

Trolls and polls -the economic costs of online harassment and cyberhate

January 2019

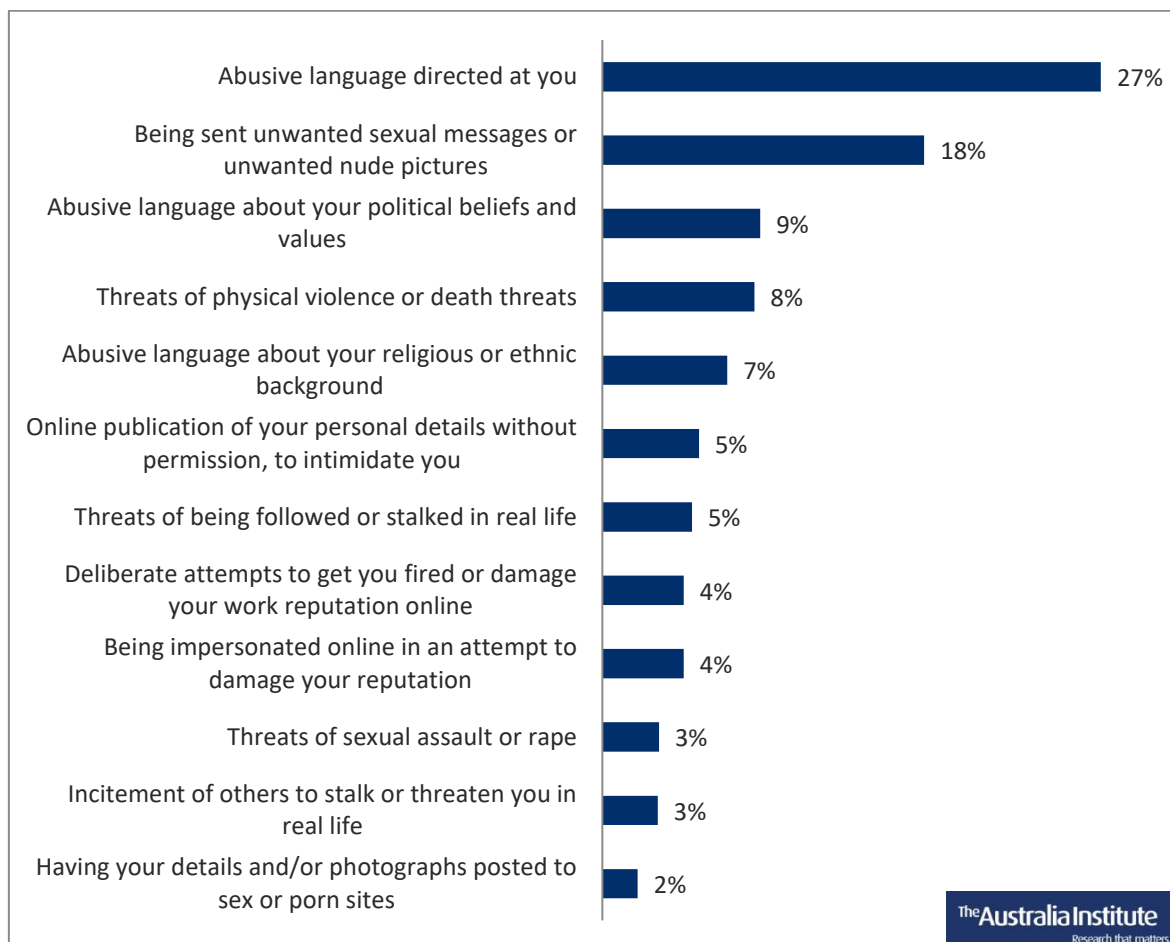
The Australia Institute was commissioned by independent journalist and researcher Ginger Gorman to estimate the economic costs of online harassment and cyberhate. This report is part of a wider research by Ms Gorman on cyberhate.

In April 2018, a nationally representative sample of 1,557 Australians were surveyed about online harassment and cyberhate. The poll was conducted online. Questions and details of poll method and adjustments to data are provided later in this report.

Online harassment

- Respondents were first presented with a list of forms of online harassment. For each form of harassment listed, results are shown in Figure 1.

Figure 1: Occurrence of types of online harassment



- More than a third of respondents (39%) said they had experienced one or more forms of online harassment.
- Projecting across the population, this is equivalent to 8.8 million Australians experiencing harassment online.¹
- Those who had been harassed online on average said they had experienced 2.5 forms harassment.

