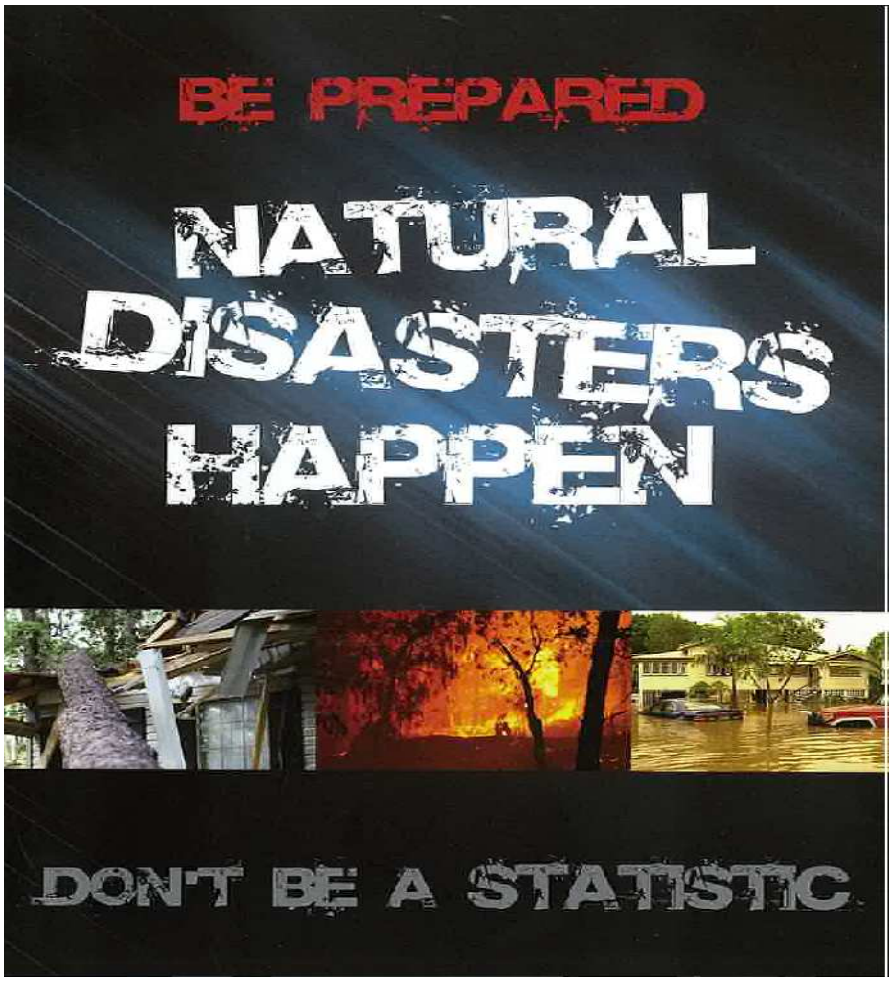
Centre for Disaster Studies
James Cook University

Evaluation of DVD "Be Prepared: Natural Disasters Happen": Telephone Survey of Residents of Rockhampton. 2010 -2011



Evaluation of DVD "Be Prepared: Natural Disasters Happen": Telephone Survey of Residents of Rockhampton

David King, Centre for Disaster Studies, James Cook University

May 2011

Summary

- Evaluation of the awareness and preparedness DVD was carried out by means of a telephone survey of 300 households in Rockhampton Regional Council.
- 23% of respondents claimed not to have received the DVD.
- Of those who received the DVD 35% watched it.
- 47% of the respondents had read the information booklet that came with the DVD.
- Of those who watched the DVD 48% had looked at both the cyclone and bushfire information, regardless of where they lived.
- The Kinka Beach simulation received the lowest effectiveness ranking of all of the cyclone and bushfire messages.
- All preparation measures and messages were rated positively for both cyclone and bushfire information.
- 85% felt that the DVD was about the right length.
- 78% will keep the DVD for future use, regardless of whether or not they had watched it at the time of the survey.
- The majority of respondents stated significant use of the internet for access to general information.

Introduction and Methodology

An educational DVD was developed by Rockhampton Regional Council to raise hazard awareness, specifically of cyclone and bushfire preparation. The DVD was delivered to 10,000 households in suburbs of Rockhampton and townships within Rockhampton Regional Council during September and October 2010. An evaluation survey of the use and effectiveness of the DVD was carried out by the Centre for Disaster Studies of James Cook University, beginning in late November and concluded by mid February 2011.

The process of release of household information by Rockhampton Regional Council required the satisfaction of privacy legislation and approval by the Council. Release of household addresses was delayed until November 2010. Suburb names indicated addresses that are within bushfire hazard zones and those in coastal cyclone and storm surge risk zones. A greater number of DVDs had been delivered to cyclone and surge risk zones than to bushfire risk areas. Therefore 200 households were randomly sampled from cyclone surge prone addresses and 100 households were randomly sampled from addresses in suburbs in bushfire risk areas.

From the addresses that were supplied by the council, landline phone numbers were generated from Telstra White pages for randomly selected addresses. This introduced an error in not allowing access to unlisted numbers. Additionally, only landline numbers could be selected for residential addresses, thereby excluding all mobile accounts. This introduced a bias towards what is probably an older section of the population.

The evaluation survey was then conducted by telephone. A single and experienced interviewer conducted all surveys to ensure consistency of questioning and response. All telephone surveys were only conducted between 1600 and 1900 hours on weekdays. Almost 100 of the cyclone surge prone addresses had been contacted by the week before Christmas. At that point the survey was suspended until the new year. Severe flooding then occurred in the Rockhampton area, and the survey was not resumed until after the main Rockhampton floodwaters had receded. Bushfire prone addresses were contacted after the 200 cyclone surge prone addresses had been completed.

