



Preventing bushfires through community reporting to Crime Stoppers: 2017 survey. Sixth report to Crime Stoppers

June 2018

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Acknowledgments

This research was undertaken under the Australian Research Council Linkage Funding LP 160100661. We would like to thank Crime Stoppers Victoria for the ongoing financial support and confidence in this project. We would also like to thank Tim Huggins (King Lake), Michaela Read (online survey and fieldwork management), Andrew Wicks (fieldwork) and Claire Denby (Editor).

To be cited as

Read, P. and Stanley, J. (2018) *Preventing bushfires through community reporting to Crime Stoppers:* 2017 survey, sixth report to Crime Stoppers Victoria, Melbourne Sustainable Society Institute, University of Melbourne.

ISBN: 978 0 7340 4955 1

Crime Stoppers Victoria and Melbourne Sustainable Society Institute, University of Melbourne





Melbourne Sustainable Society Institute

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GLOSSARY

| SD | Standard deviation |
|---------|---|
| CSV | Crime Stoppers Victoria |
| DN | Do nothing about a suspected event |
| FW | Fatal Wildfire |
| ME | Handling the Situation Personally |
| NS | Not statistically significant |
| NT | Non-reporting tendency |
| RS | Reporting strength |
| RT | Reporting tendency |
| SB | Small Bushfire that burns out a few acres with no damage to people or property |
| TFB | Total Fire Ban day |
| TZ | '000' – number in Victoria to report an emergency |
| VCARF 1 | Victorian Community Arson Reporting Form 1, the survey questionnaire used in Survey Four in 2012 |
| VCARF 2 | Victorian Community Arson Reporting Form 2, the survey questionnaire used in the Fifth Survey, 2015 |
| VicPol | Victoria Police |



SUMMARY

This report to Crime Stoppers Victoria (CSV) gives results for the 2017 community survey and reports on trends across three surveys, 2012, 2015 and 2017. The aim of the research is to provide information for CSV in order to raise the level of reporting of suspicious behaviour in relation to illegal fires witnessed in regional areas of Victoria: Latrobe, Murrindindi, Nillumbik, Macedon, Yarra Ranges, Surf Coast, being areas of high bushfire risk, and Knox as a control region with a more urban status where bushfires are less likely to occur.

Samples of respondents (N= 655 for 2012, 610 for 2015, 630 for 2017) were surveyed using online and field surveying. The questionnaire was progressively developed to include not only normative questions and awareness of CSV but ones that sought trends in reporting in relation to demographic factors, personality characteristics of the reporter, the relationship between the reporter and the offender and the nature and severity of the fire event. This identified those people who may be more or less likely to report, and under what circumstances. Careful statistical analysis was undertaken of the data, testing reliability, associations and effect sizes. A couple of variables were excluded on the grounds of statistical unreliability. There were no large systematic differences between the three time periods and the regions, although Knox showed a few variations, as would be expected with a control group.

For 2017, the average age of respondents for the full sample was 48 years (± 15 SD), women comprising 53% of the sample. Education was 32% secondary, 20% trades, 40% tertiary and 12% postgraduate. Of the total sample, the average time of residency in their home region, was 21 years (± 15 SD).

It was found that overall reporting to authorities had a small drop between 2015 and 2017, especially in Nillumbik, Macedon and Latrobe, perhaps to be expected with less active bushfire years. However, the proportion of reports to CSV increased over this time, with Yarra Ranges, Murrindindi and Nillumbik showing the greatest increases, possibly reflecting greater CSV media attention in these areas, or more suspicious activity occurring.

Awareness and understanding of the role of Crime Stoppers helps identify groups requiring more campaign education, whether by age, gender or regional location. Since 2012, awareness of CSV across the sample has steadily increased towards saturation, starting with 97% in 2012, 98% in 2015 and 99.5% in 2017. In 2017, 10% of people had ever made a report to Crime Stoppers. While still low (12% in 2017), knowledge of the CSV number is increasing, along with a high commitment to report where suspicion is present (97% in 2017). The results show that those who need more targeting by CSV to encourage reporting are mostly women, generally younger, more educated and newer to the area, especially so in Knox, Yarra Ranges, Surf Coast and Nillumbik. The most important target is gender, followed by age, education and residential tenure.

Respondents were asked if they heard of CSV from a range of sources: radio, television, local newspapers, state or national newspaper, social media or websites, work, friends and family and billboards. They were then asked if they could recall a mention of bushfires or arson. There is a small fall in media recall for CSV from 2015 to 2017 (47% to 44%). By contrast, there is a considerable rise in the percentage of people who recall the report mentioning bushfire (23% to 34%) over the same time period. Television again is the largest source of information about CSV for both years in each of the regions, followed by radio with local newspapers proving to be important, as well as social media/websites. In relation to bushfire/arson, family and friends were the most important for 2015 and 2017 in each region, followed by work colleagues in 2015 and billboards in 2017.

To better understand how particular circumstances may impact on the willingness to report suspicion about an illegal fire, respondents were asked what they would do when faced with 19 scenarios in relation to a fire situation. The action choices were 'do nothing', 'handle the situation themselves', call TZ and call CSV. The scenarios were presented in three categories of event severity, covering common fire-lighting scenarios on a Total Fire Ban Day, a fire that destroys a few acres and damages property, and while covering similar scenarios, the outcome was changed to a fatal wildfire that kills people.

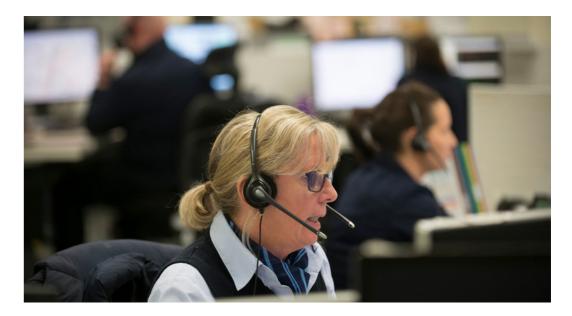
The findings suggest that the potential actions taken by respondents vary greatly, depending on circumstances. The effects that significantly dampen reporting in 2017 are: the perpetrator is a child (by 18%), the person is close to the respondent (11%), and known to the respondent (9%). The effects that increase reporting are: the fire is deliberately lit (20%), by a difficult youth (12%), and shifts from a small bushfire to a fatal wildfire (13%). In order of effect size, those promoting CSV reporting are: anonymity (8%), fear (6%), severity and intent (5%), relatedness (4%) and intentionality (3%). Total reporting (CSV and TZ) effects are much greater, following intentionality (21%), severity and intent (18%), strangers (16%) and fear (8%).

The use of the correct pathway for reporting was examined. The percentage of people who correctly selected CSV for reporting suspected information on illegal fire-lighting has increased by more than 50% since 2012 and the trend across all regions suggests growing understanding, although the numbers are still low. These positive trends are replicated in five of the six bush-fire-affected communities. Latrobe, worryingly, is the only area where the percentage of people correct on all items has fallen in 2017. 44% of Latrobe people and 36% of Murrindindi people would direct unsubstantiated claims to Triple Zero. Although small in numbers, of more concern, are the 5.6% of respondents in Latrobe who choose to report a witnessed and growing fire to CSV rather than Triple Zero, in 2017. The 137 respondents who incorrectly called the emergency number differed from those who consistently made the correct choices for CSV and TZ. Those who used the incorrect pathway were much less likely to have recalled CSV media.

The four subgroups of respondents were highlighted. Of particular importance are those who refuse to report suspicions. They were found to have difference characteristics to the broad sample group. They group, were significantly less likely to have seen CSV in the media, were younger, less happy, more likely to be tertiary educated, and be less attached to the community. While more likely to be victimised by crime as a group, they were five times more likely to say police had not helped when making a report. They were concerned about obstacles to reporting, particularly fear of revenge, having a personal relationship with the offender, concern about accusing the wrong person, and cynicism about CSV follow-up.

The respondents were asked if they had ever been exposed to 11 types of personal and property crimes. Across the entire sample, 45% of people were victimised at least once. Within this group, 90 people were victimised twice and 49 three or more times. Regional differences in victimisation emerge as significant for stalking, assault, sexual assault, home burglary and other theft, converging on a trend that Knox has the highest rates in most cases. The exception was assault, where Latrobe had the highest risk, followed by Knox.

The rate of reporting across these crimes was examined with a view to understanding if reporting about fire differed from the reporting of other crimes. Only 44% of the 11 crime types that respondents said they had experienced at some time, were reported. Property crimes were 1.6 times more likely to be reported (61%) compared to personal crimes (39%). One in ten (61) had made a direct report to CSV in the past, of which 70% (43) said it was helpful. Satisfaction as a result of the



report was highest for Triple Zero (92%), followed by police (81%) and then CSV (70%). Interestingly, there is a strong association between making a report and seeing the agency as helpful, across both reporting pathways. This suggests that further explanation of the how CSV uses the report could achieve improved understanding of the process and perception of the reporter's satisfaction.

The relative importance of 18 variables and social characteristics that drove two thirds of reports for all regions was compared with the control region of Knox. They are described for the total survey and then each of the bushfire prone regions. The total findings are given in this summary section.

Those residents with higher levels of wellbeing are more likely to report illegal fire-lighting. Reporting is increased for men who have made a report in the past, who have moral congruence with authorities, and who trust in anonymity and individualism. Reporting falls for men when they feel safe about summer bushfires. Reporting increases for women with perceived poverty, higher CSV media recall, who have moral congruence with authorities, and are older in age. It falls with past criminal victimisation and a sense that locals take the law into their own hands.

The following suggestions may increase arson reporting to CSV across all regions, using media not specific to a region, such as state television, radio and newspapers and social media. The findings suggest it is important to engage women who are discouraged by vigilantism and victimisation; stress anonymity and the personal power to safely control local crime of all types with regular CSV reports. Note that television was weak in driving reports but helped with knowing the CSV phone number, favouring women, older people and those worried about vigilantism. Individualistic people avoid television; happier people are more likely to make a report and prefer newspapers. State and national newspapers have the second strongest direct effect on increasing illegal fire and CSV reporting after local radio and local newspapers. Both television and newspapers should focus on anonymity, but fear of bushfires is especially strong for newspapers. It would be of value to build messages that regular reporting to CSV is a personal crime reduction strategy that is becoming the norm and is important in reducing local crime.

INTRODUCTION

Crime Stoppers Victoria is a not for profit organisation, which encourages the anonymous reporting of suspicions about a crime that are passed onto the Victorian Police. Crime Stoppers are represented nationally and are present in 24 countries. This report is the sixth in a longitudinal study of reporting arson to Crime Stoppers Victoria, Australia, since the catastrophic *Black Saturday* bushfires, of February 2009. Since then, arson reporting in Victoria has been tracked every second year and the results refined for use in framing annual summer media campaigns across communities to encourage reporting.

Close to 3000 Victorians have now been surveyed. The survey questions have become progressively refined and comprehensive, modified from iterative community feedback and analyses from each survey. This report on the 2017 survey further builds knowledge on reporting trends and the community responses to raising awareness surrounding Crime Stoppers' unique role in preventing wildfires in Australia.



As in previous years, the study maintains a special focus on people's intention to report an act of arson in Victorian peri-urban communities where fires frequently occur and can be highly dangerous. Suburban Knox was again used as a baseline comparison against six bushfire-affected regions: Latrobe, Murrindindi, Nillumbik, Macedon, Yarra Ranges and Surf Coast.

People were surveyed using a two-page instrument covering 150 direct and embedded variables that examine the reasons why people with particular characteristics do, or do not, report. This study compares the data across surveyed regions covering the three time periods, 2012, 2015 and 2017. It also compares the reporting of arson with ten other crimes. Key themes over time are noted, as well as information specific to a particular region. Finally, the report presents an exploration of how the reporting of arson may differ according to the socio-economic characteristics of regions, the personal experience of crime, and personal characteristics.

