

# COUPLE'S DECISION-MAKING PROCESSES INVOLVED IN THE FORMULATION OF A LONG TERM HOUSEHOLD BUSHFIRE PLAN

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Communicating Risk: Human Behaviour Under Stress (2)

Australian fire agencies produce considerable instructional material on how to formulate a bushfire safety plan appropriate to a family's circumstances

**“Preparing reduces the risk of loss and injury”**

The review of post-Black Saturday community bushfire safety research suggests that many households in at-risk areas have failed to formulate an adequate bushfire plan (Paton, Burgell, & Prior, 2008)  
(Whittaker & Handmer, 2010)

Some of these couples perished

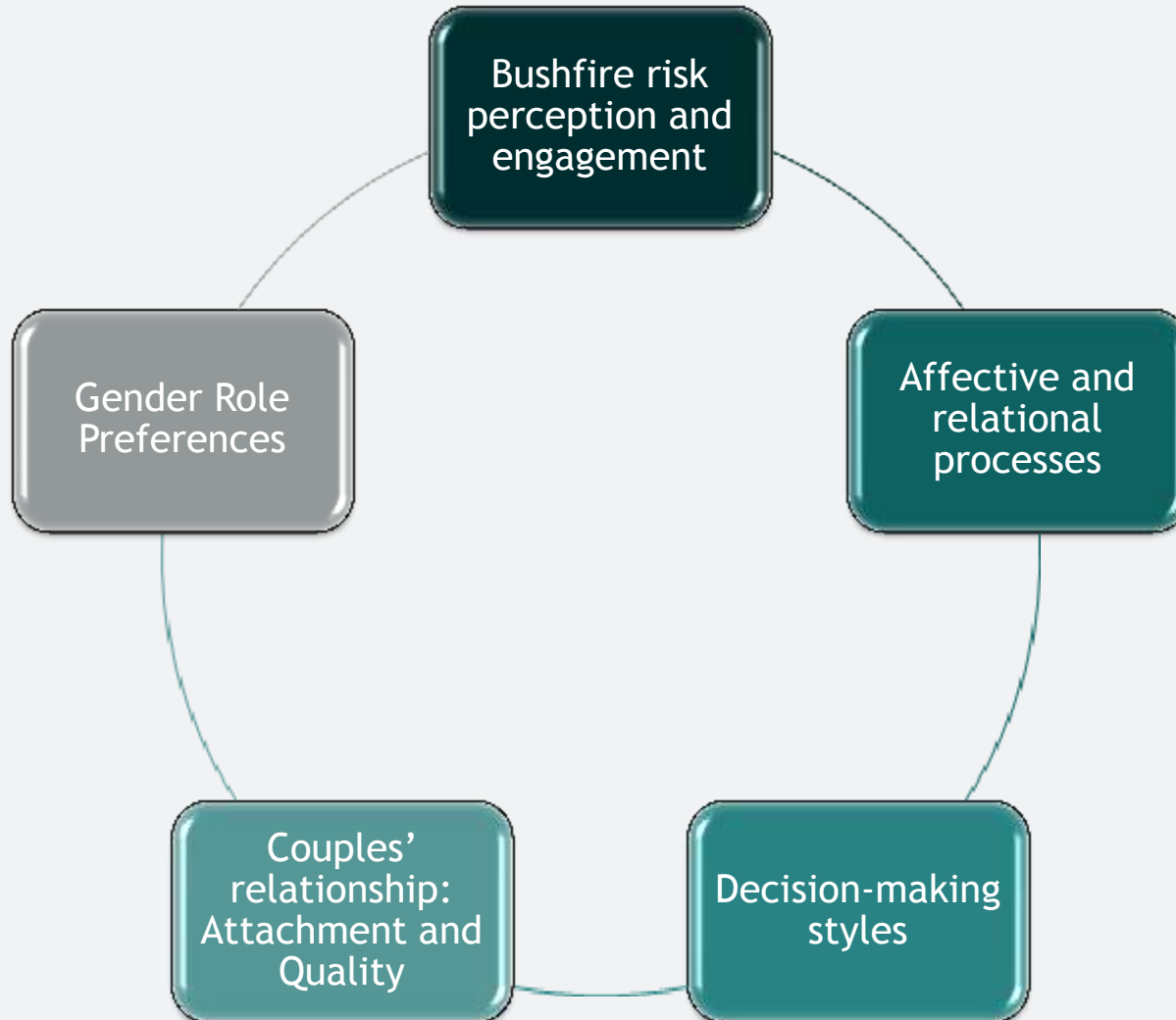
Most researchers have approached these areas at  
an individual level

(Martin, Bender & Raish, 2007)

This project will target decision-making processes  
at the **couple level**.\*

\* Two persons who are unified by marriage or in a de facto relationship and who are usually resident in the same household (Australian Institute of Family Studies, 2011).

