Human Behaviour Under Stress

Leads

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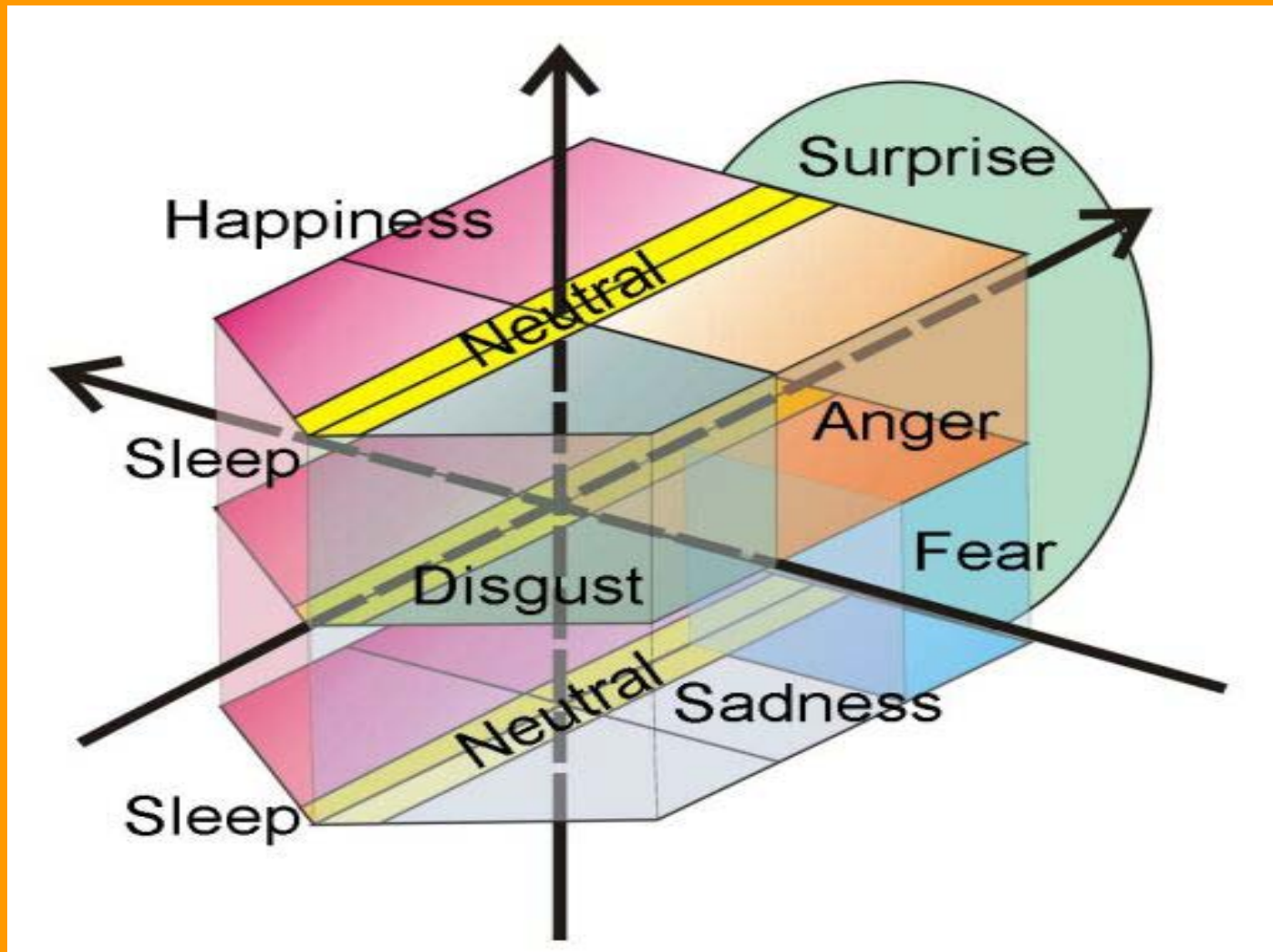Lies Notebart

Illona McNeil

McLennan & Elliott (2010)

- Ten Lessons from Murrindindi Fire:
  - Two identified the importance of community and social context