This report has been written with minimal information on data analysis and statistical processes in order to emphasise the findings that can be taken from the work. For those who wish to learn more about the analytical details, these will be recorded in more detail in an academic journal article.

METHOD

SURVEYING AND SAMPLING

The 2017 survey was completed, online and in the field, by 90 people in each of the six bushfire-prone communities on the Victorian peri-urban fringe, plus a seventh suburban community, Knox, for comparison. This provided a total sample of 630 people in Knox, Nillumbik, Murrindindi, Yarra Ranges, Macedon Ranges, Latrobe and Surf Coast (see Figure 2.1). The same regions were sampled in 2015 covering 610 people, and in 2012 covering 655 people in total. Surveying occurred from April until July in 2017, representing the winter months when bushfire issues are not necessarily 'top of mind'. This has been typical of past surveys as well, ensuring data reports can be concluded before the summer communications campaigns are launched by CSV, typically November through to March.

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Figure 2.1 Survey sites in Victoria

Most respondents answered questions in booths set up in the field around strip shopping centres at times before and after lunch. Around one in five of each group was answered online using Facebook community links; the rest in the field. Six people were eliminated due to the region not being their usual place of residence. For the samples from 2012 to 2017, only 1-3% were visiting over the years sampled (that is the postcode was not their usual residential postcode) and these were removed before analysis. Notably 100% of Surf Coast was a permanent resident at the time of sampling during autumn and winter.

150

 8

Participation was anonymous and confidential, the survey being approved by the University of Melbourne Research Ethics Committee (No: 1648223). Participants could, if they chose, provide their email address if they were willing to complete the survey a second time, post-campaign, scheduled for March and April 2018.

From 2012 - 2017 the sample covered 1,895 Victorian people. Where population is greater than 5000 people, a sample of 1000 people will usually provide a population estimate that risks varying from reality by $\pm 3\%$. In this study there are more than 600 people within years so the margin of error increases to $\pm 4\%$. Within regions there are 90 people so the error margin increases to $\pm 10\%$. This means the larger effects (d>.8) can be trusted.

IMPROVEMENTS TO QUESTIONNAIRE

Over the five years to 2015, waves of survey findings gradually shifted from supporting the broader normative theory of public behaviour change (e.g. I'm doing this because it is the right thing to do) to a more sophisticated and evidence-based view from the international literature in relation to a socio-ecological approach of crime reporting.



Although multiple regression suggested these normative variables accounted for 60% of reporting intention, none of the earlier questionnaires controlled for social desirability bias; actual reporting in the past; separation of reporting pathways between Triple Zero and Crime Stoppers, as well as the options of Doing nothing or Handling a situation independently; how the respondents defined arson; how they pictured their relationship to the offender; the perceived intentions of the offender; and the size of the fire. These issues were gradually addressed with each new wave of the survey from 2010 until 2015, when the survey was further refined by pre-testing a series of new questions enhanced by past findings plus a new global review of crime reporting outside of arson (nothing was available for arson reporting until this study). While the 2015 and 2017 surveys still matched items going back to 2009, they also covered other crimes, embedded measurement scales and 18 reporting scenarios.

Emerging as a much more refined survey instrument in 2015, the 2017 results now represent the first time exact replicas of surveys and samples have been applied twice, in both 2015 and 2017, offering much more in the way of validity testing. This allows for greater confidence in those results likely to change community behaviour via CSV media campaigns during the summer season.

THE 2015 AND 2017 SURVEY INSTRUMENT

The latest questionnaire asks about past reporting and if this was found to be helpful. It asks about six social issues that may have been experienced in the past 12 months: homelessness, hunger, no income, poor, time poor, overworked. The questionnaire asks about the respondent's experience of 11 crimes over the past 12 months: stalking, bullying, assault, sexual assault, family violence, violence to pets, property damage, fraud, home burglary, other theft and illegal fires, and if they reported any of these crimes to an agency or the police. The questionnaire asks about the source of information about Crime Stoppers and recollection about messages in relation to fire. A Yes/No response is required to all these questions.

The questionnaire asked about personality and related variables. It included questions about how reporting might change depending on perceived facilitators and barriers to reporting, such as the intent and character of the arsonist, the respondent's personal relationship to the arsonist, the respondent's knowledge of the Crime Stoppers number and the perceived value of reporting and the respondent's moral congruence with police and authorities. For these items, the respondent reports on a 4-point scale: 0=Not at all, 1=A little bit, 2=Quite a bit, 3=A lot

19 possible scenarios are given, overlayed by three vignettes ranging from *minor acts* committed by on a Total Fire Ban day, through deliberate fire-lighting causing a small bushfire, to a fatal wildfire as the final outcome. Respondents are asked whether or not they would report based on the scenario (yes/no response) to four separate options: do nothing, handle it myself, call Triple Zero or call Crime Stoppers. The scenarios purposefully shift in tense from present to past, and suspected to known.

A GUIDE TO EFFECT SIZES

With such a large sample size aggregate effects might emerge as statistically significant even when an effect size is so small as to be rendered useless to CSV in terms of encouraging community reports. Whilst it might be of academic interest contributing to the internationally scant literature on crime reporting, it is important for the real-world summer communications campaign to know when an effect is critical to making a difference versus small effects that could simply waste precious time and resources were they given equal importance.

When two groups are compared on any scale in this report, the difference will be reported in two ways; one as a simple percentage change (%) and the other as a statistical effect size (d). The percentage change is given to help readers gauge the change in reporting strength that might occur if the campaign fully leveraged its effect. For this report the percentage will always use the smaller value as the baseline for reasons of consistency in interpretation. The other value, *Cohen's d*, is derived by taking the difference of the mean of two groups and dividing it by the standard deviation. It converts the difference into a standardised form that works on any scale and its size generally ranges from zero to three. A value of 0.20 is generally recognised as a small effect or difference, even if it is statistically different; a medium effect is 0.5, and 0.8 is considered a large effect.

^{1.} For an overview of the literature see Read, P. & Stanley, J. (2017) *Community Attitudes Towards Reporting Bushfire Arson to Crime Stoppers Victoria 2012-2015*, Crime Stoppers Victoria, Melbourne Sustainable Society Institute, University of Melbourne.

TESTING FOR DATA FRRORS

It is important to ensure no large systematic errors in age, gender or education might interfere with estimating the impacts of independent variables. Tests were conducted on all variables for the samples in each year and then split by region to identify anomalies. The analysis for Latrobe women in 2017 (which varied over the years) confirms that all but one scale provide sufficient internal validity. Compared to the total 2017 sample, the scale that measured neighbourhood criminality was again shown as an unusable metric, therefore has not been used in the analysis. The remaining personality and related variable scales were found to be valid at the full sample level and at the regional level, even when restricting the subsample to women alone. The next test checked to make sure that across each valid scale there were no systematic differences between men and women that might require modelling as a confound in later analyses. The only scale that emerged as significantly different was wellbeing (11.6%, d=.38, t=2.5, p=.014). This means men in Latrobe are 12% less happy than women and the effect is moderate with a larger margin for error. Apart from wellbeing, the rest of the scales can have their effects on reporting modelled at the regional levels without too much concern about confounding variables undermining or else magnifying any true results.

The same analyses were then replicated in 2015, although here the Latrobe group combines both men and women as an additional check. Results were again confirmed between the full sample and the region.

As the single most important dependent variable, the respondent's willingness to report an arsonist in the future, additional levels of validation were undertaken. The 19 scenario items that change the severity and cause of the fire show that trends across the whole sample are confirmed by Latrobe (where the greatest variability was found) and that both sets of trends are also confirmed in 2015 and 2017.

DEMOGRAPHY

The samples for 2012 and 2017 surveys are described in Table 2.1, where most demographic variables are comparable across times and regions. In addition to age, gender and average education, Table 2.1 shows the average period of residency at that postcode (tenure), the per cent of respondents who are a member of the police or fire-fighting agencies (internal), and the per cent who left a comment on the questionnaire.

For 2017, the average age of respondents for the full sample was 48 years (± 15 SD), women comprised 53% of the sample. Education was 32% secondary, 20% trades, 40% tertiary and 12% postgraduate. Of the total sample, the average time of residency was 21 years (± 15 SD).

While there are no large systematic differences between the three time periods and the regions, some variations exist. There is a discrepancy in gender between Latrobe and Yarra Ranges in 2017, the preponderance of women in Latrobe always being high compared to other regions. This makes sense as the region also displays the greatest number of trade qualifications to match the region's economy based on energy production and agriculture, both traditionally served by male labour forces and the sampling took place at shopping centres during the day.

There is an increase in ages across almost all regions with time. Independent sample t tests confirm that the samples from 2012 and 2015 are effectively identical (p>0.05), although ages tend towards being older in 2017 (p<0.025). Knox men are significantly younger than those in Murrindindi or Nillumbik, even though regional differences vanish across the whole sample as men and women both average 48 years; t (628) =-0.109, p = 0.914.

Table 2.1 Total and regional descriptive statistics across time samples, 2012, 2015 and 2017

| Area | Year | Number | Age ±SD | Female | Education ¹ | Tenure ² | Internal ³ | Comments |
|--------------|------|--------|---------|--------|------------------------|---------------------|-----------------------|----------|
| | | | | (%) | Average | Average | % | % |
| Total | 2017 | 630 | 48±15 | 53 | 2.3±1.1 | 21±15 | 15 | 11 |
| | 2015 | 610 | 41±14 | 62 | 2.1±1.1 | 17±13 | 10 | 15 |
| | 2012 | 655 | 44±15 | 63 | 2.1±1.1 | - | 10 | 19 |
| Knox | 2017 | 90 | 41±15 | 53 | 2.0±1.0 | 18±12 | 9 | 9 |
| | 2015 | 84 | 40±15 | 60 | 2.1±1.0 | 12±11 | 7 | 11 |
| | 2012 | 100 | 41±15 | 55 | 2.1±1.1 | - | 5 | 15 |
| Yarra Ranges | 2017 | 90 | 49±12 | 28 | 2.5±1.0 | 22±15 | 11 | 10 |
| | 2015 | 101 | 45±14 | 59 | 2.4±1.0 | 15±11 | 13 | 17 |
| | 2012 | 103 | 41±9.0 | 61 | 2.6±1.1 | - | 10 | 28 |
| Macedon | 2017 | 90 | 47±16 | 42 | 2.4±1.0 | 20±15 | 17 | 16 |
| | 2015 | 69 | 42±14 | 76 | 2.3±1.1 | 19±11 | 10 | 17 |
| | 2012 | 117 | 46±15 | 63 | 2.1±1.1 | - | 10 | 20 |
| Surf Coast | 2017 | 90 | 45±16 | 42 | 2.4±1.0 | 21±15 | 11 | 6 |
| | 2015 | 82 | 39±13 | 75 | 2.0±1.0 | 13±10 | 16 | 16 |
| | 2012 | 78 | 44±17 | 62 | 2.0±1.1 | - | 11 | 25 |
| Latrobe | 2017 | 90 | 50±15 | 71 | 1.9±1.0 | 21±16 | 18 | 9 |
| | 2015 | 72 | 38±15 | 78 | 1.9±1.0 | 26±16 | 3 | 3 |
| | 2012 | 102 | 48±14 | 73 | 2.0±1.0 | - | 7 | 14 |
| Nillumbik | 2017 | 90 | 52±16 | 43 | 2.3±1.2 | 21±15 | 18 | 11 |
| | 2015 | 74 | 41±16 | 66 | 2.2±1.1 | 18±13 | 12 | 17 |
| | 2012 | - | - | - | - | - | - | - |
| Murrindindi | 2017 | 90 | 51±16 | 48 | 2.2±1.1 | 23±16 | 21 | 19 |
| | 2015 | 128 | 41±14 | 55 | 2.0±1.0 | 19±14 | 16 | 14 |

Notes:

- 1. Finishing at secondary level is represented as '1', trade as '2', graduate as '3' and post graduate as '4'
- 2. Tenure Average period of residency at that postcode
- 3. Internal % respondents who are a member of the police or fire-brigade
- 4. Comments % of respondents who made a comment on the questionnaire

RESPONDENT GROUPING FOR ANALYSIS

Attention is drawn to three particular groups of respondents. There were 30 women and 61 men who worked as fire-fighters, as well as one woman and five men who worked as police officers. These were all combined into an 'internal group' (n=91) for comparisons. A second smaller subgroup were those who refused to report crimes to CSV (even if *they see something*) representing an intractable group (n=17, 3% of total). This group was equally split between genders but were younger and more educated than usual (p<0.01). None were members of the internal group but half (11) had lived in Knox for about 15 years (±10 SD). A third 'text group' included people who provided survey commentary, amounting to 70 people (11%) who wrote a total of 1369 words. This written sample allows enough text to measure group-level personality trends as well as branding, needs, values and media preferences. A fourth group were those who correctly recalled the CSV phone number (n=61).

