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Abstract | Based on an online panel survey of 13,302 adults, this study examines the common demographic characteristics of those who have intentionally viewed child sexual abuse material (CSAM) in the past year.

Overall, 0.8 percent of those surveyed reported they had intentionally viewed CSAM in the past year. This is somewhat lower than previous estimates, which have ranged from 2.2 to 4.6 percent.

Further analysis based on logistic regression and predicted probabilities identified four key demographic factors associated with CSAM consumption. Survey respondents who were aged 18–34 years (predicted probability of 1.2%), were living with disability (predicted probability of 1.5%) were currently serving or had previously served in the military (1.9%), or spoke a language other than English at home (predicted probability of 2.0%) were more likely than others to have intentionally viewed CSAM.

Prevalence of viewing online child sexual abuse material among Australian adults

Rick Brown

Introduction

Internationally, reports of child sexual abuse material (CSAM) have grown rapidly in recent years. The US-based National Center for Missing and Exploited Children (2023) received almost 32 million CSAM reports from electronic service providers in 2022, representing a 47 percent increase since 2020. CSAM is available through a wide range of outlets, including (among others) websites, forums, peer-to-peer networks, file-storage sites and social media sites (Brown 2022). This has led to what Wortley (2012) called supply-side demand, with the increasing availability fuelling an increase in consumption of CSAM. However, relatively little is known about the nature and extent of that demand.

Previous estimates of the proportion of the population viewing CSAM have varied due to differences in sampling, survey design and questioning. A survey of 1,902 17–20-year-old males (mean age of 18 years) in Sweden examined the prevalence and frequency of pornography use, finding that 97.8 percent had viewed pornography at least once (Svedin, Åkerman & Priebe 2011). Among the questions asked about pornography use, respondents were asked whether they had ever viewed pornography involving sex between adults and children aged under 15 years.

Of the 1,861 respondents who had ever viewed pornography, 4.6 percent reported they had ever viewed material involving sex between adults and children. This was more prevalent for those viewing pornography frequently (more or less daily; 17.0%) compared with others who had viewed pornography less frequently (3.1%; Svedin, Åkerman & Priebe 2011). Reanalysis of this survey data by Seto et al. (2015) calculated a prevalence estimate for the entire sample and not just those reporting having ever viewed pornography. Using the same definition of CSAM (having ever viewed pornography involving sex between adults and children aged under 15 years), 4.2 percent reported having viewed such material.

In a survey of 8,718 German men aged 18 to 89 years, respondents were asked whether as adults they had ever watched pornographic depictions of children to get sexually aroused, with 2.2 percent of respondents reporting they had (Dombert et al. 2016). Using an online panel survey, Seigfried-Spellar and Rogers (2013) surveyed respondents aged 18 years and over in the United States about their internet pornography use. Of the 630 surveyed, 502 (80%) were women and 128 (20%) were men. Respondents were asked if they had ever viewed pornographic materials featuring individuals under the age of 18 years. The prevalence of viewing such material was found to be higher for men (*n*=16, 12.5%) than for women (*n*=17, 3.4%).

In Australia, a recent online panel survey of 1,945 men aged 18 years and over examined a range of issues associated with child sexual abuse perpetration (Salter et al. 2023). The survey asked respondents whether they had knowingly and deliberately viewed pornographic material containing people below the age of 18, finding that 2.5 percent of respondents reported having done so.

Characteristics of CSAM consumers

CSAM consumers are often described as being heterogeneous, coming from a diverse range of backgrounds (Prichard & Spiranovic 2014; Shelton et al. 2016). However, there are some recurring characteristics that can be identified from previous studies (Brown & Bricknell 2018). CSAM consumers typically have been found to be male (Prat & Jonas 2012; Seigfried-Spellar 2013; Wolak, Finkelhor & Mitchell 2011), white/Caucasian (Babchishin, Hanson & VanZuylen 2015; Navarro & Jasinski 2015) and single (Babchishin, Hanson & Hermann 2011; Navarro & Jasinski 2015; Price, Lambie & Krynen 2015; Seigfried-Spellar 2013; Wolak, Finkelhor & Mitchell 2011). CSAM consumers have also been found to have typically completed a higher level of education than other sexual offenders (Armstrong & Mellor 2016; Babchishin, Hanson & VanZuylen 2015; Faust et al. 2015; Seto et al. 2012) and to have a higher income level (Babchishin, Hanson & VanZuylen 2015). They often have no parental responsibility (Brown & Bricknell 2018) and are less likely than contact child sexual offenders to live with children (Babchishin, Hanson & VanZuylen 2015; Seto et al. 2012).