Cyclone Yasi and closure of the James Cook University further delayed completion of the telephone survey until mid-February, at which time data entry and analyses were carried out. Initially the cyclone and bushfire databases and table outputs were separated, but analysis was made difficult by the fact that people either watched the whole DVD, or did not, regardless of whether or not they lived in a predominantly bushfire of cyclone surge prone area. While only coastal suburbs are surge prone, all addresses are vulnerable to cyclone impact. Thus although only 30 people who lived in bushfire areas watched the DVD, 51 responded to questions about the effectiveness of bushfire information. Therefore cyclone and bushfire preparation databases were combined and outputs were produced from the whole survey population.

Figure 1a. Rockhampton Regional Council

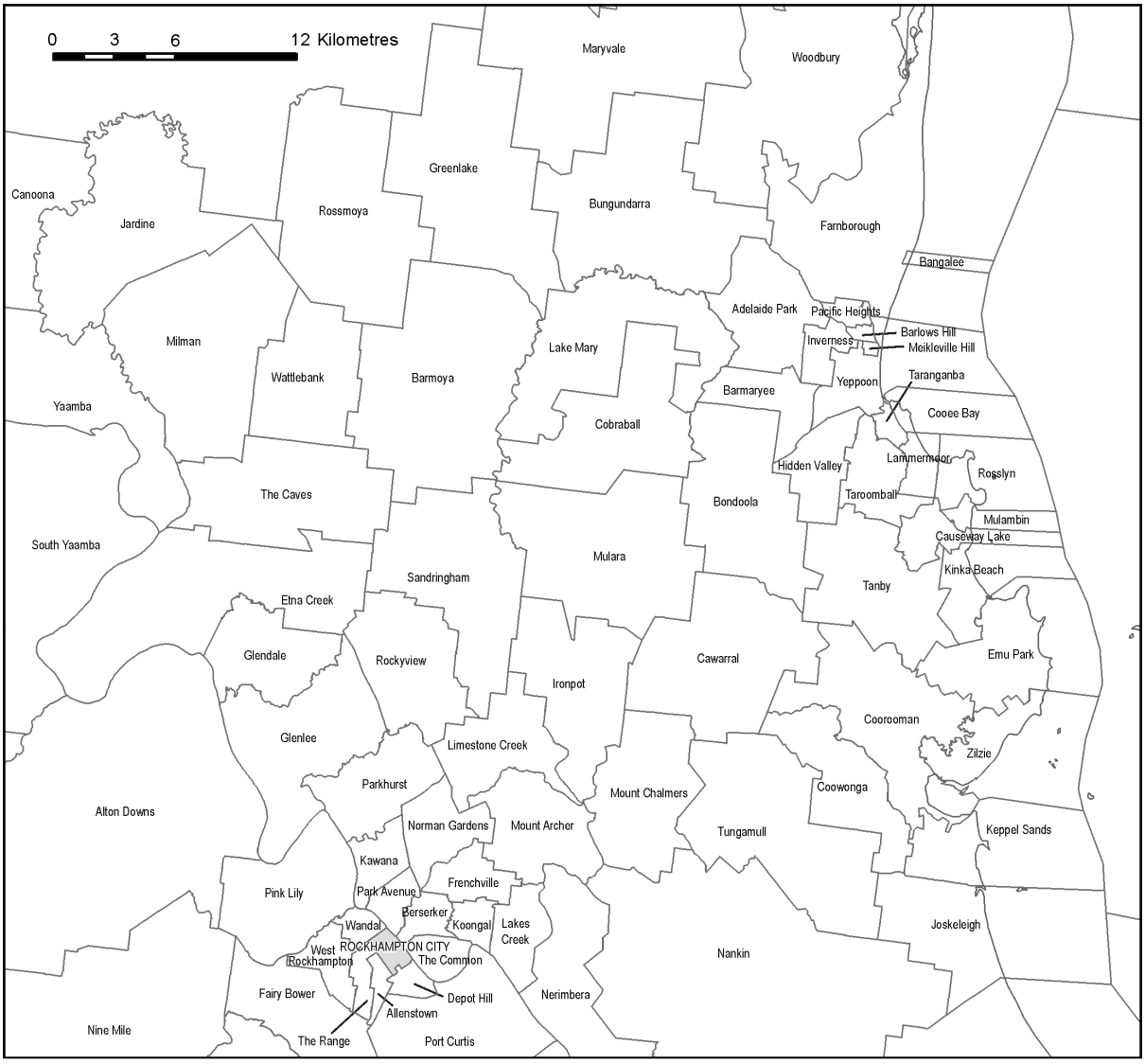


Figure 1b. Rockhampton Regional Council: Inset City and Capricorn Coast

Tables and graphs have been kept to a simple format as an aid to the clarity of the primary message from each response. A small number of cross-tabulations have been used to examine the timing and demographic variability. Only a limited use has been made of statistical analysis to measure the differences of responses to the effectiveness of the primary messages. All questions were qualitative in nature and straightforward in meaning, such that simple percentages make a clear statement of findings. These are discussed alongside each group of tables.

Frequency tabulations record the actual percentage of each response from all of the 300 households that were contacted, including the 70 or so that claimed not to have received the DVD. The column headed "valid percent" in each frequency table records the actual responses to the questions of the survey while the actual percentage column records the overall response of the whole population.

Response Rate

Of the 300 households surveyed, 68 claimed not to have received the DVD, with two recorded as no response. No further questions were asked of the 68 who said they hadn't received it. The "no response" households were in the same category, so table two and subsequent tables only involve the 230 who answered that they had received the DVD.

Table 1. Did you receive a DVD called "Be Prepared: Natural Disasters Happen" Cross-tabulated by before or after the flood

Received DVD	Before or after the flood				Total	
	Before		After			
	Number	%	Number	%	Number	%
yes	95	83.3%	135	72.6%	230	76.7%
no	17	14.9%	51	27.4%	68	22.7%
no response	2	1.8%	0	.0%	2	.7%
Total	114	100.0%	186	100.0%	300	100.0%

Tables 1 and 2 are broken down according to the timing of the survey i.e., before or after the floods of early January. Tables 2 and 3 record the responses to the question that asked how many had actually watched the DVD. If the floods had raised hazard awareness it was reasonable to surmise that more people would have been interested in the DVD after the flood had occurred. If it is assumed that some or all of those who replied no to receiving the DVD, had in fact received it, but had forgotten, it was possible that the yes response would have been higher after the flood. This was not the case. The occurrence of the flood disaster seems to have played no part in raising people's interest in the DVD. Although the DVD was not about floods, the experience of a natural disaster tends to raise people's awareness of hazards in general (for example Kapucu 2008, Mileti 1999, Tierney et al 2001).