# RELEVANT FACTORS TO BE ANALYSED



To identify significant couple/marital judgmental and decision-making processes which influence survival-related decision making in forming a bushfire plan

Long-term planning and preparation decisions, rather than decisions made under imminent bushfire threat

- 1) What psychological processes are involved in decision making by couples about long-term planning and preparation for bushfire threat?
- 2) What are the key relational dynamics which sustain couple's long-term planning and preparation decisions about bushfire safety?
- 3) What kinds of relational, cognitive, and affective processes are likely to compromise survival-related decision making processes in formulating a family bushfire plan?

What kind of decision-making processes are involved in couples' long-term bushfire planning and preparation?

# THE RESEARCH IN THREE STUDIES

## STUDY 1

- Analysis of reported couples' bushfire safety decision-making by couples who were threatened by bushfires

## STUDY 2

- Surveys of members of couples in at-risk communities and analysis of associations among variables

## STUDY 3

- Couple study - Risk perception and relational dynamics in bushfire planning



# STUDY 1

## Analysis of reported couple's bushfire-safety decisions

### Participants and data sources

40 transcripts of interviews conducted by Bushfire Research CRC following the Lake Clifton bushfire (WA, 10 January 2011)

Unity of analysis: the couples who experienced those fires (n. 30)

### Data analysis

NVivo - Coding Form and Rating Scale

### Procedure

Content analysis to identify categories and themes

Six types of variables:

1. Couples' bushfire risk perception;
2. Comprehensiveness of the plan;
3. Degree of detail;
4. Degree of couple consensus;
5. Safety decisions as a joint activity;
6. Gender preferences in intended actions and preparation.

# SOME EXAMPLES ...

*Female:* “I already had all these box files that had all our passports, wills, documents, insurance, that was all packed”. [...] “I packed a couple of bags with clothes and medication”.

*Male:* “We downloaded all the computer stuff onto a Terabyte drive, all the photos and everything”.

COMPREHENSIVENESS	DEGREE OF DETAIL	AMOUNT OF COUPLE CONSENSUS
Level 3. (Some )	Level 1. (Nil)	Level 4. (High)
Some approximate arrangement on different aspects.	No details are present. Who does what before, during, and after a bushfire is unmentioned.	Partners agree with the all intended actions, tasks distribution and timing, either about leaving or staying and defend.

*Facilitator:* Did you have a formal fire plan, of what to do if we get a warning that there's a bushfire on the way you got here?



*Interviewee:* Never even though. [...] We just thought, we'll put the sprinklers on, like they [the fire brigade] always say and keep everything watered down and put water in your gutters.

# RESULTS ... IN PROGRESS!

A major difference with Black Saturday: there was awareness about the risk

Mostly mo

ut bushfire risk



red

Couples' difficult  
level of the risk

er-estimation of the

Reduced motivation and willingness to adopt efficient mitigation behaviours (Farace, Kenneth, & Rogers, 1972)

From “WAIT AND SEE” to “*GO AND SEE*”

Strong association between plan and preparation

Long term preparation was often focused narrowly on protection of the house (sprinklers, pumps, hoses, etc)

Household bushfire preparation was mainly managed by husbands

If they were threatened by a bushfire in the future, they would act in the same way as they had on the day of the fire

# STUDY 2

## Survey of members of couples

**Aim:** To understand what forms of cognitive and relational processes are involved in couples' bushfire safety decisions

~ 300 individuals (members of couples)

On-line (or postal) self-report questionnaire ...

Three communities:

- One truly rural
- One centring around a small town
- One involving a Melbourne neighbourhood on the fringe of bushland

... incorporating measures of each of the constructs to be investigated:

1. Decision making styles
2. Attachment styles
3. Quality of relationship
4. Gender role preferences

## **General Decision-Making Style Inventory**

(Scott & Bruce, 1995)

## **Experiences in Close Relationships- Revised (ECR-R) questionnaire**

(Fraley, Brennan, & Waller, 2000)

## **Revised Dyadic Adjustment Scale (RDAS)**

(Busby, Crane, Larson, & Christensen, 1995)

## **Gender Role Preferences (GRP) Scale**

(Scanzoni & Szinovacz, 1980)

## **Checklist Items For Researchers: Householder Preparations For Bushfires**

(McLennan & Elliott, 2011)

## SPSS

Regression procedures  
to identify variables  
associated with more  
versus less  
comprehensive  
bushfire planning

# STUDY 3

## Risk perception and relational dynamics in bushfire planning

**Aim:** how couples arrive at their choices regarding planning for emergency situations, and which relational processes are likely to influence these decisions

### Participants

From Study 2

Up to 60 couples: 20 couples for each of the fire-prone areas of the Study 2.

Members of Fire Emergency Services and people affected by recent fires will be excluded.