Evidence in relation to age appears mixed, with some studies finding that CSAM consumers tend to be younger than other types of child sexual offenders (Aslan & Edelmann 2014; Babchishin, Hanson & VanZuylen 2015; Seto & Eke 2005). Other studies have found that CSAM consumers are more likely to be older than other offenders (Brown & Bricknell 2018; Faust et al. 2015).

There is also contradictory evidence about the employment status of CSAM consumers. While some researchers have found the majority of CSAM consumers are employed (Clevenger, Navarro & Jasinski 2016; Tomak et al. 2009; Wolak, Finkelhor & Mitchell 2011), a meta-analysis of the literature found that online sexual offenders were more likely to be unemployed compared with both the general population and with offline sexual offenders (Babchishin, Hanson & Hermann 2011). However, a subsequent meta-analysis found that offline sexual offenders were more likely than online sexual offenders to be unemployed (Babchishin, Hanson & VanZuylen 2015).

In terms of criminal justice involvement, Dowling et al. (2021) noted that CSAM offenders were less likely to have previous convictions than other types of child sexual offenders. In their systematic review of the literature, Babchishin, Hanson and Hermann (2011) estimated that just 12 percent of online child sexual offenders had a prior criminal conviction, substantially lower than for contact child sexual offenders. Babchishin, Hanson and VanZuylen (2015) similarly found that contact child sexual offenders had higher rates of prior offending than online child sexual offenders.

This study set out to explore these issues in further detail. It aimed to provide an estimate of the prevalence of CSAM consumers in the general population and to identify the demographic characteristics of such offenders.

Methodology

Sample

This study used data from a survey that was primarily designed to explore the political and social attitudes and beliefs of Australians. The survey was administered by Roy Morgan Research on behalf of the Australian Institute of Criminology, and fieldwork was undertaken between 3 November and 6 December 2022. The survey targeted individuals aged 18 years and over who were signed up to receive survey invitations through online panels accessed by the survey company. Non-probability proportional quota sampling was used to ensure the sample was broadly reflective of the spread of people living in Australia. Quotas were based on the Australian adult population, stratified by age, sex and usual place of residence. Following data cleaning to remove poor quality responses and duplicates, the data were weighted by age, sex and usual place of residence to ensure they were broadly proportional to the Australian population. Additional weights corrected for education level and internet and social media use. The final sample comprised 13,302 respondents who completed the survey. All results presented in this paper are based on weighted data.

Measures

The survey included two questions that could be used to estimate the prevalence of CSAM consumption. The first asked, 'In the last year, have you encountered sexually explicit material of people who are or look under the age of 18 online (whether unintentionally or otherwise)?' Respondents could answer with 'yes', 'no', 'don't know', or 'prefer not to say'. Those responding 'yes' were asked the follow-up question, 'Did you encounter this sexually explicit material of people who are or look under the age of 18 by mistake?' Again, respondents could answer with 'yes', 'no', 'don't know', or 'prefer not to say'. Individuals were coded as having consumed CSAM if they had encountered such material (answering 'yes' to the first question) and had not done so by mistake (answering 'no' to the follow-up question).

Limitations of the study

This study has a number of potential limitations. The survey design involved the use of a non-random sample selected through online panel membership. As a result, it is not possible to extrapolate to the wider population. In addition, while the quota sampling and subsequent weighting took into account a range of demographic factors, it is also possible that those who sign up to participate in online panel surveys differ from the general population in ways that have not been addressed. However, this may be partially offset by the fact that the survey captured data about online behaviour among those who were more likely to be computer literate.

