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HOUSEHOLD PREPAREDNESS FOR BUSHFIRES

The role of residents' engagement with information sources

Technical Report 2014-2015

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PART 1 EXECUTIVE SUMMARY

The following report shows that even after controlling for bushfire risk perceptions, people who access and engage with information sources are better prepared for bushfires than those who do not. The report notes, however, that the majority of people are not accessing information on how to prepare their household for bushfires, despite being at risk of this occurrence. Several key finding are summarised below.

- People who used one of the three active information sources (i.e., **information meetings**, **websites**, or **brochure**s) or had seen a bushfire related television **commercial,** had on average completed a significantly higher percentage of **physical preparedness** and **planning** actions compared to those who had not accessed an information source.

- People who had used **multiple (2 or 3) active information sources** had also completed a significantly higher percentage of **physical preparedness** and **planning** actions compared to those who had accessed only one information source.

- Use of **websites** had the greatest positive impact on preparedness actions, followed by **brochure** use. **Meeting** attendance and seeing a television **commercia**l had only small effects on preparedness.

- Twenty-three percent of people used a **brochure** to access information on bushfire preparedness, while 20% used a **website** and 5% attended a local **meeting.**

- Overall, less than half of the people surveyed (44%) had used at least one of the three types of **active information sources** (i.e., information meetings, websites, or brochures). Fifty-two percent of people however, recalled seeing a bushfire related c**ommercial** on TV in the last sixmonths.

PART 2 END USER STATEMENT

Suellen Flint, *Department of Fire and Emergency Services*

As an end-user for the communications and warnings cluster, one of our objectives is to improve household preparedness for bushfires. DFES engages with the community through a variety of methods and has developed a suite of information resources. These comprise publications, audio visual media options and the delivery of face-to-face community workshops. Identifying how residents access information in relation to bushfire preparedness and which of these methods is most effective is an ongoing challenge for practitioners. The research that has been conducted by the BNHCRC on 'The role of residents engagement with information sources' is incredibly valuable to assist emergency service agencies demonstrate effective engagement and understand which information sources work in motivating residents to actively prepare for bushfires.

A pilot study was commissioned by AFAC to assess the survey's practical application by an agency, and how it could potentially be used as an industry standard tool. In October and November 2015, the Department of Fire and Emergency Services (DFES) piloted the survey to see if the tool had practical application for fire agencies and to allow DFES to assess the preparedness of households involved in the Bushfire Ready Program (BRG) program. The results of the pilot survey will assist to make recommendations about the future application of the tool and establish a baseline for monitoring how effective the community based programs are in helping the community to prepare for bushfires.

The success of this pilot study in WA has resulted in DFES deciding to roll out the Household Preparedness Tool with Bushfire Ready Groups in 2016. The research completed by the BNHCRC provides DFES with baseline data that will be used to compare future findings on household preparedness for bushfires. This evidence will assist DFES in evaluating our bushfire preparedness information sources and in further refining our community engagement practice.

The report was written simply, making it very easy to read. It was enjoyable to read a report that summarised the research so succinctly.

PART 3 BACKGROUND AND METHODOLOGY

3.1 Objectives

The increasing frequency and complexity of natural hazards poses a challenge for community resilience. One of the goals of the emergency management sector is to increase preparedness for natural hazards amongst residents of hazard prone areas in order to mitigate the risk these hazards pose to people's lives and property. One way in which they have been aiming to achieve this is through the dissemination of relevant information. However, before the start of this CRC project, relatively little was known about the effectiveness of different information sources in increasing preparedness and planning.

There are a number of studies that have provided descriptive information about the number of residents in bushfire prone areas who access information materials and about the preparedness levels of residents.[1] In addition, some research has examined the relationship between information dissemination and preparedness levels in bushfire prone areas, showing that residents in areas in which information dissemination has occurred have higher risk perceptions and higher levels of preparedness than residents in areas in which information dissemination has been more limited.[2] However, no research to date has looked at whether or not *active engagement* with the information source (e.g., reading a brochure, going to a meeting, etc.) is statistically related to higher levels of preparedness and planning.

Additionally, some research had been done on the relationships between television commercials and increased risk awareness and preparedness activities.[3] However, this research directly asked residents about the possible effects of the commercials, which opens up the possibility of human error. Indeed, previous research has shown that people are often unaware of the factors that motivate their behaviour, and the explanations they give for their behaviour are not necessarily accurate. [4]

In sum, no research to date had examined in an objective and quantitative manner whether people who actively use different information sources end up better prepared than those who do not use these sources, and whether people who remember seeing a television commercial end up better prepared than those who do not. The purpose of the research presented in this report was to fill this

[1] Country Fire Authority, Victoria. (2011). *C2.10B Evaluation and Effectiveness Project: Evaluation Report 2010-2011.*

[2] Department of Fire and Emergency Services, Western Australia. (2014). *Community Bushfire Awareness, Resilience and Preparedness Survey* (Final Report). See also; McLennan, D., Paton, D., & Wright, L. (2015). At-risk householders' responses to potential and actual bushfire threat: An analysis of findings from seven Australian post-bushfire interview studies 2009–2014. *International Journal of Disaster Risk Reduction,* 12, 319–327.

[3] South Australian Country Fire Service. (2015). *Bushfire Awareness and Attitudes* (Summary Report).

[4] Nisbett, R. E., & Wilson, T. D. (1977). The halo effect: Evidence for unconscious alteration of judgments. *Journal of Personality and Social Psychology,* 35, 250-256.

gap and examine whether the active use of different information sources (i.e. community information meetings, websites, and brochures) and the passive awareness of television commercials are related to higher levels of preparedness amongst residents of bushfire prone areas. A similar study was conducted in relation to flood preparedness. Results for the flood study are presented in a report titled '*Household preparedness for floods. The role of residents' engagement with information sources.*'

3.2 Methodology

Quantitative research was conducted with two online surveys. Respondents were recruited through an online panel provider.

Data was collected at two time points. The first point of data collection (Wave 1) was four weeks into the 2014/2015 bushfire season and the second point of data collection was ten weeks into the 2014/2015 bushfire season (Wave 2). Exact timing of the data collection was staggered by state and regions, depending on when the official fire season was declared in each locality.

To select participants we used a short screening questionnaire. Potential respondents were screened out and not eligible to complete the survey if they;

I. Were under the age of eighteen, or
II. The closet bushland (e.g., park, reserve, undeveloped public or private land, etc.) that was at least one hectare in size, was more than 100 meters away from where they lived, or
III. They were not the main person making bushfire safety related decisions in their household, or alternatively they did not equally share the decision making with their partner/spouse or other adults in the house.

The study was conducted in New South Wales, Victoria, South Australia, Western Australia and Tasmania. A total of 514 respondents successfully completed both surveys with 82 residents residing in NSW, 77 in VIC, 147 in SA, 78 in WA and 130 in TAS.

3.3 How to Read This Report

The statistical significance tests reported in the analyses section were conducted using the total number of participants (N), i.e., the 514 respondents rather than testing effects separately for each state. This was deemed appropriate as we found no significant interaction effects between state and information sources on preparedness, i.e., the pattern of relationships between information's sources and preparedness did not vary between states.

Statistically significant results are indicated by a single (+), double (++) or triple (+++) plus sign. These respectively indicate the 90%, 95% and 99% confidence levels. Confidence levels are guides as to how certain you can be that there is a statistically significant relationship between variables or a statistically significant difference between the groups you are comparing on the variable you are interested in, and that the difference is not due to chance. For example in Section 5.4.3 the plus signs (+) indicates that we can be 90% confident that people who look at a website to get information about preparing and planning for bushfires, are generally more conscientious than those who do not look at awebsite.

In Section 5.2 (*Is the Use of Information Sources Related to Higher Levels of Preparedness*) we have also included a measure of effect size, namely the partial eta squared. The partial eta squared indicated by the symbol η_p^2 tells you how much of the variance in the variable of interest is accounted for by whether or not the respondent used the information source in question. For example in Figure 5.2.5 η_p^2 = 7%, tells you that 7% of the variance in respondents' planning scores can be accounted for by whether or not they used a website. Within the behavioural sciences there are general rules of thumb as to whether the size of the effect can be considered small, medium or large. A partial eta squared of 1% would be considered a small effect, 6% would be considered medium and anything exceeding 14% would be considered large.

In analyzing the results in relation to the use of information sources (Section 3.2 and Section 3.3), we controlled for the perceived likelihood and perceived severity of a bushfire threatening the respondent's residence to rule out risk perceptions as an alternative explanation for the results. In line with this, all the means reported in Sections 5.2 and 5.3 have been estimated after keeping perceived likelihood and perceived severity of a bushfire threatening the respondent's residence constant.

Finally, please note that percentages may not always sum to exactly 100% due to rounding to the nearest whole figure.

3.4 What Was Measured in the Surveys Detailed in This Report

The following gives an outline of what was measured in the two surveys and how the scores for each measure were calculated. It also mentions whether each measure was part of the first survey at Wave 1 or the second survey at Wave 2.

3.4.1 Demographics

General demographic questions were asked of respondents at Wave 1, in addition to three questions concerning their previous experiences with bushfires.

A complete list of the demographic questions and breakdown of the responses can be found in APPENDIX 1 DEMOGRAPHICS.

3.4.2 Engagement with Information Sources

We measured active engagement with three possible information sources at Wave 2, namely;

I. Attending a meeting(s) or information session(s) in the community where the topic of focus was preparing for bushfires,

II. Looking at a website(s) in order to access information about preparing and planning for bushfires, and

III. Using a brochure or information booklet to help prepare and plan for bushfires.

We also measured passive engagement with one source, namely noticing a bushfire-related commercial on the television.

Finally, whenever residents indicated they had actively used an information source, they were asked for details about the source, including who delivered the source and how helpful the source had been. A breakdown of the responses regarding who delivered the information sources can be found in APPENDIX 2 WHO IS DELIVERING THE INFORMATION SOURCES.

3.4.3 Preparedness Measures

The following preparedness measures were captured at Wave 2.

For more information on the development of the preparedness measures please refer to the BNHCRC technical report titled '*Report on the Selection of Preparedness and Planning measures for "Improving the Role of Hazard Communications in Increasing Residents' Preparedness and Response Planning for Recurring Natural Hazards".*'

3.4.3.1 Physical preparedness

To measure physical preparedness for bushfires, we used the measure by Dunlop *et al.* (2014)[5], which consists of three subtypes of preparedness, namely:

I. Preparedness for safely defending your property (measured with 27 items),
II. Preparedness for safely evacuating (measured with 6 items), and
III. Actions you can carry out to increase the fire resistance of your property in your absence (measured with 23 items).

Respondents reported on whether they had completed each item by selecting *currently true*, *currently untrue*, or *not applicable* to their situation. The physical preparedness scores in the report are the percentage of applicable tasks people had completed for each subtype of preparedness.

In addition, we also included a 16 item measure of the percentage of tasks people had completed towards preparing an emergency kit.

A complete list of the physical preparedness and emergency kit questions, in addition to a breakdown of the responses can be found in A 3.1 Physical Preparedness Items & A 3.2 Emergency Kit Items.

3.4.3.2 Planning

We also included a measure of the extent to which people had thought about and planned their response to a bushfire. This was measured with 11 items. As above, respondents reported on whether they had performed each planning item by selecting *currently true*, *currently untrue*, or *not applicable* to their situation. The planning score is therefore the percentage of applicable planning actions respondents had completed.

A complete list of the planning questions and breakdown of the responses can be found in A 3.3 Planning Items.

3.4.3.3 Social support

In addition to actions people can carry out when preparing and planning for bushfires, we included a measure of social support availability. We captured both the social support people expect to have available to them during bushfires, and the support they expect to have available to them in the recovery phase.

Both types of social support were measured with 6 items that were rated on a 7-point scale (1 = *strongly disagree*, 7 = *strongly agree*). The two scores (i.e. *social support for response* and *social support for*

[5] Dunlop, P.D., McNeill, I.M., Stacey, J.L., Morrison, D.L., & Skinner, T.C. (2014). Preparing… for what? Developing multi-dimensional measures of community wildfire preparedness for researchers, practitioners, and households. *International Journal of Wildland Fire, 23*, 887-896.

recovery) are the means of the relevant 6 items, with a higher score indicative of greater social support.

A complete list of the social support questions and breakdown of the responses can be found in A 3.4 Social Support Items.

3.4.3.4 Perceived ability to respond and recover

We also included a measure of people's own perceived ability to respond to a bushfire during a bushfire and a measure of their perceived ability to recover from a bushfire after the event of a bushfire.

Both types of perceived ability were measured with 7 items that were rated on a 7-point scale (1 = *strongly disagree*, 7 = *strongly agree*). The two scores are the means of their relevant 7 items, with a higher score indicative of greater perceived ability to respond or recover.

A complete list of the perceived ability to respond and recover questions and breakdown of the responses can be found in A 3.5 Perceived Ability to Respond and Recover Items.

3.4.3.5 Knowledge

Finally we had a 5-item measure of people's knowledge about how bushfires behave and how to act safely in the event of a bushfire. Each item was a statement and respondents could answer *true*, *false* or *unsure*. The knowledge score is therefore the sum of items answered correctly and ranges from 0 to 5.

A complete list of the knowledge questions and breakdown of the responses can be found in A 3.6 Knowledge Items.

3.4.4 Personality and Individual Differences

In order to allow us to profile engagers vs. non engagers we also measured a variety of variables to capture personality and individual differences.

3.4.4.1 Personality variables

We measured three aspects of people's personality through three subscales of the 60-item long HEXACO Personality Inventory (Ashton & Lee, 2009)[6] at Wave 2, namely:

[6] Ashton, M. C., & Lee, K. (2009). The HEXACO-60: A short measure of the major dimensions of personality. *Journal of Personality Assessment, 91*, 340-345.

I. Emotionality, i.e., the degree with which people experience anxiety in response to stressful life events, are fearful of physical danger, rely on emotional support from others, and are empathetic and sentimental (10 items),
II. Extraversion, i.e., the extent to which people are confident in social gatherings, positive about themselves, enthusiastic and energetic (10 items), and
III. Conscientiousness, i.e., the degree to which people make careful decision, are disciplined and organised and aim for perfection and accuracy (10 items).

Respondents reported the extent to which they agreed with each item on a scale of 1 to 5 *(1 = strongly disagree, 5 = strongly agree)*. The personality scores are therefore the mean of the relevant 10 items and range from 1 to 5, with a higher score indicative of a higher level of the personality trait.

A complete list of the personality questions can be found in A 4.1 Personality Items.

3.4.4.2 Perceived effectiveness of preparing

At Wave 1 we assessed the extent to which people perceived preparing as an effective tool in reducing the threat posed to life and property by a bushfire. This was measured with 3 items on a 9-point scale (1 = *very strongly disagree*, 9 = *very strongly agree*). The score represent the mean of the 3 items and ranges from 1 to 9, with a higher score indicating greater perceived effectiveness of preparing.

A complete list of the perceived effectiveness of preparing questions can be found in A 4.2 Perceived Effectiveness of Preparing Items.

3.4.4.3 Motivation to prepare and plan

We also measured at Wave 1, the degree to which people are interested in, and see the importance of, preparing and planning for bushfires with 6 items on a 9-point scale (1 = *very strongly disagree*, 9 = *very strongly agree*). The score represents the mean of the 6 items and ranges from 1 to 9, with a higher score indicating greater motivation to prepare and plan for bushfires.

A complete list of the motivation to prepare and plan questions can be found in A 4.3 Motivation to Prepare and Plan Items.

3.4.4.4 Perceived risk

Lastly, at Wave 1, we included a measure of perceived bushfire risk. We captured both people's perceived likelihood of a bushfire threatening their property (1 = *definitely won't happen*, 7 = *definitely will happen*) and the severity of the consequences if such an event were to occur (1 = *not severe at all*, 7 = *extremely severe*).

Both types of bushfire risk were measured with a single item on a 7-point scale.

The two perceived bushfire risk questions can be found in A 4.4 Perceived Risk Items.

PART 4 DISCUSSION

4.1 How Many People Are Using Each Information Source and How Helpful Do People Find Them?

Only **a small percentage (13%) of respondents were aware of any meetings** in their community or nearby, and **very few respondents (5%) reported attending at least one meeting** concerning bushfire preparedness in the lead up to or during the current bushfire season.

Of the respondents who knew about a meeting in their locality, 42% attended at least one. This percentage varied across the states, with the lowest attendance recorded in Victoria (9% of those who were aware of meetings) and highest in Western Australia (78% of those who were aware of meetings).

Compared to meeting attendance, the percentage of people that reported that they had accessed at least one website or used a brochure for information on bushfire preparedness was a bit higher (20% and 23% respectively). However, **the majority of people (66%) did not use any of the three types of active information sources (i.e., information meetings, websites, or brochures)**.

In terms of passive engagement with an information source, **52% of respondents recalled having seen a** bushfire related **commercial** on TV since the start of September, 2014.

When asking people who attended at least one meeting about the extent to which these meetings were didactic versus interactive, **43% reported the meetings were equally didactic and interactive**, and **44% reported the meetings were more interactive than didactic**.

Finally, **when asking people how helpful the active sources (i.e., information meetings, websites, or brochures) were** for preparing their property, preparing a bushfire plan, and knowing what to do and expect after a bushfire, websites were rated by respondents as most helpful for preparing their property, out of the three types of helpfulness. Brochures and meetings were considered by respondents as most helpful for preparing a bushfire plan, out of the three types of helpfulness, while all information sources were rated as least helpful for knowing what to do and expect after a bushfire has happened. However, **none of these differences were statistically significant**.

4.2 Is the Use of Information Sources Related to Higher Levels of Preparedness?

4.2.1 Information Meetings

Those respondents who reported attending at least one **information meeting** on average completed a significantly higher percentage of preparedness actions in relation to increasing the **fire resistance** of one's property, **safely evacuating**, **safely defending**, and **planning**, than those who did not attend any meetings, and those who attended at least one information meeting also attained, on average, a higher percentage of **emergency kit** items than those who did not attend any meetings.

The attendees also appeared to have a greater **perceived ability to respond** to a bushfire and reported having more **social support for recovery** available to them.

4.2.2 Websites

Similarly, those who accessed at least one **website** on average completed a significantly higher percentage of preparedness actions in relation to increasing the **fire resistance** of one's property, **safely evacuating**, **safely defending**, and **planning**, than those who did not. Those who looked up at least one website also attained, on average, a higher percentage of **emergency kit** items than those who did not look up any websites.

In addition website viewers reported greater **perceived ability to recover** from a bushfire and greater **social support for recovery** available to them.

The website viewers also demonstrated significantly greater **knowledge** on how bushfires behave and how to act safely in the event of a bushfire, than those respondents who had not viewed a website.

4.2.3 Brochures

Like meetings and websites, those who used a **brochure** also completed a significantly higher percentage of preparedness actions in relation to increasing the **fire resistance** of one's property, **safely evacuating**, **safely defending**, and **planning**, than those who did not. Those who used a brochure also attained, on average, a higher percentage of **emergency kit** items than those who did not look up any websites.

In addition, those who used a brochure appeared to have higher levels of **perceived ability to respond** to a bushfire and reported more **social support** for both **response** and **recovery** available to them than those who did not use a brochure.

4.2.4 Commercials

Respondents who reported having seen a bushfire-related television **commercial** since the start of September 2014 had also completed a higher percentage of preparedness actions in relation to increasing the **fire resistance** of one's property, **safely evacuating**, **safely defending**, and **planning**, than those who had not seen a commercial. Those who remembered seeing a commercial also attained, on average, a higher percentage of **emergency kit** items than those who did not.

4.2.5 Effect Sizes

Small to medium effects on physical preparedness and planning were consistently demonstrated **for websites and brochures**, while only **small effect sizes** where found **for meeting attendance and recalling seeing a television commercial**. These small effect sizes should not be disregarded however as they can still be indicative of meaningful relationships. Further research is needed to replicate and expand on these results.

4.3 Is the Use of Multiple Active Information Sources Related to Higher Levels of Preparedness?

Both those respondents who had accessed one information source and respondents who had accessed multiple sources (two or three) had completed a significantly higher percentage of preparedness actions towards **safely defending**, **safely evacuating**, **fire resistance, emergency kit** and **planning** comparative to respondents who had not accessed any information sources. In addition, those respondents who had accessed multiple sources completed a significantly higher percentage of the actions listed above comparative to those who had only accessed one information source.

