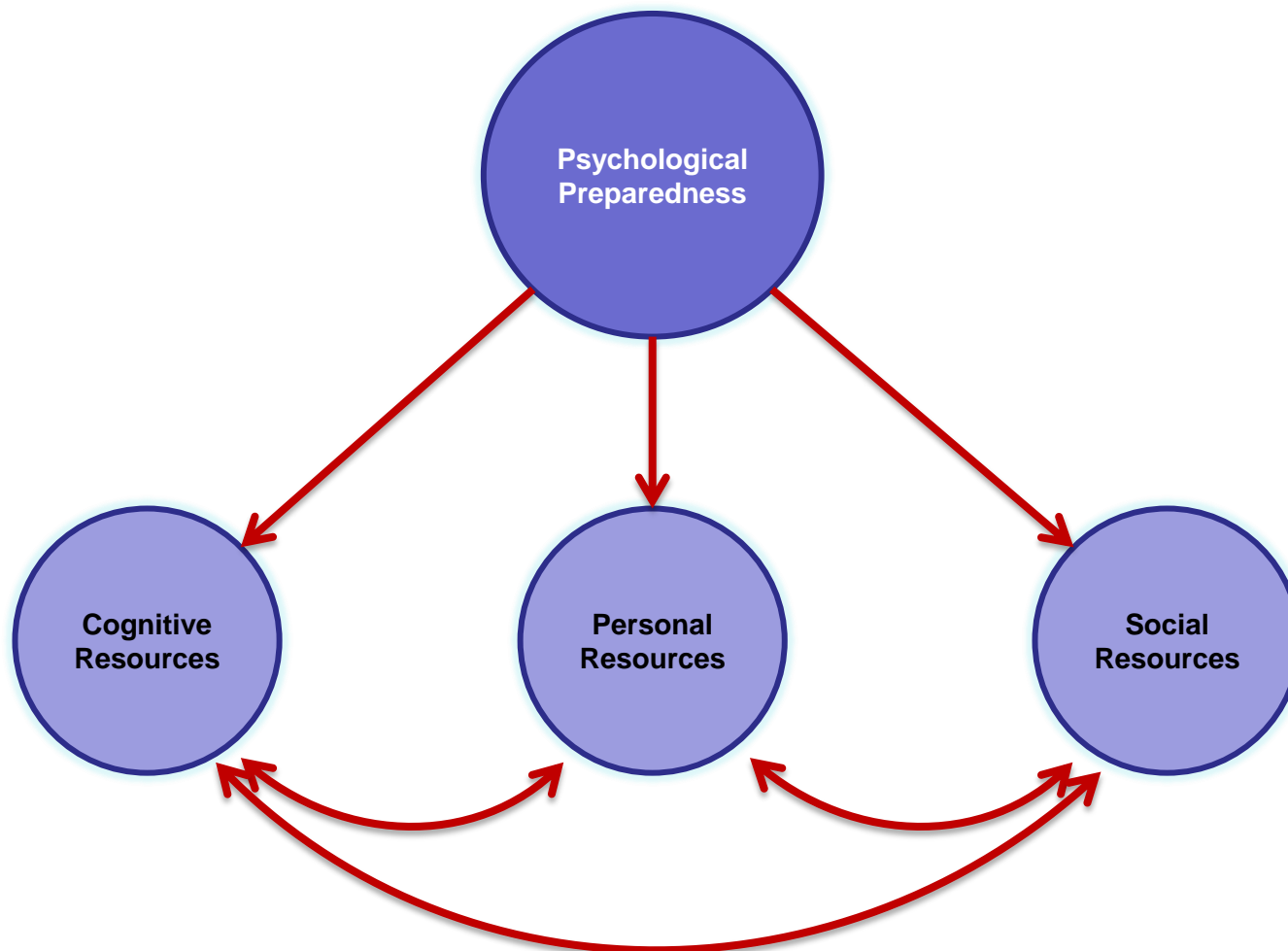
Current stage

Resource theories of stress & coping

- Resource theories take a proactive approach to understanding stress & coping

- Resources: ↓ stress in the future, ↓ severity of stress consequences, ↑ adaptability & problem solving

- Internal e.g. self-esteem or optimism

- External e.g. money or fire fighting equipment

Stage 1: Conceptualise Psychological Preparedness

Cognitive Resources

Cognitive resources refer to a person's knowledge about bushfires

- Knowledge about how bushfires spread

- The difference between safe and unsafe behaviours

- The type of facilities available

- Physical and emotional impact

Knowledge: realistic expectations, understanding & interpretation of the stressful situation ⟶ better decisions & judgements.