Table 2. Did you watch the DVD Cross-tabulated by before or after the flood

Watched DVD	Before or after the flood				Total	
	Before		After			
	Number	%	Number	%	Number	%
yes	33	34.7%	47	34.6%	80	34.6%
no	62	65.3%	89	65.4%	151	65.4%
Total	95	100.0%	136	100.0%	231	100.0%

Table 3. Did you watch the DVD?

Watched DVD			
	Frequency	Percent	Valid Percent
yes	80	26.7	34.6
no	151	50.3	65.4
Total	231	77.0	100.0
No response	69	23.0	
Total	300	100.0	

Note: in this and all following tables, no response represents those households that either did not receive the DVD or had not watched it.

Only 35% of households who had acknowledged receiving the DVD had watched it. This is fairly typical of household response to hazard information. Rohrmann (1998) states that most information campaigns are not empirically evaluated. When organisations do not evaluate

their educational campaigns (Rohrmann 1998), they mistakenly assume that people know what to do because they have been told. Rohrmann (1998) stresses the importance of evaluation of educational campaigns, requiring criteria of content of the message, the educational process, and outcomes of risk awareness campaigns to be evaluated. He states that the process of hazard awareness raising needs to encompass feedback. This survey evaluated peoples opinions of the effectiveness of the material, but did not (could not) evaluate outcomes in the sense of changed behaviour. This would require detailed follow-up interviews. Case studies of information campaigns show that only half of the respondents remembered having seen the information material (Rohrmann 1998).

Finnis et al (2010) found that with hazard education among youth, aspects of awareness remained very poor. Kapucu (2008) found low levels of cyclone awareness and preparedness from a number of surveys in the United States, despite information having been delivered directly to households. A survey in Florida of 1000 residents only achieved a 12.5 % response (Kapucu 2008). Paton and Johnston (2001) reported weak responses and outcomes to education campaigns and surveys in Australia and New Zealand that concur with previous experience of studies carried out by the Centre for Disaster Studies (Anderson Berry et al 2002).

Table 4. Did you read the information booklet that was contained with the DVD?

Read the information booklet			
	Frequency	Percent	Valid Percent
yes	107	35.7	46.5
no	119	39.7	51.7
no response	4	1.3	1.7
Total	230	76.7	100.0
No response	70	23.3	
Total	300	100.0	

More significantly a much higher proportion of households had read the information booklet (table 4). Table 5 and figure 2 show that of the 107 people who had read the information booklet, 57 had also watched the DVD, while 21 had only watched the DVD and 50 had only read the information booklet. Thus we can assume that each component of the package functions semi independently and that brochures and booklets still have a useful role in educational campaigns.

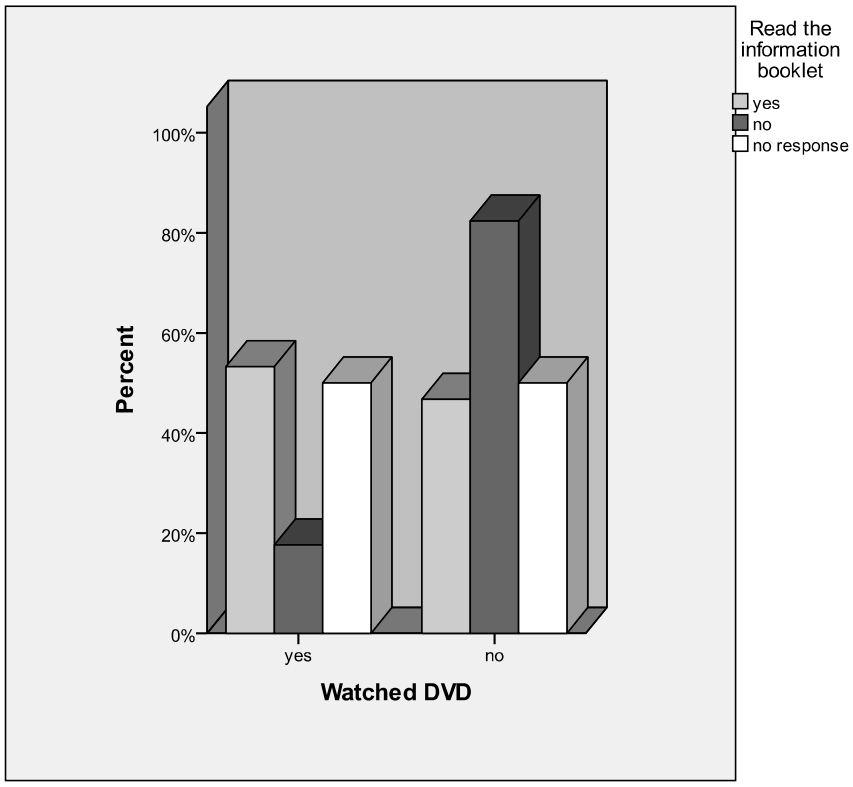


Figure 2. Response to watching the DVD

This questionnaire did not ask people whether or not they own a DVD. Many newer TVs have their own memories, some households have satellite TV and others have only a basic TV. Thus we cannot assume that that all respondents had the opportunity to view the DVD if they had wanted to. On the other hand only two people made the comment to the interviewer, that they couldn't watch a DVD even if they had wanted to because of the lack of a player. These are probably the "no responses".