Respondents who accessed multiple information sources also reported significantly greater **ability to respond** to and **recover** from a bushfire and had greater **knowledge** on how bushfires behave, and how to act safely in the event of a bushfire, compared to those respondents who had not accessed any information sources. There was no significant difference between respondents who had accessed one information source and those respondents who had not accessed any information sources on these measures.

Both those respondents who had accessed one source and respondents who had accessed multiple sources reported greater availability of **social support in response** to a bushfire and greater **social support in recovery** from a bushfire, compared to those who had not accessed any information sources. Finally, those respondents who had accessed multiple sources reported significantly greater availability of **social support in recovery** compared to respondents who had only accessed one information source.

4.4 How Do Those Who Actively Use the Different Information Sources Differ from Those Who Do Not?

Respondents who engaged with the information sources appeared to differ from those who did not in several ways:

- Those who attended information meetings or used brochures are more extraverted (i.e., they feel more positive about themselves and enjoy/are confident during social interactions) than those who did not engage with these information sources.
- Those who used at least one website are more conscientious than those who did not use websites.
- Those who used a brochure consider preparing to be a more effective tool in reducing the threat posed by a bushfire than those who did not use a brochure.
- Use of an information source (versus non-use of that source) was related to a greater motivation to prepare for each of the three information sources (i.e., information meetings, brochures, and websites).
- Use of an information source (versus non-use of that source) was also related to a greater perceived risk of bushfires both in terms of likelihood and severity of a bushfire threat to one's property.

Those who engaged with information sources did not differ in emotionality from their non-engaged counterparts.

4.5 Implications

There has been a noticeable push by Australian fire agencies to convey the clear message to bushfire-at-risk households that it is essential to have a bushfire safety plan in place and be well prepared in advance to implement this plan. Despite this, research has consistently indicated that only a small minority of householders are adequately prepared for a bushfire event.[7] This has led some to question the ability of community education programs in their current form to have an appreciable impact on household preparedness.[8]

The findings of this report have several important implications for the emergency management sector. First, they show that those who use information sources are better prepared than those who do not use the information sources. This is especially evident for physical preparedness and planning, and less so for perceived ability to prepare and respond, and the expected availability of social support in response to and recovery from a bushfire event. These findings hold even after controlling for risk perceptions, meaning they cannot be explained by differences in perceived likelihood and severity of a bushfire threat.

However, the findings presented in this report also show that the majority of residents do not use any of the provided active information sources (66%). These results are consistent with previous research that has found that a minority of residents in high bushfire risk areas are accessing written information material (14-35%) or attending meetings (3-12%).[9]. It has been suggested that people's lack of engagement with formal information sources is the result of a low level of perceived need for such information. This argument is supported by research conducted by the CFA. The study, which surveyed 600 households in high bushfire risk locations, found that 56% of respondents rated themselves as 'very well informed' about bushfire safety, whilst 34% considered themselves to be 'moderately well informed'. However, only a minority of residents surveyed had actually undertaken specific fire protection measures and had a household bushfire plan that agencies would consider to be effective.[10] This means that optimizing the *content* of active information sources is likely to only be beneficial for the minority of the at risk population that will engage with such sources.

In addition to the usefulness of information sources, the results of the study presented in the current report also examined whether seeing a television commercial would lead to greater preparedness

[7] McLennan, D., Paton, D., & Wright, L. (2015). At-risk householders' responses to potential and actual bushfire threat: An analysis of findings from seven Australian post-bushfire interview studies 2009–2014. *International Journal of Disaster Risk Reduction,* 12, 319–327.

[8] Rhodes, A. (2011). Opinion: ready or not? Can community education increase householder preparedness for bushfire? *The Australian Journal of Emergency Management*, 26(2), 6-10.

[9] McLennan, D., Paton, D., & Wright, L. (2015). At-risk householders' responses to potential and actual bushfire threat: An analysis of findings from seven Australian post-bushfire interview studies 2009–2014. *International Journal of Disaster Risk Reduction,* 12, 319–327.

[10] Country Fire Authority, Victoria. (2011). *C2.10B Evaluation and Effectiveness Project: Evaluation Report 2010-2011.*

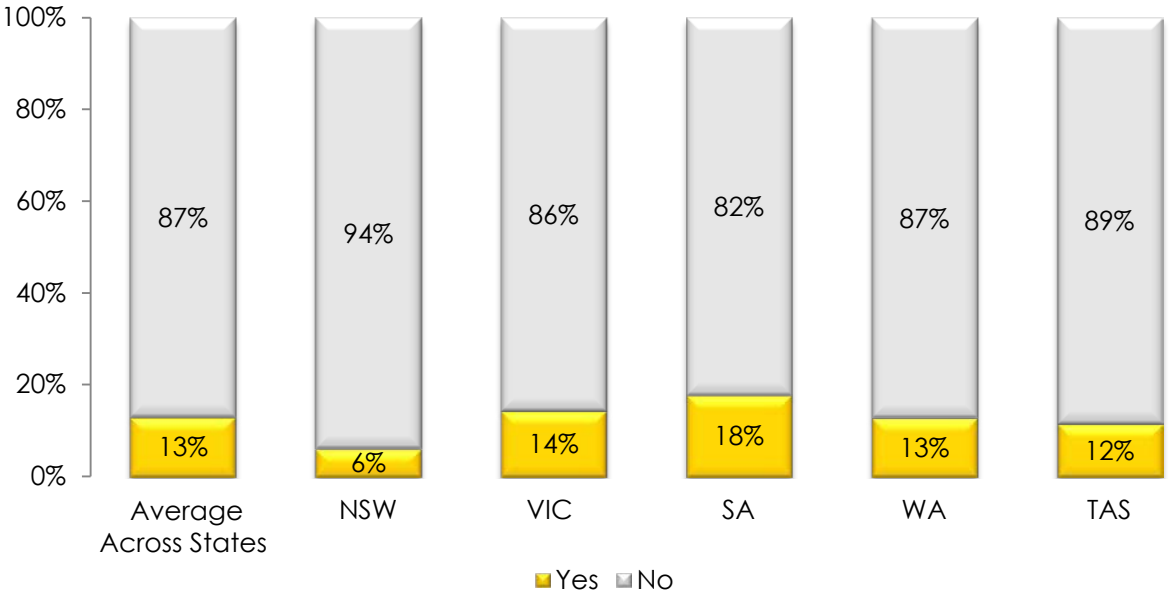
amongst residents. The findings indicate that this is indeed the case for physical preparedness and planning, but the effect sizes are small, meaning the viewing of a commercial on television only explained a small amount of the variance (1%) in preparedness and planning.

In sum, this report has provided the emergency management sector with information that can serve as a basis for decision-making around resource allocation, such as how much to invest in television commercials or the optimization of content of the different information sources. In addition, the low percentage of engagement with the information sources indicates the need for a shift in strategies to motivate residents to prepare for natural hazards. Several agencies are already testing new approaches to increase residents' engagement with resilience building activities, and the current data set can serve as a baseline to compare the effectiveness of these new programs to. All in all, future research is needed to explore ways to get more people to engage with information sources and resilience building initiatives, as well as exploring the potential of alternative strategies to see whether these could have a more pronounced effect on residents' preparedness levels than the strategies examined in this report.

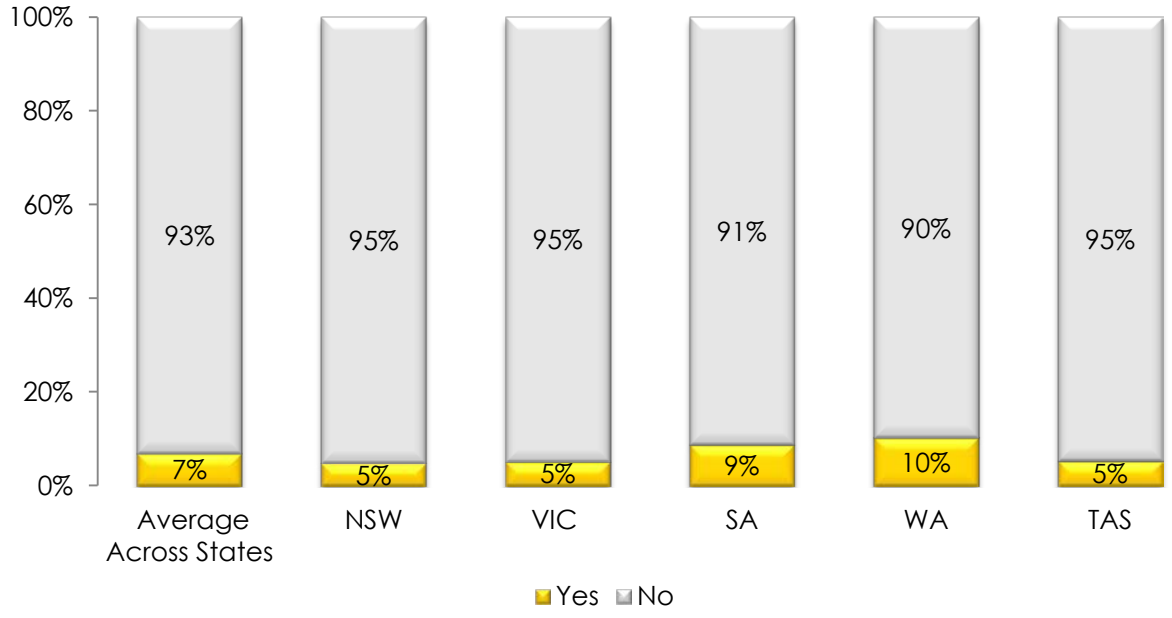
PART 5 ANALYSES

5.1 How Many People Are Using Each Information Source and How Helpful Do People Find Them?

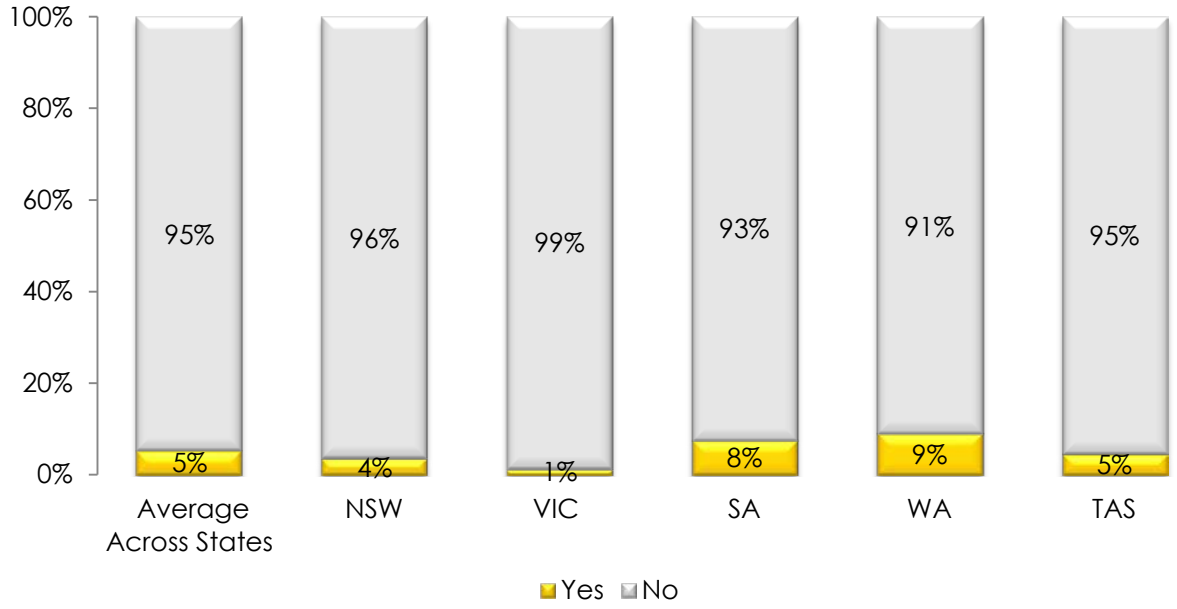
5.1.1 Have there been any meetings or information sessions in your community or nearby in the lead up to and during the current bushfire season, where the topic of discussion/information was preparing for bushfires?



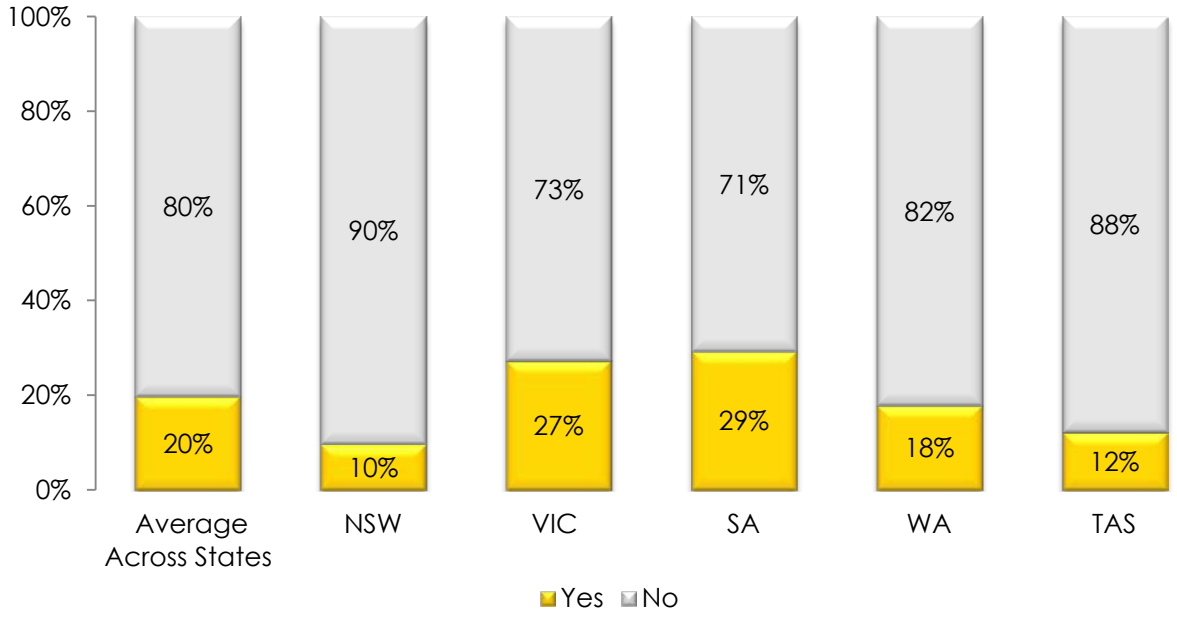
5.1.2 Have you attended one these information sessions during the past 3 years?



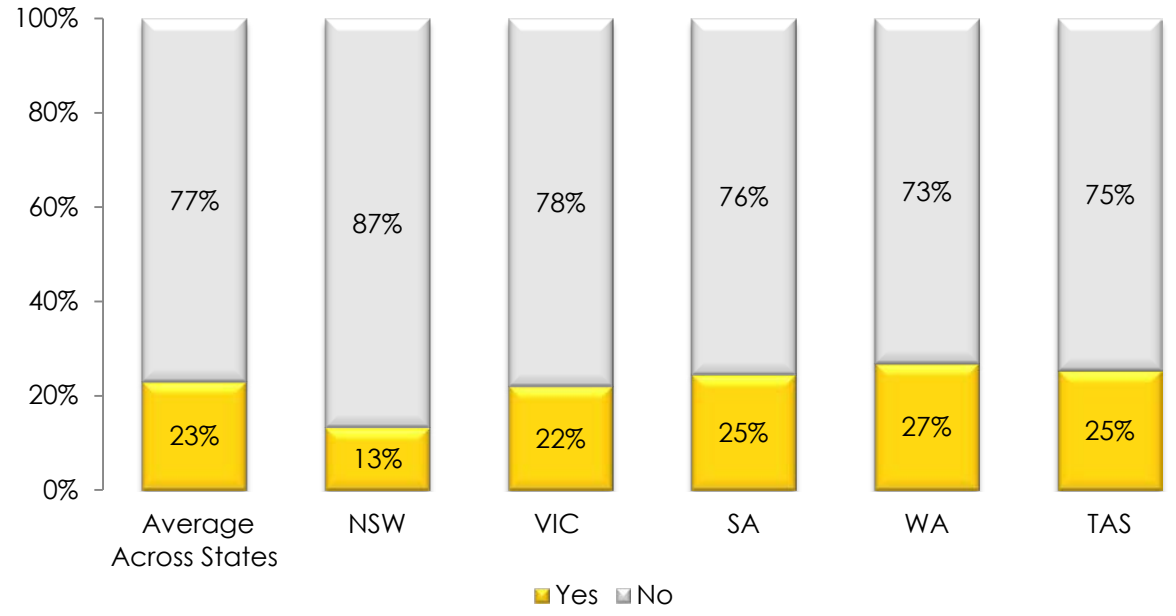
5.1.3 Have you attended one of these information sessions in the lead up to and during the current fire season?



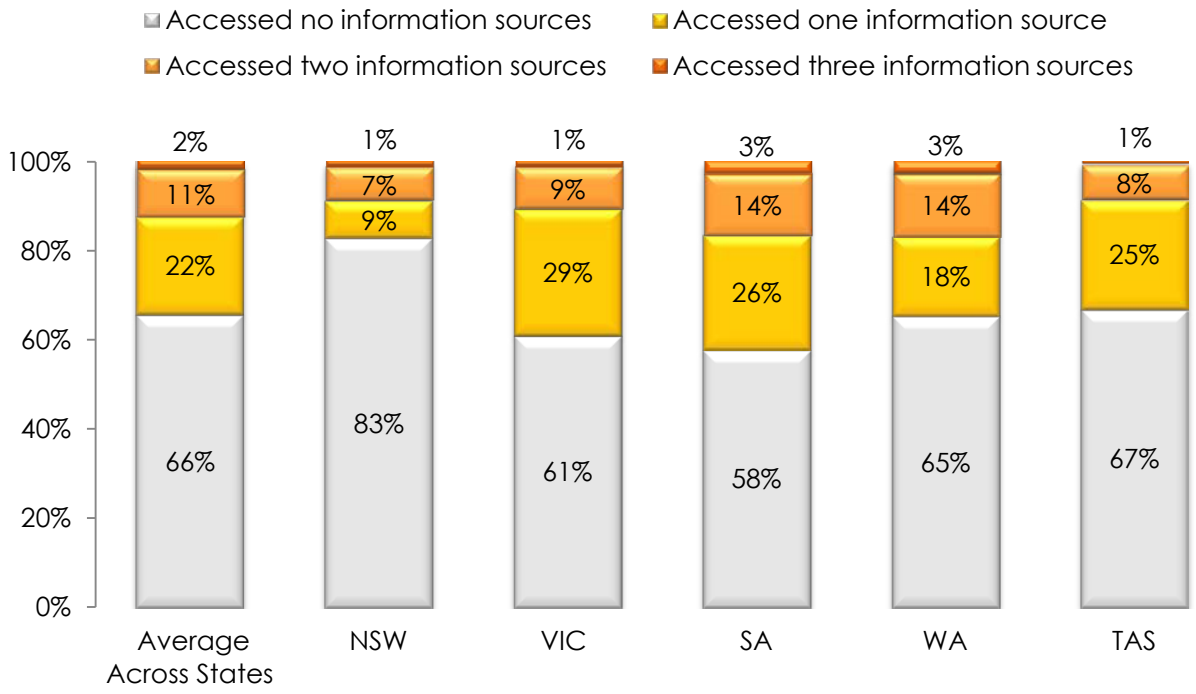
5.1.4 Have you looked at any websites over the past few months to get information about preparing and planning for bushfires?