Personal Resources

Personal resources refer to a person's characteristics that promote adaptation and resilience during stressful situations

- Belief in their ability to cope & adapt

- Belief they are in control of what happens to them

- Positive outlook on the future

- Proactive and preventative approach to reducing stress

Personal characteristics ➡ feel in control of unpredictable situations ➡ resilient & adaptable

Social Resources

Social resources refers an individual's social support

- Informational support: advice, suggestions and general information

- Emotional support: listens to problems with empathy, care and understanding

- Instrumental support: provides functional aid in completing tasks if needed

Social support → adaptability & resilience

Stage 2: Write questions for the measure

- Total number of questions: 170

  - Cognitive resources: 69 questions
  - Personal resources: 71 questions
  - Social resources: 30 questions

- Source of information: fire & emergency services pamphlets, fact sheets, videos, research literature, previous measures, suggestions from experts
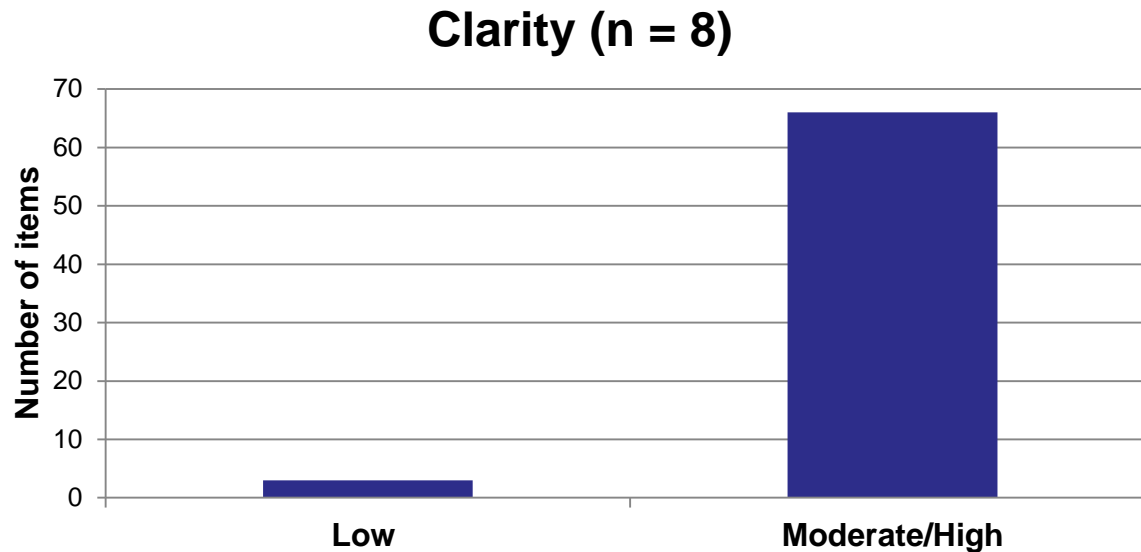
Stage 3: Preliminary review of questions

- Experts rated the clarity and relevance of each question in only one of the scales and provided additional comments

    - Clarity: 1 = very unclear – 4 = very clear
    - Relevance: 1 = Not relevant – 4 = very relevant