Table 5. Did you watch the DVD cross-tabulated by watched DVD

Read the information booklet?	Watched DVD?				Total	
	Yes watched DVD		Not watched DVD			
	Number	%	Number	%	Number	%
yes	57	71.3%	50	33.3%	107	46.5%
no	21	26.3%	98	65.3%	119	51.7%
no response	2	2.5%	2	1.3%	4	1.7%
Total	80	100.0%	150	100.0%	230	100.0%

Table 6. Which parts of the DVD did you watch

Parts of DVD watched			
	Frequency	Percent	Valid Percent
cyclones only	31	10.3	38.3
bushfires only	11	3.7	13.6
both cyclones & bushfires	39	13.0	48.1
Total	81	27.0	100.0
No response	219	73.0	
Total	300	100.0	

While the survey was originally planned to cover 200 households in cyclone surge prone suburbs and 100 in bushfire vulnerable areas, respondents in both locations either did or did not view the material regardless of the type of vulnerability of their suburb. Thus some viewed cyclone information and some bushfire information regardless of the type of suburb in which they lived. Table 6 shows that almost half of the respondents who watched the DVD looked at both sections, such that 70 people commented on the cyclone information and 50 answered questions on the bushfire section.

Effectiveness of the Cyclone Information

Table 7 to 12 record the responses to different aspects of the information on cyclones. All of the tables show clearly that over 60% of of people who viwed the DVD rated the effectiveness of the content as good or very good with the exception of the Kinka Beach simulation. It is surprising that the Kinka Beach simulation was not as well received as expected. Its dramatic impact might have predicted a more positive response.. Some of the comments in Table 15 suggest that some people found it scary or considered it to be a 'scare tactic'.

Table 7. How effective were the storm surge images

Effectiveness of storm surge images			
	Frequency	Percent	Valid Percent
very good	11	3.7	15.7
good	31	10.3	44.3
no strong opinion	17	5.7	24.3
poor	9	3.0	12.9
very poor	2	.7	2.9
Total	70	23.3	100.0
No response	230	76.7	
Total	300	100.0	

Table 8. How effective was the evacuation information

Effectiveness of evacuation information			
	Frequency	Percent	Valid Percent
very good	8	2.7	11.4
good	30	10.0	42.9
no strong opinion	22	7.3	31.4
poor	8	2.7	11.4
very poor	2	.7	2.9
Total	70	23.3	100.0
No response	230	76.7	
Total	300	100.0	

Table 9. How effective were the instructions for cyclone preparation

Effectiveness of cyclone preparation instructions			
	Frequency	Percent	Valid Percent
very good	9	3.0	12.9
good	39	13.0	55.7
no strong opinion	17	5.7	24.3
poor	3	1.0	4.3
very poor	2	.7	2.9
Total	70	23.3	100.0
No response	230	76.7	
Total	300	100.0	

Table 10. How effective was the information on cyclone warnings

Effectiveness of information on warnings			
	Frequency	Percent	Valid Percent
very good	6	2.0	8.6
good	38	12.7	54.3
no strong opinion	20	6.7	28.6
poor	5	1.7	7.1
very poor	1	.3	1.4
Total	70	23.3	100.0
No response	230	76.7	
Total	300	100.0	

Table 11. How effective was the information on what to do after the cyclone

Effectiveness of information on aftermath			
	Frequency	Percent	Valid Percent
very good	4	1.3	5.7
good	41	13.7	58.6
no strong opinion	20	6.7	28.6
poor	4	1.3	5.7
very poor	1	.3	1.4
Total	70	23.3	100.0
No response	230	76.7	
Total	300	100.0	

Table 12. How effective did you find the Kinka Beach simulation

Effectiveness of Kinka Beach simulation			
	Frequency	Percent	Valid Percent
very good	11	3.7	15.7
good	26	8.7	37.1
no strong opinion	18	6.0	25.7
poor	8	2.7	11.4
very poor	7	2.3	10.0
Total	70	23.3	100.0
No response	230	76.7	
Total	300	100.0	

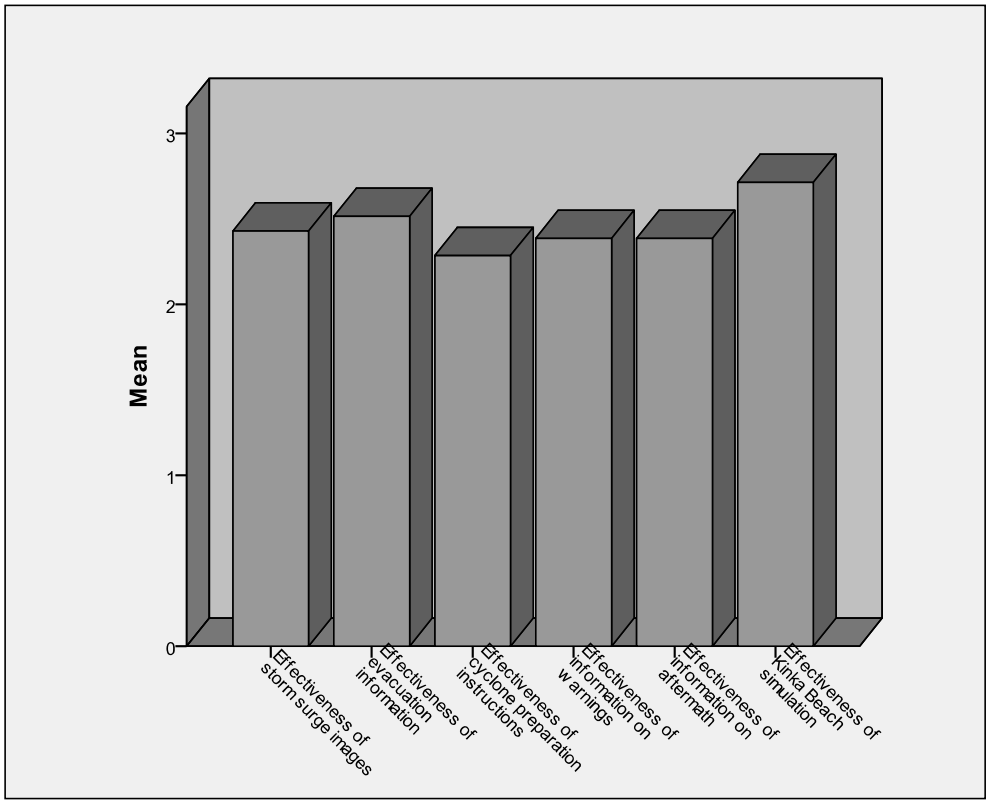


Figure 3. Effectiveness of Cyclone Information Elements

Figure 3 and tables 13 and 14 present the means of all of the responses for each category of information. The responses were coded from 1 for very good to 5 for very poor. A code of 3 was allocated to no strong opinion, but when calculating the mean values, 3 represents a midpoint. As shown by the predominance of good/very good, all means are less than 3, with the Kinka Beach simulation the lowest score in relation to the 'good' values, while information on cyclone preparation attracts the highest score in terms of effectiveness.