5.1.5 Have you used a brochure or information booklet to help you prepare and plan for the fire season?



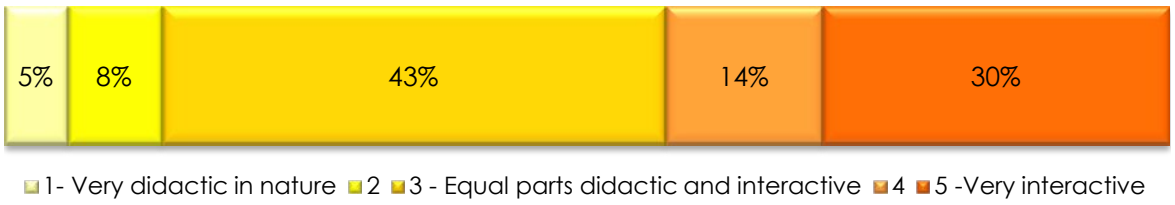
5.1.6 Percentage of respondents using no information sources to multiple information sources



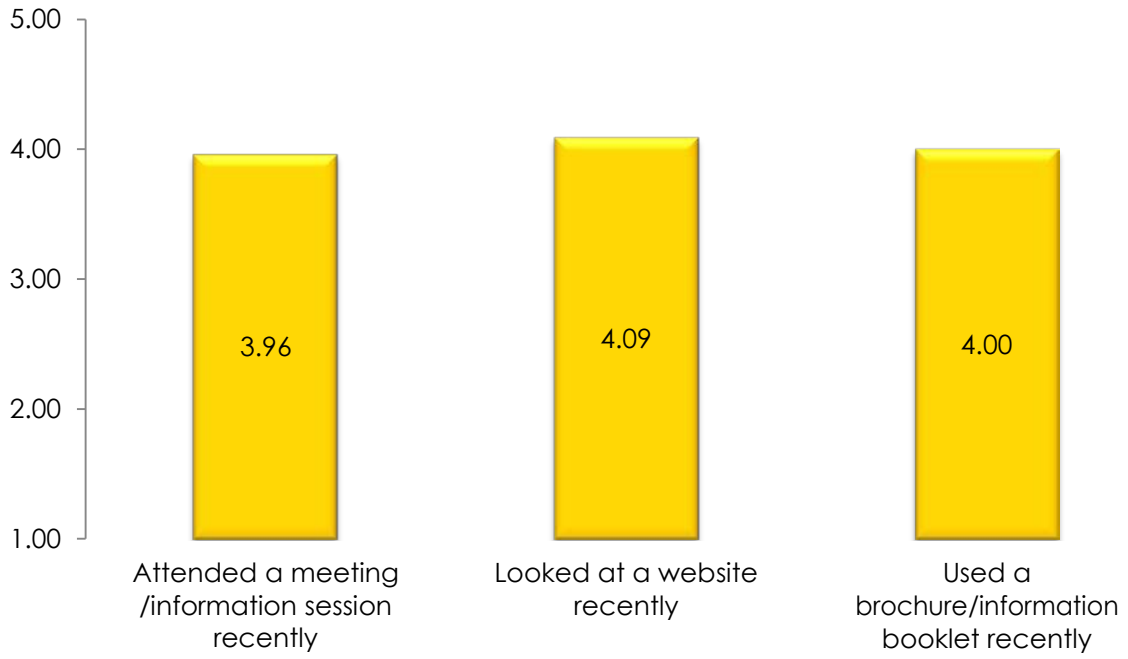
5.1.7 How interactive were the meetings you attended, ranging from very didactic to very interactive.

Meetings that are very didactic in nature have a speaker or presentation of some sort that gives the attendees information, but these meetings have very limited opportunities for questions or discussion by the attendees.

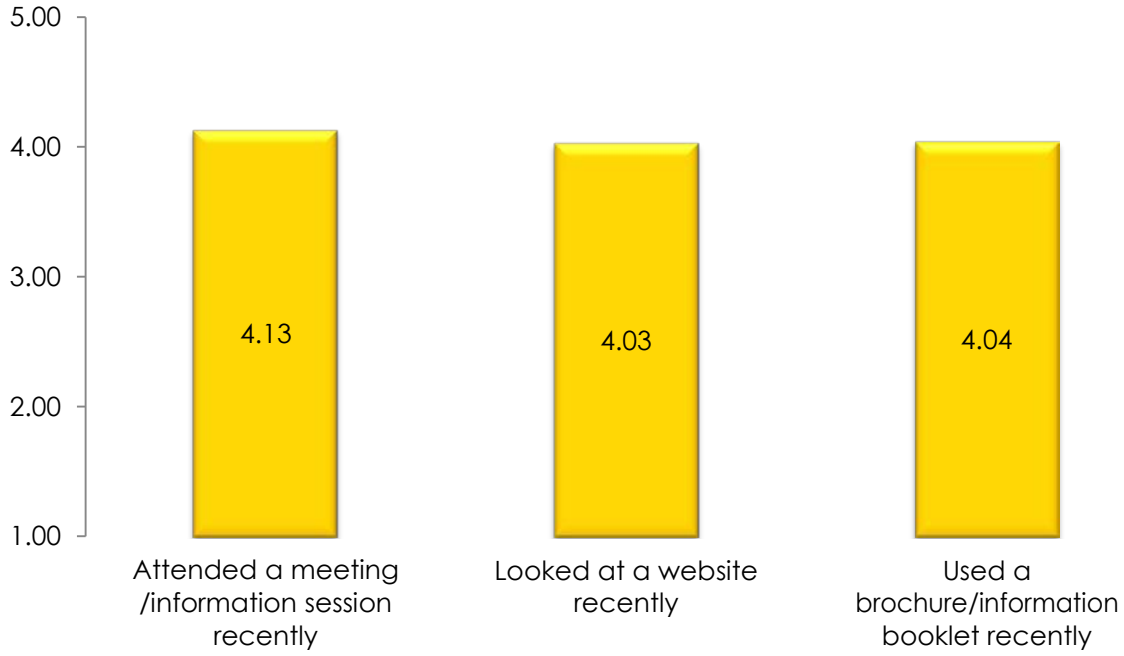
Meetings that are very interactive do not tend to have a single speaker. Instead they tend to have a topic of discussion where any of the attendees can raise issues, ask questions, provide ideas, etc.



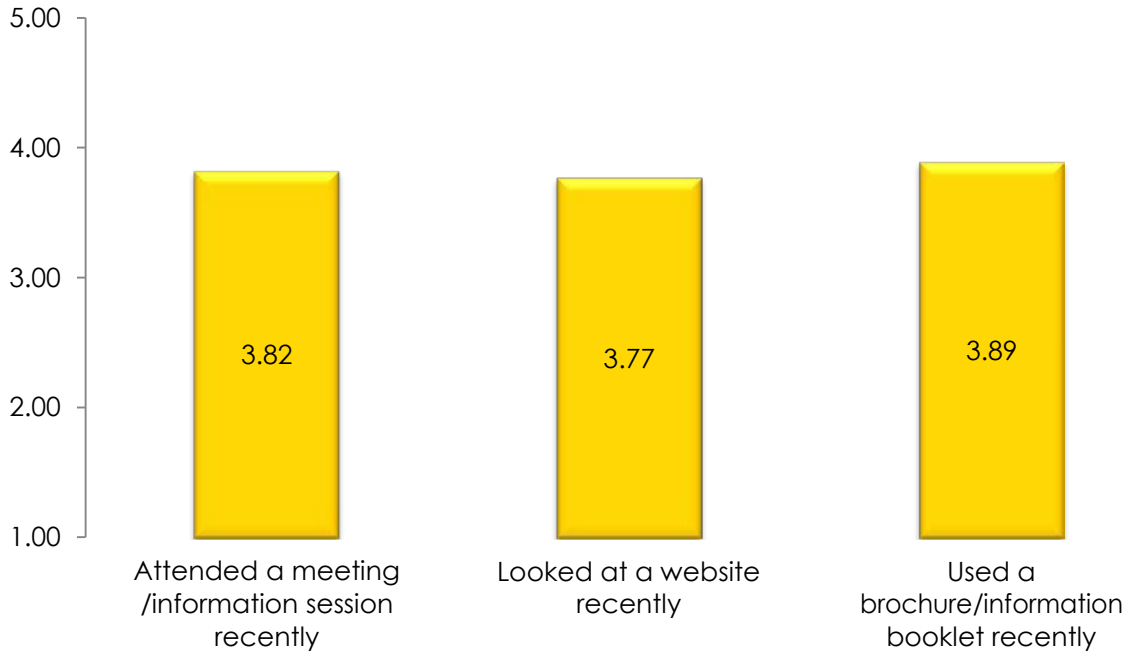
5.1.8 How helpful was each information source for preparing your property? (Scale: 1= "Not helpful at all" – 5 = "Extremely helpful")



5.1.9 How helpful was each information source for creating a good bushfire plan? *(Scale: 1= "Not helpful at all" – 5 = "Extremely helpful")*

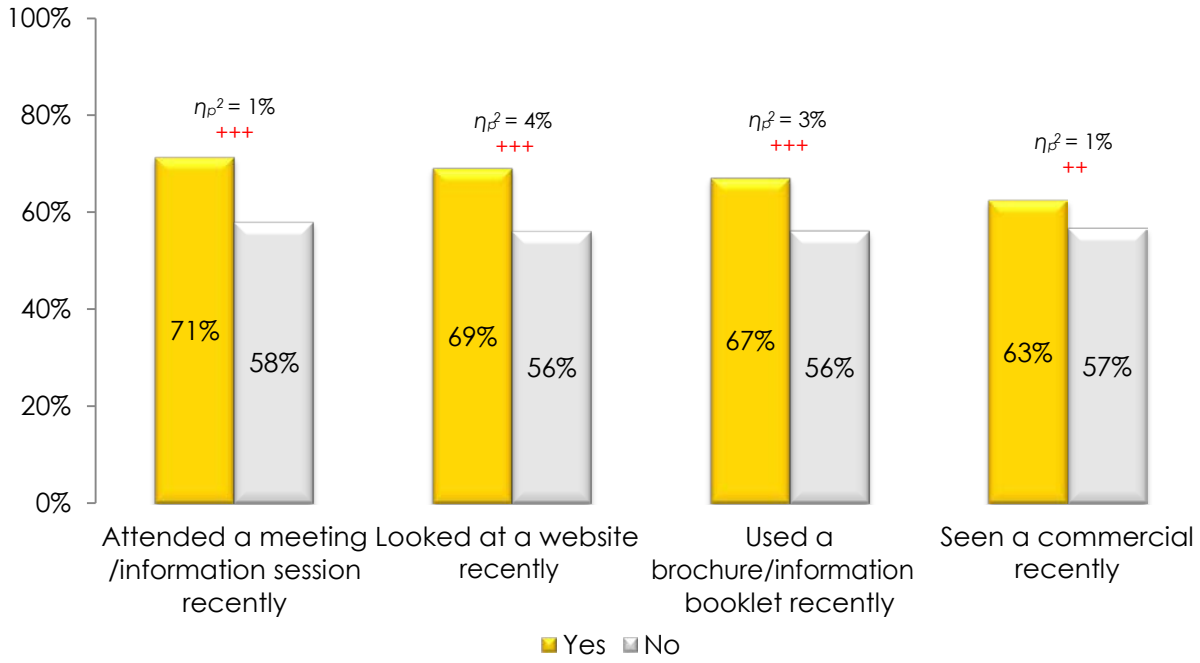


5.1.10 How helpful was each information source for knowing what to do and expect after a bushfire has happened? *(Scale: 1= "Not helpful at all" – 5 = "Extremely helpful")*

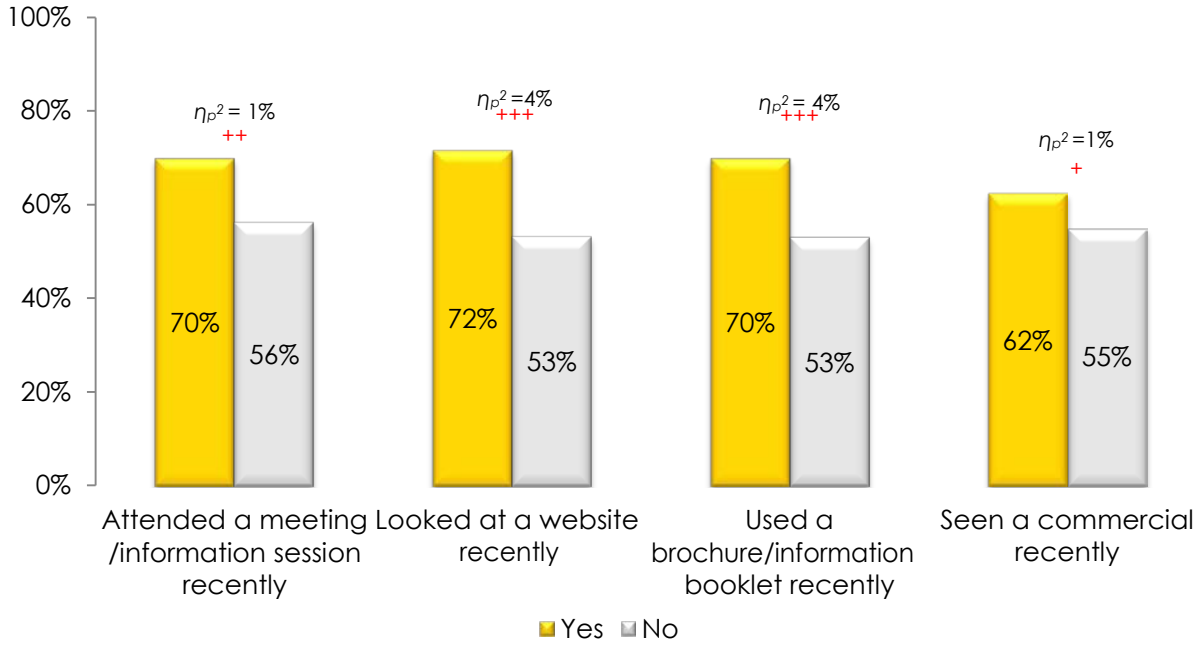


5.2 Is the Use of Information Sources Related to Higher Levels of Preparedness?

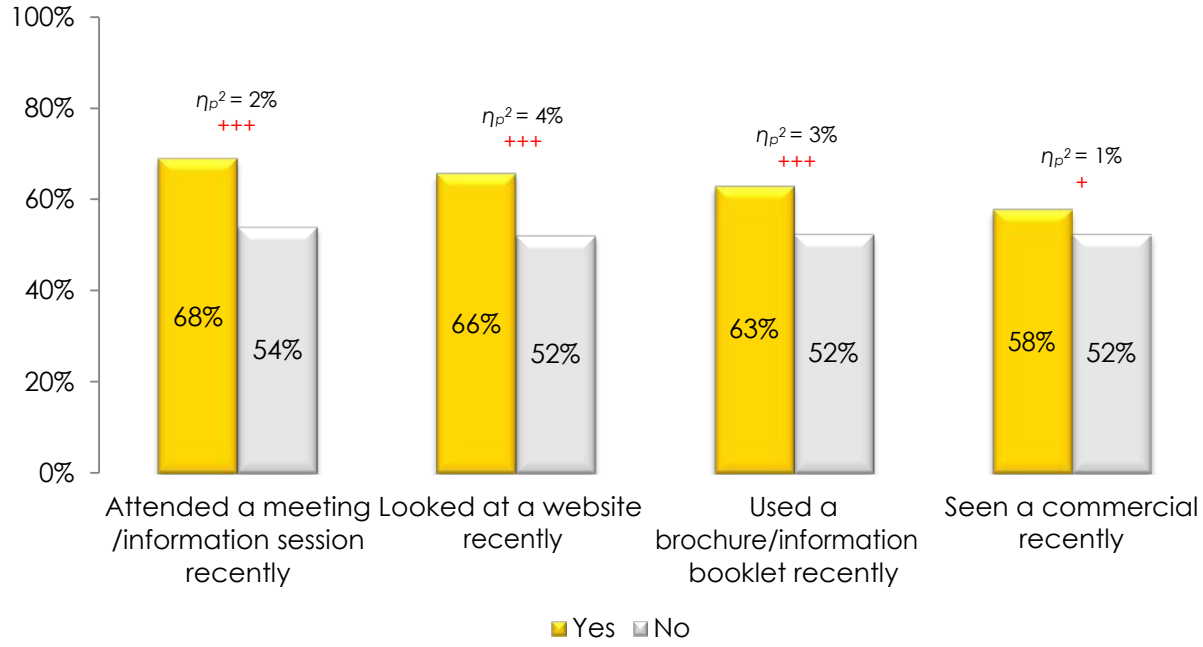
5.2.1 Mean percentage of tasks completed towards preparedness for safely defending the property in the event of a bushfire.



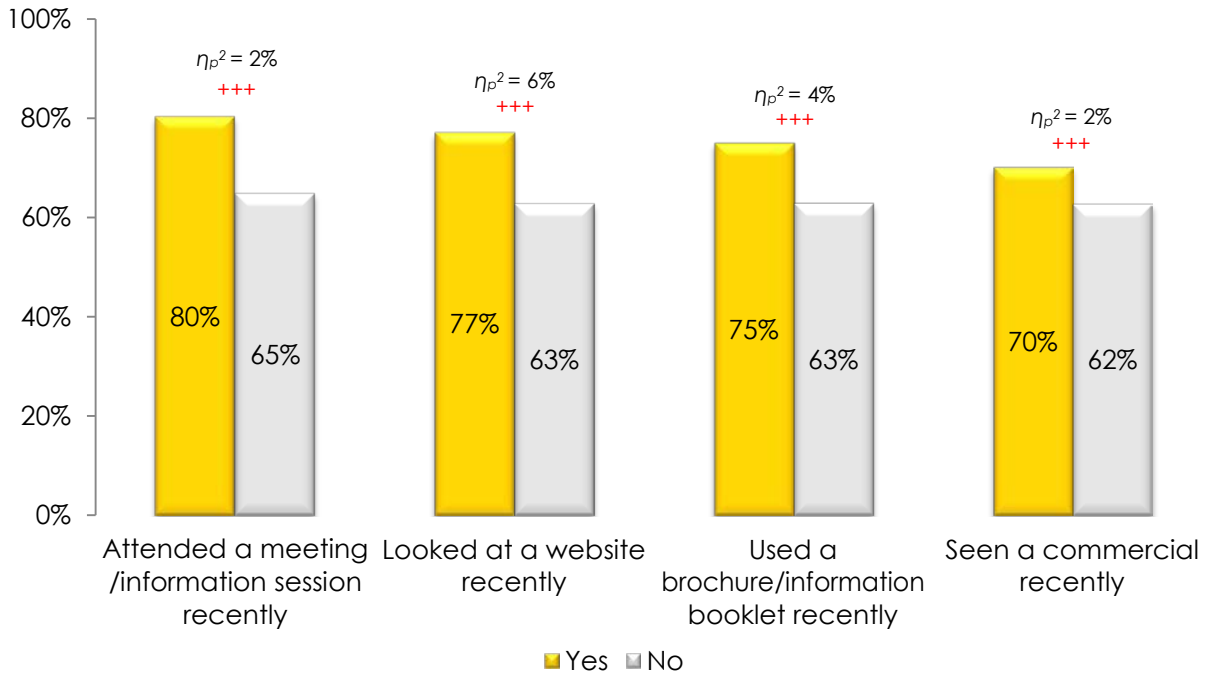
5.2.2 Mean percentage of tasks completed towards preparedness for safely evacuating the property in the event of a bushfire.



