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COUPLES' BUSHFIRE SURVIVAL PLANNING: A CASE STUDY – THE 2011 LAKE CLIFTON (WA) FIRE

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Communicating Risk: Human Behaviour Under Stress (2)




BACKGROUND

Bushfires and Families



Australian fire agencies produce considerable instructional material on how to formulate a bushfire safety plan

“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, Burgel, & Prior, 2008)

(Whittaker & Handmer, 2010)

Some of these couples perished

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Research



Systematic research contributing to a better understanding of the psychological and cognitive processes involved in decision making related to bushfires is still scarce ...

... Particularly on marital or couple dynamics related to bushfire survival.

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)

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AIM



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METHOD



Participants and data sources

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

Unit of analysis: the couples who experienced those fires (n. 29)

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.

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DATA ANALYSIS




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DATA ANALYSIS



- ❖ **CODING FORM:**
 - ✓ couples' awareness of the fire prone area
 - ✓ gender differences in risk perception
 - ✓ knowledge of fire (what to do before and when the fire approaches)
 - ✓ previous experience with fires
 - ✓ implementation of the plan

 - ❖ **RATING SCALES:**
 - ✓ the comprehensiveness of a plan
 - ✓ the degree of detail
 - ✓ the amount of couple consensus
- 
- ❖ **Very comprehensive plans:** intended actions focused on a broad range of aspects.
 - ❖ **Highly detailed and written plans:** who does what before, during, and after a bushfire is meticulously thought through.
 - ❖ **High level of couple consensus:** reciprocal agreement within the couple. Partners agree with all intended actions, tasks distribution and timing.

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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.

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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

- Couples' bushfire risk perception and awareness about the possibility of a bushfire risk
- Couples' long-term bushfire planning and preparation
- Couples' relationship
- Gender differences in household bushfire planning
- On the day actions
- Future bushfire actions

COUPLES' BUSHFIRE RISK PERCEPTION AND AWARENESS



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

However ... **level of concern** only ranging from very low to moderate.

Couples' bushfire risk perception and awareness about the possibility of a bushfire risk
 "You don't see it as a real risk" about it" or "You never think it's going to happen to you"



Couples difficulties in envisaging threats due to an under-estimation of the level of the risk (Weinstein, 1987).

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

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COUPLES' LONG-TERM BUSHFIRE PLANNING AND PREPARATION



A) 21 couples did not have a formal bushfire plan

For those who had a plan (n = 8), it usually consisted of "a fair bit of talking" mainly about the most important things to do and what to take

Couples' long-term bushfire planning and preparation

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

Only one case of very detailed long-term planning and preparation for an active defense of the house

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COUPLES' RELATIONSHIP



Their level of engagement, initiatives, power and consensus about planning for bushfire threats

- ❖ Unbalance in regard to the preparation of the property

"The only time I [the husband] panicked was I told Susan to not go down into the smoke and she disappeared down there and I didn't see her come back into the house so I went mad at her for a while about that because you know you've got to obey the chief".

- ❖ Tacit consent of 'no planning'

Those decisions involving minimal perceived risk are generally less likely to be the result of joint decision-making processes

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GENDER DIFFERENCES IN HOUSEHOLD BUSHFIRE PLANNING



Differences in preferred actions along gender lines have been found previously in couples forming a bushfire plan
(Handmer et al., 2010)

Gender differences in household bushfire planning
UNWRITTEN RULES BASED ON GENDER EXPECTATIONS

(Sholevar, 2003)

Wives were generally focused on taking paperwork and other relevant important documents

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ON THE DAY ACTIONS: FROM "WAIT AND SEE" TO "WENT TO SEE"



Couples affected by the Lake Clifton fires exhibited a specific and recurrent pattern



One member of the couple driving toward the fire and the partner remaining at home waiting for his/her return

On the day actions: from "WAIT AND SEE" TO "WENT TO SEE"

As a result, many couples separated on the day

"That was an okay decision. But as far as splitting the family, that didn't always sit well. But it was like, stay as long as it's safe but we're not going to - I will keep the kids safe".

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FUTURE BUSHFIRE ACTIONS



⌘ 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.

A general lack of knowledge about the possible actions to undertake in order to better facing emergency situations such as a bushfire.

⌘ However, some of the couples interviewed said they would "probably" do something different

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CONCLUSIONS



The identification of couple's judgment and decision-making processes would assist in delivering effective community bushfire education and safety programs appropriate to a family circumstances

LEVELS OF HOUSEHOLD PLANNING AND PREPARATION REMAIN GENERALLY LOW

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THE RESEARCH IN THREE STUDIES



STUDY 1

Analysis of risk perception and decision-making by couples who are 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

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