DEFINITIONS OF BELIEFS AND SOCIAL CONDITIONS

The survey also gathered information from the respondents on 30 items relating to their beliefs and social conditions. These are defined below to clarify meanings of these terms as they are used in this report. The variables with an asterisk indicate a measure new to the literature.

Anonymity Effect: How much arson reporting changes when there is a belief of anonymity. Positive values mean anonymity is important to people.

Arson Reporting: Positive values show the strength of a person's reporting intention.

*Authoritarianism: A cultural factor reflecting intolerance, being tough on crime, thinking that is black and white.

Bushfire safety: Positive values show how safe people feel when thinking of summer bushfires, while negative values reflect fear of bushfires.

Close Friend: How much arson reporting changes when the arsonist changes from stranger to close friend or family member.

*Correct CSV use: Correctly designating proper agencies to call under four scenarios: knowing when to call CSV to maximise community safety

*CSV Anonymity: Trust in CSV anonymity designated by positive values.

*CSV Beliefs: Believing CSV is run by police and detectives.

CSV Preferences: Positive values show the strength of a person's reporting intentions to CSV alone as a percentage of overall arson reporting strength; willingness to report to CSV. Negative values denote unwillingness.

*Dangerous Locals: How much people think they know dangerous locals.

Deliberately Lit: How much arson reporting changes when the fire shifts from accidental to deliberate

Difficult Youth: How much arson reporting changes when the arsonist shifts from a stranger to a difficult youth with a fire-setting history.

***Education:** Positive values reflect more education from secondary schooling through to post-graduate tertiary qualifications.

Fatal Fire (Child): How much arson reporting changes when the outcome of a child-lit fire shifts from local property damage to a fatal wildfire.

Fatal Fire (Stranger): How much arson reporting changes when the outcome of a stranger-lit fire shifts from local property damage to a fatal wildfire.

*Individualism: A personality factor reflecting how much people think differently from others and authorities.

Known Arsonist: How much arson reporting changes when the arsonist changes from stranger to someone known in the community.

*Local vigilantism: How much people think locals are prone to taking the law into their own hands.

Media CSV recall: Percentage of people in a region that recall CSV stories pertaining to bushfires over the past 12 months.

*Moral Congruence: A socio-criminological reporting factor on how much people share outlooks and beliefs with police.

Obstacles: Behavioural capabilities scale showing how much people will suppress reporting an arsonist due to obstacles ranging from fear of revenge to knowing the phone number. Positive values suppress reporting whereas negative values suggest people drive through and overcome obstacles to make sure they report.

*Past Reporting: Lifetime prevalence of reporting to CSV, police or emergency, or Triple Zero

- *Perceived Poverty: A relative measure multiplying depth of relative poverty against neighbours by depth of relative poverty of neighbourhood, i.e. not an objective measure. Positive values reflect deeper sense of relative poverty (presumed to be more powerful than actual poverty).
- *Perceived Safety: Standard socio-criminological items reflecting sense of safety in the local community, whether outside or in the home after dark. Note this is positive in bushfire communities whereas bushfire safety is negative.

Revenge Effect: How much arson reporting changes when the arsonist might take some dangerous action against the reporter. This is a problematic item that often zeroes itself out due to two separate coping strategies: either 1. Report a dangerous person for protection, or 2. Don't report a dangerous person for fear.

*Social Cohesion: Sense of Community, that measures how well a person relates to their community.

*Social Problems: Percentage of people who have suffered income, food, housing, work and time issues over the past 12 months.

*Victimisation: Percentage of people who have suffered any of 11 personal and/or property crimes over the past 12 months.

Vulnerable Teen: How much arson reporting changes when the arsonist changes from a stranger to a local teen who is known to have recently tried to commit suicidal.

***Wellbeing**: How subjectively happy a person feels overall with their quality of life, standard of living, combined with standard measures of overall satisfaction.

RESULTS

OVERVIEW

This results section gives findings on the changes in overall reporting, and for preferences endorsing CSV rather than the emergency phone number, from 2015 to 2017 and on a regional basis. Awareness and understanding of Crime Stoppers is shown for the full sample and regions from 2015 to 2017, with gender, age, education and residential tenure considered. The source of information for CSV and in particular about arson and bushfires are shown. Findings are given to the question that asked what respondents would do ('do nothing', 'handle it themselves', call TZ and call CSV) when faced with 19 possible scenarios in relation to a fire situation. This is followed by a discussion as to whether they adopted a more favourable action pathway. Characteristics of four specific groups are examined, these being respondents who knew the CSV phone number, a group who said they wouldn't report to CSV, respondents employed as fire-fighters or police and a group identified as the working poor. Respondents' experience, and reporting patterns, in relation to other crimes, are considered. Finally, results as to the variables more and less likely to lead to reporting, are presented for each region.

CHANGES IN REPORTING FROM 2015 TO 2017

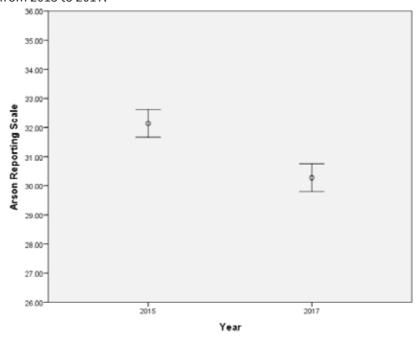
Fewer respondents said that they have made a report to the police, or called TZ or CSV in 2017 than stated in the 2015 survey. However, more respondents said they made a report to CSV in the 2017 survey than in the 2015 survey, as shown in Figure 3.1a & b. Note that the error bars in Figure 3.1a & b represent standard error and a rule of thumb is that any that do not overlap will be statistically significant. Using independent sample t tests between 2015 and 2017 confirms the fall is significant for reporting across the full sample (7%, d=.36, t=5.665, p=.000), as with the rise for selecting CSV versus the TZ across the full sample (31%, d=.43, t=3.464, p=.003). Note that the axes are scaled to provide greatest contrast. The vertical axis for the first figure (3.1a) is overall reporting based from the ordinal scale applied to the 19 bushfire items where 'Do nothing' = 0, 'Handle it myself' = 1, 'Report' = 2, such that the scale ranges 0-38 and 'report' is defined as any type of report. The vertical axis in the second figure (3.1b) multiplies overall reporting by the percentage of CSV chosen as the preferred reporting pathway (based on percentage but reflecting the portion of the overall reporting scale specifying reports to CSV). For interpretation, it means that around 8 of 32 points in 2015 were dedicated to CSV rather than the emergency number; about 12.5 out of 30 in 2017.

Reporting preferences for CSV according to the surveyed regions are compared for 2015 and 2017 (Figure 3.2). As can be seen there is an interaction with survey year as well as significant differences between regions (F=2.92, p= .008). All but Yarra Ranges falls from 2015 to 2017. The fall in three regions is statistically significant, the largest effects, in order, being Nillumbik (8.6%, d=.455, p=.009), Macedon (8.4%, d=.56, p=.001), and Latrobe (6%, d=.39, p=.009). Note the percentage changes are not always ranked in the same order as the effect sizes, despite being very close.

An important finding is that the apparent change for Knox does not reach significance for either reporting or CSV preferences, which makes sense because Knox is not a CSV target area for bushfire arson. By contrast, the effect of living in a bushfire-prone area on reporting to CSV is striking across both years when the six main regions are compared to Knox. Regions can be

ranked for reporting strength to CSV in order of Yarra Ranges (34.3), Murrindindi and Nillumbik (both 33.8), Latrobe (33.5), Surf Coast (33.2), Macedon Ranges (32.8), and Knox trailing (30.3). Note the difference between Knox and other regions could reflect the effects of CSV media targeting of bushfire areas or there has been less suspicious activity around in relation to bushfire in the bushfire prone areas. The latter is a likely impact as the bushfire incidence has been lower in the intervening time period.

Figure 3.1a & b Arson reporting overall, then arson reporting to CSV, for the full sample from 2015 to 2017.



Fewer reports were made to TZ or CSV in 2017 than in 2015, but proportionally more reports were made to CSV

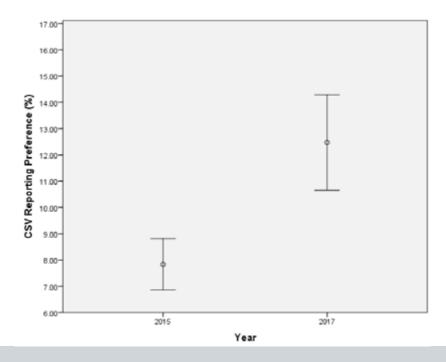
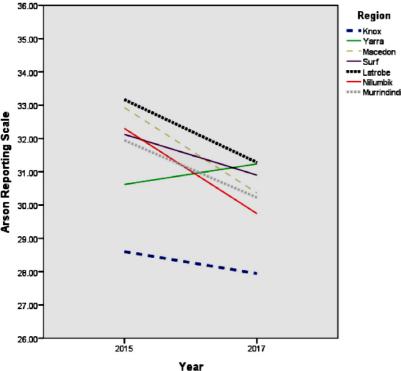


Figure 3.2 Arson reporting according to region



ENGAGEMENT WITH CRIME STOPPERS

Awareness and understanding of the role of Crime Stoppers helps identify groups requiring more campaign education, whether by age, gender or regional location. Awareness and understanding was measured in multiple ways. The respondents were asked whether they had ever heard of Crime Stoppers, whether they had ever made a report to CSV and, if so, whether the report had helped. They were asked to demonstrate whether they knew the CSV phone number by correctly writing it down by memory alone (previous 2010/11 surveys had shown twice as many believe they know the number than those that actually do). At the end of the survey they were asked whether they would 'say something' if they 'saw something', reminding them of the CSV tagline: 'See something, say something'. These metrics were checked to see if they changed across time and then if they differed in 2017 by age, gender, education, region or residential tenure. By knowing which of these demographics are less aware or engaged with CSV it helps to inform media targeting for general CSV branding as well as the bushfire campaign leading up to summer.