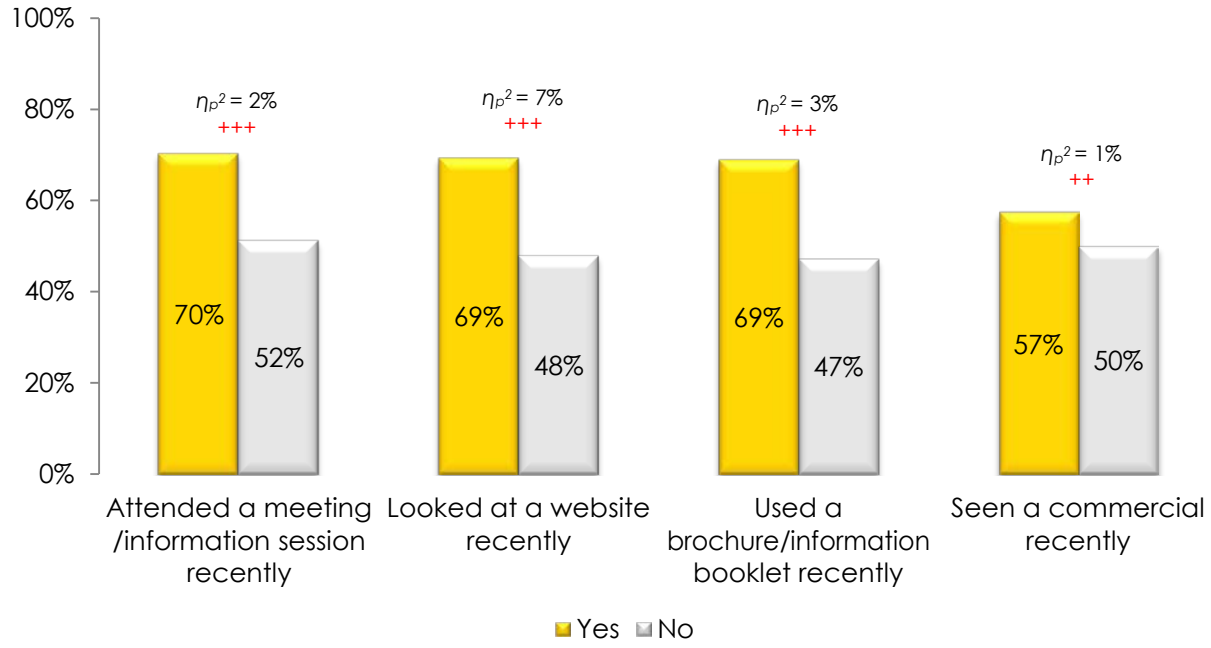
5.2.3 Mean percentage of tasks completed towards improving the fire resistance of the property in the event of a bushfire.



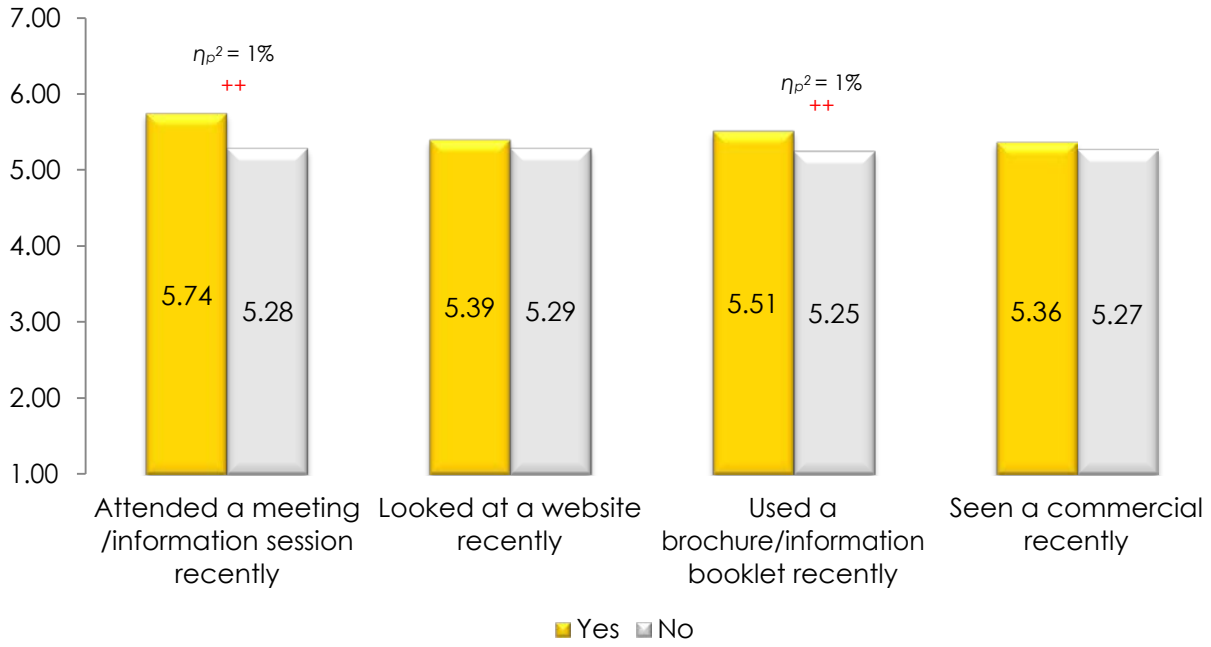
5.2.4 Mean percentage of tasks completed towards preparing an adequate emergency kit.



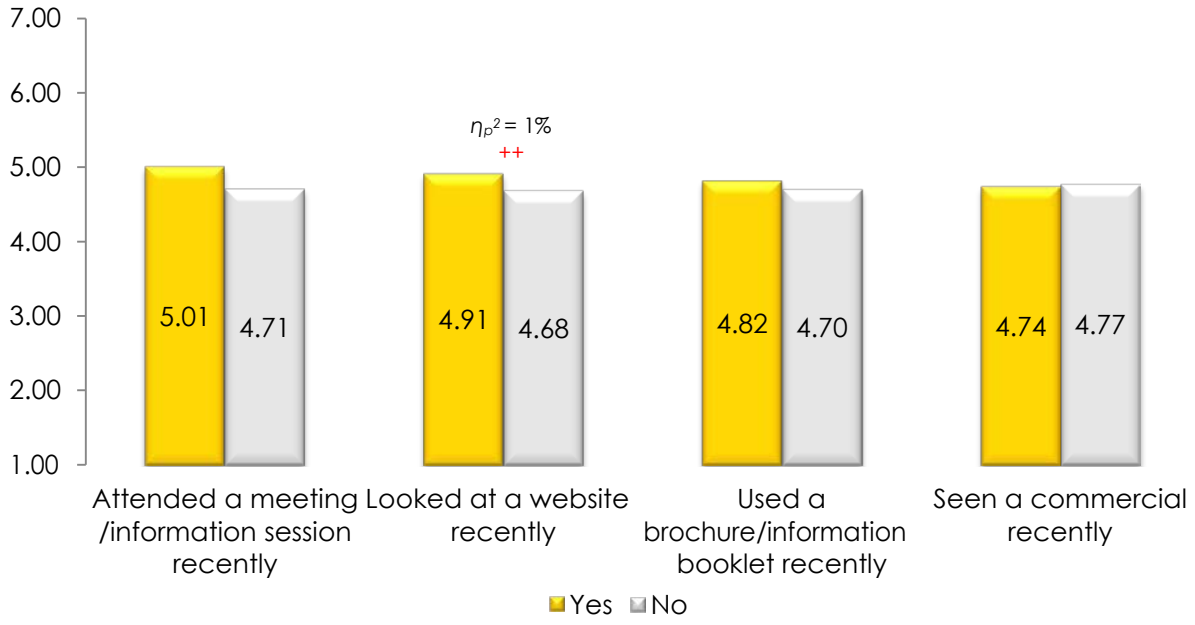
5.2.5 Mean percentage of tasks completed towards planning response to a bushfire.



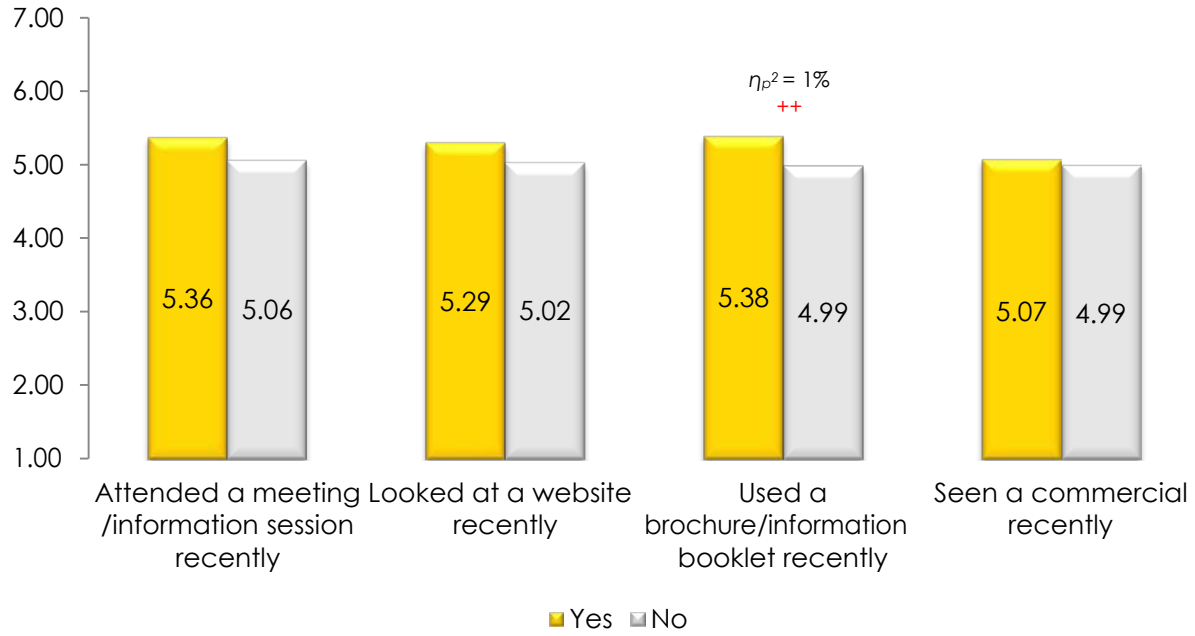
5.2.6 Mean level of perceived physical, cognitive, and emotional ability to respond to a bushfire.



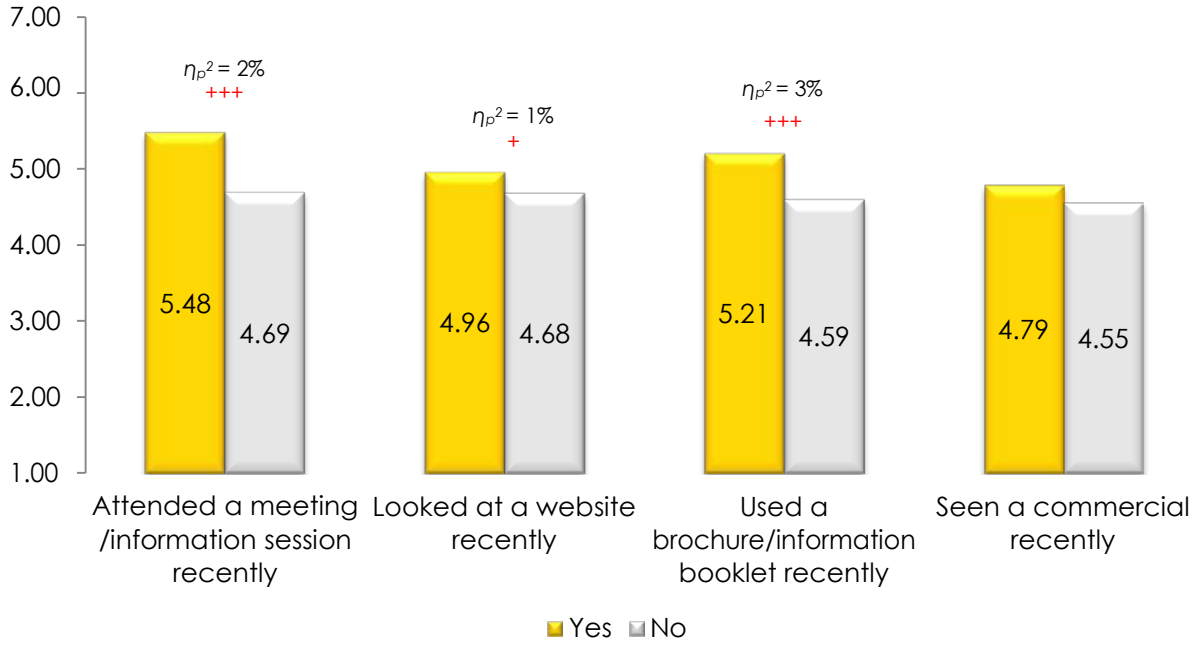
5.2.7 Mean level of perceived physical, cognitive, and emotional ability to recover from a bushfire.



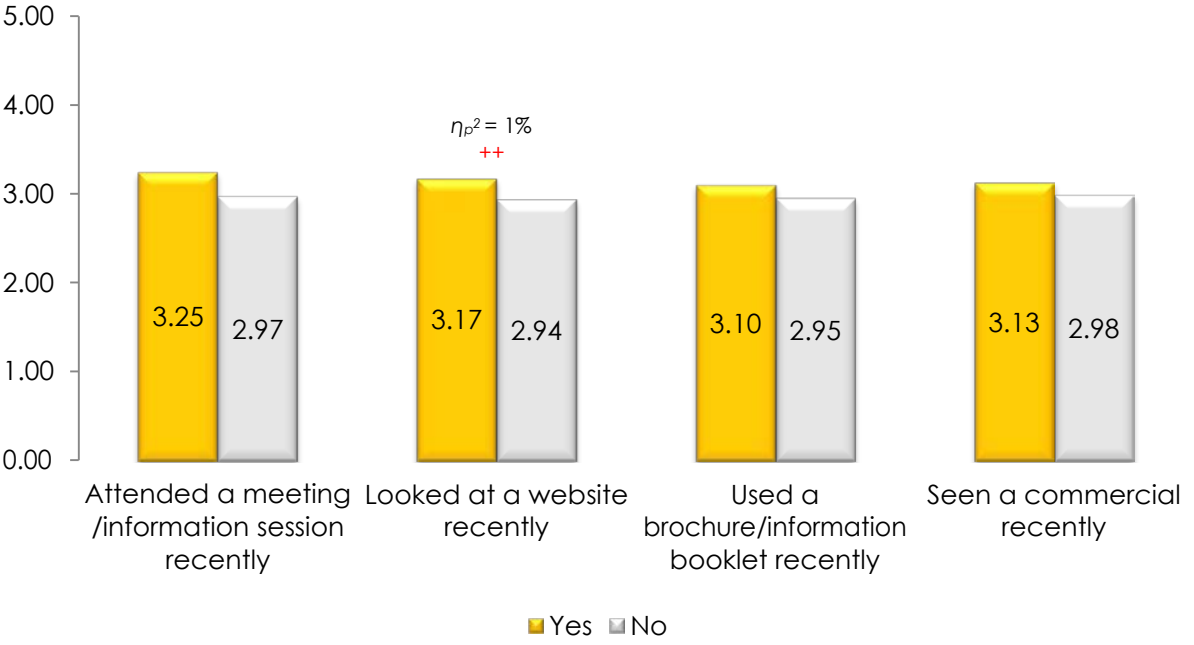
5.2.8 Mean level of perceived availability of instrumental, informational and emotional social support in responding to bushfire.



5.2.9 Mean level of perceived availability of instrumental, informational and emotional social support in recovering from a bushfire.

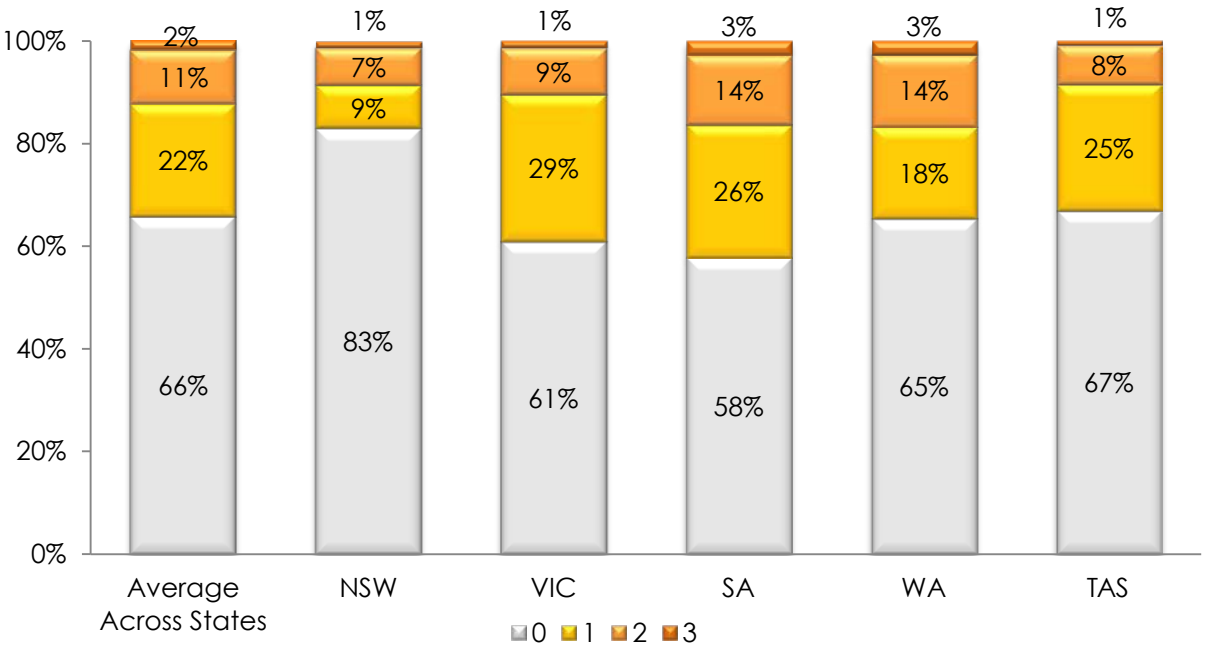


5.2.10 Mean level of knowledge on how bushfires behave and how to act safely in the event of a bushfire. *(Scale: 0 – 5 = Number of questions answered correctly)*

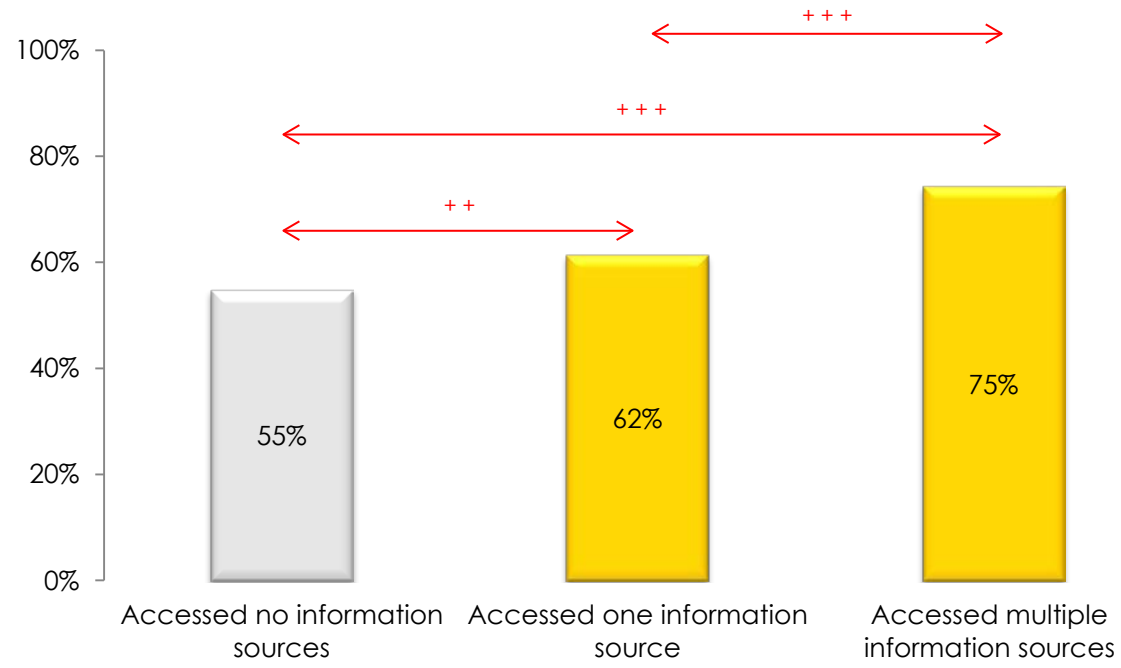


5.3 Is the Use of Multiple Active Information Sources Related to Higher Levels of Preparedness?

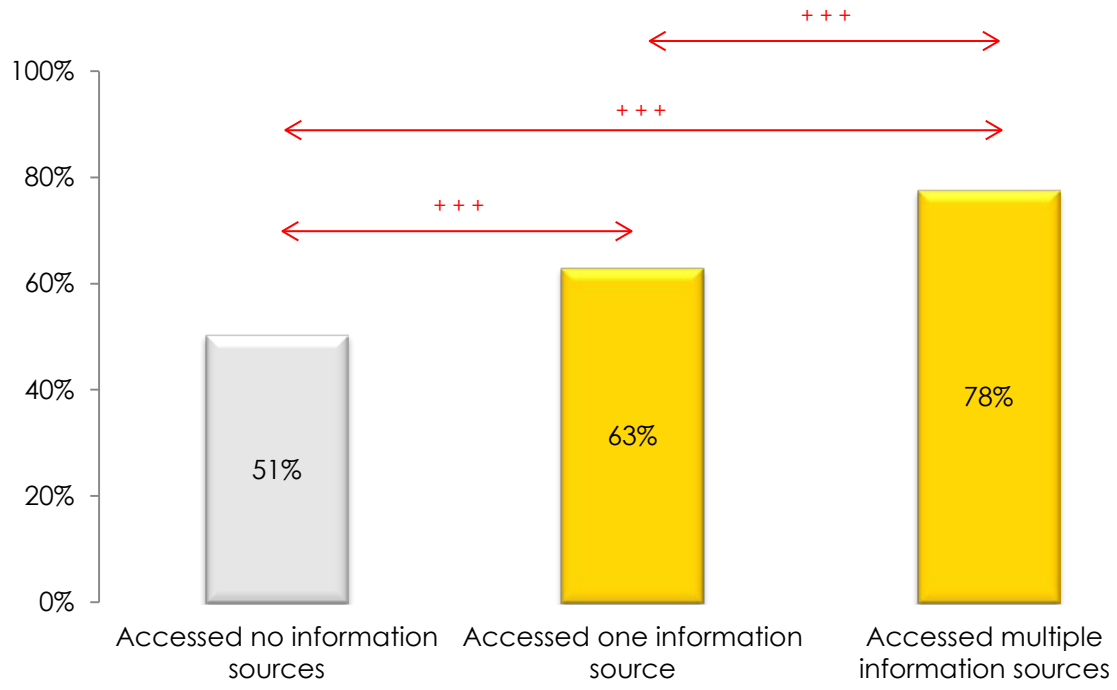
5.3.1 How many people are using multiple information sources?