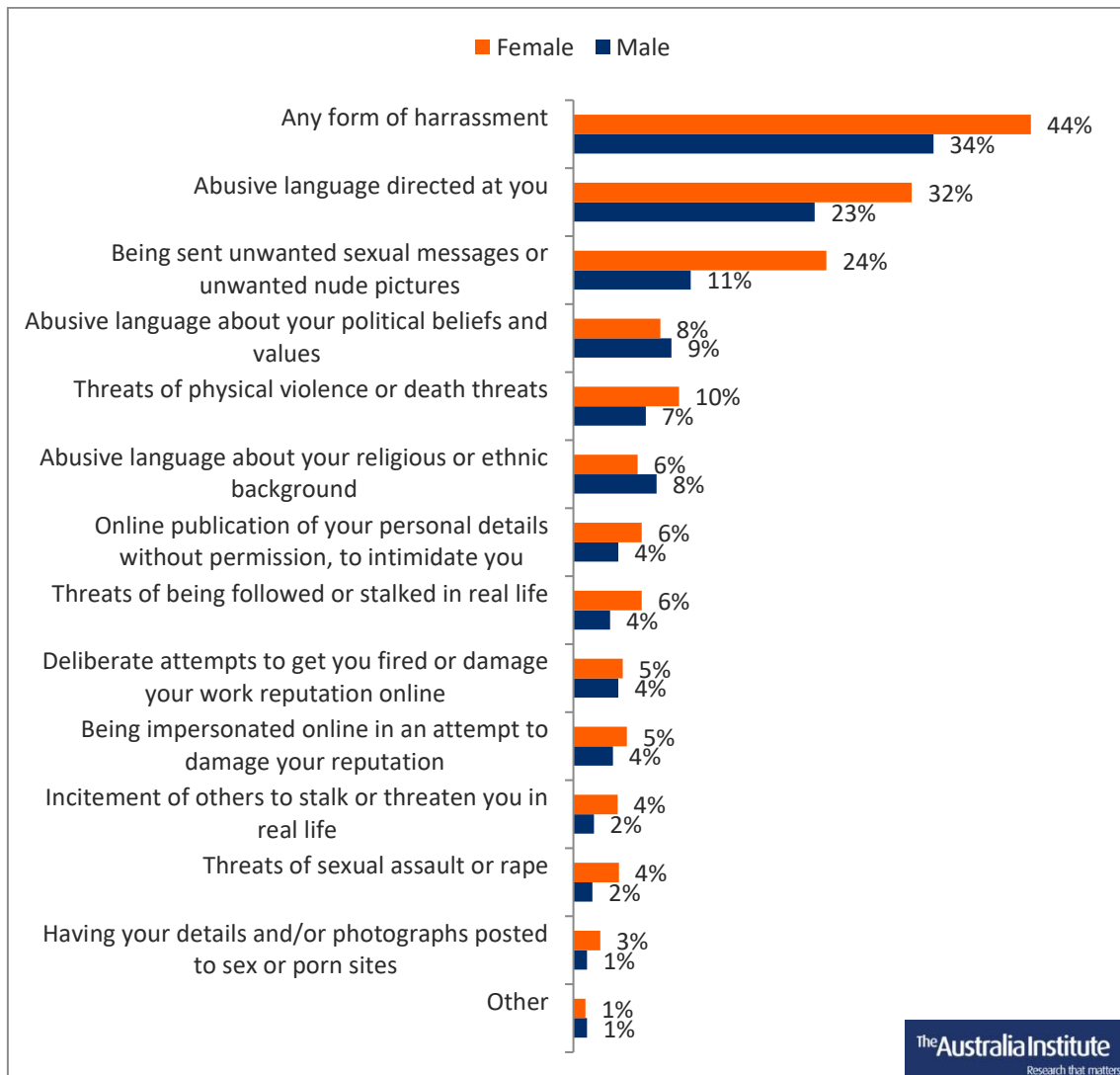
- 57% said they had not experienced any form of harassment.
- 4% were not sure.

- The most often experienced forms of online harassment were:
 - Abusive language directed at them (27%), including
 - abusive language about political beliefs and values (9%), and
 - abusive language about religious or ethnic background (7%);
 - Being sent unwanted sexual messages or nude pictures (18%);
 - Threats of physical violence or death threats (8%);
 - Online publication of your personal details without permission, to intimidate you (5%).

- Women were more likely to say they had been harassed online (44%) than men (34%) (see Figure 3).
 - 32% of women experienced “abusive language directed at [them]”, compared with 23% of men.
 - 24% of women were “sent unwanted sexual messages or unwanted nude pictures”, much higher than 11% of men.
 - Men were more likely to experience abusive language about religious or ethnic background (6% women, 8% men).
 - Women were generally more likely than men to experience
 - threats of violence or death threats (10% women, 7% men)
 - threats of being followed or stalk (6% women, 4% men)
 - threats of sexual assault or rape (4% women, 2% men).