  - Two identified the importance of information and its sources

  - One identified the role of anxiety and emotional regulation
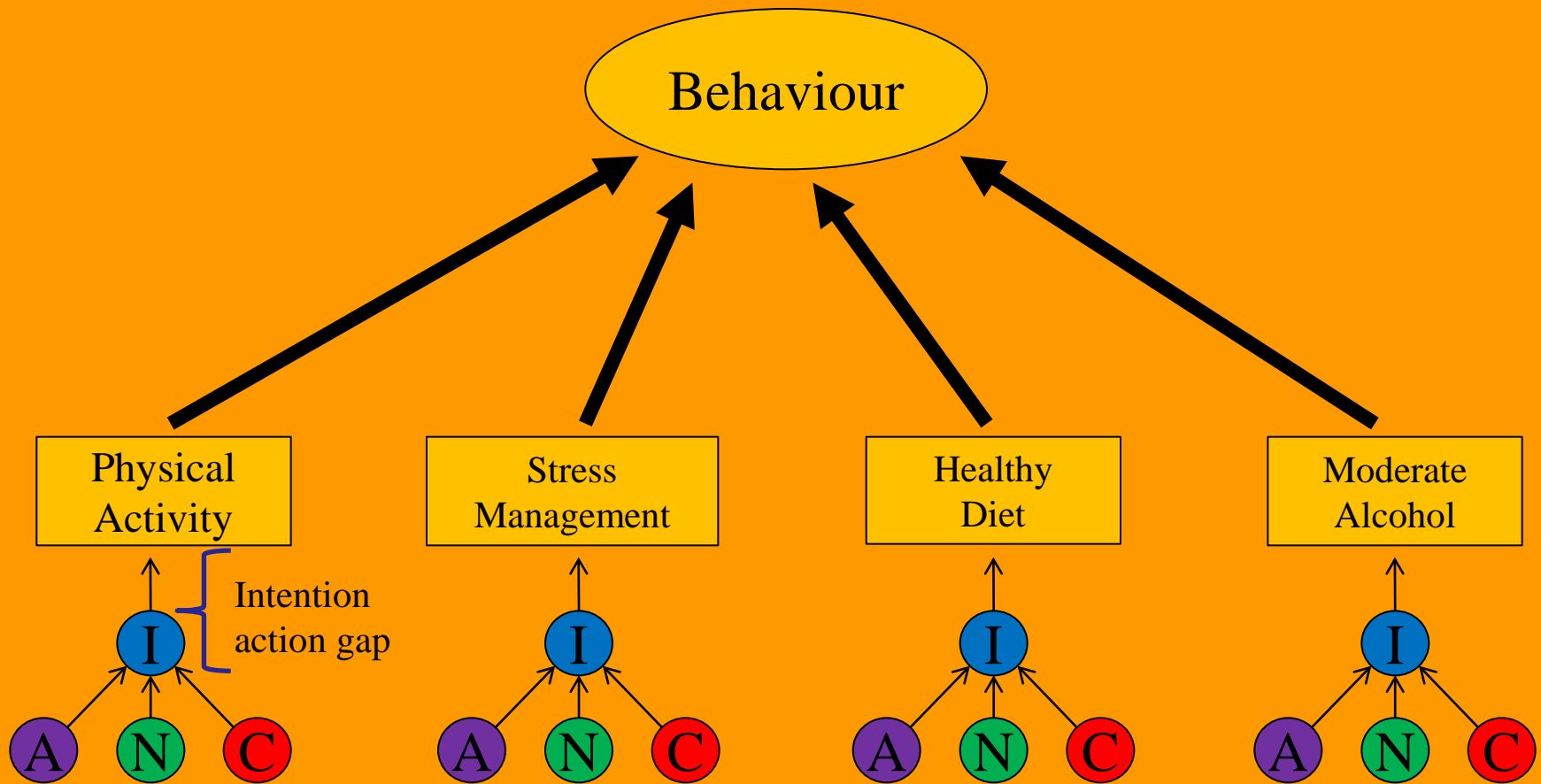
Human Decision Making