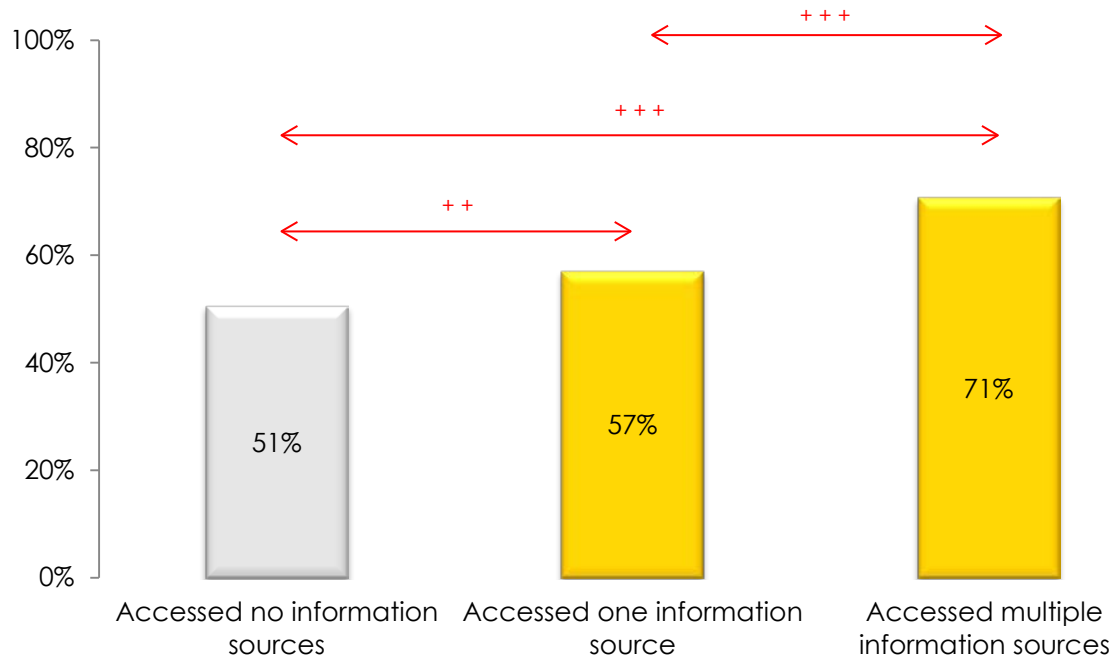
5.3.2 Mean percentage of tasks completed towards preparedness for safely defending the property in the event of a bushfire.



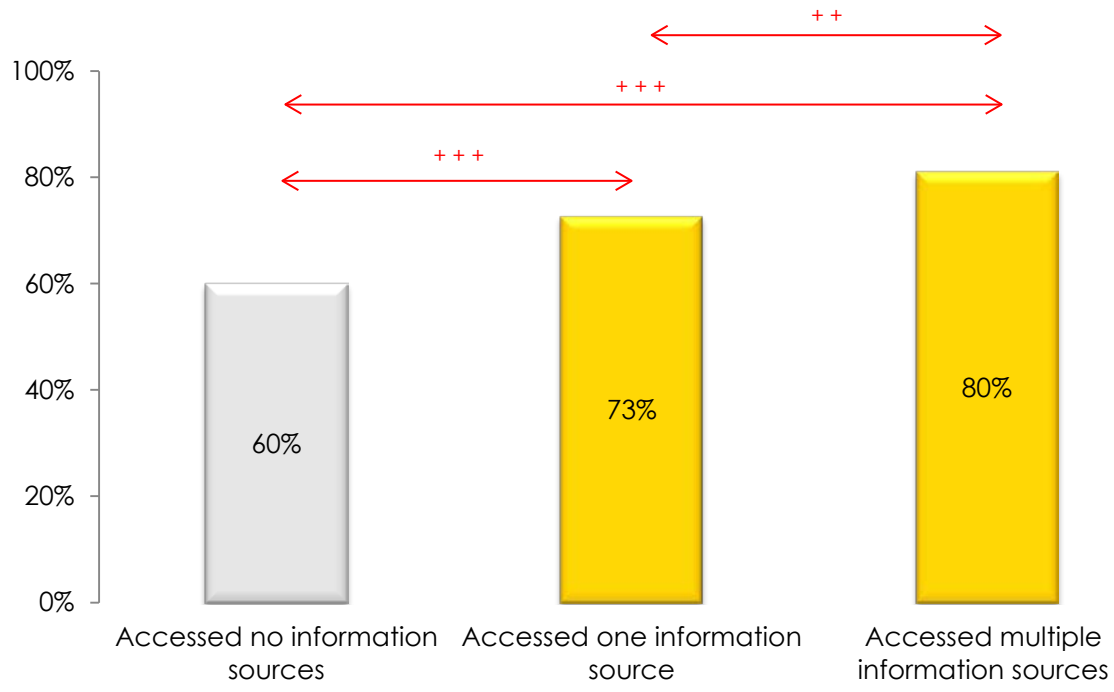
5.3.3 Mean percentage of tasks completed towards preparedness for safely evacuating the property in the event of a bushfire.



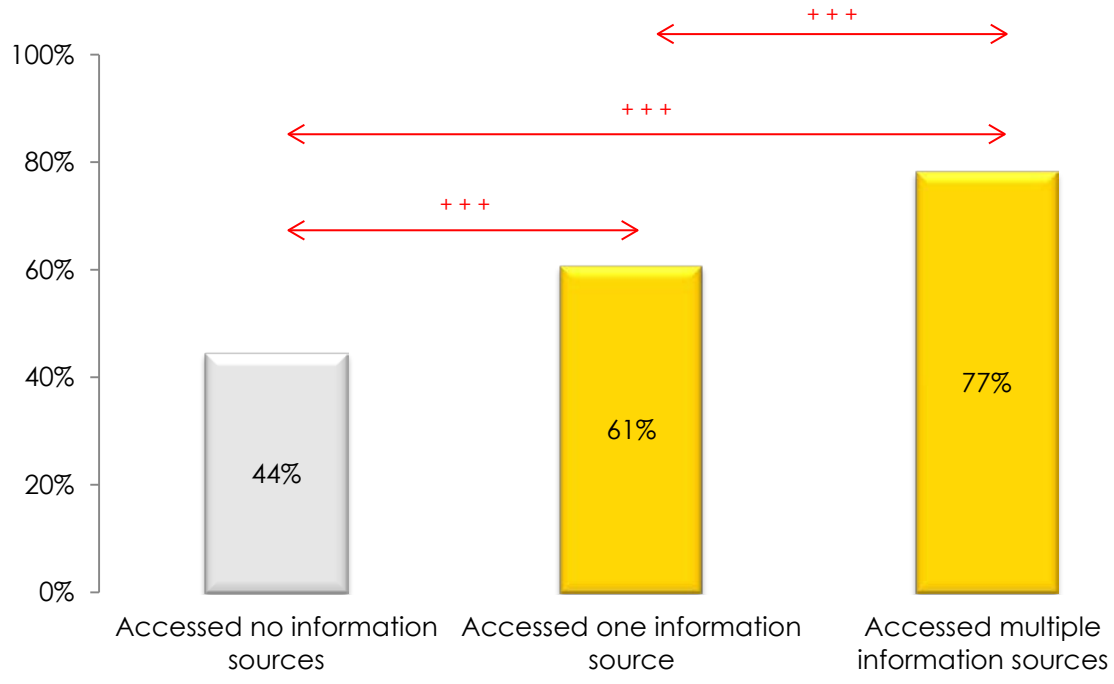
5.3.4 Mean percentage of tasks completed towards improving the fire resistance of the property in the event of a bushfire.



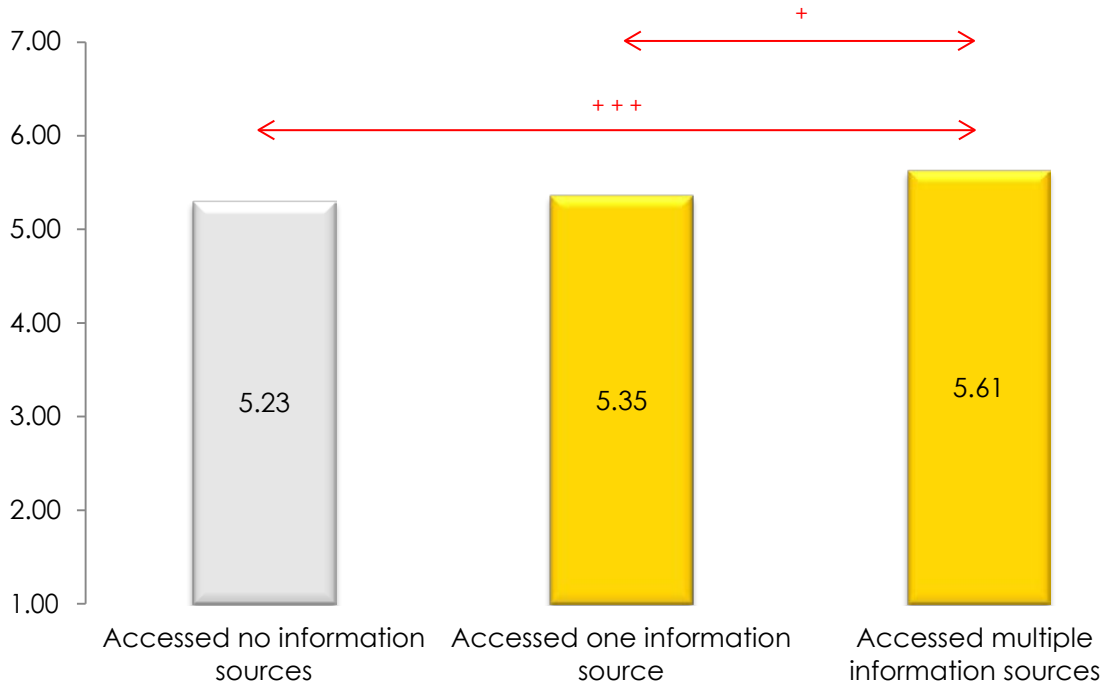
5.3.5 Mean percentage of tasks completed towards preparing an adequate emergency kit.



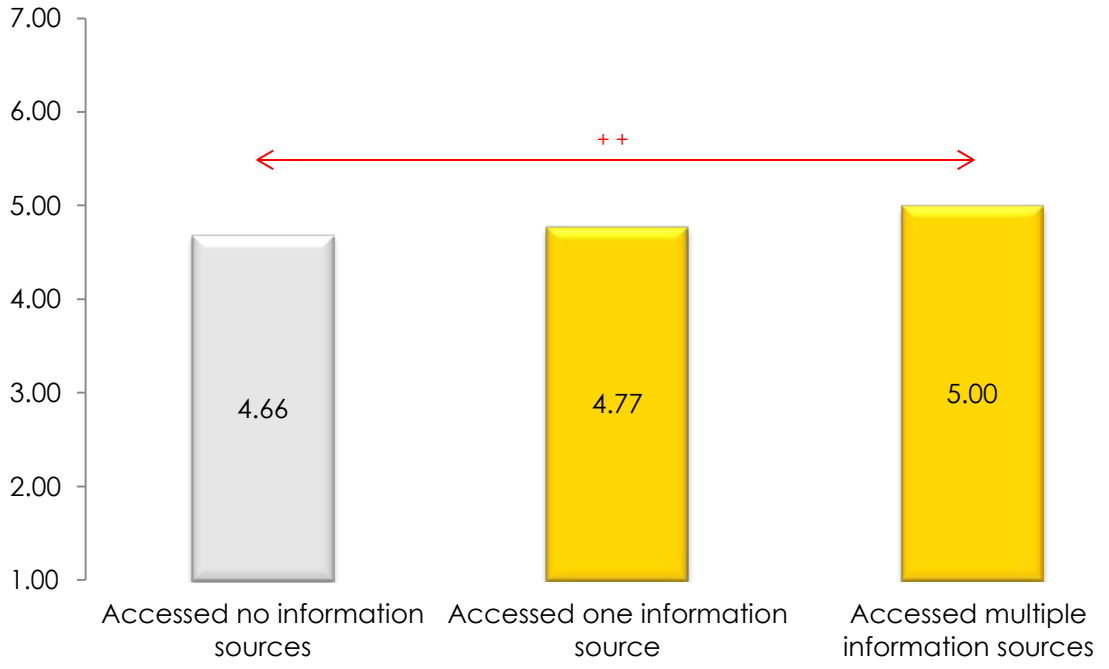
5.3.6 Mean percentage of tasks completed towards planning response to a bushfire.



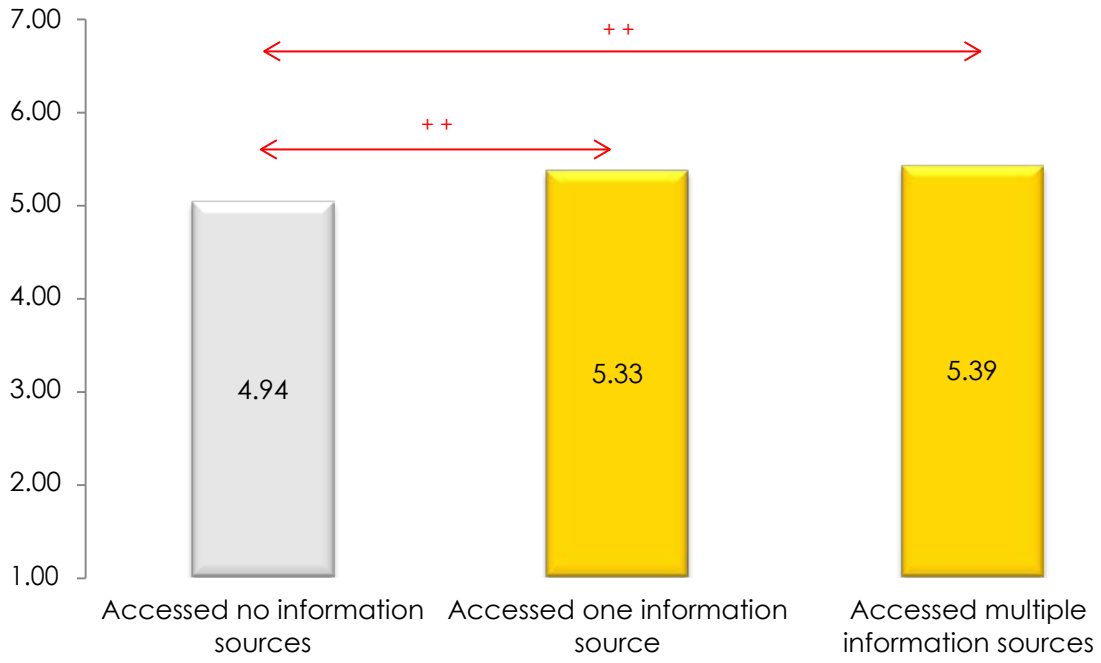
5.3.7 Mean level of perceived physical, cognitive, and emotional ability to respond to a bushfire.



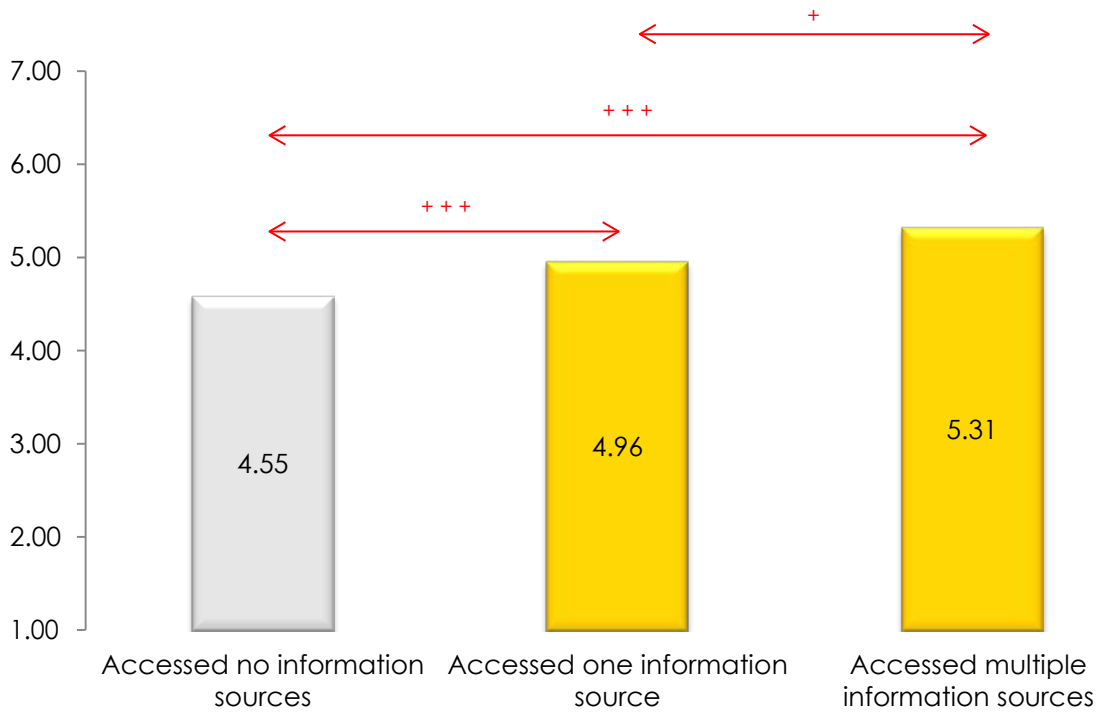
5.3.8 Mean level of perceived physical, cognitive, and emotional ability to recover from a bushfire.