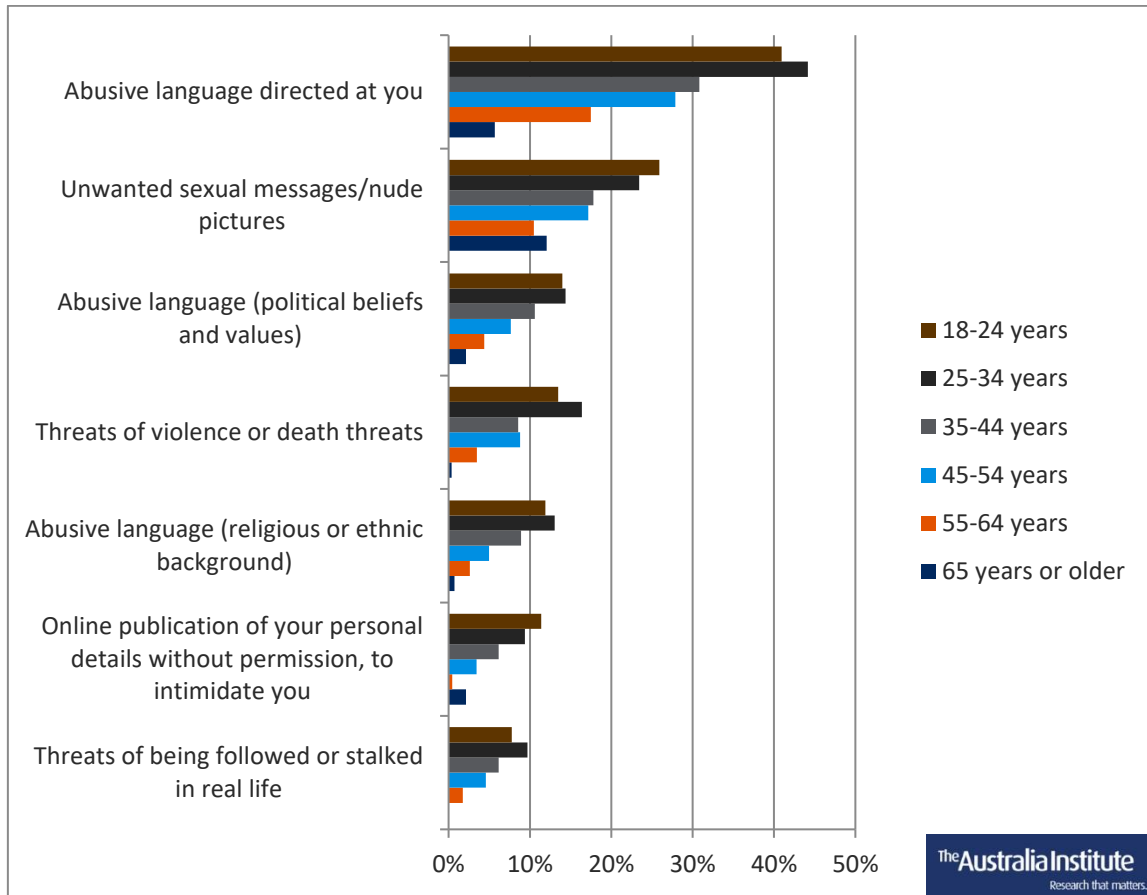
¹ The method uses the adult population and rate of internet usage. It is explained below.

Figure 2: Online harassment by gender



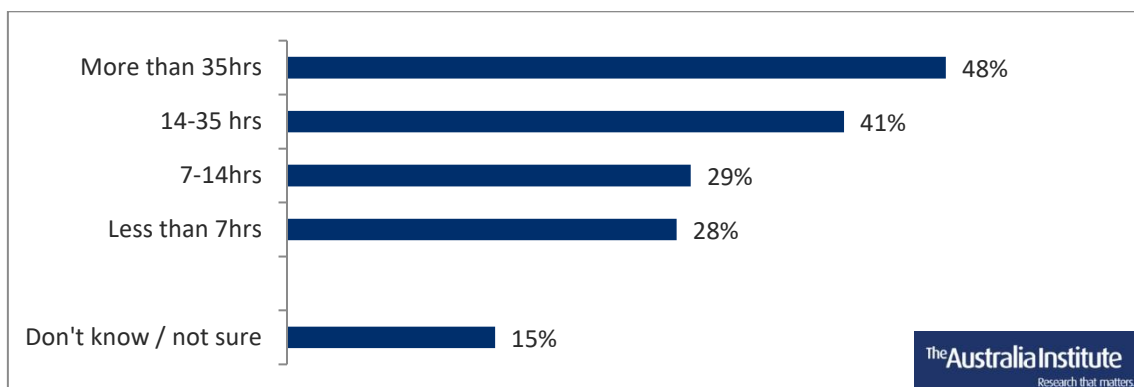
- Harassment was experienced most by younger age groups. Figure 3 shows trends for the top seven most reported forms of harassment. The same trend occurred across all forms of reported harassment.

Figure 3: Online harassment by age group (top seven)



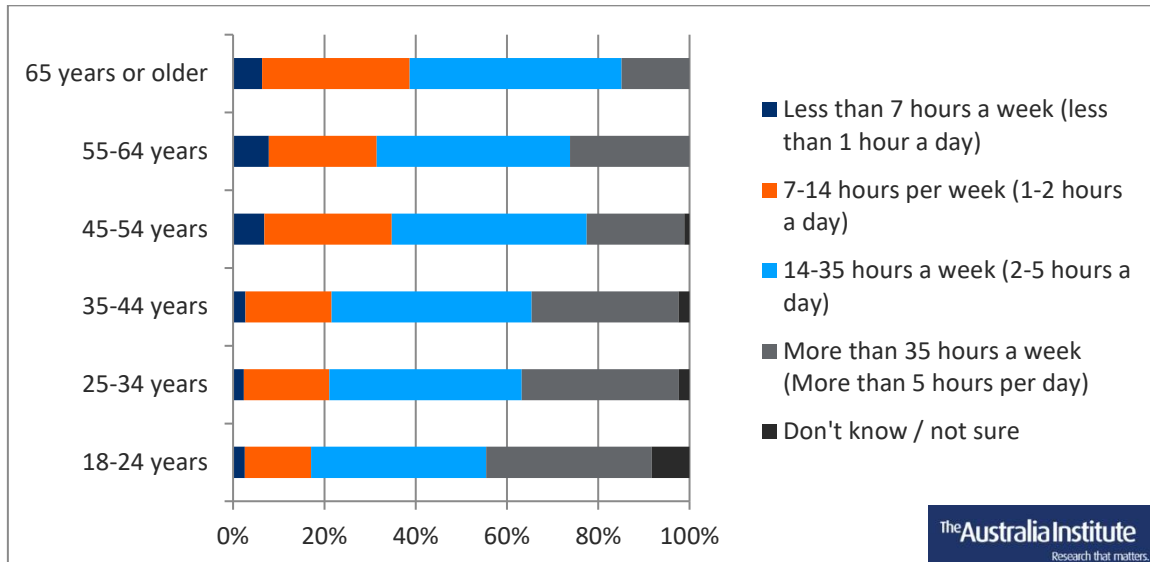
- Those who used the internet for more hours each week were more likely to report being harassed online (Figure 4).
- However, even amongst those using the internet least often, more than 1 in 4 reported some form of harassment.