- Clarity scores were <u>averaged</u>

- <u>Interrater agreement</u> was used for relevance scores

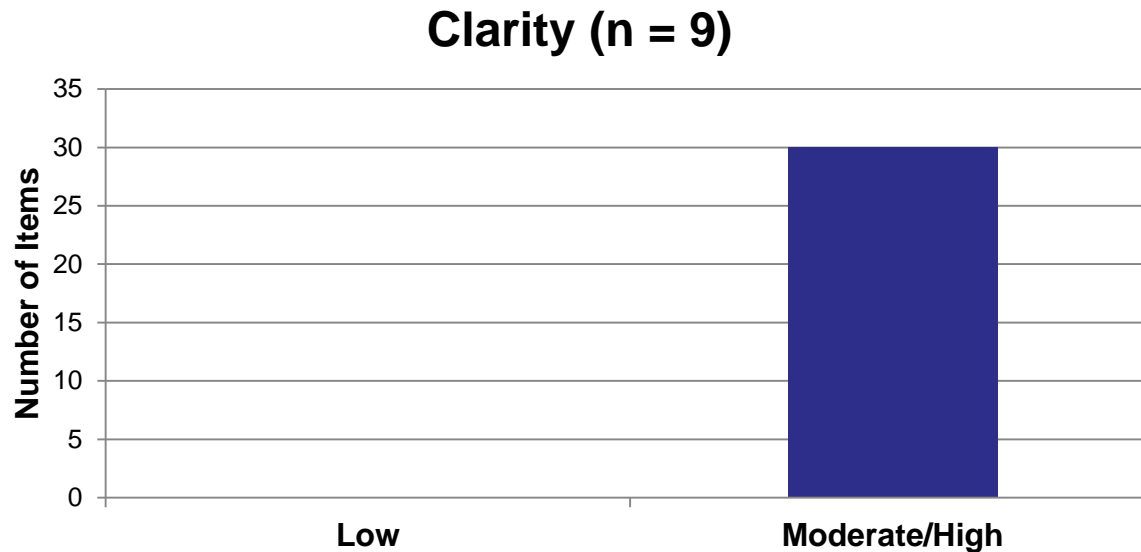- This data was used to **reword**, **delete** or **add** questions

Stage 3: Results - Cognitive Resources Scale

Clarity (n = 8)

- 32 questions deleted (clarity, relevance, too similar)

- 7 questions added

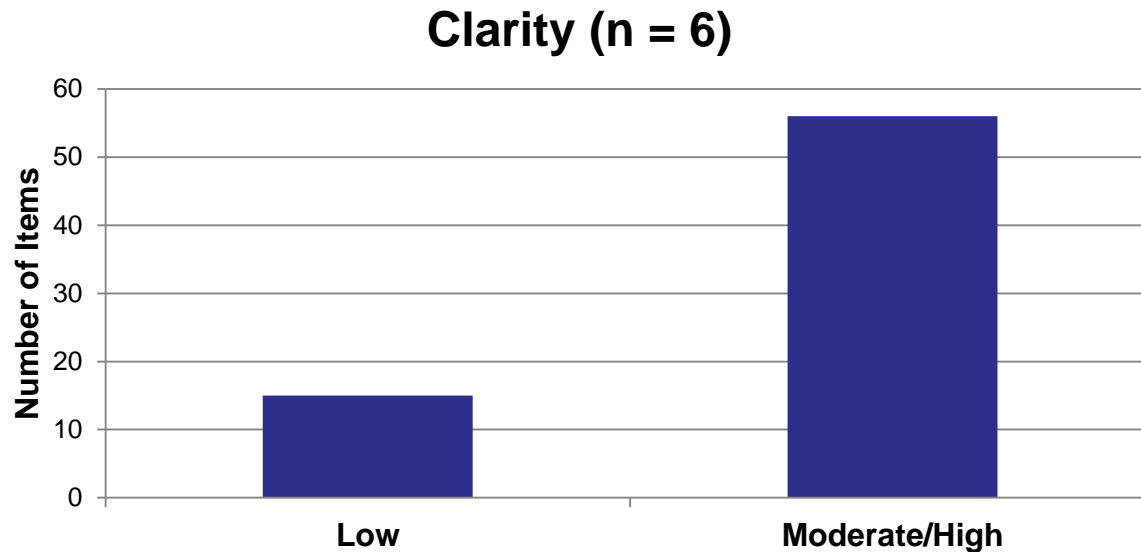- Cognitive resources scale reduced from **69 to 47 questions**

Stage 3: Results – Social Resources Scale

Clarity (n = 9)

- 8 questions deleted (relevance, too similar)

- 4 questions added

- Social resources scale reduced from **30 to 26 questions**

Stage 3: Results – Personal Resources Scale

Clarity (n = 6)