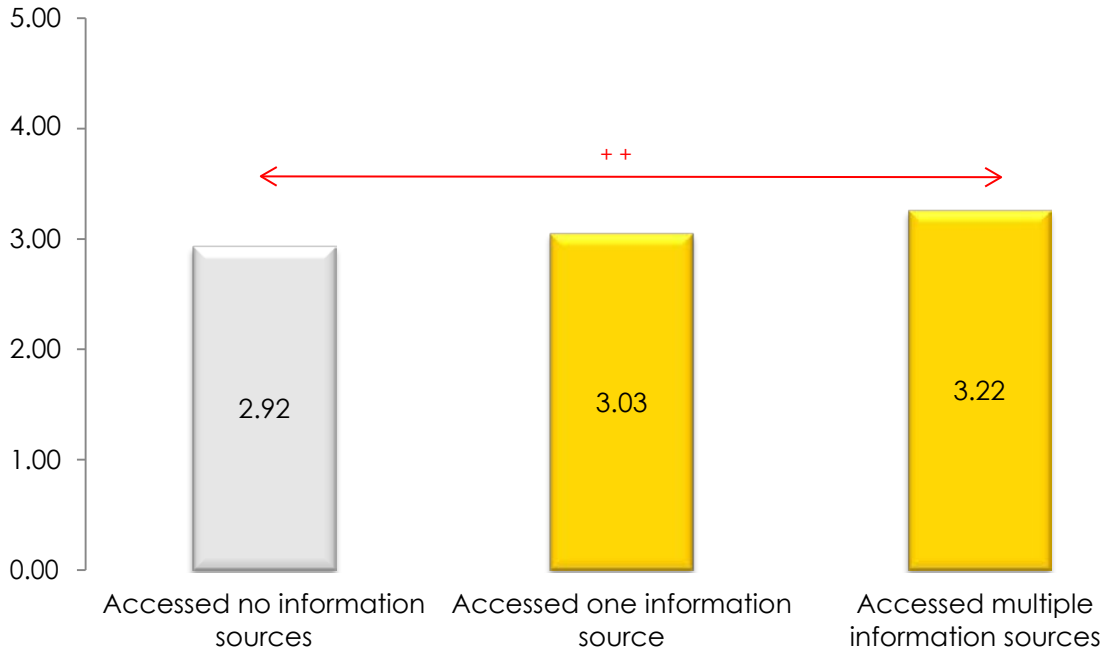
5.3.9 Mean level of perceived availability of instrumental, informational and emotional social support in responding to bushfire.



5.3.10 Mean level of perceived availability of instrumental, informational and emotional social support in recovering from a bushfire.

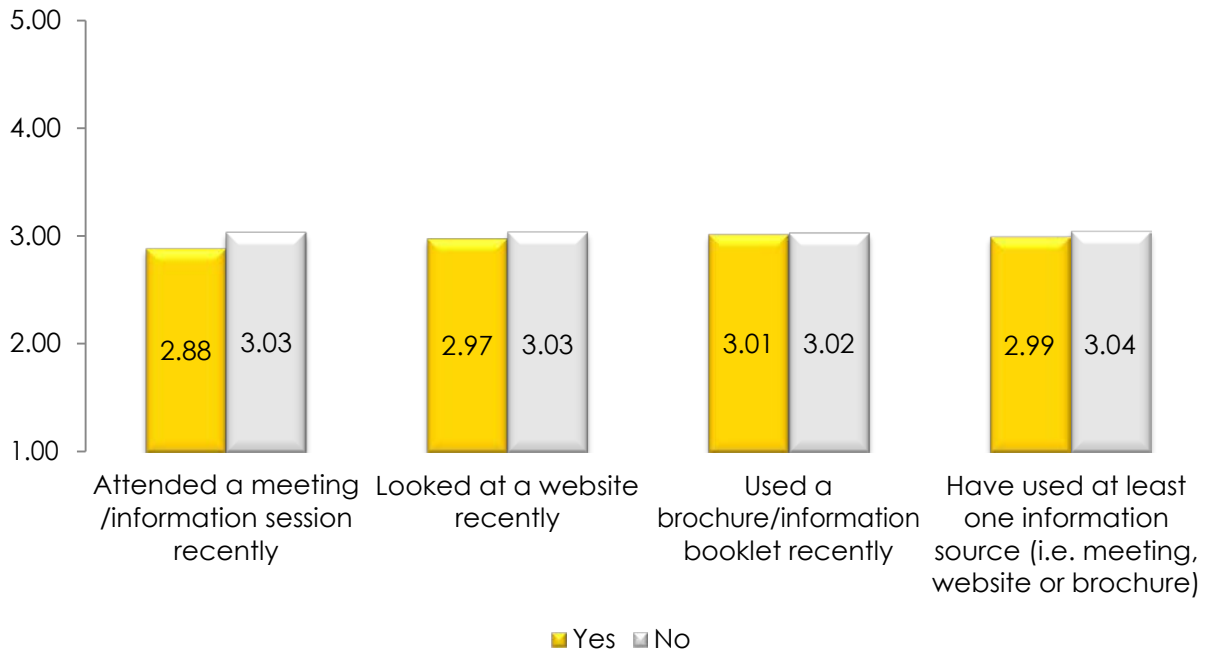


5.3.11 Mean level of knowledge on how bushfires behave, and how to act safely in the event of a bushfire. *(Scale: 0 – 5 = Number of questions answered correctly)*



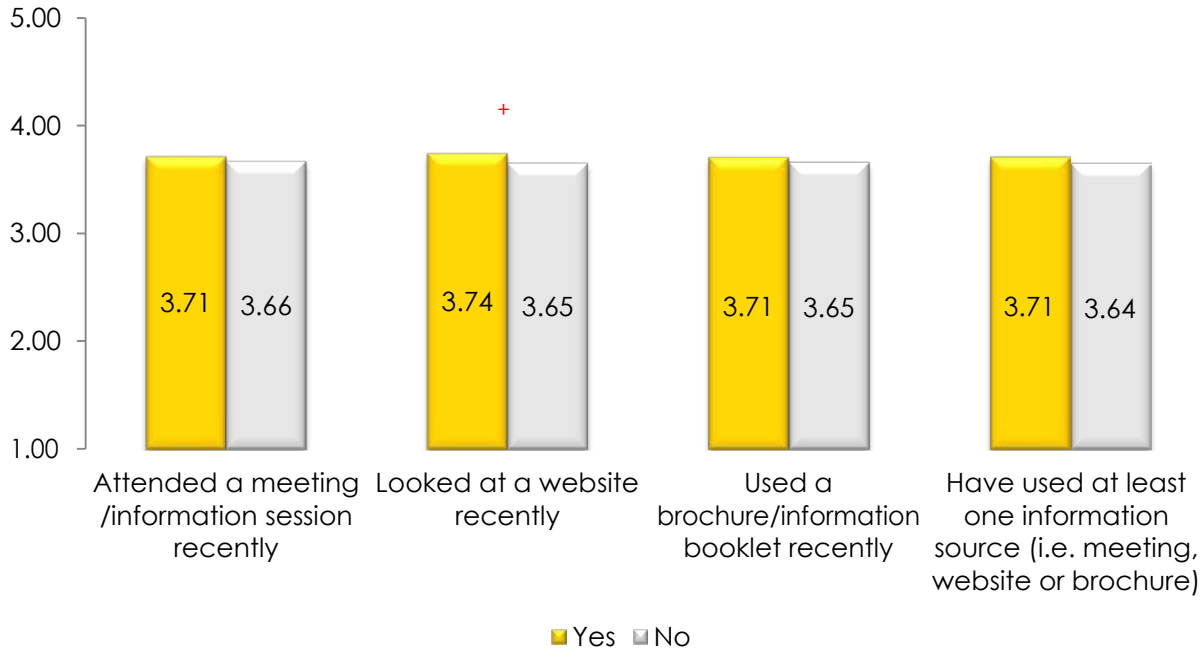
5.4 How Do Those Who Actively Use the Different Information Sources Differ from Those Who Do Not?

5.4.1 Mean level of emotionality.

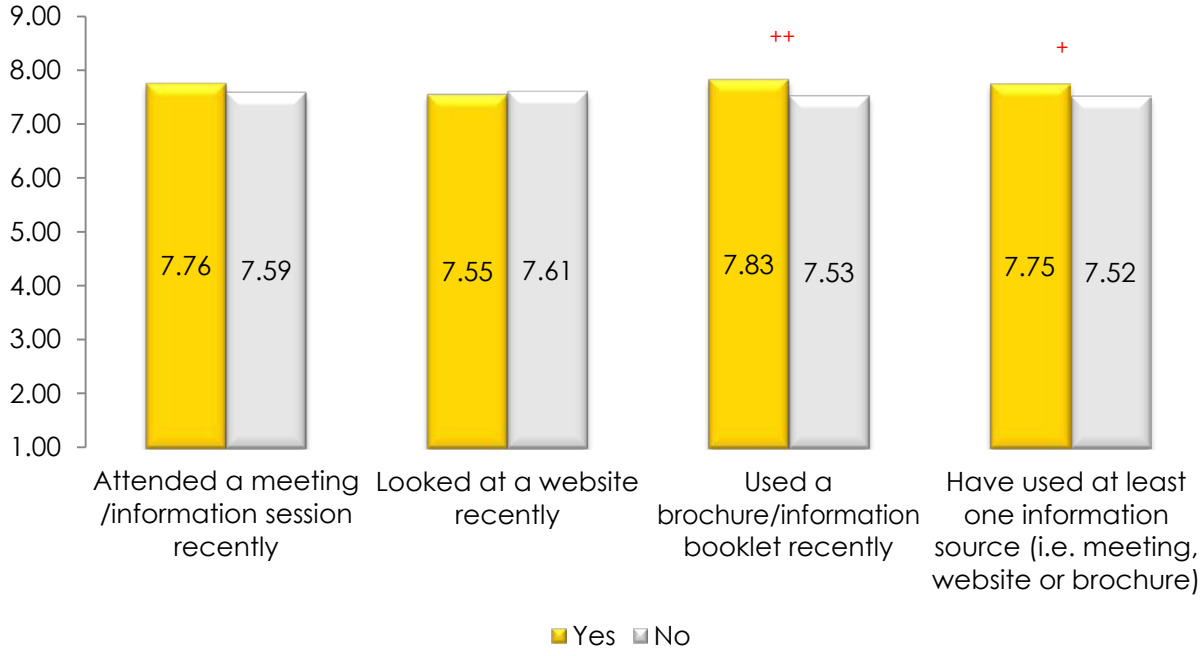


5.4.2 Mean level of extraversion.

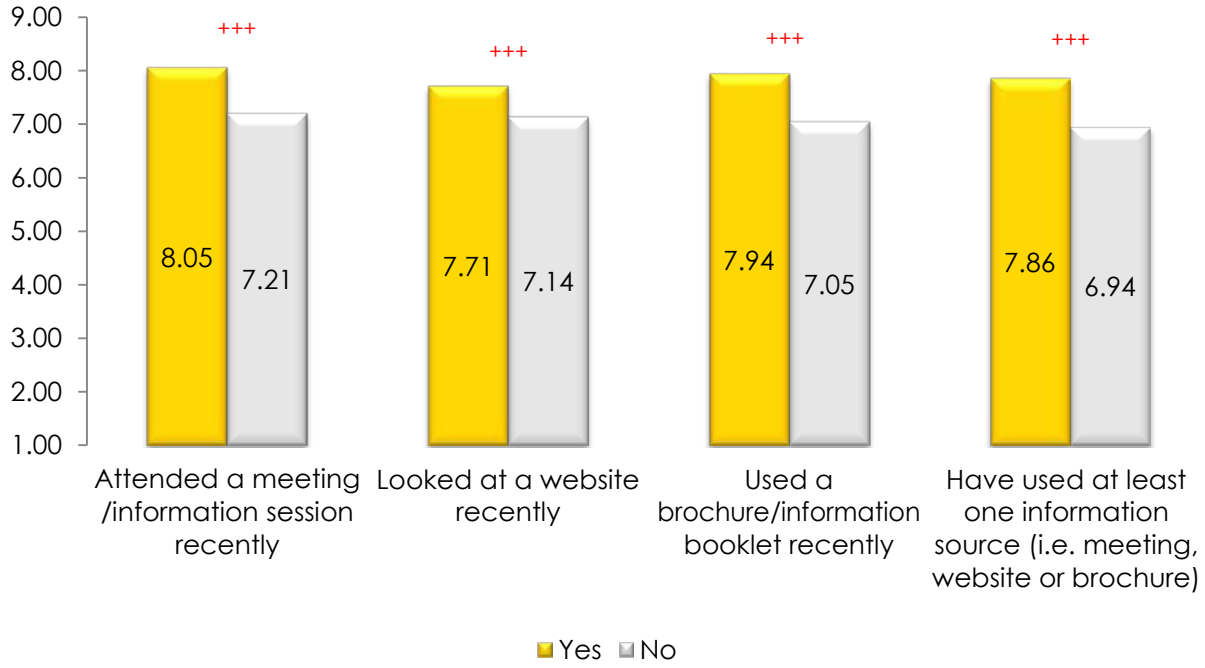
5.4.3 Mean level of conscientiousness.



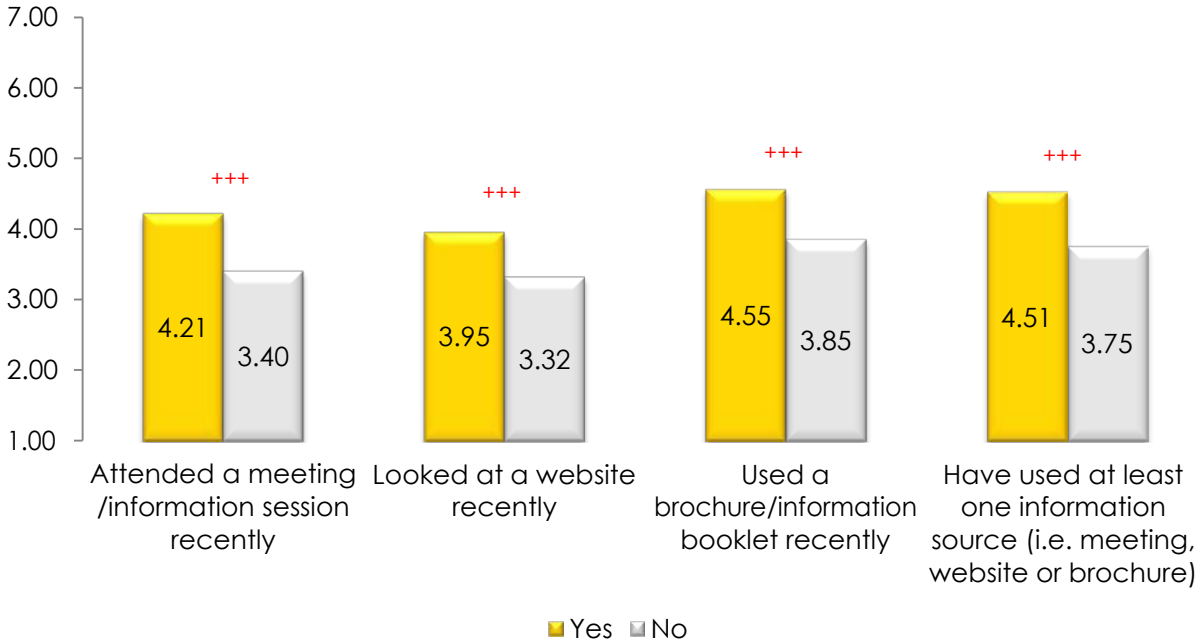
5.4.5 Mean level of perceived effectiveness of preparing.



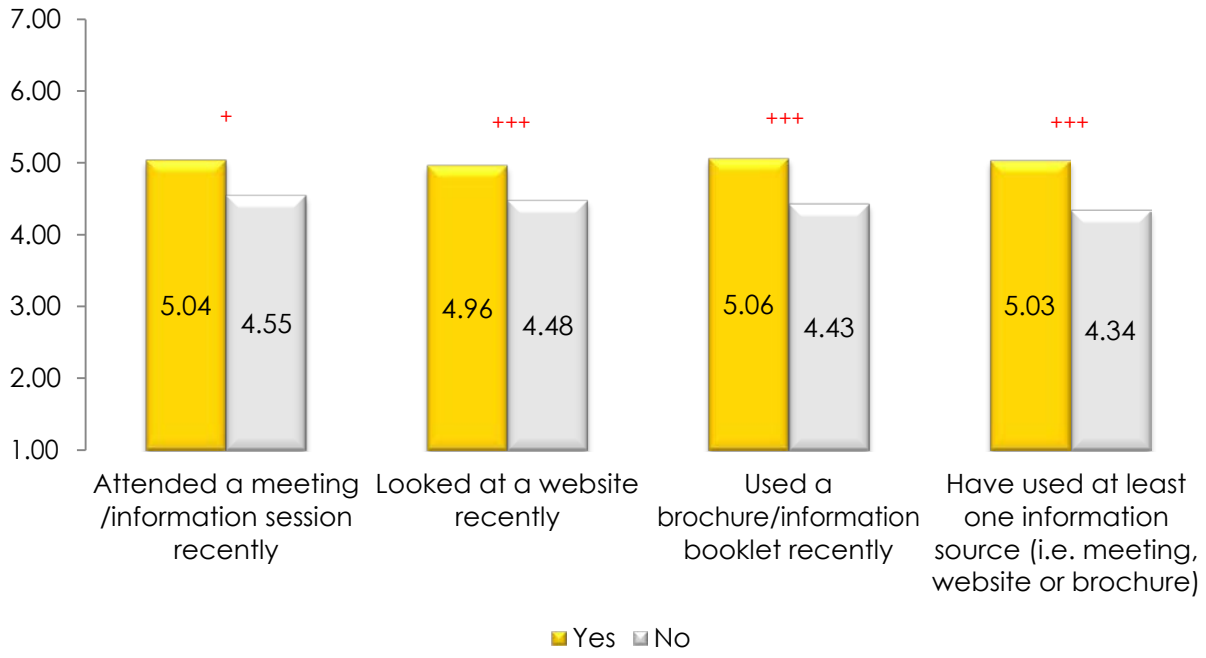
5.4.6 Mean level of motivation to prepare.