Table 13. Means of Effectiveness of Cyclone Information Elements

Descriptive Statistics	Mean	Std. Deviation
N = 70		
Effectiveness of storm surge images	2.43	1.001
Effectiveness of evacuation information	2.51	.944
Effectiveness of cyclone preparation instructions	2.29	.854
Effectiveness of information on warnings	2.39	.804
Effectiveness of information on aftermath	2.39	.748
Effectiveness of Kinka Beach simulation	2.63	1.182

To test whether or not these means scores are significantly different, table 14 and figure 3 summarise the test of statistically significant difference. The statistical significance level of 0.032 leads to a rejection of the null hypothesis which states that there is not a statistically significant difference between the means of the effectiveness of evaluations. In other words the mean scores tabulated in Table 13 are significantly different. It is interesting to observe that the conventional message of cyclone preparation scores best and the new technology represented in the storm surge simulation is scored as the least effective. This may reflect a conservatism on the part of the surveyed population, or it may be driven by the dominance of the older demographic, with 63% of those who watched the DVD over the age of 50.

Demographics are worth further analysis, but with such a relatively small response rate, cross-tabulations did not demonstrate anything very conclusive.

Table 14. Significance Test of Means of Effectiveness of Cyclone Information Elements

Ranks	Mean Rank
Effectiveness of storm surge images	3.46
Effectiveness of evacuation information	3.65
Effectiveness of cyclone preparation instructions	3.19
Effectiveness of information on warnings	3.40
Effectiveness of information on aftermath	3.46
Effectiveness of Kinka Beach simulation	3.84
Test Statistics(a)	
Number	70
Chi-Square	12.235
df	5
Asymp. Sig.	.032

a. Friedman Test

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distributions of Effectiveness of storm surge images, Effectiveness of evacuation information, Effectiveness of cyclone preparation instructions, Effectiveness of information on warnings, Effectiveness of information on aftermath and Effectiveness of Kinka Beach simulation are the same.	Related-Samples Friedman's Two-Way Analysis of Variance by Ranks	.032	Reject the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

Figure 4. Significance Test of Means of Effectiveness of Cyclone Information Elements

Table 15 then listed the open-ended responses concerning the overall impression of the cyclone messages, with 45 out of the 70 responses containing the word prepared or preparation. The interviewer wrote down a summary phrase of the first answer that each respondent gave. Some people went on longer, but when capturing the main message it is the first thing that people say that is usually the most important to them.

Table 15. What was the main message about cyclones that you got from the DVD

Main message about cyclones	Frequency
No response	230
an idea of what might happen	1
be alert kit ready listen to warnings	1
be aware	1
be prep sim not recognisable as Kinka	1
be prepared	23
be prepared clean up even away from coast	1
be prepared clean up have kit ready	1
be prepared don't like sim	1
be prepared for floods	1
be prepared get ready to go	1
be prepared have water & canned food	1
be prepared how to prepare	1
be prepared kit ready sim frightening	1
be prepared listen to warnings	1
be prepared no new info	1
be prepared nothing new	1
be prepared nothing new though	1
be prepared the sim was good	1
be ready have kit ready	1
be sensible	1
cyclone info how to prepare	1
don't get complacent	1
emotive info scary not fact based	1
have everything ready	1
have kit ready just in case	1
how to prepare what to have ready	1
info on how to prepare	1
it could happen	1
it was a scare tactic about Kinka	1
just common sense might help some	1
listen to the radio	1
listen to warnings be prepared	1
listen to warnings get ready early	1
no new info	1
no new info distress misleading sim	1
nothing I didn't already know	1
nothing new	2
nothing new but it was well done	1
nothing new damaged property value	1
nothing useful bad for property value	1
offensive scary damaged property values	1
potential flood levels	1
preparations I'm SES so nothing new	1
same as ever be prepared tidy up etc	1
the sim was frightening worried me	1
things for prep I hadn't thought of	1
what to prepare what to do after	1
Total	300

Effectiveness of the Bushfire Information

Table 16 reports the number of people who stated that they believed they resided in a bushfire prone area, out of those who had watched the DVD. Despite 100 households being selected from suburbs that were identified by Rockhampton Regional Council as vulnerable to bushfire, only 30 people identified their residence as being in a bushfire area. Other people, who either were not in a bushfire prone area, or who may have considered they were not vulnerable to bushfires, also watched the DVD and evaluated the effectiveness of the bushfire messages.

Table 16. Do you live in a bushfire prone area crosstabulated by watched DVD

Live in bushfire area?	Watched DVD?				Total	
	Yes Watched DVD		Not Watched DVD			
	Number	%	Number	%	Number	%
Yes in bushfire area	30	39.5%	0	.0%	30	39.0%
Not in bushfire area	44	57.9%	1	100.0%	45	58.4%
no response	2	2.6%	0	.0%	2	2.6%
Total	76	100.0%	1	100.0%	77	100.0%

Tables 17 to 21 and figure 5 record the evaluation of the effectiveness of each aspect of the bushfire information. As with the Cyclone information, the majority of the responses rated the effectiveness of the information as either 'good' or 'very good'. In contrast to the cyclone information, fewer people rated the information as 'poor' or 'very poor'. Thus the means that are recorded in Table 22 are very close to a mean of good (i.e. 2). The significance test that is shown in table 23 and figure 6 returns a significance level of 0.179 that retains the null hypothesis. Thus there is no statistically significant difference between the mean evaluations of each of the bushfire information elements.