Is influenced by many things

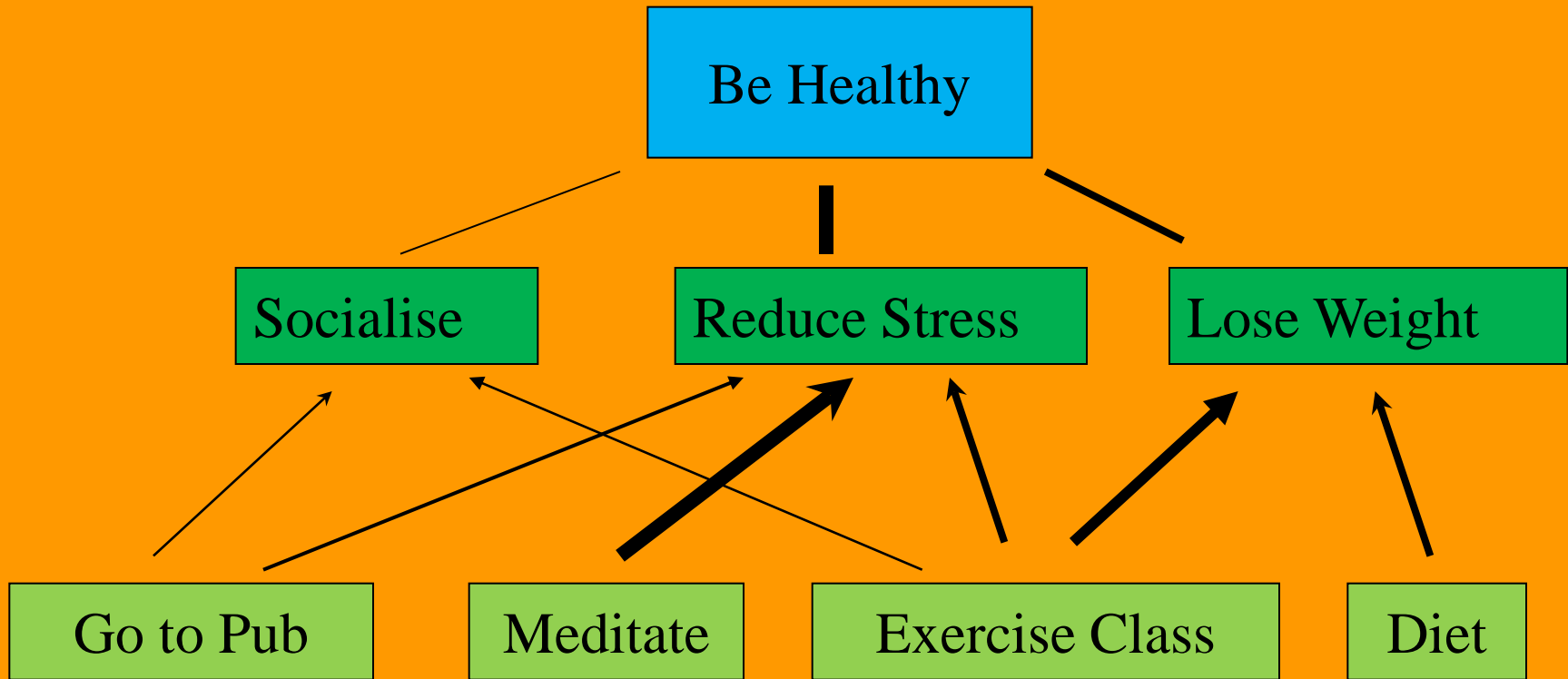People can behave in a rational way under some circumstances but frequently they do not

Intention to Action: I'm going to…but will I?