Figure 4: Respondents reporting online harassment, by hours spent online each week



The fact that younger respondents were much more likely to report online harassment is in part explained by the fact that they were also more likely to spend more hours each week online (see Figure 5).

Figure 5: Internet usage by age (hours each week on average).



Impacts on wellbeing

Respondents who had experienced online harassment were asked if it “has ever reached a point that it negatively affects your physical or mental wellbeing?”

- A third (34%) said yes. In other words, 13% of all respondents, or 1 in 8, reported negatively impacts on wellbeing from online harassment.
 - This is equivalent to 2.2 million Australians.
- Negative impacts were reported by 37% of women and 30% of men.
- Amongst those who reported harassment, negative impacts were more commonly reported more by people who spent more time online, however the trend was not strong (Figure 6).

Figure 6: Negative impacts from online harassment, by hours online each week



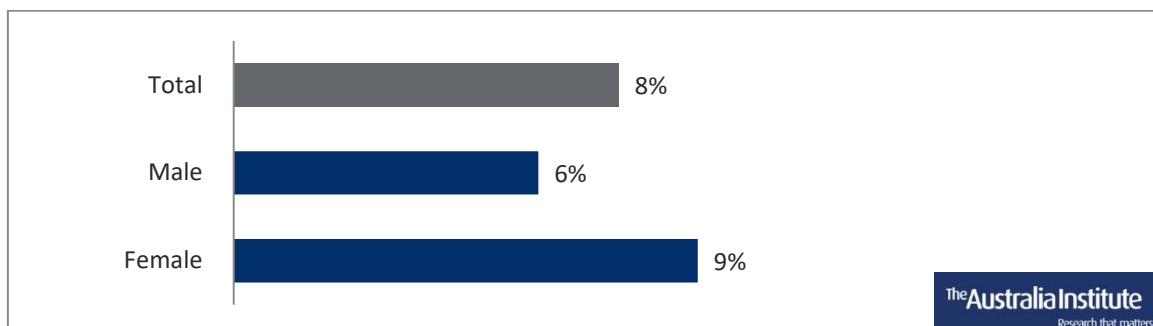
Cyberhate

In addition to online harassment more generally, respondents were presented with a specific definition for “cyberhate”:

“repeated, sustained threats or attacks on an individual through the use of electronic devices, which result in real-life harm to the target. These harms may be physical and/or psychological. The attacks may be perpetrated by one or more individuals”.

- Defined in this way, 8% of respondents reported that they had experienced cyberhate.
 - While more than 1 in 3 of respondents said they experienced online harassment, 1 in 13 said they experienced cyberhate.
 - This is equivalent to 1.3 million Australians having experienced cyberhate.²
- 9% of women said they had experienced cyberhate, compared with 6% of men (Figure 7).

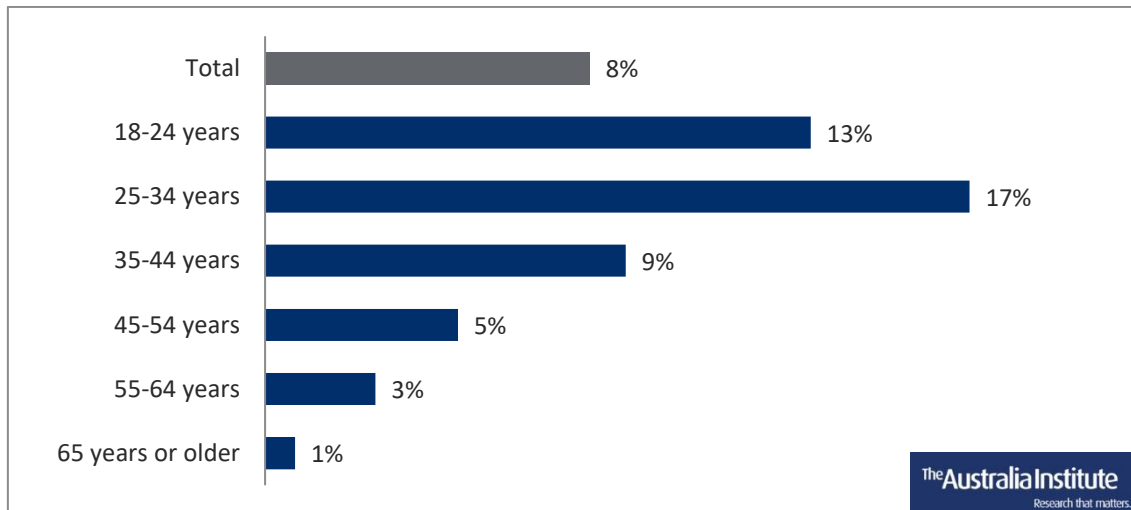
Figure 7: Reported cyberhate by gender



² Method explained below.