Table 17. How effective were the images of bushfires

Effectiveness of bushfire images			
	Frequency	Percent	Valid Percent
very good	11	3.7	21.6
good	30	10.0	58.8
No strong opinion	8	2.7	15.7
poor	2	.7	3.9
Total	51	17.0	100.0
No response	249	83.0	
Total	300	100.0	

Table 18. How effective was the information about fire knowledge

Effectiveness of fire knowledge information			
	Frequency	Percent	Valid Percent
very good	4	1.3	7.8
good	36	12.0	70.6
no strong opinion	9	3.0	17.6
poor	2	.7	3.9
Total	51	17.0	100.0
No response	249	83.0	
Total	300	100.0	

Table 19. How effective was the information about bushfire preparation

Effectiveness of information on fire preparation			
	Frequency	Percent	Valid Percent
very good	5	1.7	9.8
good	35	11.7	68.6
no strong opinion	9	3.0	17.6
poor	2	.7	3.9
Total	51	17.0	100.0
No response	249	83.0	
Total	300	100.0	

Table 20. How effective was the information about the best tree and shrub species to plant

Effectiveness of information on plant species			
	Frequency	Percent	Valid Percent
very good	7	2.3	13.7
good	33	11.0	64.7
no strong opinion	9	3.0	17.6
poor	2	.7	3.9
Total	51	17.0	100.0
No response	249	83.0	
Total	300	100.0	

Table 21. How effective was the information on fire breaks

Effectiveness of information on fire breaks			
	Frequency	Percent	Valid Percent
very good	5	1.7	9.8
good	35	11.7	68.6
no strong opinion	9	3.0	17.6
poor	2	.7	3.9
Total	51	17.0	100.0
No response	249	83.0	
Total	300	100.0	

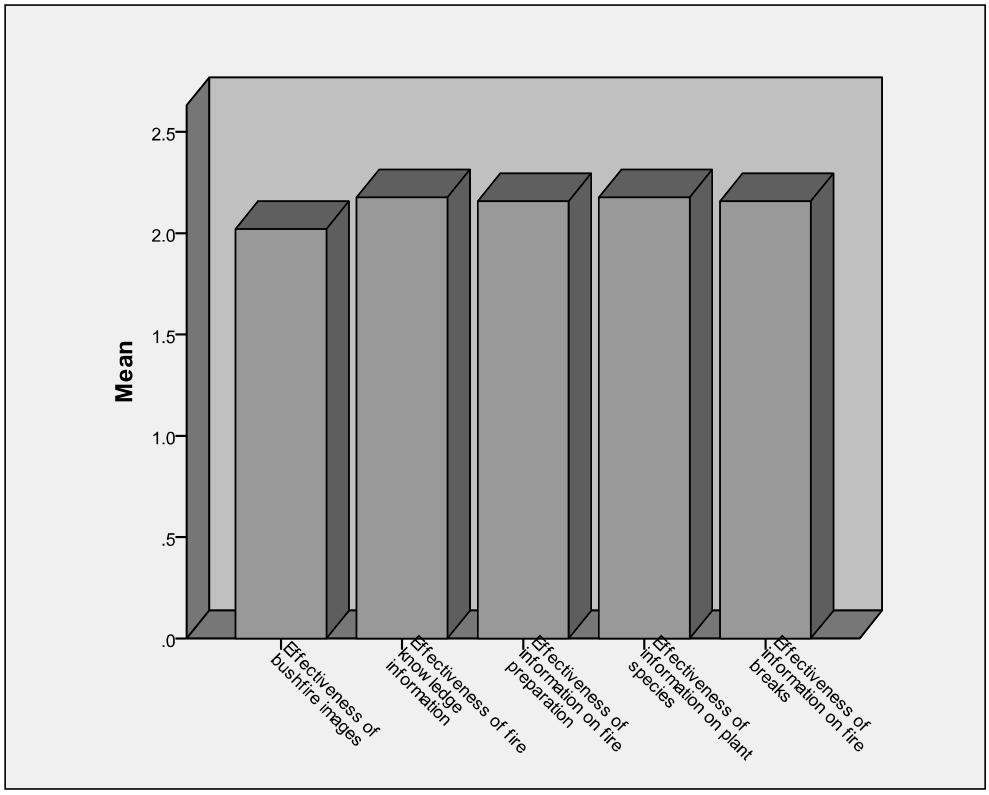


Figure 5. Means of the Effectiveness of Information on Bushfire Elements

Table 22. Means of the Effectiveness of Information on Bushfire Elements

Descriptive Statistics		
N = 51	Mean	Std. Deviation
Effectiveness of bushfire images	2.02	.735
Effectiveness of fire knowledge information	2.18	.623
Effectiveness of information on fire preparation	2.16	.644
Effectiveness of information on plant species	2.18	.865
Effectiveness of information on fire breaks	2.16	.644

Table 23. Significance Test of Means of the Effectiveness of Information on Bushfire Elements

Ranks	Mean Rank
Effectiveness of bushfire images	2.76
Effectiveness of fire knowledge information	3.12
Effectiveness of information on fire preparation	3.08
Effectiveness of information on plant species	2.96
Effectiveness of information on fire breaks	3.08
Test Statistics(a)	
N = 51	51
Chi-Square	6.284
df	4
Asymp. Sig.	.179

a. Friedman Test

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distributions of Effectiveness of bushfire images, Effectiveness of fire knowledge information, Effectiveness of information on fire preparation, Effectiveness of information on plant species and Effectiveness of information on fire breaks are the same.	Related-Samples Friedman's Two-Way Analysis of Variance by Ranks	.179	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

Figure 6. Significance Test of Means of the Effectiveness of Information on Bushfire Elements

Responses Concerning the DVD and Information Sources

Table 24 shows that 85% of respondents considered the length of the DVD to be 'about right'.