Since 2012, awareness of CSV across the sample has steadily increased towards saturation, starting with 97% in 2012, 98% in 2015 and 99.5% in 2017. Such a minority of people remain unaware of Crime Stoppers as to render demographic analyses for this group almost meaningless. In 2017, 10% of people had ever made a report to Crime Stoppers. Of this group, 41% said it was helpful, 59% said no, 'it didn't help' (this is unrecorded for previous years). It is unclear as

to why this judgement was made and could be investigated further, but is likely to be around the practice of anonymity that is misunderstood. Correct knowledge of the CSV phone number was 10% in 2012, 11% in 2015 and 12% in 2017 (partially correct recall of the CSV phone number raises the 2017 percentage to 18%). Committing to 'say something' if they 'see something' was 90% in 2012, 93% in 2015, and 97.3% in 2017 (p<.05). In all indicators of CSV awareness the trend is rising for the full sample, suggesting CSV continues to build its brand awareness. Reporting to CSV is more likely to occur where a respondent had made a past report to CSV (t = 4.26, p < .000) although there is no effect on whether they believed that the report helped or not. The same pattern was displayed for reports to police or Triple Zero.

Only 9.4% of the total sample completely distrusts the anonymity of CSV but this significantly rises to 16.5% of younger women. 46.9% completely trust the anonymity of CSV and this significantly falls among older women to 33% ($Chi^2 = 30$, p = .000). All but 23% of the sample believes CSV is run by police, 21% are certain of it, and 54% believe CSV are detectives, with 10% certain of this. Of note, women are more likely to hold the detective belief than men, and particularly younger men where it falls to 47% (P < 0.05). This significantly differed by region, with Surf Coast more confused than other areas. Surf Coast was also significantly least likely to have made a report to CSV in their lifetimes, whereas Latrobe and especially Nillumbik make widespread use of the pathway.

Those who need increased targeting by CSV are mostly women, generally younger, more educated and newer to their residential area

There was a regional effect for the response to the broader key message where Knox respondents were less likely to 'say something' than the bushfire-affected regions (Chi^2 =38.812, p=.000). This is related to a gender effect where women were 4.6 times less likely to 'say something' compared to men in Knox (Chi^2 =4.085, p=.042) and 3.9 times less likely to 'say something' in Yarra Ranges (Chi^2 =8.069, p=.020). This confirms gender has a real effect on intractability in two regions. So it can be trusted for CSV to invest in targeting women in these areas as needed.

By contrast, the effects of age, residency and education follow different regional profiles. Those who would not 'say something' were much younger in Knox (28%, d=.59, t=1.994, p=.049), around 35±18 years old, but the effect vanished in Yarra Ranges. When checking knowledge of the CSV phone number only two regions demonstrated significant effects. Those who knew the CSV number were much older in Surf Coast (39%, d=1.1, t=2.521, p=.013), around 60 years of age, and Nillumbik (35%, d=.95, t=2.398, p=.019). In Nillumbik they were additionally less educated (87%, d=0.96, t=2.464, p=.016) and had lived in the region for longer (145%, d=1.28, t=4.878, p=.000). Some of the sample sizes are getting small here but because all three variables follow the same trend they can be reasonably trusted. In fact, similar results emerge for the number of past reporters to CSV. Here, Knox is similar to Nillumbik in that past reporters are also less educated (164%, d=.94, t=3.072, p=.012) and had lived in the area longer (56%, d=.92, t=2.035, p=.048). They were also older in Yarra Ranges (24%, d=.80, t=2.029, p=.046).

To summarise, those who need more targeting by CSV are mostly women, generally younger, more educated and newer to the area, especially so in Knox, Yarra Ranges, Surf Coast and Nillumbik. It appears the effect sizes are largest for gender, followed by age, education and residential tenure.

SOURCE OF INFORMATION ON CRIME STOPPERS

Respondents were asked if they heard of CSV from a range of sources: radio, television, local newspapers, state or national newspaper, social media or websites, work, friends and family and billboards. They were then asked if they could recall a mention of bushfires or arson. Across time, and averaged across the six media pathways, there is an overall fall in media recall for CSV media from 47% to 44% but this is small (p>.05) so reporting could be considered to be stable. By contrast, the percentage of people who recall the report mentioning bushfire has significantly risen from 23% to 34% (47%, d=1.57, p=.027 adjusted for unequal variance).

The findings for the total respondents for 2015 and 2017 are shown in Table 3.1, followed by the numbers of respondents from each region who noticed a mention of CSV and then recalled a bushfire or arson mention. In 2017, each region had 90 respondents in total.

The source of recall of information about bushfire/arson was strongest with family and friends in each region followed by work in 2015 and billboards in 2017

Television again is the largest source of information about CSV for both years in each of the regions, followed by radio for each region and over both years. Local newspapers proved to be important, as well as social media/websites. In relation to bushfire/arson, family and friends were the most important for both years, in each region followed by work in 2015 and billboards in 2017. Divergence from the overall pattern was especially noted in bushfire recall for state and local newspapers and billboards, where 2017 respondents report the highest changes since 2015. This should be checked against actual billboard placement by agencies other than CSV. For example, the Gippsland Arson Prevention Program (GAPP) and Country Fire Authority run billboard campaigns.

Table 3.1 Source of information about CSV and recall of bushfire and/or arson mentioned, 2015 and 2017 and across regions

| Recall | 2015 | 2017 | Knox | Yarra | Latrobe | Murrin | Maced | Surf | Nillum |
|------------------|------|------|------|-------|---------|--------|-------|------|--------|
| | % | % | n | n | n | N | n | N | n |
| Radio | 62 | 54 | 44 | 46 | 52 | 45 | 45 | 45 | 63 |
| Bushfires | 31 | 29 | 10 | 14 | 14 | 8 | 13 | 19 | 26 |
| Television | 92 | 90 | 79 | 75 | 81 | 78 | 80 | 89 | 84 |
| Bushfires | 42 | 35 | 26 | 28 | 33 | 24 | 28 | 31 | 29 |
| Local newspapers | 36 | 31 | 28 | 28 | 32 | 33 | 23 | 23 | 27 |
| Bushfires | 19 | 37 | 9 | 14 | 16 | 10 | 7 | 7 | 9 |
| State newspapers | 29 | 26 | 17 | 23 | 31 | 32 | 19 | 17 | 25 |
| Bushfires | 15 | 35 | 7 | 9 | 15 | 8 | 6 | 2 | 10 |
| Social media | 35 | 39 | 22 | 35 | 37 | 32 | 38 | 34 | 44 |
| Bushfires | 20 | 28 | 9 | 9 | 17 | 5 | 13 | 5 | 10 |
| Work | 19 | 12 | 10 | 7 | 19 | 6 | 11 | 13 | 8 |
| Bushfires | 45 | 39 | 4 | 2 | 9 | 1 | 4 | 5 | 4 |
| Friends & Family | 23 | 21 | 15 | 18 | 24 | 15 | 19 | 27 | 14 |
| Bushfires | 50 | 50 | 3 | 9 | 16 | 4 | 10 | 15 | 9 |
| Billboards | 27 | 25 | 17 | 17 | 34 | 21 | 25 | 21 | 20 |
| Bushfires | 11 | 37 | 4 | 3 | 18 | 12 | 10 | 4 | 6 |

This is interesting given that bushfires are visually dramatic but the main recollections surround other people in the community and at work. Even television falls behind despite its visual impact, and the weakness of radio and social media is surprising given that ABC Radio provides emergency updates as does the CFA online. It is unlikely that public recollections are strictly attached to CSV for these items but the trends might be explained by close alignment with CSV efforts across these media.

When the estimate of regional interest is calculated (non-targeted state newspaper recall minus targeted local newspaper recall) it suggests the greatest CSV activity for the 2016/17 bushfire season was focused on, in order: Surf Coast (17), Yarra Ranges (11), Murrindindi (11), Latrobe (7), Macedon Ranges (3), Nillumbik (-2), and Knox (-4). This pattern makes sense as Knox is not bushfire-affected whereas Surf Coast and Yarra Ranges were nominated as problem areas in the 2015 report, and Surf Coast was most recently impacted by catastrophic bushfires in 2015. Moving backwards in time, Murrindindi and Latrobe were both affected by Black Saturday in 2009, followed by Macedon Ranges affected in earlier fires. Nillumbik and Knox are more urbanised, but Nillumbik stretches from suburban Eltham to regions bordering King Lake and St Andrews, both affected badly during Black Saturday.

The problem with recall is that it is affected by three things: CSV media activity in the region, the interest of the respondent, and the respondent's personal media preferences. This means recall on its own is hard to interpret as it represents an interaction of all three effects.

Television and state newspapers are two media pathways that are unable to target regions specifically. So recall is more likely to capture the background interest of communities rather than regional differences in CSV media activity. If this is the case, the recall values for the two pathways (television and state newspapers) would be expected to correlate across regions. Bushfire interest demonstrates just such a correlation (r=.77 p=.045).

WILLINGNESS TO REPORT BASED ON ARSON SCENARIOS

Respondents were asked what they would do when faced with 19 scenarios in relation to a fire situation (Table 3.2). The action choices are 'do nothing', 'handle themselves', call TZ and call CSV. The final column in Table 3.1 totals those who would report. The scenarios are presented in three categories of event severity. Items 92-100 cover common fire-lighting scenarios on a Total Fire Ban Day. Most of these capture reckless or risky behaviours of importance to the current Victorian government. Items 101-106 cover scenarios for a fire that destroys a few acres and damages property. Items 107-110 cover similar scenarios but the outcome changes to a fatal wildfire that kills people.

The findings suggest that the potential actions taken by respondents vary greatly, depending on circumstances. In four of the 19 scenarios, under half of the respondents would report the issue to TZ or CSV. Even if the respondent is the only witness and it is a Total Fire Ban Day, 68% would not report a campfire left unattended. However, 66% would handle the situation themself – presumably by putting the fire out. 29% of people wouldn't do anything about a lit cigarette being thrown from a car on a Total Fire Ban Day.

Table 3.2 Responses to hypothetical scenarios, including reporting totals

| | | Do | Handle | Call | Call | Report |
|-----|--|--------------|-------------|---------|----------|------------|
| | | Nothing % | Myself % | TZ % | csv % | Total % |
| Na | You are the only witness to these events on a Total Fire | 70 | 76 | 70 | 76 | 76 |
| No. | Ban Day | | | | | |
| 92 | People pack up and leave a small campfire to burn itself out | 2 | 66 | 31 | 1 | 32 |
| 93 | Lit cigarette thrown from car | 29 | 26 | 34 | 11 | 45 |
| 94 | Stranger starts a small fire that starts to grow | 0 | 9 | 90 | 1 | 91 |
| 95 | And they could never find out you reported them | 0 | 9 | 82 | 9 | 91 |
| 96 | Someone you know starts a small growing fire | 1 | 24 | 73 | 2 | 75 |
| 97 | And might take action against you | 8 | 9 | 75 | 8 | 83 |
| 98 | Harmless relative or close friend | 3 | 37 | 55 | 6 | 61 |
| 99 | Well-liked child and accidental | 1 | 49 | 46 | 4 | 50 |
| 100 | Difficult youth who has lit fires in the past | 0 | 4 | 90 | 6 | 96 |
| | After a small fire burnt out a few acres of bush with no | | | | | |
| | damage to people or property | | | | | |
| 101 | You find out something that might help solve it | 8 | 4 | 60 | 29 | 89 |
| 102 | You find out the same car was seen in areas where other fires started | 12 | 0 | 61 | 27 | 88 |
| 103 | Hear gossip a local man lit it deliberately | 37 | 3 | 35 | 26 | 61 |
| 104 | Suspect a local girl who tried to suicide | 27 | 8 | 41 | 24 | 65 |
| 105 | Find out your own child did it and it was definitely an accident | 4 | 64 | 27 | 5 | 32 |
| 106 | Find evidence that it was your own child did it deliberately | 2 | 43 | 48 | 8 | 56 |
| | After a fatal wildfire that destroyed property and killed people | | | | | |
| 107 | You find out the same car was seen in areas where other fires started | 7 | 0 | 71 | 22 | 93 |
| 108 | You know something but the police say you have no evidence | 20 | 2 | 29 | 49 | 78 |
| 109 | You hear gossip an elderly couple did it accidentally | 31 | 3 | 44 | 22 | 66 |
| 110 | You find evidence it was your own child and it was deliberate | 2 | 24 | 61 | 13 | 74 |

Reporting increases where the fire is deliberately lit, by a 'difficult' youth, and where the fire shifts from a small bushfire to a fatal wildfire

To better understand the factors influencing reporting of arson, the scenarios were designed, along with the three changes in severity, to offer slight alterations in the individual items in relation to the nature of the perpetrator, the respondent's level of certainty, or changes in the time frame of reporting, such as an act in progress against something recalled. Also, as the questions move through the three forms of severity, a number of questions are repeated to test the effect of the fire's outcome on reporting. For example, items 102 and 107 are identical but fall under different outcomes, likewise items 106 compared to 110.