A=Attitudes; N=Normative Beliefs; C=Control

The picture is a bit more complicated than the theory of reasoned action implies

Be Healthy

Socialise   Reduce Stress   Lose Weight

Go to Pub   Meditate   Exercise Class   Diet

Decisions based on
- Number of higher order goals served
- Value place on goals
- Efficacy of action to serve goals

We also know that decisions are often influenced by the social context
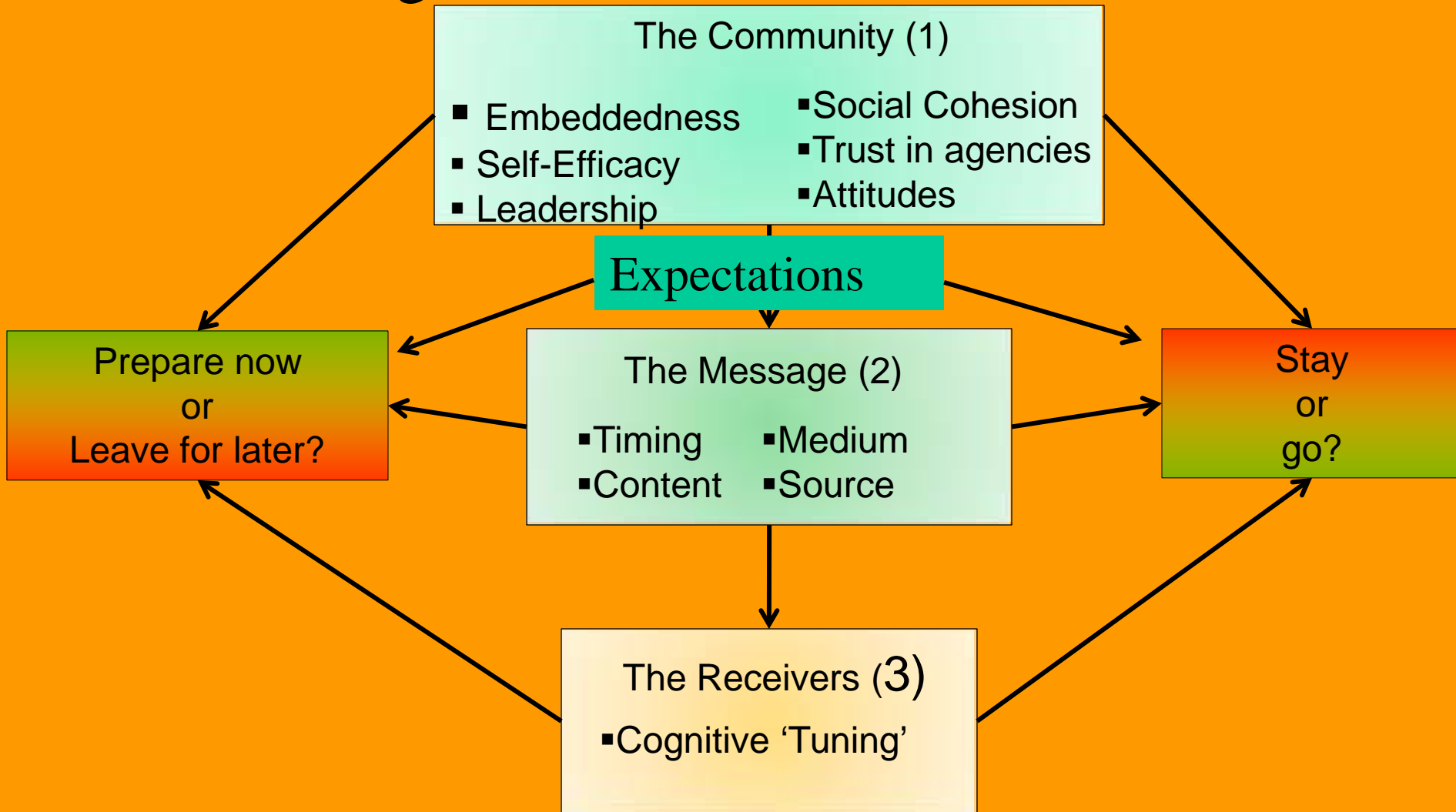