Table 24. What did you think about the length of the DVD

Length of DVD			
	Frequency	Percent	Valid Percent
too long	5	1.7	6.2
about right	69	23.0	85.2
too short	4	1.3	4.9
no response	3	1.0	3.7
Total	81	27.0	100.0
No response	219	73.0	
Total	300	100.0	

People were asked where they accessed information generally on all sorts of things. Out of the 81 responses in Table 25, 45 contained the Internet and 30 cited only the Internet. Only 17 responses cited TV and 28 stated the radio. The Internet is a clear winner, despite the older demographic of the study population, and probably of the whole area that was surveyed.

Table 25. What is the preferred way in your household of accessing information? Where do you go to get information about all sorts of things.

Source of Information	Frequency	Percentage
No response	219	
call service internet	1	
call services	4	
internet	30	
internet library	2	
internet phone services	1	
knowledge built up over years	1	
media	2	
media tv radio	1	
newletters internet	1	
news	1	
news tv radio	1	
phone services	2	
phone services internet	1	
radio	11	
radio internet	5	
radio internet tv	1	
radio, especially since the floods	1	
reading material leaflets brochures	1	
tv	3	
tv internet	3	
tv radio	8	
Total	300	

Table 26. Information on cyclones or bushfires missing from the DVD or the booklet

Missing information	Frequency
No response	219
clearer maps of Kinka	1
don't know	1
evac routes info on cyclone categories	1
evac routes more details on tidal surges	1
facts not assumptions	1
fire prevention contact numbers	1
info on flood warnings	1
info on Mulambin and evac routes	1
info on other areas good for new arrivals	1
info on other areas not just Kinka	1
info on other flooding	1
local info info on other flooding	1
location evac centres floods other areas	1
locations of evac centres	1
more local info evac routes	1
more local info evac centres floodmaps	1
none	27
no a good refresher	1
no all common knowledge	2
no alright for city folk no new info	1
no an excellent timely reminder	1
no basics were covered	1
no but dvd not necessary	1
no but flyer would have done	1
no concern about effects on property value	1
no contacting council hard	1
no covered everything	1
no didn't have time to watch cycl	1
no didn't like the Kinka sim	1
no dvd a waste of money	1
no if people don't listen its their fault	1
no it was fairly comprehensive	1
no it was good	6
no it was good informative	1
no it was good v.good for kids	1
no it was ok	1
no it was really helpful	1
no it was very good	1
no maybe useful to new/younger people	1
no new info	2
no nothing new sim was over the top	1
no the sim was really good	1
no they did a good job	1
no unnecessary ok for new arrivals	1
no we got 2 copies a bit of a waste	1
sim of a wider area	1
statistical info flood/tide heights	1
whether to open windows during a cyclone	1
Total	300

Table 26 records responses to the question concerning information that was perceived to be missing from the DVD. Most, 61 out of the 81 responses, said no (ie that they considered that nothing was particularly missing), even though most of them then embellished their answer, either positively or negatively.

Table 27 indicates that 78% of those who received the DVD will keep it for future use, even if most of them had not watched it by the time of the survey.

Table 27. Will you keep the DVD as a reference guide for the next cyclone or bushfire season

Keeping DVD for future			
	Frequency	Percent	Valid Percent
yes	181	60.3	78.4
no	43	14.3	18.6
don't know	7	2.3	3.0
Total	231	77.0	100.0
No response	69	23.0	
Total	300	100.0	

When questioned whether or not they had heard about the DVD in the local media, 47% stated yes. This is a positive response, although it had still not prompted many of them to actually watch it, although as shown earlier, many had consulted the leaflet that came with the DVD.

Table 28. Did you also hear about the DVD in the local media

Heard in local media			
	Frequency	Percent	Valid Percent
yes	141	47.0	47.0
no	157	52.3	52.3
no response	2	.7	.7
Total	300	100.0	100.0

Table 29 records where in the local media people had gained knowledge of the DVD and how many of those had watched it. Clearly local newspapers and the TV are dominant, but there is no clear trend of how that relates to the decision to watch it.

Table 29. Knowledge of DVD in the local media Cross-tabulated by watched DVD

Knowledge of DVD	Watched DVD				Total	
	yes		no			
	Number	%	Number	%	Number	%
newspaper	14	32.6%	33	42.9%	47	39.2%
radio	0	.0%	4	5.2%	4	3.3%
television	15	34.9%	27	35.1%	42	35.0%
Newspaper & radio	2	4.7%	2	2.6%	4	3.3%
newspaper & TV	6	14.0%	6	7.8%	12	10.0%
radio & TV	5	11.6%	4	5.2%	9	7.5%
newspaper, Radio & TV	1	2.3%	1	1.3%	2	1.7%
Total	43	100.0%	77	100.0%	120	100.0%

Demographics

Tables 30 and 31 listed the age groups and gender of the respondents in relation to their behaviour in either watching or not watching the DVD. As far as the decision to watch the DVD is concerned, the older age group of 50 years plus responded slightly more positively than the youngest age group of 18 to 30 years who responded slightly less positively. The survey was dominated by the older age group which is partly influenced by the demography of the suburbs that were surveyed, and partially influenced by the use of a landline rather than a mobile telephone. The gender is also skewed towards females, but it is interesting that of those who watched the DVD, women were less than their proportion of the respondents while males who watched were more than their proportion. Given this slight skew in the demographics, the results should be interpreted as indicative rather than an absolute representation of the population of this part of Rockhampton.

Table 30. Which age group you are in Cross-tabulated by watched DVD

Age group	Watched DVD				Total	
	yes		no			
	Number	%	Number	%	Number	%
18-30	4	5.0%	14	9.3%	18	7.8%
30-50	26	32.5%	52	34.4%	78	33.8%
50 plus	50	62.5%	84	55.6%	134	58.0%
no response	0	.0%	1	.7%	1	.4%
Total	80	100.0%	151	100.0%	231	100.0%

Table 31. Gender Cross-tabulated by watched DVD

Gender	Watched DVD				Total	
	Yes Watched DVD		Not Watched DVD			
	Number	%	Number	%	Number	%
male	35	44.9%	57	37.7%	92	40.2%
female	43	55.1%	94	62.3%	137	59.8%
Total	78	100.0%	151	100.0%	229	100.0%

Conclusion

A significant proportion of households either did not receive the DVD or claimed not to have received it. The response rate in terms of households that watched the DVD was relatively low although a greater proportion had read the information booklet that came with the DVD. Compared to other surveys that evaluated hazard information campaigns, the response is fairly typical and is in fact better than in some campaigns. Positive responses to the bushfire information are significantly higher than those towards the cyclone information, although in both sets of effectiveness evaluations, the overall response was positive. Conventional messages of preparation seemed to be slightly more favoured than innovative approaches. The significant use of the Internet for hazard information stresses the value of the DVD being made easily available on a web site, such as that of the council, or even that of a widely accessed information site like the Bureau of Meteorology.