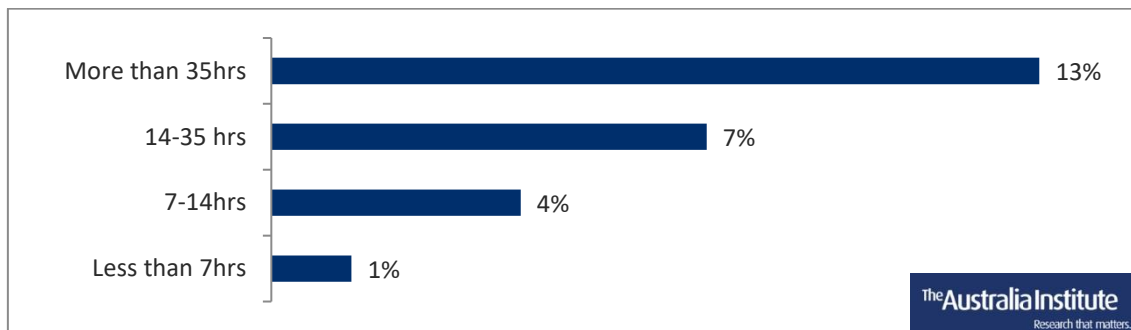
- Younger groups were most likely to report cyberhate (Figure 8).
 - It was reported amongst 13% of those aged 18–24 years old.
 - This figure rose to 17% (or 1 in 6) amongst those 25-34 years old.
 - From there, experience of cyberhate declined with age.

Figure 8: Reported cyberhate by age group



- Respondents were significantly more likely to report cyberhate if they spent more time online (Figure 9).

Figure 9: Reported cyberhate by hours spent online each week



Health and financial costs

Respondents who indicated negative impacts on wellbeing from harassment, or who reported cyberhate, were then asked about health and occupational impacts and costs. This group was 16% of the total sample.

Table 1 shows key data and estimates of the equivalent share of the Australian adult population. Note the adjustment for internet usage (as the poll was conducted online, all respondents are internet users).

Table 1: Survey rates applied to the overall population

Experience	Share of survey respondents	Adjusted for internet usage ³	Number of Australians
Australians aged 18 and over⁴			19,096,619
... that use the internet		88.0%	16,805,025
Experienced online harassment	38.9%	34.3%	6,540,684
Negative impacts from harassment, or experienced cyberhate	15.7%	13.8%	2,644,336
Seek medical help	4.4%	3.9%	744,731
Medical costs (under \$1,000)	2.3%	2.0%	388,555
Medical costs (\$1,000 or more)	0.3%	0.2%	43,173
Work and income affected	4.4%	3.9%	744,731
Lost income (under \$1,000)	1.9%	1.7%	323,796
Lost income (\$1,000 or more)	1.0%	0.8%	161,898

- In this group, 28% reported that the cyberhate or other online harassment had caused them to “see a doctor, psychologist or other health professional”.
 - In other words, 4% of all respondents reported seeing a health professional as the result of online harassment or cyber hate, equivalent to 744 thousand Australians.
- Similarly, in this group, 28% said that the cyberhate or other online harassment had affected their ability to work and earn income.
 - In other words, 4% of all respondents reported seeing a health professional as the result of online harassment or cyber hate, equivalent to 744 thousand Australians.

³ World Bank (2018) *Individuals using the Internet (% of population)* 2016 data
<https://data.worldbank.org/indicator/IT.NET.USER.ZS?locations=AU>;

⁴ ABS Cat. no 3101.0 *Australian Demographic Statistics, June 2017*
<http://www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/3101.0Main+Features1Jun%202017>

- (NB: the same number reported each type of cost; these groups overlapped but were not identical.)

Respondents who said there had been costs were then asked about the magnitude of these costs.

- Of those who had sought health care, most (58%) said it had a cost to them.
 - 52% said the cost was under \$1,000.
 - 6% gave a higher figure.
 - 17%, said that they didn't know or weren't sure.
 - 25% said there had been no financial cost.
- Of those who said there were impacts on work, 2 in 3 (65%) said there were financial costs.
 - 43% said the cost was under \$1,000.
 - 22% gave a higher figure \$1,000.
 - 23%, said they didn't know or weren't sure.
 - 12% saying that there had been no financial cost.

Estimating national costs

The survey data can be used to estimate aggregate costs from online harassment and cyberhate across Australia.

Our estimates:

- includes only medical and reported income costs;
- assumes those who experienced medical costs below \$1,000 only lost \$50 (roughly the cost of one visit to the GP);
- assumes those who experienced lost income only lost \$325 (roughly one day of work on average full-time earnings);

For a low estimate, we assume that all those who said they faced costs of \$1,000 or greater faced exactly \$1,000 in costs. This is shown in Table 2.

