BUSHFIRE PREPAREDNESS: THE DEVELOPMENT AND VALIDATION OF A PSYCHOLOGICAL PREPAREDNESS SCALE

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To develop and validate a self-report tool that can be used to measure an individual’s psychological preparedness for a bushfire. This measure will benefit researchers in the development and evaluation of theories that are dedicated to shaping and promoting bushfire safe behaviour and will be an invaluable tool for fire agencies in their efforts to improve public safety.

Background

Bushfires are complex events that can be very stressful for those involved. While a moderate amount of stress can be motivating, high levels of stress (distress) can be demotivating and see people respond in unpredictable ways (see Figure 1).

The experience of distress can be dangerous during a bushfire because it can impair a person’s cognitive functioning (e.g. decision making, attention) memory, and can cause confusion and disorientation (Mclennan et al., 2011). Distress can also lead to long term psychological problems such as anxiety, depression and post-traumatic stress.

Therefore, it is important that people are psychologically prepared for a bushfire.

Study 1

The aim for study 1 was to: 1) conceptualise psychological preparedness; and 2) develop and evaluate a large pool of items that reflect this conceptualisation.

Method: Phase 1

A literature review was conducted to conceptualise psychological preparedness. The item pool was developed using items from previous measures, as well as using a literature review to write items. The researcher aimed to develop an item pool that was at least double the desired number of items, as well as ensuring the items saturated the construct definition.

Results: Phase 1

The number of items in each scale categorised by agreement or no agreement among experts.

For the items where there was no agreement between the experts a literature review was used to determine the relevance.

Based on the clarity and relevance data and the literature review changes were made to the item pool (see Table 1). All of the items that were retained were reworded to improve the clarity.

Table 1. The changes made to each scale based on the results and a literature review.

<table>
<thead>
<tr>
<th>Scale</th>
<th>Number of items deleted</th>
<th>Number of added</th>
<th>Change to total number of items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cognitive</td>
<td>32</td>
<td>7</td>
<td>Reduced from 69 to 47</td>
</tr>
<tr>
<td>Personal</td>
<td>38</td>
<td>29</td>
<td>Reduced from 71 to 62 items</td>
</tr>
<tr>
<td>Social</td>
<td>8</td>
<td>4</td>
<td>Reduced from 30 to 26 items</td>
</tr>
</tbody>
</table>

Next Step

• Conduct an exploratory factor analysis to identify the underlying structure of the conceptual model.
• Further refine the item pool using the results from the exploratory factor analysis.
• Assess the reliability and validity of the measure.