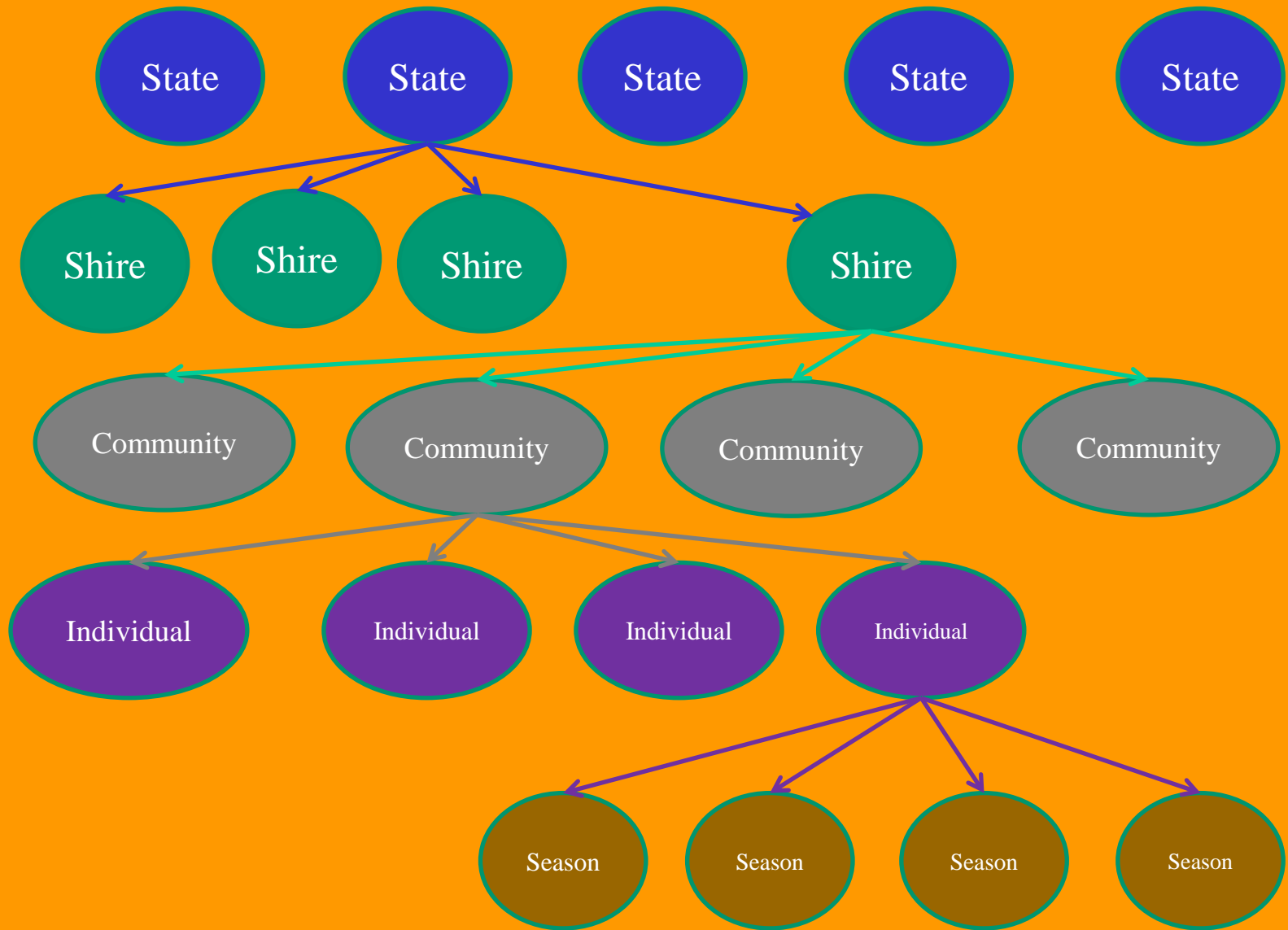The concepts of "Groupthink" and "Risky Shift" are well known

Broad Aims

1. *Take an integrated (multilevel) approach to understanding bushfire preparation and reaction to bushfires*

2. *To apply what we know about from psychological approaches to understanding decision making, cognitive and community behaviours in a manner that reduces the risk to lives in catastrophic bushfire conditions.*

3. *To make contributions to theory in a ways that goes beyond the bushfire context.*

The Bushfire Context
Making Decisions that **Minimise Risk**

The Community (1)

- Embeddedness
- Self-Efficacy
- Leadership
- Social Cohesion
- Trust in agencies
- Attitudes

Expectations

Prepare now or Leave for later?