On this low estimate, Australians have born a total cost of \$330 million from of online harassment and cyberhate: \$62 million in medical costs and \$267 million in lost income.

Our high estimate uses figures nominated for costs higher than \$1,000. (See

Table 3) On this basis, the overall cost of online harassment and cyberhate increases by an order of magnitude, to \$3.7 billion.

Table 2: National costs of online harassment and cyberhate – low estimate

Experience	Estimated Population	Cost per person	Total
Medical costs (under \$1,000)	388,555	\$50	\$19,427,774
Medical costs (\$1,000 or more)	43,173	\$1,000	\$43,172,832
Lost income (under \$1,000)	323,796	\$325	\$105,233,777
Lost income (\$1,000 or more)	161,898	\$1,000	\$161,898,119
Total			\$329,732,502

Table 3: National costs of online harassment and cyberhate – high estimate

Experience	Estimated Population	Cost per person	Total
Medical costs (under \$1,000)	388,555	\$50	\$19,427,774
Medical costs (\$1,000 or more)	43,173	\$8,000	\$345,382,653
Lost income (under \$1,000)	323,796	\$325	\$105,233,777
Lost income (\$1,000 or more)	161,898	\$20,000	\$3,237,962,374
Total			\$3,708,006,578

The significant increase in aggregate cost in the higher estimate is due to higher estimated costs borne by a minority that is small in relative terms, but still tens of thousands of Australians.

- Nominated medical costs above \$1,000 were between \$2,000 and \$50,000; the average was \$17,000 and the median was \$8,000. Using the median, the estimated subtotal for medical costs is \$345m.
- Fifteen respondents reported that their lost income as a result of harassment or cyberhate exceeded \$1,000, equivalent to 162,000 across the country. The median was \$20,000.⁵ Using the median, the estimated subtotal for work costs is \$3.2 billion.

Note respondents were asked about total costs to date, not costs over the last year, so these figures are *not* estimates of the annual cost of cyberhate and online harassment.

⁵ The average cost they identified was \$126,667. This was greatly increased by an outlier respondent who inputted the maximum amount. For this reason the median is preferred.

While these figures allow estimations indicating the magnitude of costs, they are not precise. For example, these are very small subsamples drawn from a representative national sample, making them sensitive to sampling error. On the other hand, conservative cost assumptions were used, which are considerably lower than costs reported by cyberhate victims in a detailed questionnaire jointly conducted by The Australia Institute and independent researcher Ginger Gorman, who is currently writing a book on the topic. This survey also covered legal, logistical and other costs not included in the nation-wide polling.⁶

The survey had six respondents who have been subject to ongoing cyberhate attacks that have lasted in one case for over a decade. Key results from this survey on financial costs:

- Medical costs reported at between \$400 and \$250,000.
- Legal services had been provided pro bono to one victim, another incurred \$2000 in costs, another \$25,000 while the other three all reported legal costs of over \$100,000.
- Interstate and international travel costs had been incurred, while four had moved house, three multiple times.
- Other specialist services including IT and private investigators had cost two respondents thousands and two respondents over \$10,000.
- Only one respondent had not lost income, while three respondents reported lost income of over \$100,000. Others were unable to estimate, but considered it a substantial cost.

⁶ Further results and methodology will be published in Ginger Gorman's book to be published by Hardie Grant in January 2019.

Polling data

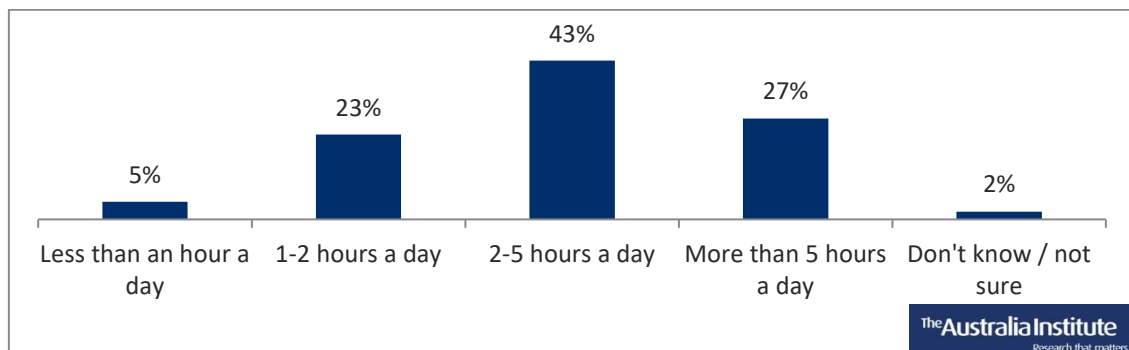
The Australia Institute conducted a national survey of 1,557 people between 27 March and 7 April 2018 online through Research Now with nationally representative samples by gender, age and state and territory. Respondents were provided with modest rewards for participating. Detailed results below show larger states only.