5.4.7 Mean level of perceived likelihood of a bushfire threatening property.



5.4.8 Mean level of perceived severity of the consequences if a bushfire threatened property.



APPENDIX 1 **DEMOGRAPHICS**

		Total (N = 514)	**NSW** (N = 82)	**VIC** (N = 77)	**SA** (N = 147)	**WA** (N = 78)	**TAS** (N = 130)
1. *What gender do you identify with?*							
	Female	57%	49%	66%	59%	69%	49%
	Male	42%	50%	34%	42%	31%	51%
	Other	0%	1%	0%	0%	0%	0%
2. *Please specify your age in years?*							
	18-29	7%	7%	8%	8%	8%	6%
	30-39	14%	11%	17%	13%	7%	17%
	40-49	14%	7%	22%	15%	6%	15%
	50-59	26%	27%	27%	24%	27%	25%
	60-69	28%	29%	20%	29%	39%	24%
	70-79	12%	17%	7%	11%	12%	12%
	80+	1%	1%	0%	1%	3%	0%
3. *Do you have any animals/pets (incl. livestock) in your home or on your property?*							
	Yes	63%	60%	46%	67%	64%	68%
	No	38%	40%	55%	33%	36%	32%

4. Please select how many children (under the age of 18) are living in your household?	**Total** (N = 514)	**NSW** (N = 82)	**VIC** (N = 77)	**SA** (N = 147)	**WA** (N = 78)	**TAS** (N = 130)
0	78%	83%	65%	79%	90%	74%
1	10%	10%	20%	8%	3%	12%
2	8%	4%	8%	12%	4%	9%
3	3%	1%	8%	1%	3%	4%
4	1%	2%	0%	0%	1%	2%
5. How long have you been living in this town or suburb?						
< 6 months	2%	1%	3%	1%	3%	4%
6 months – 1 year	2%	2%	1%	4%	1%	1%
1 year	4%	1%	3%	5%	4%	4%
2 years	8%	6%	7%	11%	4%	8%
3 years	5%	2%	8%	5%	4%	5%
4 years	4%	5%	7%	3%	4%	4%
5 or > years	75%	82%	73%	69%	81%	75%
6. What are your current living arrangements in this property?						
Own/in process of buying house or property	74%	83%	75%	69%	74%	75%
Renting; Single person or family household	20%	16%	20%	23%	17%	21%
Renting; Share house	2%	0%	1%	5%	3%	2%
Other	4%	1%	4%	3%	6%	3%

7. What type of property is it?	**Total** (N = 514)	**NSW** (N = 82)	**VIC** (N = 77)	**SA** (N = 147)	**WA** (N = 78)	**TAS** (N = 130)
Apartment or unit on a residential block	13%	11%	14%	16%	6%	15%
House on a hobby farm or small acreage	14%	7%	17%	11%	19%	16%
House on a residential block	66%	76%	64%	67%	65%	62%
House on a large farm or other large property	3%	2%	3%	3%	4%	3%
Other	4%	4%	3%	4%	5%	5%
8. Between Wave 1 and Wave 2 were there any fires that could've threatened your household, given the right conditions?						
Yes	14%	10%	9%	23%	14%	9%
No	86%	90%	91%	77%	86%	92%
9. If you answered yes to the previous question, did the fire threaten your property?	(N = 71)	(N = 8)	(N = 7)	(N = 34)	(N = 11)	(N = 11)
Yes	11%	0%	0%	18%	18%	0%
No	89%	100%	100%	82%	82%	100%
10. If you answered yes to the previous question, did you experience damage/loss?	(N = 8)	(N = 0)	(N = 0)	(N = 6)	(N = 2)	(N = 0)
No	63%	n/a	n/a	50%	100%	n/a
Yes, house/property was damaged but not destroyed	13%	n/a	n/a	17%	0%	n/a
Yes, house/property was destroyed	25%	n/a	n/a	33%	0%	n/a

APPENDIX 2 **WHO ARE DELIVERING THE INFORMATION SOURCES**

	NSW	VIC	SA	WA	TAS
1. For those respondents who reported being aware of information sessions in the lead up to and during the current fire season: *Who were the main organisers of the information sessions?*					
Note: Percentages do not sum to 100 as respondents could select multiple organisers.	(N = 5)	(N = 11)	(N = 26)	(N = 10)	(N = 15)
Fire Services	40%	73%	65%	80%	87%
The State Emergency Service	40%	0%	23%	10%	20%
The local council	40%	18%	31%	30%	20%
A community based organization, e.g. Rotary Club	0%	9%	12%	10%	13%
Unknown	0%	18%	8%	10%	7%
Other	0%	0%	12%	0%	0%
2. For those respondents who reported attending any information sessions in the lead up to and during the current fire season: *Who were the main organisers of the information session you attended?*					
Note: Percentages do not sum to 100 as respondents could select multiple organisers.	(N = 3)	(N = 1)	(N = 11)	(N = 7)	(N = 6)
Fire Services	20%	75%	45%	64%	67%
The State Emergency Service	40%	0%	5%	9%	0%
All Other (local council, community based organisations, etc.)	40%	25%	53%	27%	33%

	NSW	VIC	SA	WA	TAS
3. For those respondents who reported looking at any websites over the past few months to get information about preparing and planning for bushfires: *Which website was the most helpful?*	(N =8)	(N = 21)	(N = 43)	(N = 14)	(N = 16)
www.rfs.nsw.gov.au	63%				
www.cfa.vic.gov.au		81%			
www.cfs.sa.gov.au			72%		
www.mfs.sa.gov.au			2%		
www.dfes.wa.gov.au				64%	
www.fire.tas.gov.au					88%
The State Emergency Service Website	25%			7%	
Google	13%	5%	2%	7%	
Facebook			5%		
Government / Local Council Website		10%	9%	14%	
News Content			5%		
Weather Content				7%	
Other		5%	2%		6%
Not Sure			2%		6%
4. For those respondents who reported using a brochure or information booklet to help prepare and plan for the fire season: *What was the name of the brochure/booklet used?*	(N = 11)	(N = 17)	(N = 36)	(N = 21)	(N = 33)

RFS brochure/booklet	20%				
CFA brochure/booklet		29%			3%
CFS brochure/booklet			25%		
DFES brochure/booklet				15%	
TFS brochure/booklet					27%
Local council / shire publication	10%		6%	40%	12%
Bushfire Survival Plan	40%		8%	5%	1%
Bushfire Preparedness		6%	3%	5%	9%
Prepare Act Survive				15%	
Your Guide to Bushfire Safety		6%	6%		
Bushfire Ready		18%	14%	5%	6%
Other	10%	12%	19%	5%	15%
Can't recall	20%	29%	19%	10%	15%

5. For those respondents who reported seeing a bushfire commercial on television since the start of September: *What was the main message you took away from the commercial?*

	(N = 32)	(N = 47)	(N = 78)	(N = 45)	(N = 66)
Be prepared	28%	13%	40%	47%	46%
Have / make a plan	50%	11%	14%	7%	15%
Leave / evacuate early	3%	60%	12%	4%	17%
Prepare your property / clear your property of fire hazards	9%		15%	24%	6%
Be alert / vigilant / careful		4%	6%	7%	6%
Bushfires move quickly			1%		5%
Other	6%	11%	9%	9%	3%
Can't recall message	3%	2%	3%	2%	3%

APPENDIX 3 **MEASURES OF PREPAREDNESS**

A 3.1 Physical Preparedness Items‡‡‡

	Total (N = 514)	**NSW** (N = 82)	**VIC** (N = 77)	**SA** (N = 147)	**WA** (N = 78)	**TAS** (N = 130)
1. *Specific trigger(s) for leaving/relocating (e.g., smell smoke, hear warning on radio) have been identified.*						
Is currently true	60%	52%	61%	63%	56%	62%
Is currently untrue	27%	34%	23%	25%	26%	27%
n/a	13%	13%	16%	12%	18%	12%
2. *Members of your household have planned exactly how to leave/relocate themselves under different circumstances, including when different householders are at different locations (e.g., one is at home, one is at work), or when certain householders may not have access to a vehicle (e.g., due to another householder using it and not being home).*						
Is currently true	**44%**	43%	36%	48%	39%	49%
Is currently untrue	**35%**	43%	39%	36%	31%	29%

‡‡‡ Please note: Preparedness for safely defending is made up of items 3, 4, 6, 8, 9, 10, 12, 14, 15, 16, 17, 18, 20, 21, 22, 24, 26, 27, 28, 29, 32, 33, 34, 35, 36, 37, and 38. Preparedness for safely evacuating is made up of items 1, 2, 3, 4, 5, and 6. Preparedness for increasing the fire resistance of the property is made up of items 6, 7, 8, 9, 10, 11, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 25, 27, 30, 31, 37 and 38.

n/a	21%	15%	25%	16%	31%	22%
3. *All household members are comfortable with the household's emergency plan.*	**Total** (N = 514)	**NSW** (N = 82)	**VIC** (N = 77)	**SA** (N = 147)	**WA** (N = 78)	**TAS** (N = 130)
Is currently true	63%	54%	58%	65%	65%	65%
Is currently untrue	18%	23%	21%	18%	14%	16%
n/a	19%	23%	21%	16%	21%	19%
4. *Members of your household have taken into account atypical or unexpected situations (e.g., family members not all being at home, or in the same location, or other friends/family visiting who are not physically fit enough to defend), and have agreed on who will do what in such situations.*						
Is currently true	46%	46%	40%	49%	45%	45%
Is currently untrue	34%	37%	39%	33%	27%	33%
n/a	21%	17%	21%	18%	28%	22%
5. *Members of your household have discussed or considered how road closures and fire directions might impact on evacuation/relocation plans, and have identified alternative evacuation routes.*						
Is currently true	46%	42%	38%	48%	46%	51%
Is currently untrue	36%	45%	39%	38%	27%	32%
n/a	18%	13%	23%	14%	27%	18%

	Total (N = 514)	**NSW** (N = 82)	**VIC** (N = 77)	**SA** (N = 147)	**WA** (N = 78)	**TAS** (N = 130)
6. Important things to do and remember in case of a fire have been listed (e.g., written or typed on computer, phone, etc.).						
Is currently true	29%	31%	29%	35%	26%	24%
Is currently untrue	60%	61%	62%	56%	59%	63%
n/a	11%	9%	9%	9%	15%	13%
7. Lower tree branches (up to 2m/2 yards off the ground) in the area within 20m (20 yards) of the house have all been pruned.						
Is currently true	57%	52%	44%	54%	69%	63%
Is currently untrue	27%	35%	36%	27%	15%	25%
n/a	16%	12%	20%	19%	15%	12%
8. *There is no flammable mulch in the area within 20m (20 yards) of the house.*						
Is currently true	58%	61%	48%	63%	67%	52%
Is currently untrue	33%	29%	40%	29%	28%	37%
n/a	9%	10%	12%	8%	5%	12%
9. *Leaf litter and twigs under trees in the area that falls 20m (20 yards) or further from your house have been raked up.*						
Is currently true	60%	62%	49%	61%	67%	59%
Is currently untrue	28%	22%	36%	28%	23%	30%
n/a	13%	16%	14%	12%	10%	12%

	Total (N = 514)	**NSW** (N = 82)	**VIC** (N = 77)	**SA** (N = 147)	**WA** (N = 78)	**TAS** (N = 130)
10. *There is a minimum of a 2m (2 yards) gap between the house and tree branches.*						
Is currently true	63%	54%	51%	67%	72%	69%
Is currently untrue	26%	35%	40%	21%	17%	22%
n/a	11%	11%	9%	12%	12%	9%
11. *The area around outbuildings and sheds has been chemically treated to minimise the regrowth of vegetation.*						
Is currently true	38%	31%	29%	45%	50%	34%
Is currently untrue	38%	43%	48%	31%	30%	42%
n/a	24%	27%	23%	25%	21%	24%
12. *Vegetation has been cleared along the boundary of the property to create a firebreak.*						
Is currently true	46%	42%	35%	48%	59%	45%
Is currently untrue	29%	34%	39%	29%	12%	32%
n/a	25%	24%	26%	24%	30%	22%

	Total (N = 514)	**NSW** (N = 82)	**VIC** (N = 77)	**SA** (N = 147)	**WA** (N = 78)	**TAS** (N = 130)
13. *A landscaped garden, vegetable garden, cultivated soil or graveled areas have been established on the fire-prone side of the house.*						
Is currently true	51%	42%	31%	61%	55%	53%
Is currently untrue	29%	37%	46%	24%	22%	26%
n/a	20%	22%	23%	15%	23%	21%
14. *Non-flammable (e.g., metal) gutter protection is installed.*						
Is currently true	49%	51%	35%	50%	62%	46%
Is currently untrue	38%	42%	53%	33%	26%	42%
n/a	13%	7%	12%	17%	13%	12%
15. *Roof junctions, gaps around roof lights, ventilators and evaporative cooler are sealed with non-combustible materials.*						
Is currently true	43%	40%	40%	43%	45%	45%
Is currently untrue	39%	42%	42%	36%	39%	38%
n/a	19%	18%	18%	21%	17%	18%
16. *Gaps around window frames are sealed.*						
Is currently true	63%	65%	57%	61%	64%	68%
Is currently untrue	27%	24%	31%	28%	31%	23%
n/a	10%	11%	12%	11%	5%	9%

	Total (N = 514)	**NSW** (N = 82)	**VIC** (N = 77)	**SA** (N = 147)	**WA** (N = 78)	**TAS** (N = 130)
17. *Gaps around external doors are sealed using non-combustible weather strips and draught stoppers.*						
Is currently true	48%	43%	39%	51%	49%	54%
Is currently untrue	42%	50%	51%	36%	44%	37%
n/a	10%	7%	10%	13%	8%	9%
18. *Eaves are enclosed and gaps between fasciae or rafters are all sealed.*						
Is currently true	56%	50%	52%	57%	55%	60%
Is currently untrue	33%	39%	38%	28%	37%	28%
n/a	12%	11%	10%	15%	8%	12%
19. *External house timbers have been painted in the last five years.*						
Is currently true	39%	34%	30%	44%	45%	39%
Is currently untrue	38%	40%	46%	39%	30%	36%
n/a	23%	26%	25%	17%	26%	25%
20. *Windows that are not protected by shutters are covered with non-combustible wire mesh screens (mesh squares of 2mm in diameter)*						
Is currently true	30%	31%	22%	41%	31%	22%
Is currently untrue	58%	61%	69%	47%	54%	65%
n/a	12%	9%	9%	12%	15%	12%

	Total (N = 514)	**NSW** (N = 82)	**VIC** (N = 77)	**SA** (N = 147)	**WA** (N = 78)	**TAS** (N = 130)
21. *Non-combustible wire mesh screens (mesh squares of 2mm in diameter) have been installed over all exterior doors.*						
Is currently true	30%	34%	26%	35%	37%	19%
Is currently untrue	59%	59%	62%	53%	51%	69%
n/a	11%	7%	12%	12%	12%	12%
22. *A fire-rated roof is installed on the house (e.g., metal or tile composition).*						
Is currently true	65%	61%	58%	65%	74%	65%
Is currently untrue	24%	31%	31%	20%	18%	24%
n/a	11%	9%	10%	14%	8%	11%
23. *Non-combustible under-roof lining is installed.*						
Is currently true	43%	49%	31%	45%	55%	38%
Is currently untrue	39%	37%	52%	35%	31%	41%
n/a	18%	15%	17%	20%	14%	22%
24. *There are no flammable shrubs under and between trees in the area within 20m (20 yards) of the house.*						
Is currently true	54%	55%	40%	54%	64%	54%
Is currently untrue	37%	38%	51%	35%	27%	38%
n/a	9%	7%	9%	11%	9%	9%

	Total (N = 514)	**NSW** (N = 82)	**VIC** (N = 77)	**SA** (N = 147)	**WA** (N = 78)	**TAS** (N = 130)
25. Pipes that are essential to water delivery are metal; or non-metal pipes are buried to a depth of at least 300mm (1 foot) below the finished ground level.						
Is currently true	68%	71%	61%	64%	80%	69%
Is currently untrue	20%	22%	27%	20%	15%	19%
n/a	12%	7%	12%	16%	5%	13%
26. The doormat is made of non-combustible material (or can be easily removed before the fire arrives).						
Is currently true	63%	65%	62%	61%	72%	58%
Is currently untrue	22%	20%	26%	25%	14%	22%
n/a	15%	16%	12%	14%	14%	20%
27. Your household possesses equipment that can be used to put out spot fires and sparks, such as rakes, shovels, and mops.						
Is currently true	80%	76%	75%	74%	89%	87%
Is currently untrue	13%	15%	17%	19%	6%	7%
n/a	7%	10%	8%	7%	5%	6%
28. A minimum of 10,000 litres (2600 gallons) of water for firefighting purposes only has been obtained and stored, such as in a tank, dam, or pool.						
Is currently true	26%	33%	25%	27%	24%	22%
Is currently untrue	53%	45%	55%	52%	49%	59%
n/a	21%	22%	21%	21%	27%	19%

	Total (N = 514)	**NSW** (N = 82)	**VIC** (N = 77)	**SA** (N = 147)	**WA** (N = 78)	**TAS** (N = 130)
29. *Buckets that allow householders to move water quickly and easily have been attained and are readily available.*						
Is currently true	71%	73%	69%	67%	76%	75%
Is currently untrue	20%	20%	25%	22%	18%	18%
n/a	8%	7%	7%	12%	6%	8%
30. *Full length protective clothing (e.g., wool, cotton) has been obtained for all the householders who are staying to defend the property. This should include gloves, eye protection, smoke mask, work boots, and a broad brimmed hat.*						
Is currently true	28%	26%	30%	29%	28%	29%
Is currently untrue	56%	63%	52%	56%	53%	55%
n/a	16%	11%	18%	16%	19%	16%
31. *A list has been made of what documents and personal effects (e.g., photos, laptop, and cameras) somebody would take with them in case of evacuating/leaving the house.*						
Is currently true	42%	38%	44%	46%	49%	36%
Is currently untrue	51%	57%	49%	50%	46%	54%
n/a	6%	5%	7%	5%	5%	10%

	Total (N = 514)	**NSW** (N = 82)	**VIC** (N = 77)	**SA** (N = 147)	**WA** (N = 78)	**TAS** (N = 130)
32. *Important documents/belongings that are to remain in the house are stored in an appropriate fire-proof place (either off-site or in a fire safe compartment).*						
Is currently true	31%	29%	30%	35%	39%	25%
Is currently untrue	57%	57%	58%	56%	49%	61%
n/a	12%	13%	12%	9%	13%	15%
33. *All householders that intend to stay and defend the house are fully committed to doing so.*						
Is currently true	49%	44%	44%	48%	49%	55%
Is currently untrue	20%	29%	16%	19%	19%	16%
n/a	32%	27%	40%	33%	32%	29%
34. *Householders have taken into consideration the size of the house and the number of adults that will be needed to undertake active defence.*						
Is currently true	46%	43%	43%	48%	42%	50%
Is currently untrue	30%	35%	27%	27%	32%	29%
n/a	24%	22%	30%	25%	26%	21%
35. *Members of your household have prepared themselves emotionally for the possibility that staying and defending the homes may cause emotional trauma, injury, and death.*						
Is currently true	43%	43%	33%	46%	49%	44%
Is currently untrue	32%	37%	34%	31%	22%	33%
n/a	25%	21%	34%	22%	30%	23%

	Total (N = 514)	**NSW** (N = 82)	**VIC** (N = 77)	**SA** (N = 147)	**WA** (N = 78)	**TAS** (N = 130)
36. *Members of your household have decided beforehand under which specific conditions (e.g., the fire danger rating, whether or not people are visiting) they will defend and under which they will leave/relocate.*						
Is currently true	55%	49%	52%	57%	62%	57%
Is currently untrue	28%	38%	26%	29%	22%	28%
n/a	16%	13%	22%	15%	17%	15%
37. *Every person who intends to stay and defend the house (under pre-defined conditions) is clear about and has practiced the fire response plan together with other household members who will be defending.*						
Is currently true	33%	31%	33%	31%	32%	38%
Is currently untrue	39%	48%	36%	42%	36%	34%
n/a	28%	22%	31%	28%	32%	29%
38. *Your household has prepared a contingency plan if the initial plan to defend fails, including an appropriate spot where householders can shelter-in-place.*						
Is currently true	36%	33%	35%	37%	39%	38%
Is currently untrue	50%	59%	46%	52%	50%	45%
n/a	14%	9%	20%	12%	12%	18%

A 3.2 Emergency Kit Items

	Total (N = 514)	**NSW** (N = 82)	**VIC** (N = 77)	**SA** (N = 147)	**WA** (N = 78)	**TAS** (N = 130)
1. *You have a portable battery operated AM/FM radio with spare batteries.*						
Is currently true	51%	45%	55%	50%	59%	49%
Is currently untrue	45%	52%	39%	46%	36%	48%
n/a	4%	2%	7%	4%	5%	4%
2. *You have a torch with spare batteries.*						
Is currently true	85%	85%	88%	83%	86%	85%
Is currently untrue	12%	12%	8%	14%	13%	12%
n/a	3%	2%	4%	3%	1%	3%
3. *You have a first aid kit and manual (with medical supplies necessary for your household).*						
Is currently true	77%	76%	71%	76%	83%	78%
Is currently untrue	20%	21%	26%	20%	15%	19%
N/A	3%	4%	3%	3%	1%	4%

	Total (N = 514)	**NSW** (N = 82)	**VIC** (N = 77)	**SA** (N = 147)	**WA** (N = 78)	**TAS** (N = 130)
4. You have a printed copy of your Home Emergency Plan, including a list of emergency contact numbers.						
Is currently true	21%	15%	25%	24%	22%	19%
Is currently untrue	74%	81%	69%	71%	76%	76%
n/a	5%	5%	7%	5%	3%	5%
5. You have a waterproof bag for valuables.						
Is currently true	40%	44%	39%	37%	35%	44%
Is currently untrue	55%	50%	56%	58%	60%	52%
n/a	5%	6%	5%	5%	5%	5%
6. You have a mobile phone plus charger ready to take with you in case you evacuate.						
Is currently true	86%	78%	86%	88%	94%	84%
Is currently untrue	10%	17%	10%	9%	4%	12%
n/a	4%	5%	4%	3%	3%	5%
7. You have a change of clothes for everyone that is ready to be taken with you in case you evacuate.						
Is currently true	45%	38%	51%	45%	42%	49%
Is currently untrue	48%	57%	42%	50%	49%	45%
n/a	6%	5%	8%	5%	9%	6%