The Message (2)

- Timing
- Content
- Medium
- Source

Stay or go?

The Receivers (3)

- Cognitive 'Tuning'

Nested Structure of individual level data

Using this approach we will be able to ...

- Partition the variance into components
- Estimate the effect of changes/interventions and therefore provide a useful guide to cost benefit analysis
- Identify what it is we know from what it is we don't know

Using this approach we will be able to...

- Identify causal mechanisms for change
- Develop and recommend targeted intervention strategies
- Identify what it is we know from what it is we don't know (and the extent to which we don't know it)

The School of Psychology at the University of Western Australia in partnership with the Bushfire Cooperative Research Centre and the Fire & Emergency Services Authority of Western Australia present:

Disaster Research Seminar Series

Natural disasters are on the rise, creating widespread unprecedented emotional and financial devastation. In this seminar series key Australian and New Zealand researchers share their comprehensive knowledge to provide valuable insights into a wide variety of aspects of disaster preparedness and response. The presentations will be of interest to researchers in many disciplines (incl., psychology, business, geography, sociology, planning), policy makers, and practioners.

5 August 2011
Adjunct Professor Jim McLennan
(La Trobe University, Victoria)
'Where the rubber meets the road':
The centrality of what people decide to do during the period between awareness of threat and impact of the hazard

2 September 2011
Professor Douglas Paton
(University of Tasmania, Tasmania)
Adapting to living with bushfire and earthquake hazards: Integrating household, community and societal influences

26 August 2011
Professor Kevin Ronan
(CQ University, Queensland)
The role of youth, families and schools in community disaster preparedness and prevention

30 September 2011
A/Professor David Johnston
(Director of the Joint Disaster Research Centre, Massey University/GNS Science, New Zealand)
Exploring elements of an effective disaster recovery process: Lessons from recent New Zealand events

Chairs:
W/Professor David Morrison, W/Professor Carmen Lawrence

Time:
3 – 4.30 pm followed by informal discussions

Venue:
Myers Lecture Theatre, Myers St. Building
University of Western Australia
35 Stirling Highway, Crawley WA 6009

Each presenter also will conduct a **Master Class** 9 am – 12 noon on the morning of their presentation. The Master Classes will be announced separately.

Queries:
Please contact petra.buergelt@uwa.edu.au
or patrick.clarke@uwa.edu.au.