Thus, the effects of: anonymity, fear, relationships, intentions, and offender characteristics can be ascertained. Comparing a person's change in responses to paired items then allows a measure of the direct strength of these contextual factors in influencing reporting. It also provides an indication of how closely people read and respond to the survey, the inverse percentage of response alterations across all vignettes providing a measure of set responding. Paired comparisons used a 4 x 4 Chi Square with each of the responses labelled 0-3. The numbers in the left hand column in Table 3.1 indicate the comparisons of scenarios that are being made below.

The findings are as follows:

Anonymity effect

Comparing numbers 94 (Stranger starts a small fire that starts to grow) and 95 (And they could never find out you reported them). While the total reporting remained stable for both at 91%, there was a significant small shift from reporting to police, to reporting to CSV, amounting to an 8% rise for CSV, Chi^2 (9) = 721, p = 0.000, suggesting a preference for anonymity.

Stranger effect

Comparing numbers 94 (Stranger starts a small fire that starts to grow) and 96 (Someone you know starts a small growing fire). Where the change is a stranger compared with someone you know, while 24% chose not to change their answer, the rest shifted their responses. Respondents are more likely to handle it themselves with someone known to them, as well as being more likely to report a stranger 75% to 91%, Chi^2 (9) = 85, p = 0.000.

Fear of revenge effect

Comparing numbers 96 (Someone you know starts a small growing fire) and 97 (And might take action against you). Where there is a chance that action may be taken against the respondent, overall reporting rises from 75% to 83% and a full 15% was taken from handling it alone. Chi^2 (9) = 76, p = 0.000.

Relationship effect

Comparing numbers 96 (Someone you know starts a small growing fire) and 98 (Harmless relative or close friend). The shift is subtle to a closer intimate. While 72% retained their original answer, respondents are less likely to report a closer intimate, and more likely to handle the situation themselves. Chi^2 (9) = 395, p = 0.000.

The intentions effect

This comparison keeps both severity and relationship constant. The first compares numbers 105 (Find out your own child did it and it was definitely an accident) and 106 (Find evidence that it was your own child did it deliberately). Here 67% retain their original responses whereas respondents are more likely to report (from 32% to 56%) when their own child deliberately commits arson, Chi^2 (9) = 479, p = 0.000. The large rise in reporting is derived from an extra 21% taken from handling it alone given over to police, and an extra 3% to CSV.

Child as offender

This comparison is between numbers 96 (Someone you know starts a small growing fire) and 99 (Well-liked child and accidental). Moving from someone you know, to a child, reduces reporting from 75% to 50% of respondents and respondents are much more likely to handle

the situation themselves. The results for this analysis and the following two need to be treated with caution as there are two changing items in the scenarios, thus it is not known which of the items had the greatest impact on the actions of the respondent. However, given that many fire-lighters are young, it is important to promote reporting where there is suspicion in relation to a young person.

Difficult youth as offender

This compares numbers 96 (Someone you know starts a small growing fire) and 100 (A difficult youth who has lit fires in the past). With a difficult youth, reporting increases from 75% (knowing someone) to 96%.

Also embedded in the vignettes are consistent language changes from past to present and from suspicion only to evidence-based reporting. This enables measures of how well the person understands the different scenarios under which the correct course of action would be to call Triple Zero versus CSV. For example, the entire first section devoted to witnessing events on a Total Fire Ban day are all present tense with enough knowledge to make a direct police or Triple Zero report; the only reasons for not doing so would be either a desire to remain anonymous or else a perception that the event is not serious enough. The next two sections manipulate severity with two items each that would properly require a police report after, rather than during, the event (items 101-2 for a small fire and items 107-8 for a fatal wildfire). These two sections also shift from suspicion (items 103-4 and 109) to known evidence (105-6 and 110), where the correct action would be to report to CSV and Police respectively.

Severity

This holds all other things equal while changing from a small non-fatal bushfire to a large fatal wildfire. The first comparison pairs numbers 102 (After a small fire burnt out a few acres of bush with no damage to people or property, you find out the same car was seen in areas where other fires started) and 107 (After a fatal wildfire that destroyed property and killed people, you find out the same car was seen in areas where other fires started). Moving from a small to a fatal wildfire increased reporting by only 5%, although respondents were more likely to report to TZ than CSV. Chi^2 (4) = 542, p = 0.000.

For the second test of severity, 106 (After a small fire burnt out a few acres of bush with no damage to people or property, you find evidence that it was your own child did it deliberately) is compared with 110 (After a fatal wildfire that destroyed property and killed people, you find evidence it was your own child and it was deliberate). Where their child lights the fire deliberately, severity has a much stronger effect. Total reporting rises from 56% to 74%, 13% more to police and 5% more to CSV mostly taken from handling it alone falling from 43% to 24%, Chi^2 (9) = 813, p = 0.000.

Thus to summarise, amongst the effects that significantly dampen reporting in 2017, they can be ranked as follows: the perpetrator is a child (by 18%), the person is close to the respondent (11%), and known to the respondent (9%). As to those effects that significantly increase reporting they are ranked as: the fire is deliberately lit (20%), by a difficult youth (12%), and shifts from a small bushfire to a fatal wildfire (13%). In order of effect size, those promoting CSV reporting are, in order of largest to smallest, anonymity (8%), fear (6%), severity and



intent (5%), relatedness (4%) and intentionality (3%). Total reporting effects are much greater, following intentionality (21%), severity and intent (18%), strangers (16%) and fear (8%).

Note that two fire severity metrics are used and demonstrate an interaction because the effect of a shift from a small bushfire to a fatal wildfire will increase reporting of one's own child far more than for a stranger, mainly because reporting the stranger is already much higher; approaching saturation. In other words, strangers get reported no matter what, but reporting a family member, especially a child, depends on how severe the outcome is. This emerges in both 2015 and 2017 despite there being a significant fall in reporting items 102 and 107 in 2017. It should perhaps be noted that the size and impact of the fire should not, in reality, impact the propensity to report as the outcome of the fire is either not known, or it may be luck/chance that the fire proved to be less severe.

Fear of revenge fails to reach significance for 2017, yet emerges as a significant effect for 2015 (5%, t=4.20, p=.000). Likewise the effect of knowing the perpetrator, whilst significant in 2017, fails in 2015. This highlights the logic of testing validity outside of statistics. Findings that replicate across years can be trusted as real findings. But if a finding occurs in only one year, its veracity can still be supported if the same trend emerges across the full sample as well as the regional sample. This is exactly what happens for both metrics, suggesting that fear of revenge and knowing the perpetrator both uncover real changes from 2015 to 2017, changes affecting people at all levels. It appears reporting fell across all levels for fear of revenge in 2017. As to knowing the perpetrator the effect comes from an insignificant increase across the years for reporting item 94, reporting a stranger that lights a small growing fire, plus a decrease in item 96, reporting someone you know that lights a small growing fire.

Those who called 000 were much less likely to have recalled CSV media

REPORTING VIA CORRECT PATHWAY

Whether respondents knew the correct reporting pathway was examined in the survey. Some corrections were made to the results from 2012 and 2015, which allowed a more accurate comparison with the findings for 2017. The findings are shown in Table 3.3.

Table 3.3 shows that the percentage of people who correctly select CSV for suspected information on arson has increased by more than 50% since 2012 and the trend across all regions suggests growing understanding, although the numbers are still low.

Table 3.3 Percentage of correct reporting via appropriate pathways for total sample and by region for 2012, 2015 and 2017

| Region | | CSV correctly chosen after | 000 correctly chosen during witnessed arson % | Correct on all |
|--------------|------|----------------------------|--|----------------|
| | | suspected arson % | | items |
| All Regions | 2017 | 21 | 81 | 16 |
| | 2015 | 19 | 68 | 12 |
| | 2012 | 13 | 57 | 6 |
| Knox | 2017 | 11 | 80 | 7 |
| | 2015 | 22 | 68 | 11 |
| | 2012 | 12 | 47 | 5 |
| Yarra Ranges | 2017 | 24 | 87 | 20 |
| | 2015 | 21 | 58 | 16 |
| | 2012 | 12 | 51 | 6 |
| Macedon | 2017 | 23 | 76 | 18 |
| | 2015 | 22 | 70 | 12 |
| | 2012 | 20 | 61 | 9 |
| Surf Coast | 2017 | 22 | 82 | 17 |
| | 2015 | 23 | 67 | 10 |
| | 2012 | 8 | 56 | 3 |
| Latrobe | 2017 | 19 | 73 | 12 |
| | 2015 | 27 | 67 | 15 |
| | 2012 | 15 | 47 | 6 |
| Nillumbik | 2017 | 30 | 84 | 27 |
| | 2015 | 12 | 77 | 10 |
| | - | - | - | - |
| Murrindindi | 2017 | 17 | 86 | 14 |
| | 2015 | 16 | 70 | 10 |
| | 2012 | 12 | 70 | 5 |

These positive trends are replicated in five of the six bushfire-affected communities. Knox, as expected, is least correct and Latrobe, worryingly, is the only area where the percentage of people correct on all items has fallen in 2017. Murrindindi and Latrobe need attention here, especially as further analyses in these areas suggests that 44% of Latrobe people and 36% of Murrindindi people would direct unsubstantiated claims to Triple Zero. This may have the effect of wasting valuable operational resources and time. Of more concern, however, is the percentage of people who would choose to report a witnessed and growing fire to CSV rather than Triple Zero. In 2017, this percentage was small (1.1%) for Murrindindi but 5.6% for Latrobe. This has the effect of slowing emergency responses to a possible bushfire in 5.6% of cases by not calling the emergency number in the first instance to deploy an immediate response. Other regions of concern for this statistic include 2.2% in Macedon and Nillumbik and 4.4% in Surf Coast.

The 137 respondents who incorrectly called the emergency number differed from those who consistently made the correct choices for CSV and TZ. While the two groups were not different by age, gender, residency or education, those who incorrectly called the emergency number were much less likely to have recalled CSV media about bushfires on two measures: when all media are considered (292%, d=.29, t=4.028, p=.001) and for combined work, friends and family (93%, d=.93, t=3.633, p=.001). That both were significant provides validity and also suggests that CSV bushfire media is getting the message across (the logic being that those who get it correct, by contrast, must be those who have been exposed to CSV media).

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The only other characteristic of the incorrect group was being much poorer than those who got the items correct (132%, d=.56, t=3.896 adjusted for Levene's test, p=.000). This is difficult to explain as yet and provides no easy strategy for CSV to leverage against. What can be said is that the group is slightly more likely to have made a report to the emergency number in the past (Chi^2 =19.507, p=.012).