Other data

Population data used in the calculations above is from the ABS dataserie for estimated Australian population aged 18 or above (total 19,096,619 at June 2017).⁷

Since our survey was conducted online, all respondents were internet users. For population-wide estimates we multiplied by the World Bank's reported rate of internet use in Australia: 88%.⁸ Note ABS data that finds that 86% of households have access to the internet at home.⁹ Our respondents were reasonably representative in terms internet usage, mostly selecting "2-5 hours a day" or "more than five hours a day" (Figure 10), compared with Hootsuite's *Digital in 2018 in Oceania* report which found average Australian usage (similarly self-reported) was five hours, 34 minutes a day.¹⁰

Figure 10: How often do you use the internet each day on average?



⁷ ABS Cat. no 3101.0 *Australian Demographic Statistics, June 2017*

<http://www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/3101.0Main+Features1Jun%202017>

⁸ World Bank (2018) *Individuals using the Internet (% of population) 2016 data*

<https://data.worldbank.org/indicator/IT.NET.USER.ZS?locations=AU>;

⁹ ABC Cat no. 8146.0 - *Household Use of Information Technology, Australia, 2016-*

17 <http://www.abs.gov.au/ausstats/abs@.nsf/mf/8146.0>

¹⁰ Hootsuite (2018) *Digital in 2018 in Oceania*, p 22, <https://hootsuite.com/resources/digital-in-2018-apac>

Detailed results

How often do you use the internet each week on average?

	Total	Male	Female	18-24yrs	25-34yrs	35-44yrs	45-54yrs	55-64yrs	65yrs+
Less than 7 hours a week (less than 1 hour a day)	5%	5%	4%	3%	2%	3%	7%	8%	6%
7-14 hours per week (1-2 hours a day)	23%	24%	22%	15%	19%	19%	28%	24%	32%
14-35 hours a week (2-5 hours a day)	43%	44%	42%	38%	42%	44%	43%	42%	46%
More than 35 hours a week (More than 5 hours per day)	27%	25%	30%	36%	34%	32%	21%	26%	15%
Don't know / not sure	2%	2%	2%	8%	2%	2%	1%	0%	0%

**Have you personally experienced any of the following forms of online harassment at any point?
(Multiple response, 'none' and 'don't know' exclusive)**

	Total	Male	Female	18-24 yrs	25-34 yrs	35-44 yrs	45-54 yrs	55-64 yrs	65 yrs+
Abusive language directed at you	28%	23%	32%	41%	44%	31%	28%	17%	6%
Abusive language about your political beliefs and values	9%	9%	8%	14%	14%	11%	8%	4%	2%
Abusive language about your religious or ethnic background	7%	8%	6%	12%	13%	9%	5%	3%	1%
Being sent unwanted sexual messages or unwanted nude pictures	18%	11%	24%	26%	23%	18%	17%	10%	12%
Online publication of your personal details without permission, to intimidate you	5%	4%	6%	11%	9%	6%	3%	0%	2%
Deliberate attempts to get you fired or damage your work reputation online	4%	4%	5%	5%	7%	7%	5%	3%	0%
Being impersonated online in an attempt to damage your reputation	4%	4%	5%	7%	9%	4%	4%	2%	1%
Having your details and/or photographs posted to sex or porn sites	2%	1%	3%	5%	3%	2%	1%	0%	0%
Threats of sexual assault or rape	3%	2%	4%	7%	5%	3%	2%	2%	0%
Threats of being followed or stalked in real life	5%	4%	6%	8%	10%	6%	5%	2%	0%
Threats of physical violence or death threats	8%	7%	10%	13%	16%	9%	9%	3%	0%
Incitement of others to stalk or threaten you in real life	3%	2%	4%	6%	6%	3%	3%	1%	0%
Other	1%	1%	1%	0%	0%	1%	1%	2%	2%
None of these	57%	60%	54%	38%	41%	51%	59%	72%	79%
Don't know / not sure	4%	6%	3%	10%	4%	5%	3%	3%	2%
<i>Count</i>	1.59	1.46	1.72	2.04	2.06	1.65	1.52	1.26	1.07

	< 7 hrs / w	7-14 hrs / w	14-35hrs /w	>35hrs /w	Don't know / not sure
Abusive language directed at you	19%	18%	30%	36%	6%
Abusive language about your political beliefs and values	7%	6%	9%	12%	6%
Abusive language about your religious or ethnic background	5%	4%	7%	10%	0%
Being sent unwanted sexual messages or unwanted nude pictures	11%	12%	18%	24%	12%
Online publication of your personal details without permission, to intimidate you	4%	3%	4%	10%	3%
Deliberate attempts to get you fired or damage your work reputation online	7%	3%	4%	7%	0%
Being impersonated online in an attempt to damage your reputation	3%	3%	4%	6%	3%
Having your details and/or photographs posted to sex or porn sites	1%	1%	1%	4%	0%
Threats of sexual assault or rape	3%	2%	3%	4%	0%
Threats of being followed or stalked in real life	0%	2%	5%	8%	0%
Threats of physical violence or death threats	4%	4%	8%	14%	3%
Incitement of others to stalk or threaten you in real life	0%	3%	3%	4%	3%
Other	0%	2%	1%	1%	0%
None of these	69%	68%	56%	49%	33%
Don't know / not sure	3%	3%	3%	3%	52%
<i>Count</i>	1.35	1.32	1.57	1.94	1.21

**Has this harassment ever reached a point that it negatively affects your physical or mental wellbeing?
(asked only if any harassment selected above)**