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Acknowledgements

Thanks to Rhian Morgan of JCU who conducted all of the telephone interviews and data entry.

Bill Ludwig of Rockhampton Regional Council and Alison Godber of EMQ initiated, organised and structured the evaluation study.

QTCCC sponsored the study.

Adella Edwards and RRC supplied the maps of localities.

Appendix 1. Survey Questionnaire

Telephone Survey: Evaluation of DVD "Be Prepared: Natural Disasters Happen".

My name is ****** from James Cook University. We are carrying out a brief telephone survey on behalf of Emergency Management Queensland and Queensland Tropical Cyclone Consultative Committee to hear your reactions to the DVD about Natural Disasters Happen that was recently delivered to your address by Rockhampton Regional Council.

We are doing a survey to find out if this kind of educational DVD is helpful to households in preparing for natural hazards.

If you over 18 years of age and are prepared to participate we should be very grateful if you can spend a short amount of time to answer a few questions about the Natural Disasters Happen DVD. This survey is completely confidential and voluntary. We will not record your address or phone number on the survey. You can end the survey whenever you like. Responses and contact details will be strictly confidential. The data from the study will be used in research publications and reports to Emergency Management Queensland. You will not be identified in any way in these publications. If you have any questions about the study, please contact David King on 0747 814430**.**

This survey will take about five minutes. Are you happy to answer the survey questions?

Question sheet

Write in name of suburb.
1. Did you receive a DVD called "Be Prepared: Natural Disasters Happen"?
If no to question 1 go to question 22.
2. Did you watch the DVD?
3. Did you read the information booklet that was contained with the DVD?
If no to questions 2 and 3 go to question 21.
4. Which parts of the DVD did you watch?
Cyclones only bushfires only both cyclones and bushfires.
The next few questions are about the cyclone information.
For each question please give your opinion on a scale of very good, good, no strong opinion, poor, very poor.
5. On the same scale, how effective were the storm surge images?
6. On the same scale, how effective was the information on evacuations?
7. On the same scale, how effective were the instructions for cyclone preparation?
8. On the same scale how effective was the information on cyclone warnings?
9. On the same scale, how effective was the information on what to do after the cyclone?
10. What was the main message about cyclones that you got from the DVD?
11. On a scale of very good to very poor, how effective did you find the Kinka Beach simulation.
12. Do you live in a bushfire prone area?
The next few questions are about the bushfires information.
For each question please give your opinion on a scale of very good, good, no strong

opinion, poor, very poor.
13. On a scale from very good to very poor, how effective were the images of bushfires?
14. On the same scale, how effective was the information about fire knowledge?
15. On the same scale, how effective was the information about bushfire preparation?
16. On the same scale, how effective was the information about the best tree and shrub species to plant?
17. On the same scale, how effective was the information on fire breaks?
18. What did you think about the length of the DVD? Was it too long, about the right length, too short?
19. What is the preferred way in your household of accessing information? Please let us know where you go to get information about all sorts of things.
20. Was there any information about either cyclones or bushfires that you think was missing from the DVD or the information booklet?
21. Will you be keeping the DVD as a reference guide for the next cyclone or bushfire season?
22. Can you please tell us which age group you are in? 18 to 30, 30 to 50, 50 years or older.
23. Did you also hear about the DVD in the local media. If so which of the following. Newspaper, Radio, Television
24. Gender. Infer – if in doubt ask.

Appendix 2. Survey Information Sheet

INFORMATION SHEET

Study to Examine the Effectiveness of 'Disasters Happen – Be Prepared' DVD Product

INFORMATION REQUIRED FOR PARTICIPANTS

My name is ********** from James Cook University. We are carrying out a brief telephone survey on behalf of Emergency Management Queensland and Queensland Tropical Cyclone Consultative Committee to hear your reactions to the DVD about Natural Disasters Happen that was recently delivered to your address by Rockhampton Regional Council.

We are doing a survey to find out if this kind of educational DVD is helpful to households in preparing for natural hazards.

If you over 18 years of age and are prepared to participate we should be very grateful if you can spend a short amount of time to answer a few questions about the Natural Disasters Happen DVD. This survey is completely confidential and voluntary. We will not record your address or phone number on the survey. You can end the survey whenever you like.

This survey will take about five minutes. Are you happy to answer the survey questions?

This survey is completely confidential and voluntary. We will not record your address or phone number on the survey. You can end the survey whenever you like.

Taking part in this study is completely voluntary and you can stop taking part in the study at any time without explanation or prejudice. You may also withdraw any unprocessed data from the study.

As this is a brief telephone survey recording peoples' opinions on a DVD there should not be any distress.

Responses and contact details will be strictly confidential. The data from the study will be used in research publications and reports to Emergency Management Queensland. You will not be identified in any way in these publications.

If you have any questions about the study, please contact **David King on 0747 814430.**

Principal Investigator:
David King
School of Earth & Environmental Sciences
James Cook University
Phone: 4781 4430
Email: david.king@jcu.edu.au

Appendix 3. Privacy Deed. Full copy with Rockhampton Regional Council

PRIVACY DEED -
ACCESS TO PERSONAL INFORMATION

Between

ROCKHAMPTON REGIONAL COUNCIL
ABN: 59 923 523 766
"the Principal"

and

JAMES COOK UNIVERSITY
ABN 46 253 211 955
("the Consultant")

Appendix 4. Professional and Public Liability Certificates

Documents are with Council.