By contrast, the much smaller group of only six people who consistently chose the wrong (and much more dangerous) option for a witnessed fire demonstrated no differences for age or residency but were more likely to have secondary schooling as their highest educational attainment (d=1.1, t=3.677, p=.012). Of importance, their overall engagement with CSV media was not significantly different from the broader group but not one of them had heard mention of bushfires in the CSV media they had seen. Their recall of CSV media outside of bushfire mentions was restricted to social media, radio and television, but only their engagement in social media significantly distinguished them from the rest of the sample (Chi^2 =18.954, p=.004).

COMPARING SUBGROUPS OF RESPONDENTS

A subsidiary set of analyses on four subgroups were identified for comparison. These subgroups are:

- those that correctly recalled the CSV phone number
- the intractable group that refuses to report
- fire-fighters and police internal groups
- those identified as the 'working poor', being respondents who rated themselves time poor and overworked yet also cash poor.

Independent samples t tests or else 2 x 2 Chi Square analyses were used for each group against the remainder of the total sample. For this section, p is set at 0.01 and effect size d also represents a percentage unless otherwise specified.

Correct recollection of the CSV number

There were no significant findings for the group that correctly recalled the CSV phone number. They were demographically identical to the broader group, with no differences across victimisation, reporting, personality and media awareness.

Non-reporters

In contrast to the 'correct recollection' group, the intractable group who refused to report to CSV displayed wide-ranging differences. They were significantly less likely to have seen CSV in the media (p<0.025). They were younger, averaging 37 years, significantly less happy (d=-59), and many lived in Knox (65%) or Latrobe (18%). They were more victimised by crime as a group and yet five times more likely to say police had not helped when making a report ($Chi^2 = 10$, p

Firefighters and police were much more likely to report in almost every hypothetical vignette =.002). Perhaps this is why they also displayed less moral congruence with police and authorities (d=-53). They were six times more likely to have been stalked (Chi^2 =218, p=.000), three times more likely to have been bullied (Chi^2 =27, p=.001) and six times more likely to have been assaulted (Chi^2 =219, p=.000). They did not differ by gender but tended towards more tertiary education (70%). Although they had never had experience of CSV they displayed less trust in its anonymity (d=-129) and were less likely to report bushfire arson across all the hypothetical vignettes (d=-52),

with special sensitivity to obstacles like fear of revenge (d=+99), a personal relationship with the offender (d=+55), concern about accusing the wrong person (d=+46) and cynicism about CSV follow-up (d=+50). They were more likely to know people who take the law into their own hands (d=+37) and had less social cohesion in their neighbourhood (d=-42).

Internal group - fire-fighters and police

The internal group of police and fire-fighters displayed a very different profile. They were older, averaging 53 years, and had lived in their local area for an average of 27 years as opposed to the 20 years average of all respondents (p = .001). As would be expected they had strong moral congruence with police and authorities (d = +21) and resisted each and all obstacles to reporting (d = -43). Their past reporting displayed the same pattern as they were 2.6 times as likely to have called Triple Zero ($Chi^2 = 15$, p = .000) and twice as likely to have made a report to the police ($Chi^2 = 7$, p = .009). Moreover, they were much more likely to report in almost every

hypothetical vignette, ranging from unattended campfires (d = +14) and gossip about a local arsonist (d = +22) through to their own child lighting a small bushfire accidentally (d = +15) or a fatal wildfire intentionally (d = +7.5). Perhaps as part of their job they also take a naturally higher interest in CSV media. Compared to the broader sample they have recalled news items about bushfires on the radio ($Chi^2 = 5$, p = .020) and with people at work ($Chi^2 = 6$, p = .016) twice as often, and with friends and family ($Chi^2 = 16$, p = .000) three times as often. They also have greater wellbeing (d = +12), much greater confidence in local safety (d = +15) and are less likely to suffer bullying ($Chi^2 = 7$, p = .009).

Working poor

The working poor generally reflected the same gender, residency and educational profile as the broader group but were significantly younger (average of 44 years old), twice as likely to have made a past report to CSV ($Chi^2 = 26$, p = .018) and 4.5 times more likely to praise the helpfulness of Triple Zero ($Chi^2 = 27$, p = .008). The group further displayed significantly more poverty (d = 57), less wellbeing (d = -15) and less social cohesion (d = -11). They are significantly more likely than others to report, and significantly less likely to raise obstacles like fear of revenge (d = -31) and distrust in follow-up (d = -34). They are, however, less likely to report when someone they know lights a small growing fire (d = -6.5), if their own child lights a small non-fatal bushfire, whether accidental (d = -23) or deliberate (d = -11), or when their child deliberately lights a fatal wildfire (d = -18). They are twice as likely to have seen CSV in social media (Chi^2 = 10, p = 002), much more so than other media where they typically have only a third of the recall for CSV in the case of state or national newspapers (Chi^2 = 6, p = .014), local newspaper (Chi^2 = 8, p = .005), television (Chi^2 = 8, p = .014) and radio (Chi^2 = 6, p = .017).

Respondents experience of, and reporting other crimes

The respondents were asked if they had ever been exposed to 11 types of personal and property crimes. The total sample stated they had experienced 480 criminal incidents, being 200 instances of personal victimisation (including violence to pets) and 280 reports of property crimes covering damage or theft and including illegal fires). Across the entire sample, 45% of people were victimised at least once (n=355). Within this group, 90 people were victimised twice and 49 three or more times.

45% of people were victimised by a crime at least once.

10% reporting this to CSV and 70% saying it was helpful

Regional differences in victimisation emerge as significant for stalking, assault, sexual assault, home burglary and other theft, converging on a trend that Knox has the highest rates in most cases. The exception is assault, where Latrobe has the highest risk, followed by Knox. Relative risk calculations applied to Knox (against the total) suggest Knox has twice as much stalking, three times as much sexual assault, twice as much burglary and 1.8 times the amount of theft. Latrobe has 1.8 times the total assault rate. Nillumbik has the lowest rates of burglary and assaults but the highest rates of other thefts, 1.9 times the total rate. Yarra has the lowest theft rates.

Table 3.4 shows the six types of personal crime according to region. The first number in each cell being the reporting sample number and the second being the number of people victimised. The final row converts the totals across all regions into percentages, the first number the percentage of victims reporting, the second the percentage of the total sample of 630 people

who were victimised. Across the sample, 82% had made a report about a crime in the past to one of either police, triple zero or CSV, a small group making a report to all three (7%). The most prevalent crime was bullying, at 14%, yet only 8% report it. Sexual assault, by contrast, affects 2% of the total sample and is reported in 38% of cases. The final columns provide similar information for each region, suggesting Knox has the highest victimisation rates (7%) and Latrobe has the highest reporting rates (41%).

Table 3.4 Personal victimisation showing reporting and victimisation

| | Stalking | Bullying | Assault | Sexual | Family | Violence | Total | Percentage |
|--------------|----------|----------|---------|---------|----------|----------|----------|------------|
| | | | | Assault | Violence | to Pets | | % |
| Knox | 2/11 | 0/17 | 3/8 | 2/5 | 2/4 | 1/1 | 10/46 | 22 / 7 |
| Yarra Ranges | 0/1 | 2/11 | 1/5 | 0/0 | 1/3 | 0/1 | 4 / 21 | 19/3 |
| Latrobe | 0/3 | 2 / 8 | 6/10 | 1/1 | 2/5 | 0/0 | 11/27 | 41/4 |
| Murrindindi | 1/6 | 2/16 | 1/2 | 1/1 | 0/1 | 0/2 | 5 / 28 | 18 / 4 |
| Macedon | 0/7 | 1/11 | 1/3 | 1/2 | 2/5 | 0/1 | 5 / 29 | 17/5 |
| Nillumbik | 0/5 | 0/13 | 0/1 | 0/0 | 0/0 | 0/1 | 0 / 20 | 0 / 3 |
| Surf Coast | 0/3 | 0/12 | 4/6 | 0/4 | 0/4 | 0/0 | 4 / 29 | 14/5 |
| Total n | 3/36 | 7/88 | 16/35 | 5 / 13 | 7 / 22 | 1/6 | 39 / 200 | |
| Percentage % | 8/6 | 8 / 14 | 45 / 6 | 38 / 2 | 32 / 3.4 | 17 / 1 | 20 / 32 | |

For property offences (Table 3.5) there were no significant differences by region for property damage, fraud or illegal fires. Yarra Ranges had significantly less theft compared to the high rates in Knox and Nillumbik (Chi^2 =20, p<0.01) and yet Knox and Nillumbik themselves represented the regional extremes of home burglary (Chi^2 =17, p<0.01). When counted overall, there are no gender differences for property victimisation (Chi^2 =3, p>0.05) however people living in Knox (Chi^2 =31, p<0.05) are again more likely to suffer property crimes.

Table 3.5 Property victimisation showing reporting and victimisation

| | Stalking | Bullying | Assault | Sexual | Family | Violence | Total | Percentage |
|--------------|----------|----------|---------|---------|----------|----------|----------|------------|
| | | | | Assault | Violence | to Pets | | % |
| Knox | 2/11 | 0/17 | 3/8 | 2/5 | 2/4 | 1/1 | 10/46 | 22 / 7 |
| Yarra Ranges | 0/1 | 2/11 | 1/5 | 0/0 | 1/3 | 0/1 | 4 / 21 | 19/3 |
| Latrobe | 0/3 | 2 / 8 | 6/10 | 1/1 | 2/5 | 0/0 | 11/27 | 41/4 |
| Murrindindi | 1/6 | 2/16 | 1/2 | 1/1 | 0/1 | 0/2 | 5 / 28 | 18 / 4 |
| Macedon | 0/7 | 1/11 | 1/3 | 1/2 | 2/5 | 0/1 | 5 / 29 | 17/5 |
| Nillumbik | 0/5 | 0/13 | 0/1 | 0/0 | 0/0 | 0/1 | 0 / 20 | 0 / 3 |
| Surf Coast | 0/3 | 0/12 | 4/6 | 0/4 | 0/4 | 0/0 | 4 / 29 | 14/5 |
| Total n | 3/36 | 7/88 | 16/35 | 5 / 13 | 7 / 22 | 1/6 | 39 / 200 | |
| Percentage % | 8/6 | 8 / 14 | 45 / 6 | 38/2 | 32 / 3.4 | 17 / 1 | 20 / 32 | |

A subsample of one in ten (61) had made a direct report to CSV in the past, of which 70% (43) said it was helpful. Satisfaction is highest for Triple Zero (92%), followed by police (81%) and then CSV (70%). There were no differences in past reporting to police between regions. For Triple Zero, Yarra Ranges made more reports and felt they were helpful (*Chi*²=15, p<0.025) whereas Knox, Nillumbik and Surf Coast made less reports and felt they were more unhelpful (*Chi*²=33, p<0.001). Interestingly, there is a significant correlation between making a report and seeing it as helpful (r2=0.99, P<0.01) across all three reporting pathways. Only 44% of the 11 crime types totalling 480 incidents were reported. Property crimes are 1.6 times as likely to be reported (61%) compared to personal crimes (39%), whereas social issues were only reported in 13% of cases.

WILLINGNESS TO REPORT BASED ON BELIEFS & SOCIAL CONDITIONS

In addition to the variables gleamed from the 19 scenarios, as presented above, other factors are likely to influence a willingness to report an arson or fire event. This section provides the relative importance of 18 variables that drive two thirds of reports for all regions as compared with the control region of Knox, and then each of the regions separately. Definitions of the variables are as given in Section 2.8. The findings presented here cover the great majority of factors previously tested on behalf of CSV. Some of the terms are arson-specific developed from the current research, whereas others are drawn from the international literature on crime reporting. The effect size has been standardized, so can be read as if a percentage.