	Total	Male	Female	18-24yrs	25-34yrs	35-44yrs	45-54yrs	55-64yrs	65yrs+
Yes	34%	30%	37%	34%	41%	30%	41%	29%	13%
No	62%	66%	60%	60%	56%	68%	54%	66%	84%
Don't know / not sure	4%	5%	3%	6%	2%	2%	5%	5%	4%

	< 7hrs /w	7-14hrs /w	14-35hrs /w	>35hrs/ w	Don't know / not sure
Yes	33%	28%	34%	38%	40%
No	57%	68%	63%	59%	60%
Don't know / not sure	10%	5%	3%	3%	0%

Beyond harassment, "cyberhate" is used to mean repeated, sustained threats or attacks on an individual through the use of electronic devices, which result in real-life harm to the target. These harms may be physical and/or psychological. The attacks may be perpetrated by one or more individuals.

Have you experienced a cyberhate attack as defined above?

	Total	Male	Female	18-24yrs	25-34yrs	35-44yrs	45-54yrs	55-64yrs	65yrs+
Yes	8%	6%	9%	13%	17%	9%	5%	3%	1%
No	87%	86%	87%	76%	75%	87%	89%	96%	98%
Don't know / not sure	5%	8%	3%	11%	8%	5%	6%	2%	1%

	< 7hrs /w	7-14hrs /w	14-35hrs /w	>35hrs/ w	Don't know / not sure
Yes	1%	4%	7%	13%	0%
No	92%	92%	88%	84%	39%
Don't know / not sure	7%	4%	5%	3%	61%

Have cyberhate attacks or other online harassment caused you to see a doctor, psychologist or other health professional help?

(asked only of those who reported any harassment, or reported cyberhate)

	Total	Male	Female	18-24yrs	25-34yrs	35-44yrs	45-54yrs	55-64yrs	65yrs+
Yes	28%	27%	29%	31%	39%	24%	20%	15%	0%
No	69%	67%	70%	67%	60%	71%	73%	85%	88%
Don't know / not sure	3%	6%	1%	2%	1%	4%	7%	0%	13%

	< 7hrs /w	7-14hrs /w	14-35hrs /w	>35hrs/ w	Don't know / not sure
Yes	29%	30%	23%	34%	0%
No	71%	65%	72%	66%	50%
Don't know / not sure	0%	5%	5%	0%	50%

Please estimate the total financial cost to you of any medical costs you incurred as the result of being the target of any cyberhate attacks or other online harassment.

Please include all visits to GPs, psychological and psychiatric support, medication or any other support.

(asked only of those who reported seeking medical help)

	Total	Male	Female	18-24yrs	25-34yrs	35-44yrs	45-54yrs	55-64yrs	65yrs+
No financial cost to me	25%	25%	24%	38%	25%	25%	11%	0%	0%
Some, but less than \$1000 in total	52%	50%	54%	46%	56%	58%	33%	67%	0%
Thousands \$	6%	7%	5%	0%	6%	0%	22%	0%	0%
Don't know / not sure	17%	18%	17%	15%	13%	17%	33%	33%	0%

	< 7hrs /w	7-14hrs /w	14-35hrs /w	>35hrs/ w	Don't know / not sure
No financial cost to me	0%	45%	17%	25%	0%
Some, but less than \$1000 in total	50%	45%	50%	56%	0%
\$	0%	0%	13%	3%	0%
Don't know / not sure	50%	9%	21%	16%	0%

Have cyberhate attacks or other online harassment affected your ability to work and earn income?

(asked only of those who reported any harassment, or reported cyberhate)

	Total	Male	Female	18-24yrs	25-34yrs	35-44yrs	45-54yrs	55-64yrs	65yrs+
Yes	28%	26%	29%	29%	33%	31%	23%	25%	0%
No	69%	68%	69%	69%	66%	63%	70%	75%	100%
Don't know / not sure	3%	6%	1%	2%	1%	6%	7%	0%	0%

	< 7hrs /w	7-14hrs /w	14-35hrs /w	>35hrs /w	Don't know / not sure
Yes	57%	24%	25%	32%	0%
No	43%	76%	70%	66%	50%
Don't know / not sure	0%	0%	5%	2%	50%

Please estimate the total financial cost to you of any lost income as the result of being the target of any cyberhate attacks or other online harassment. Please consider things such as: leave without pay, unemployment or lost work opportunities.

(asked only of those who reported impacts on work)

	Total	Male	Female	18-24yrs	25-34yrs	35-44yrs	45-54yrs	55-64yrs	65yrs+
No financial cost to me	12%	11%	12%	8%	11%	13%	10%	20%	0%
Less than \$1000 in total	43%	44%	43%	42%	59%	40%	30%	0%	0%
Input thousands: \$	22%	30%	17%	25%	19%	20%	40%	0%	0%
Don't know / not sure	23%	15%	29%	25%	11%	27%	20%	80%	0%

	< 7hrs /w	7-14hrs /w	14-35hrs /w	>35hrs/ w	Don't know / not sure
No financial cost to me	0%	11%	8%	17%	0%
Less than \$1000 in total	50%	78%	31%	43%	0%
Input thousands: \$	25%	11%	31%	17%	0%
Don't know / not sure	25%	0%	31%	23%	0%