- Currently refining the questions using similar criteria as previous scales

Some examples of the refined items
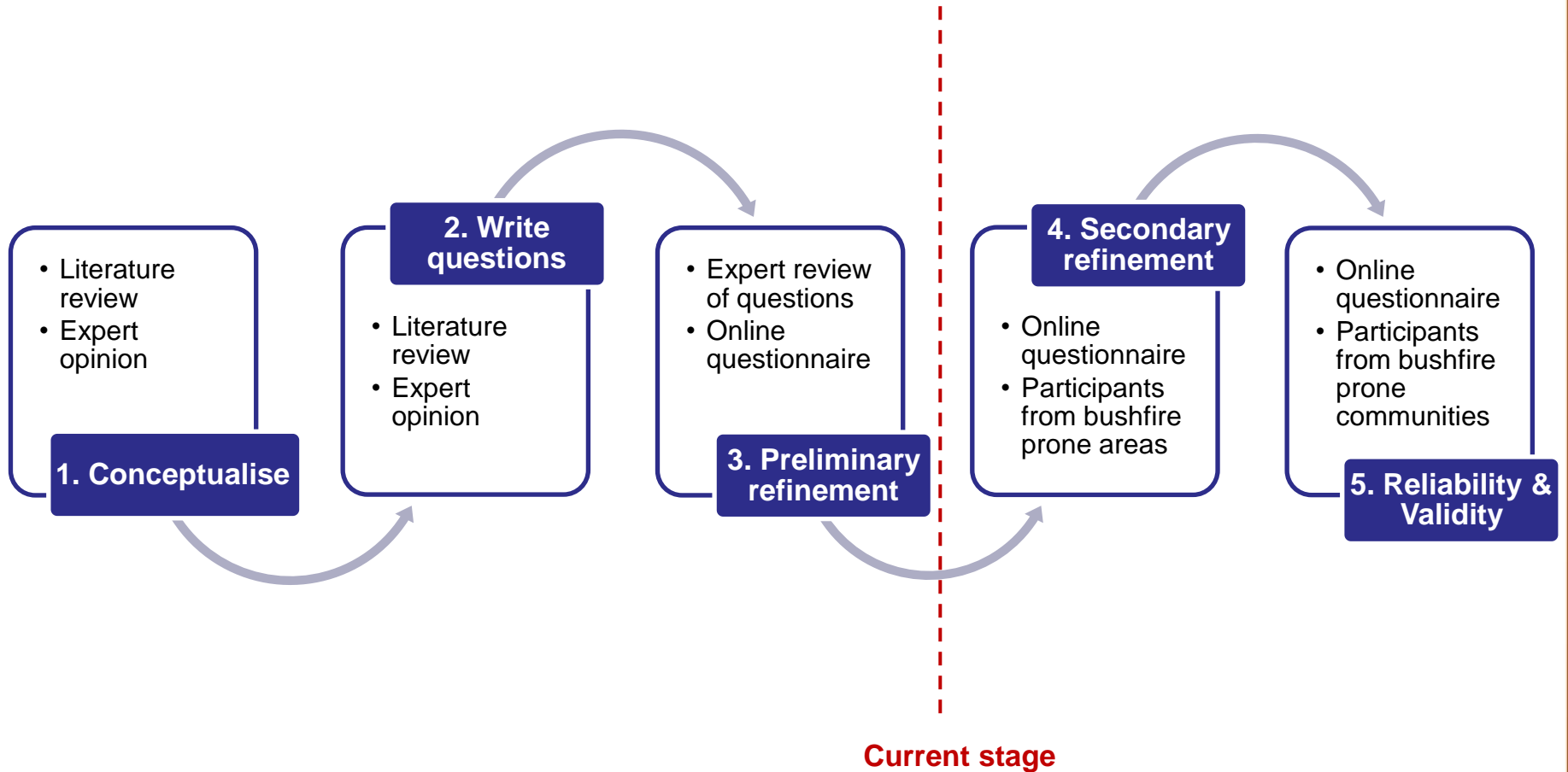
Cognitive Resource Scale

1. A bushfire moves faster when travelling downhill.

2. Bushfires typically travel at 100km/hr.

3. Spot fires can start 5km in front of a fire.

Social Resource Scale

1. There is a neighbour, relative, or friend living in my locality who I talk to regularly about bushfire safety.

2. If there was a bushfire in my area, I would have a hard time finding a neighbour, relative, or friend living in my locality who I could turn to for advice.

3. There is a neighbour, relative, or friend living in my locality who I can depend on for help during a bushfire if I needed it.

Next step

1. Conceptualise
- Literature review
- Expert opinion

2. Write questions
- Literature review
- Expert opinion

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Current stage

Other projects...

- Tasmania bushfire research

  – Interviews and surveys
  – Interviewed the interviewers
  – Preliminary report: iPad data, interviewer observations & training evaluation.

Thank you for listening

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