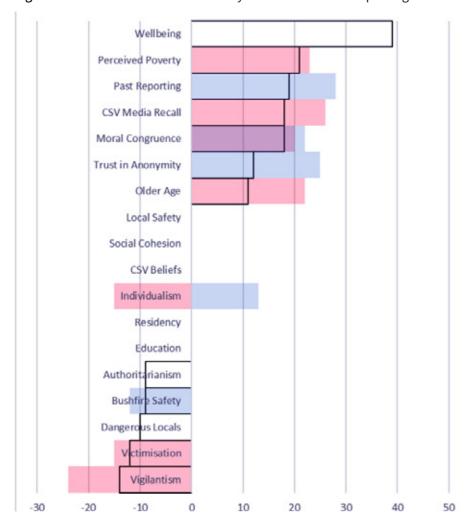
Variables that promote and reduce arson reporting for all seven regions

Figure 3.3 shows those variables most likely to increase and decrease reporting of suspicious fire behaviour to CSV for all regions surveyed. The variables to the right of the 0 axis will increase reporting and those to the left are more likely to decrease reporting. Where available, the findings are differentiated according to gender – pink female, blue male and purple where there is overlap. The black line represents the findings for the six bushfire risk regions, combined.

About two-thirds of reporting across all seven regions is explained by the factors shown in Figure 3.3. Personal wellbeing is very important. Arson reporting is increased for men with past reporting, moral congruence with authorities, trust in anonymity and individualism. Reporting falls for men when they feel safe about summer bushfires. Arson reporting increases for women with perceived poverty, CSV media recall, moral congruence, and older age. It falls with past criminal victimisation and a sense that locals take the law into their own hands.

The following are suggestions to increase arson reporting to CSV across all regions, using untargeted media, such as state television, radio and newspapers and social media. The findings suggest it is important to engage women who are discouraged by vigilantism and victimisation; stress anonymity and the personal power to safely control local crime of all types with regular CSV reports. Note that television is weak in driving reports but helps with knowing the CSV phone number, favouring women, older people and those worried about vigilantism. Individualistic people avoid television; happier people, are more likely to make a report and prefer newspapers. State and national newspapers have the second strongest direct effect on increasing arson and CSV reporting after local radio and newspapers. Both television and newspapers should focus on anonymity, but fear of bushfires is especially strong for newspapers.

Figure 3.3 Variables that are most likely to influence arson reporting



Use visuals of bushfire for television but link it to human activity. Build messages that regular reporting to CSV is a personal crime reduction strategy that is becoming the norm and is important in reducing local crime.

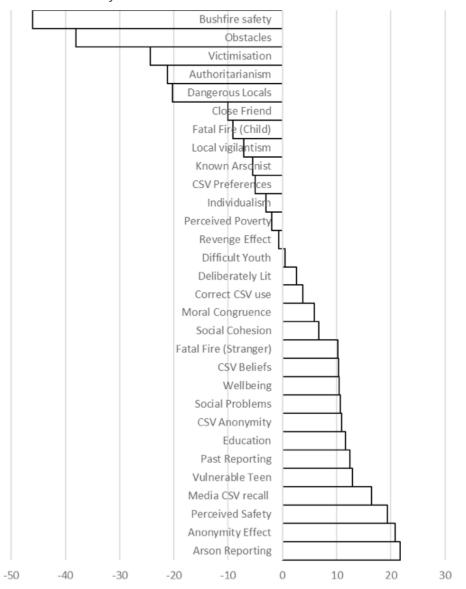
Differentiation of profiles of bushfire-affected communities and the control region

Figure 3.4 illustrates 30 unique profiles of surveyed bushfire-affected communities compared to the control community, Knox. The findings show variables that are more present and less present than found in Knox (the 0 axis). Therefore, variables more likely to be present than found in Knox are on the negative side of the figure and those more likely to be present than found in Knox are on the positive side of the diagram. All values are standardised effect sizes expressed as if on a percentage scale.

As would be expected, bushfire-prone regions feel much less safe about summer bushfires and are much more willing to push through obstacles to report arson. They are less criminally

victimised and less authoritarian; they know fewer dangerous locals. At the other end of the graph, bushfire communities are much more likely to report arson and to respond to CSV anonymity. They feel safer at the community level (other than with bushfires), have greater CSV media recall and are more likely to have made a past report. Compared to suburban Knox, bushfire communities tend to have higher wellbeing and are more educated, but suffer more social problems related to time and money.

Figure 3.4 Profiles of bushfire-affected communities in comparison with a non-bushfire affected community



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The graphic shows the main variables that rise or fall with arson reporting when compared with the control or benchmark region, which is Knox. A negative value means the characteristic falls with reporting, a positive value means it rises with reporting, pink for women, blue for men and purple when they overlay one another. Also overlaid is the summary profile for all bushfire regions combined – clear, bordered bars on top of the male and female colour-coding. This facilitates an understanding of how one region compares with the total group.

Figure 3.5 reports on the media that prompted an arson report when the item focused on bushfire and/or arson. As seen here, television recall is surprisingly weak for prompting arson reports to CSV as well as other agencies. This is probably a saturation effect - so many people have strong recall for television (it is the highest) that it no longer distinguishes high versus low reporting behaviour. Television, though it remains the strongest media pathway for CSV recall, can no longer be further leveraged. It still offers utility in other ways, e.g. branding, phone number, education. Reporting behaviour still increases with bushfire stories via radio, billboards, social media, and local newspapers.

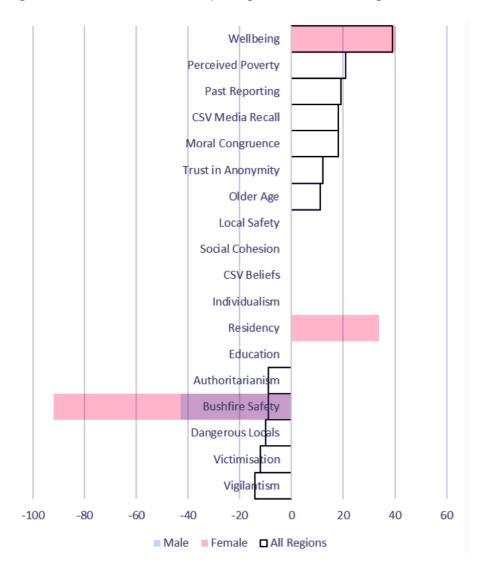


Yarra Ranges

Variables influencing reporting in Yarra Ranges

Variables that influence reporting in individual regions are now reported. The material is presented in three figures: variables that influence arson reporting, a psychosocial profile of the area, and a media profile.

Figure 3.5 Factors that influence reporting of arson in Yarra Ranges



Reporting. Fear of bushfire (converse to safety) is the biggest driver of arson reporting in Yarra affecting both genders, especially women (Figure 3.5). The coloured bars explain 85% of female (red) and 43% of male (blue) reporting. To summarise, happier women report, especially longer-term residents with more fear about bushfire safety.

Psychosocial Profile. As an example of how to interpret the second graph (Figure 3.6), the profile shows Yarra matches other bushfire regions for low bushfire safety but high personal safety. So, although bushfire safety drives reporting, it is normative in the second - the same as other bushfire regions. By contrast, the largest divergences from other regions can tailor media messages to suit Yarra specifically. For example, Yarra is less authoritarian and less likely to know dangerous locals. At the other extreme below, Yarra is more educated, especially among men and more likely to have made past reports. The biggest effect after arson reporting is that anonymity is understood by Yarra men but not women, despite women having better media recall.

Figure 3.6 The background Yarra Ranges profile

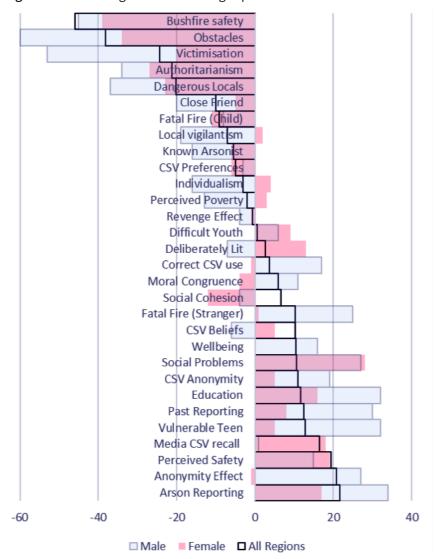
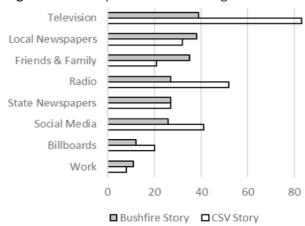


Figure 3.7 Media profile for Yarra Ranges



Media Profile. Yarra people have the best recall for bushfire stories delivered via television, local newspapers and radio (Figure 3.7). Family and friends (second most potent) could be engaged by clever integration with local media.



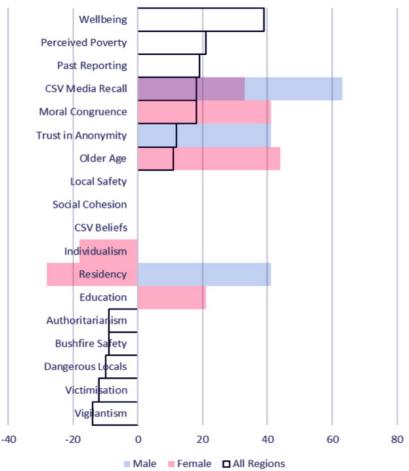
Latrobe

Variables influencing reporting in Latrobe

Reporting. Predictive analyses for Latrobe are strong; coloured bars predict about 80% of arson reporting for both genders (78% for men and 81% for women) (Figure 3.8). Leading drivers of arson reporting include CSV media and trust in its anonymity. For women, reporting increases with age, education, and moral congruence, whereas residency differs by gender. Longer-term residents supress reporting for women (opposite to Yarra) but increase reporting for men. Individualistic women reduce reporting, suggesting reporting women are more conforming whereas non-reporters are new arrivals, younger, individualistic, and less educated.

 $_{36}$

Figure 3.8 Variables that impact on reporting in Latrobe



Media Profile. Latrobe people have the best recall for bushfire messages via billboards, although general CSV is best recalled via television, radio and social media (Figure 3.9). After billboards, bushfire messages are best recalled via local newspapers, then social media.

Figure 3.9 Media profile for La Trobe

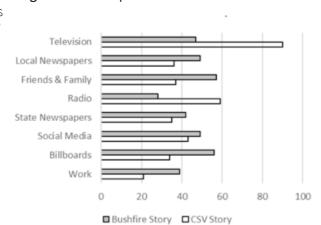
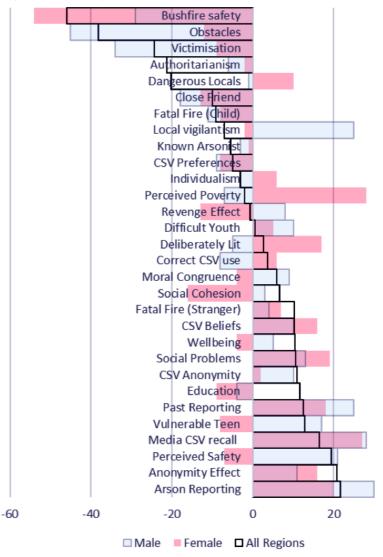


Figure 3.10 Background for Latrobe



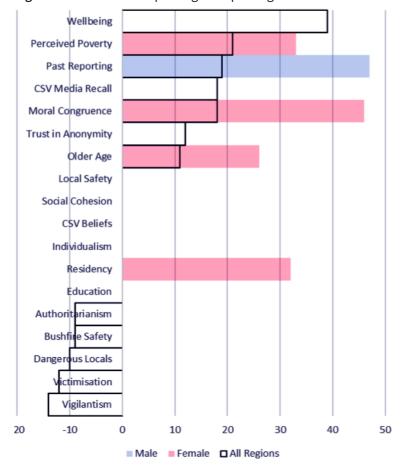
Psychosocial Profile. Latrobe women are more scared of bushfires than, say, Yarra women; men less so (Figure 3.10). The largest divergences for tailoring messages to suit Latrobe are: CSV media for both genders, greater vigilantism for men, poverty for women. Latrobe women increase reports when a fire is deliberately lit, more so than other regions if they are frightened of revenge. Men decrease it for revenge (values are reversed). Latrobe women are less engaged with neighbours than men, less educated and feel less safe.