	Total (N = 514)	**NSW** (N = 82)	**VIC** (N = 77)	**SA** (N = 147)	**WA** (N = 78)	**TAS** (N = 130)
8. *Everyone in the household has at least one pair of closed-toed shoes or boots to take with them in case you evacuate.*						
Is currently true	82%	74%	82%	82%	81%	86%
Is currently untrue	14%	22%	14%	16%	10%	9%
n/a	5%	4%	4%	3%	9%	5%
9. *You own a pair of sturdy gloves.*						
Is currently true	70%	57%	71%	73%	67%	75%
Is currently untrue	26%	37%	23%	25%	30%	20%
n/a	4%	6%	5%	2%	4%	5%
10. *You have a folder with important paperwork (e.g. insurance, passport).*						
Is currently true	62%	60%	57%	64%	69%	59%
Is currently untrue	34%	37%	38%	33%	24%	35%
n/a	5%	4%	5%	3%	6%	6%
11. *You have an adequate amount of canned food and bottled water to last four days (totalling 12 litres per person), including the ability to prepare the food in the days following a bushfire.*						
Is currently true	48%	37%	44%	49%	56%	50%
Is currently untrue	45%	57%	49%	46%	33%	42%
N/A	7%	6%	7%	5%	10%	9%

	Total (N = 514)	**NSW** (N = 82)	**VIC** (N = 77)	**SA** (N = 147)	**WA** (N = 78)	**TAS** (N = 130)
12. *You are capable of maintaining basic household needs (i.e. water, food) until normal availability has recovered.*						
Is currently true	70%	63%	58%	74%	80%	73%
Is currently untrue	23%	29%	35%	20%	15%	21%
n/a	6%	7%	7%	6%	5%	6%
13. *You have an emergency source of lighting and warmth/cooling that could be used in the days following a bushfire.*						
Is currently true	47%	46%	39%	47%	55%	45%
Is currently untrue	45%	43%	52%	45%	39%	48%
n/a	8%	11%	9%	8%	6%	7%
14. *You are confident that your home is secure if you were to evacuate it.*						
Is currently true	69%	65%	56%	69%	71%	77%
Is currently untrue	26%	29%	40%	27%	24%	16%
n/a	5%	6%	4%	4%	5%	7%
15. *You have candles and waterproof matches.*						
Is currently true	61%	51%	61%	61%	67%	62%
Is currently untrue	35%	44%	35%	35%	30%	32%
n/a	5%	5%	4%	4%	4%	6%

16. *You have made sure your house and/or contents insurance are adequate for your situation and up to date, and covers bushfires.*	**Total** (N = 514)	**NSW** (N = 82)	**VIC** (N = 77)	**SA** (N = 147)	**WA** (N = 78)	**TAS** (N = 130)
Is currently true	78%	76%	71%	82%	86%	73%
Is currently untrue	15%	18%	20%	12%	9%	16%
n/a	8%	6%	9%	6%	5%	11%

A 3.3 Planning Items

	Total (N = 514)	**NSW** (N = 82)	**VIC** (N = 77)	**SA** (N = 147)	**WA** (N = 78)	**TAS** (N = 130)
1. *Members of your household have planned exactly how to leave/relocate themselves under different circumstances, including when different householders are at different locations (e.g., one is at home, one is at work), or when certain householders may not have access to a vehicle (e.g., due to another householder using it and not being home).*						
Is currently true	44%	43%	36%	48%	39%	49%
Is currently untrue	35%	43%	39%	36%	31%	29%
n/a	21%	15%	25%	16%	31%	22%
2. *Important things to do and remember in case of a fire have been listed (e.g., written or typed on computer, phone, etc.).*						
Is currently true	29%	31%	29%	35%	26%	24%
Is currently untrue	60%	61%	62%	56%	59%	63%
n/a	11%	9%	9%	9%	15%	13%
3. *You have formed a household bushfire emergency plan.*						
Is currently true	50%	38%	52%	53%	50%	55%
Is currently untrue	43%	52%	39%	42%	44%	39%
n/a	7%	10%	9%	5%	6%	7%

	Total (N = 514)	**NSW** (N = 82)	**VIC** (N = 77)	**SA** (N = 147)	**WA** (N = 78)	**TAS** (N = 130)
4. A suitable relocation destination for household members (including pets) has been selected.						
Is currently true	57%	49%	60%	60%	58%	57%
Is currently untrue	35%	43%	30%	35%	36%	35%
n/a	8%	9%	10%	5%	6%	9%
5 You (and all members of your household) have thought carefully about what (each of) you would need to do in response to a bushfire, and how this would be affected by different circumstances, including when different householders are at different locations (e.g., one is at home, one is at work, kids at school), or when certain householders may not have access to a vehicle (e.g., due to another householder using it and not being home) or at different times of the day / week (i.e. at night).						
Is currently true	47%	45%	43%	52%	42%	47%
Is currently untrue	36%	40%	38%	34%	39%	32%
n/a	18%	15%	20%	14%	19%	22%
6. Specific trigger for starting to undertake preparatory actions and/or leaving/relocating the house (e.g. Fire Danger Rating, fire location and speed, hear certain warning on radio have been identified.						
Is currently true	64%	56%	58%	69%	65%	67%
Is currently untrue	27%	35%	30%	26%	26%	23%
n/a	9%	9%	12%	5%	9%	10%

	Total (N = 514)	**NSW** (N = 82)	**VIC** (N = 77)	**SA** (N = 147)	**WA** (N = 78)	**TAS** (N = 130)
7. Members of your household (and other people highlighted in the plan) have taken into account atypical or unexpected situations (e.g., certain family members not being at home even though they normally are, or friends/family visiting who are unable to leave/relocate themselves without help), and have agreed on who will do what in such situations.						
Is currently true	40%	34%	36%	43%	41%	40%
Is currently untrue	42%	52%	46%	42%	37%	35%
n/a	19%	13%	18%	16%	22%	25%
8. *All people who play a part in the successful execution of your hazard plan (e.g. household members, neighbours, people you plan to stay with) are aware of the plan and have agreed to their role in the plan.*						
Is currently true	46%	35%	43%	52%	47%	45%
Is currently untrue	41%	55%	46%	37%	35%	37%
n/a	14%	10%	12%	11%	18%	18%
9. *All important things to do and remember in case of a bushfire have been listed (written or typed on computer, phone, etc.).*						
Is currently true	26%	21%	27%	32%	28%	19%
Is currently untrue	66%	65%	65%	62%	69%	70%
n/a	8%	15%	8%	6%	3%	11%

	Total (N = 514)	**NSW** (N = 82)	**VIC** (N = 77)	**SA** (N = 147)	**WA** (N = 78)	**TAS** (N = 130)
10. *You (and your family/household) have practiced / rehearsed your bushfire emergency plan at least once over the last 3 months.*						
Is currently true	17%	13%	13%	21%	18%	15%
Is currently untrue	75%	78%	79%	71%	77%	73%
n/a	9%	9%	8%	8%	5%	12%
11. *You are prepared emotionally for the possibility that your home may be destroyed if you leave.*						
Is currently true	60%	59%	55%	59%	68%	61%
Is currently untrue	34%	37%	38%	35%	27%	31%
n/a	7%	5%	8%	6%	5%	9%
12. *You are prepared emotionally for the possibility that your home may be destroyed even if you defend it.*						
Is currently true	55%	57%	42%	54%	64%	57%
Is currently untrue	33%	32%	38%	34%	26%	32%
n/a	13%	11%	21%	12%	10%	11%

A 3.4 Social Support Items

A 3.4.1 Social Support for Response

	Total (N = 514)	**NSW** (N = 82)	**VIC** (N = 77)	**SA** (N = 147)	**WA** (N = 78)	**TAS** (N = 130)
The score is equal to the mean of the 6 items; scale ranges from 1 to 7.						
Mean (*Standard Deviation*)	**5.08** (*1.48*)	**5.15** (*1.50*)	**4.99** (*1.58*)	**5.03** (*1.42*)	**5.37** (*1.49*)	4.**96** (*1.48*)

1. *I have neighbours, relatives, or friends living in my locality that I could depend on for help during a bushfire if I needed it.*

2. *I have neighbours, relatives or friends living in my locality who would help me relocate during a bushfire if I needed it.*

3. *I'd have a hard time finding someone who would let me (and my family, pets, etc.) stay with them if I had to leave my property during a bushfire (R).*[§§§]

4. *I'd have a hard time finding a neighbour, relative, or friend living in my locality that I could contact if I were frightened by a bushfire in my area (R).*

5. *If there were a bushfire in my area, I would have a hard time finding a neighbour, relative, or friend living in my locality that I could turn to for advice (R).*

6. *If I were to need help understanding warnings and communications related to a bushfire threat, I would have a hard time finding a neighbour, relative, or friend living in my locality who could assist me (R).*

§§§ *R indicates the item has been reverse coded i.e. if a respondent selects 6 for a reverse coded question it will be recoded to 2 when calculating the mean score for the measure.*

A 3.4.2 Social Support for Recovery

	Total (N = 514)	**NSW** (N = 82)	**VIC** (N = 77)	**SA** (N = 147)	**WA** (N = 78)	**TAS** (N = 130)
The score is equal to the **mean** of the 6 items; scale ranges from 1 to 7.						
Mean (*Standard Deviation*)	**4.73** (*1.37*)	**4.84** (*1.50*)	**4.61** (*1.45*)	**4.72** (*1.30*)	**4.99** (*1.41*)	**4.60** (*1.27*)

1. *I'd have a hard time finding a neighbour, relative or friend living in my locality that I could trust to talk to about my problems following a bushfire (R).*

2. *I have neighbours, relatives or friends living in my locality that I could talk to if I were feeling upset following a bushfire in my area.*

3. *If I was injured during a bushfire, I'd have neighbours, relatives or friends in my locality that would assist me around the home until I recovered.*

4. *If my property were to be destroyed by a bushfire and restoring it would either take a lot of time or be impossible, I'd have neighbours, relatives or friends that would help me (and my family, pets, etc.) find a more permanent solution for housing.*

5. *There is at least one person in my household who is a member of a community group that would be likely to help out in the aftermath of a bushfire (e.g. Lions Club, Rotary Club, local church, etc.).*

6. *I have neighbours, relatives or friends living in my locality that I can turn to for advice on how to deal with my problems following a bushfire.*

A 3.5 Perceived Ability to Respond and Recover Items

A 3.5.1 Perceived Ability to Respond

	Total (N = 514)	NSW (N = 82)	VIC (N = 77)	SA (N = 147)	WA (N = 78)	TAS (N = 130)
The score is equal to the **mean** of the 6 items; scale ranges from 1 to 7. **Mean** (*Standard Deviation*)	**5.31** (*0.99*)	**5.29** (*0.93*)	**5.21** (*1.07*)	**5.31** (*0.95*)	**5.33** (*0.92*)	**5.35** (*1.05*)

1. *I am physically capable of protecting my personal safety and carrying out my bushfire plan during a bushfire.*

2. *I am capable of finding solutions to difficult problems if they arise during a bushfire.*

3. *I feel confident in my ability to interpret general bushfire warnings and communications and understand their relevance to my household's situation.*

4. *I am capable of resisting the impulse to act hastily if I feel pressured to do so.*

5. *I am emotionally strong enough to think clearly and act decisively in the event of a bushfire.*

6. *No matter what I do, I am likely to become emotional in the event of a bushfire.*

A 3.5.2 Perceived Ability to Recover

	Total (N = 514)	**NSW** (N = 82)	**VIC** (N = 77)	**SA** (N = 147)	**WA** (N = 78)	**TAS** (N = 130)
The score is equal to the **mean** of the 6 items; scale ranges from 1 to 7.						
Mean (*Standard Deviation*)	**4.73** (*1.01*)	**4.79** (*1.01*)	**4.59** (*1.09*)	**4.71** (*0.95*)	**4.68** (*1.10*)	**4.81** (*0.98*)

1. *I am physically dependent on the help of others in restoring my house if it gets damaged.*

2. *I am confident in my ability to negotiate insurance claims and organize contractors for any repairs that might be needed after a bushfire.*

3. *I am capable of dealing with all the disruptions that a bushfire might cause in the period following the event.*

4. *I am in control of my recovery from a bushfire event.*

5. *Luck will play a big part in determining the intensity of the emotions I experience in recovering from a bushfire.*

6. *I am certain that I am capable of stopping myself from becoming upset by unpleasant thoughts whilst my community is recovering from a bushfire.*

A 3.6 Knowledge Items

	Total (N = 514)	NSW (N = 82)	VIC (N = 77)	SA (N = 147)	WA (N = 78)	TAS (N = 130)
1. *Bushfires typically travel at 30 - 60 km/hr.*						
False **(correct)**	17%	17%	17%	18%	26%	12%
True	42%	51%	44%	40%	42%	39%
Not Sure	40%	32%	39%	42%	32%	49%
2. *A person can get burns during a bushfire without coming into direct contact with flames or hot objects.*						
True **(correct)**	88%	87%	83%	88%	89%	91%
False	4%	4%	8%	3%	4%	2%
Not Sure	9%	10%	9%	9%	8%	8%
3. *An above-ground pool or water tank is a safe place to shelter if a bushfire reaches my home.*						
False **(correct)**	64%	57%	66%	63%	55%	72%
True	12%	20%	10%	10%	24%	4%
Not Sure	24%	23%	23%	27%	21%	24%
4. *Most people will experience ongoing psychological problems following a bushfire categorised as high on the fire danger rating scale.*						

	Total	**NSW**	**VIC**	**SA**	**WA**	**TAS**
	(N = 514)	(N = 82)	(N = 77)	(N = 147)	(N = 78)	(N = 130)
True **(correct)**	67%	73%	66%	65%	77%	61%
False	8%	4%	12%	7%	5%	10%
Not Sure	25%	23%	22%	28%	18%	29%
5. If a bushfire reaches my home and my home is not safe to shelter in, I should go to a place that has already burnt if safe to do so.						
True **(correct)**	52%	57%	38%	51%	65%	51%
False	20%	16%	27%	19%	19%	19%
Not Sure	28%	27%	35%	30%	15%	31%

APPENDIX 4 **MEASURES OF PERSONALITY AND INDIVIDUAL DIFFERENCES**

A 4.1 Personality Items

A 4.1.1 Emotionality

	Total (N = 514)	NSW (N = 82)	VIC (N = 77)	SA (N = 147)	WA (N = 78)	TAS (N = 130)
The score is equal to the **mean** of the 10 items; scale ranges from 1 to 5.		**2.96**	**3.09**	**3.06**	**3.05**	**2.95**
Mean (*Standard Deviation*)	**3.02** (*0.59*)	(*0.63*)	(*0.62*)	(*0.60*)	(*0.54*)	(*0.55*)

1. I would feel afraid if I had to travel in bad weather conditions.

2. I sometimes can't help worrying about little things.

3. When I suffer from a painful experience, I need someone to make me feel comfortable.

4. I feel like crying when I see other people crying.

5. When it comes to physical danger, I am very fearful.

6. I worry a lot less than most people do(R). ****

7. I can handle difficult situations without needing emotional support from anyone else (R).

**** *R indicates the item has been reverse coded i.e. if a respondent selects 6 for a reverse coded question it will be recoded to 2 when calculating the mean score for the measure.*

8. I feel strong emotions when someone close to me is going away for a long time.

9. Even in an emergency I wouldn't feel like panicking (R).

10. I remain unemotional even in situations where most people get very sentimental (R).

A 4.1.2 Extraversion

	Total (N = 514)	**NSW** (N = 82)	**VIC** (N = 77)	**SA** (N = 147)	**WA** (N = 78)	**TAS** (N = 130)
The score is equal to the **mean** of the 10 items; scale ranges from 1 to 5. **Mean** (*Standard Deviation*)	**3.26** (*0.61*)	**3.33** (*0.64*)	**3.19** (*0.64*)	**3.28** (*0.63*)	**3.30** (*0.59*)	**3.21** (*0.55*)

1. I feel reasonably satisfied with myself overall.

2. I rarely express my opinions in group meetings (R).

3. I prefer jobs that involve active social interaction to those that involve working alone.

4. On most days, I feel cheerful and optimistic.

5. I feel that I am an unpopular person (R).

6. In social situations, I'm usually the one who makes the first move.

7. The first thing that I always do in a new place is to make friends.

8. Most people are more upbeat and dynamic than I generally am (R).

9. I sometimes feel that I am a worthless person (R).

10. When I'm in a group of people, I'm often the one who speaks on behalf of the group.

A 4.1.3 Conscientiousness

	Total (N = 514)	**NSW** (N = 82)	**VIC** (N = 77)	**SA** (N = 147)	**WA** (N = 78)	**TAS** (N = 130)
The score is equal to the **mean** of the 10 items; scale ranges from 1 to 5. **Mean** (*Standard Deviation*)	**3.67** (*0.49*)	**3.70** (*0.51*)	**3.68** (*0.48*)	**3.70** (*0.47*)	**3.73** (*0.52*)	**3.56** (*0.49*)

1. I plan ahead and organise things, to avoid scrambling at the last minute.

2. I often push myself very hard when trying to achieve a goal.

3. When working on something, I don't pay much attention to small details (R).

4. I make decisions based on the feeling of the moment rather than on careful thought (R).

5. When working, I sometimes have difficulties due to being disorganized (R).

6. I do only the minimum amount of work needed to get by (R).

7. I always try to be accurate in my work, even at the expense of time.

8. I make a lot of mistakes because I don't think before I act (R).

9. People often call me a perfectionist.

10. I prefer to do whatever comes to mind, rather than stick to a plan (R).

A 4.2 Perceived Effectiveness of Preparing Items

	Total (N = 514)	**NSW** (N = 82)	**VIC** (N = 77)	**SA** (N = 147)	**WA** (N = 78)	**TAS** (N = 130)
The score is equal to the **mean** of the 3 items; scale ranges from 1 to 9. **Mean** (*Standard Deviation*)	**7.60** (*1.28*)	**7.46** (*1.26*)	**7.40** (*1.38*)	**7.50** (*1.44*)	**8.00** (*1.04*)	**7.67** (*1.10*)
1. When people prepare in the right manner, it can greatly reduce the threat posed by a bushfire.						
2. People can overcome unexpected situations or obstacles that occur during a bushfire by preparing in the right manner.						
3. People's decision making during a bushfire plays a crucial role in the threat posed to their lives and properties.						

A 4.3 Motivation to Prepare and Plan Items

	Total (N = 514)	**NSW** (N = 82)	**VIC** (N = 77)	**SA** (N = 147)	**WA** (N = 78)	**TAS** (N = 130)
The score is equal to the **mean** of the 6 items; scale ranges from 1 to 9. **Mean** (*Standard Deviation*)	**7.25** (*1.47*)	**6.99** (*1.50*)	**7.18** (*1.41*)	**7.17** (*1.55*)	**7.76** (*1.23*)	**7.26** (*1.47*)

1. When it comes to preparing my household and property for bushfires I find it important to carry out my responsibilities to prepare.

2. When it comes to preparing my household and property for bushfires I don't really see the point.

3. When it comes to preparing my household and property for bushfires I am not really that interested in doing so.

4. When it comes to making a plan for bushfires I find it important to carry out my responsibilities to have a good plan.

5. When it comes to making a plan for bushfires I don't really see the point.

6. When it comes to making a plan for bushfires I am not really that interested in doing so.

A 4.4 Perceived Risk Items

A 4.4.1 Perceived Likelihood of a Bushfire Threatening Property

	Total (N = 514)	**NSW** (N = 82)	**VIC** (N = 77)	**SA** (N = 147)	**WA** (N = 78)	**TAS** (N = 130)
Scale ranges from 1 to 7. **Mean** (*Standard Deviation*)	**3.44** (*1.20*)	**3.24** (*1.30*)	**3.61** (*1.16*)	**3.34** (*1.13*)	**3.68** (*1.21*)	**3.45** (*1.22*)

1. How likely is it that a bushfire will threaten you/your property in the next fire season?

A 4.4.2 Perceived Severity of the Consequences if a Bushfire Threatened Property.

	Total (N = 514)	**NSW** (N = 82)	**VIC** (N = 77)	**SA** (N = 147)	**WA** (N = 78)	**TAS** (N = 130)
Scale ranges from 1 to 7. **Mean** (*Standard Deviation*)	**4.58** (*1.46*)	**4.26** (*1.61*)	**4.99** (*1.36*)	**4.39** (*1.48*)	**4.68** (*1.53*)	**4.68** (*1.30*)

1. If a bushfire were to threaten you/your property, how severe do you think the negative consequences of it would be for you/your property?