Host:
Bushfire Cooperative Research Centre
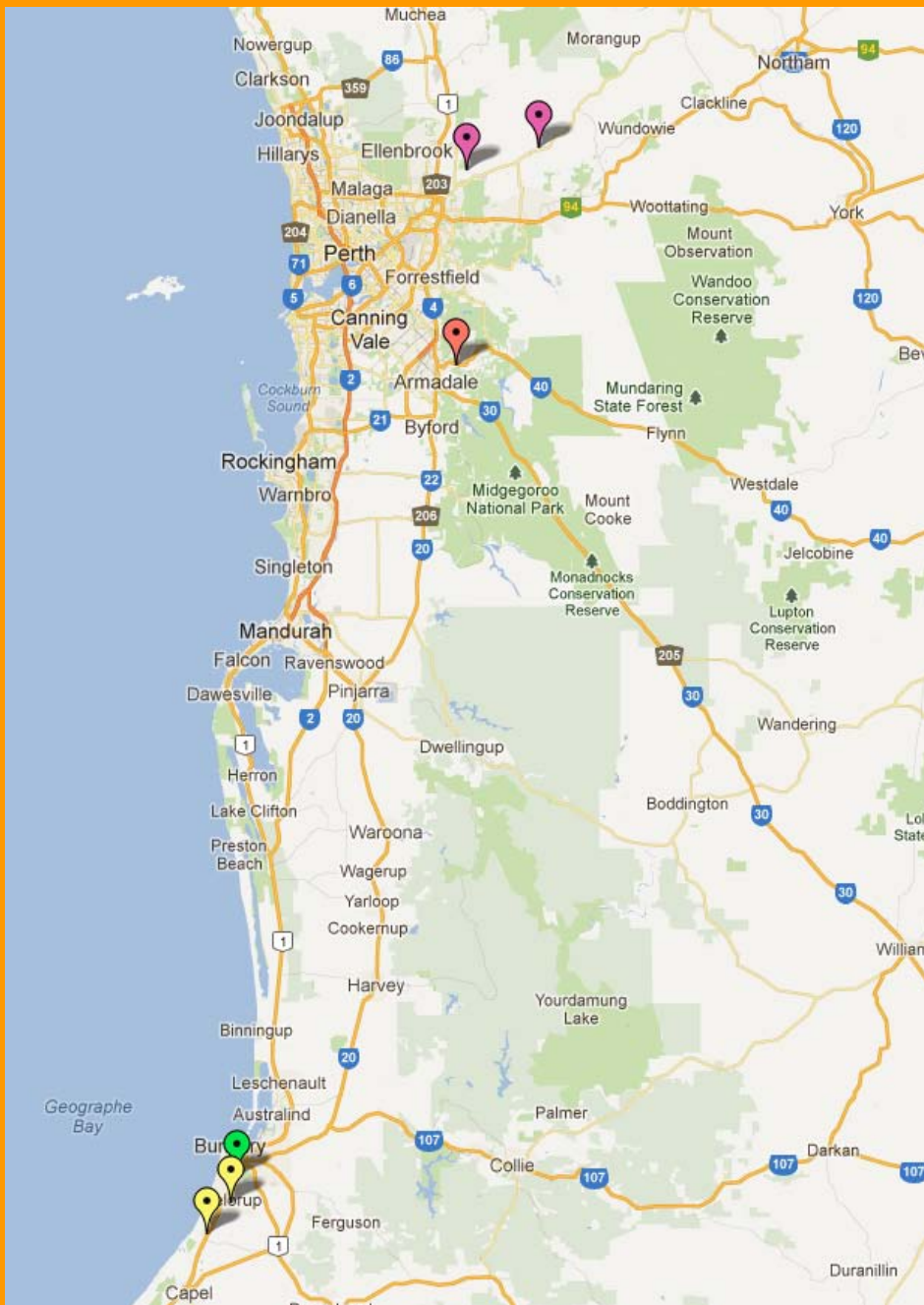School of Psychology
35 Stirling Highway
Crawley 6009

http://www.psychology.uwa.edu.au/research/bushfire

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bushfire CRC

GOVERNMENT OF WESTERN AUSTRALIA

FESA
Fire & Emergency Services Authority of Western Australia

Study Areas

City of Armadale

City of Swan

City of Bunbury

Shire of Capel

Goals

1. Develop a valid self-report measure of preparedness

2. Understand what determines household fire plans and the links to action

3. Explore the role of individual differences in explaining the links between intentions to prepare and actual preparedness

4. Explore community differences

Progress

- Community Surveys
    - Redhill/Roleystone fires (400 interviews, 1008 mail drop surveys)
    - Collaborative links established (Kalamunda, Mundaring, Armadale, Busselton, Bunbury, Redhill)
    - Qualitative cases study review completed
    - Measures developed
    - Longitudinal Survey (T1 and T 2 completed)
- Disaster month
- Cognitive Behaviour Modification: Theoretical Development, Stimulus materials for first studies developed and exeperiments completed.

Field Research: Summary

- Initial Survey 1000+ multiple site
- Two-wave longitudinal study just completed:
  - Six communities in Western Australia
- Wave 1
  - 385 responses (resp rate ≈ 30%)
  - Measures:
    - Proneness to worry
    - Indecisiveness
    - Bushfire goals
    - Intentions to prepare

Field Research: Summary

- Wave 2
  - 262 responses from Wave 1 (resp. rate ≈ 68%)
  - Measures:
    - Actual preparedness
    - Perceptions of fire safety responsibility (government vs. household)

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Implications of Research Undertaken to Date

1. A ready-made multidimensional measure of preparedness.

2. How communications might be used to influence choice of fire plan.

3. Why some community members find it difficult to decide what to do before fire season.