### Procedure

#### Observation of joint decision-making tasks

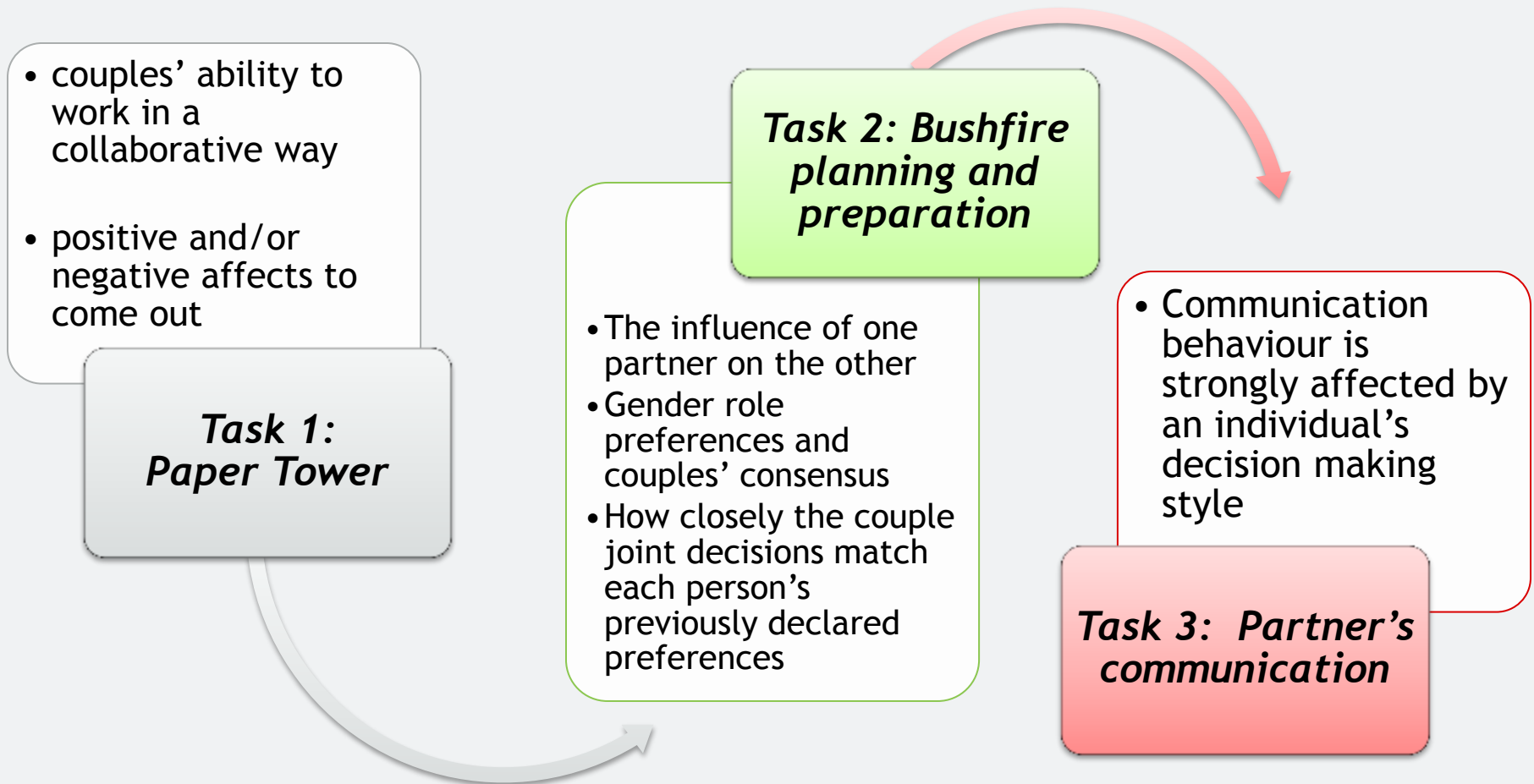
on prearranged joint decision tasks

will allow:

- ✓ A closer analysis of partners' decision-making processes
- ✓ Relational dynamics to be captured in real time



# THREE TASKS



## ***Self-Reported Outcomes Task:***

prevailing preferences and ability to create solutions that satisfy both partners

**Task 1:  
Paper Tower**

- *Inclusiveness*
- *Controlling behaviour*

**BRAY-CURTIS  
DISTANCE  
MEASURE AND  
COEFFICIENT**

**Task 2: Bushfire  
planning and  
preparation**

- *Movement toward consensus*
- *The relative power*

**Task 3: Partner's  
communication**

- *Four communication styles:  
“Tell”; “Sell”; “Consult”; “Joint”*

**TANNENBAUM  
AND  
SCHMIDT'S  
MODEL**

***Self-Reported Outcomes Task:***  
satisfaction with the interaction process and outcome of the  
interaction/decision-making activity

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