Murrundindi

Variables influencing reporting in Murrindindi

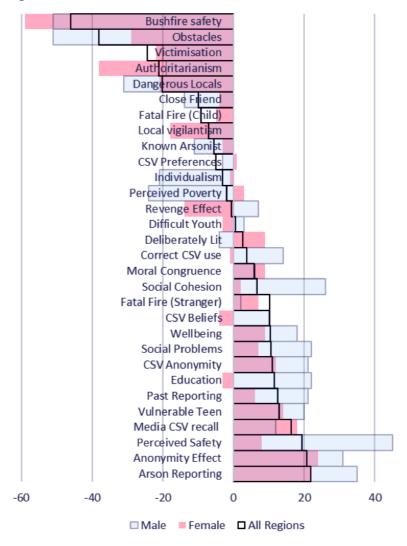
Reporting. Predictive analyses for Murrindindi are strong for women (75%), not so much for men (47%), suggesting perhaps missing variables that need some community elicitation in the region (Figure 3.11). A male focus group might help uncover variables outside of past reporting. Leading drivers of arson reporting for women, even greater than other regions, include poverty, moral congruence, older age, and longer residency.

Figure 3.11 Variables impacting on reporting in Murrindindi



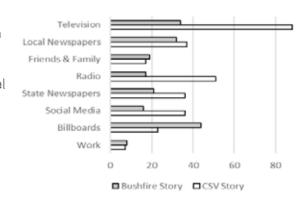
Psychosocial Profile. Murrindindi women are more scared of bushfires whereas men are less affected by obstacles to reporting, despite having much higher social cohesion than men in other regions (Figure 3.12). Men are a tight group, less individualistic and wealthier than other regions, and feel safer than most, with lower levels of victimisation, vigilantism and dangerous locals. The anonymity effect is very important to them and they tend to trust CSV. Women are less authoritarian than other regions so 'tough on crime' messages will not work. Again, women will increase reports for fear of revenge whereas men will decrease reports. Arson reporting is stronger for men than in other regions but average for women.

Figure 3.12 Profile of Murrindindi



Media Profile. Murrindindi people have the best recall for bushfire messages via billboards (although it is uncertain who has placed them), followed by television and local newspapers (Figure 3.13). Untargeted media like television, radio and state newspapers, followed by social media, offer stronger recall for more general, non-bushfire coverage of CSV.

Media Profile. Murrindindi people have Figure 3.13 Media profile for Murrundindi

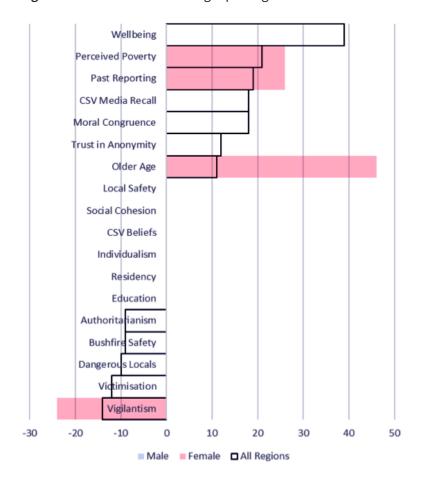


Macedon

Variables influencing reporting in Macedon

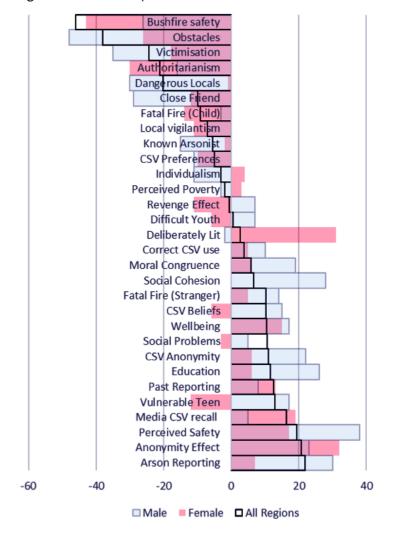
Reporting. Predictive analyses for Macedon men failed, suggesting other variables might need uncovering using community elicitation, as for Murrindindi (Figure 3.14). Arson reporting among Macedon women, by contrast, is 77% predicted by: perceived poverty, past reporting and older age. Local vigilantism suppresses reporting and so issues relating to local crime should not be a focus of media releases.

Figure 3.14 Variables influencing reporting in Macedon



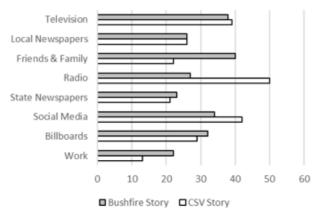
Psychosocial Profile. Female reporting of arson is problematic and low by comparison with other regions, whereas Macedon men are more likely to report. Women are equally as scared of bushfires but the stand-out divergence for them is that witnessing a fire being deliberately lit is important to them. This suggests continued misunderstanding of the role of CSV regarding evidence. Also, they seem less confused about CSV not being run by police but doubt CSV anonymity, more so than Macedon men and other regions. They are more educated and feel less safe than men. Again, the revenge effect is gendered in the same way as with Murrindindi and Latrobe. Similar effects emerge for reporting a vulnerable teen girl, where men decrease reporting and women increase reporting. So compassionate messages will not work.

Figure 3.15 Macedon profile



Media Profile. Macedon people have better recall for bushfire messages via friends and family, and television, than social media. For recall of CSV generally, a focus on radio should offer good results.

Media Profile. Macedon people Figure 3.16 Media profile for Macedon



Nillumbik

Variables influencing reporting at Nillumbik

Reporting. Predictive analyses for arson reporting in Nillumbik was 77% for both genders. Women are prompted to report when they have high sense of community, hence messages surrounding the protection of their patch of neighbourhood would be strong. Reporting for women is suppressed in the presence of vigilantism. For men, it is suppressed with moral congruence and the belief that CSV is run by police, so messages should drive CSV independence. Men will report when they trust CSV anonymity, when they are longer-term residents and when they know dangerous locals, suggesting the protection of the area would work with both genders -CSV presented as a local support partner and charity.

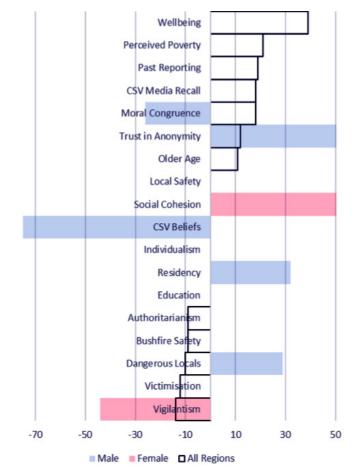
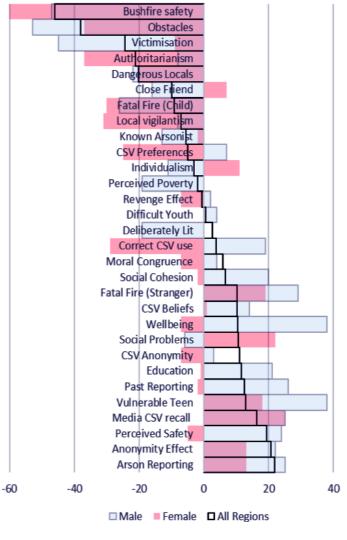


Figure 3.17 Variables influencing reporting in Nilumbik

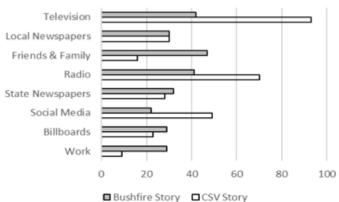
Psychosocial Profile.

Nillumbik people are frightened of bushfires but personal safety is gendered; higher for men, who are happier and less victimised. Arson reporting is an issue with women, who are very resistant to using CSV. They are more individualistic, less morally congruent with authorities, distrust CSV anonymity and are confused about when to report to CSV, all despite having better than average recall of CSV media. Perhaps the style of messaging is not resonating for them. They are more likely to report a child if the fire is large and fatal but less likely to report a close friend or vulnerable youth.

Figure 3.18 Nilumbik profile



Media Profile. Nillumbik has strong recall for bushfire stories via friends and family, television and radio. Radio and social media are strongest for CSV generally.



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Surf Coast

Variables influencing reporting in Surf Coast

Reporting. Predictive analyses for Surf Coast are strong for women (74%), even stronger for men (98%) (Figure 3.19). Leading drivers of arson reporting for women, even greater than other regions, include poverty, moral congruence, and individualism. For socially cohesive men, reporting is suppressed if they know dangerous locals prone to vigilantism. This suggests a perception of a criminalised community could be affecting this group. Male reporting increases when men are morally congruent with authorities and believe CSV is run by police. They are individualistic but also authoritarian and happier, yet poorer.

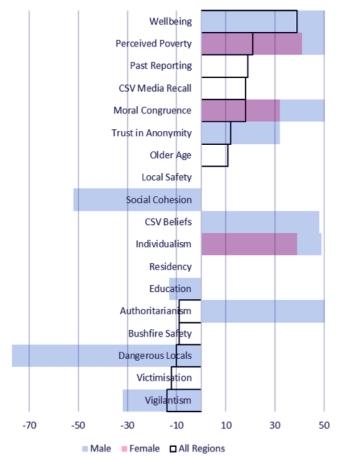
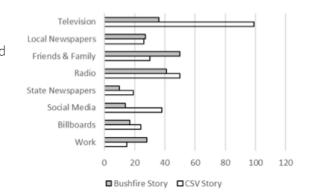


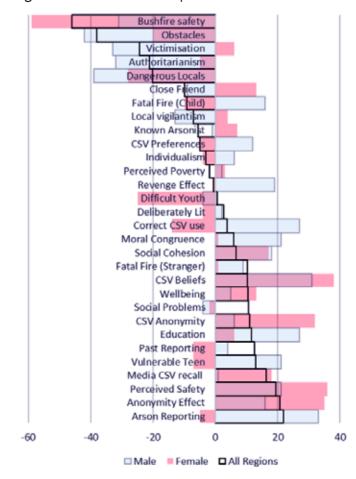
Figure 3.19 Variables that impact on reporting in Surf Coast

Media Profile. Surf Coast has the best recall for bushfire messages via friends, family and radio. CSV messaging is strong for electronic media.



Psychosocial Profile. Surf Coast women are very frightened of summer bushfires yet least likely to report arson, less so men who have the opposite profile (Figure 3.20). Both genders are more likely to know dangerous locals compared to other regions. Men have been more victimised and are more authoritarian, also more educated and suppress reporting for fear of revenge. Women will report a difficult youth and a vulnerable teen more than men will, although male reporting is much higher overall. Men have better understanding of when to use CSV but women have greater trust in its anonymity. Both genders believe CSV is run by police, explaining why social cohesion among criminalised men may be suppresses reporting.

Figure 3.20 Socio-economic profile of Surf Coast



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