The measures of CSAM consumption used in this study provide a conservative estimate of the issue. They exclude those who may have viewed CSAM by mistake, having come across it unintentionally, as this study was interested in the prevalence of individuals who were motivated to view CSAM. It also has a relatively narrow temporal frame of reference, focusing on CSAM consumption in the past year, rather than at any time. Most previous studies have used a more expansive temporal frame of reference. In this study, a one-year temporal frame was used because it aligned with the temporal frame for other questions asked in the survey. Both of these factors—the definition of CSAM consumption and the temporal frame—are likely to lead to underestimation of the scale of CSAM consumption in this study when compared with most previous studies.

The current study was also unable to account for differences in the regularity with which individuals viewed CSAM intentionally. There may well be important differences between those who viewed CSAM once or twice and those who viewed it on a regular basis. The binary nature of the questions asked (ie viewed or not) did not account for nuances associated with the extent of CSAM consumption.

Results

Most respondents reported they had not encountered sexually explicit material of children over the past year. Of the 12,756 survey participants who provided a 'yes' or 'no' response to this question, 595 (4.7%) indicated they had encountered such material. There were also 546 individuals (4.1% of the entire sample of 13,302) who provided a 'don't know' or 'prefer not say' response to this question and were excluded from further analysis. Among the 595 individuals who had encountered CSAM, most (*n*=462, 77.7%) encountered it by mistake. There were 101 respondents who reported they had not encountered it by mistake and were therefore categorised as having intentionally viewed CSAM. This gives an overall prevalence estimate for intentionally viewing CSAM of 0.8 percent (101/12,724 who provided a response). Note that there were also 32 individuals (5.4% of those who had encountered CSAM) who provided a 'don't know' or 'prefer not to say' response to the secondary question on intentionality and were excluded from further analyses, although they become relevant later when interpreting the results. Excluding the 'don't know' or 'prefer not to say' responses was a conservative approach given that it was unclear whether these were socially acceptable responses given by those who had intentionally viewed CSAM, or were responses from those who had not viewed such material but were uncomfortable answering the questions.

Differences in demographic factors

Bivariate analyses explored the prevalence of viewing CSAM across a range of demographic variables. Most of the variables were selected based on prior evidence from studies of CSAM prevalence, including gender, age, racial/ethnic origin (addressed here by Aboriginal and/or Torres Strait Islander status, place of birth and language background), relationship status, living with children, education, employment, income, and criminal justice involvement. The survey also offered an opportunity to explore variables that have received less attention in previous studies, including having served in the military, living with disability and sexuality. Table 1 shows the distribution of each demographic variable within the sample and the proportion of each group that had intentionally viewed CSAM in the past year. Variables associated with intentionally viewing CSAM were examined using Pearson's chi square test. There was a significant difference between gender groups, with males more likely to intentionally view CSAM (1.1%) than females (0.6%). While non-binary and other genders were included, none reported having intentionally viewed CSAM.

Statistically significant differences in the intentional viewing of CSAM were also found for the following variables:

- age (1.3% of 18–34 year olds compared with 0.6% of those aged 35 years and older);
- Aboriginal and/or Torres Strait Islander background (3.6% of Indigenous respondents compared with 0.7% of non-Indigenous respondents);
- language most often spoken at home (1.9% of those who most often speak a language other than English at home, compared with 0.7% of those who most often speak English at home); and
- disability (1.7% of those with any disability compared with 0.7% of those with no disability).

Table 1 shows there was no statistical difference in the proportion reporting intentionally viewing CSAM based on place of birth, sexuality, relationship status, or living with children.

Table 1: Demographic variable distribution of survey responses and prevalence of intentionally viewing CSAM (weighted *n*=13,302)

	Variable distribution		Prevalence of intentionally viewing CSAM		
	n[a]	%	*n*	%[b]	χ^2
Gender					
Male	6,470	48.6	65	1.1	**
Female	6,770	50.9	36	0.6	
Non-binary	62	0.5	0	0	
Age					
18–34 years	3,847	28.9	47	1.3	***
35+ years	9,455	71.1	54	0.6	
Aboriginal and/or Torres Strait Islander					
Yes	362	2.7	12	3.6	***
No	12,836	97.3	88	0.7	
Place of birth					
Australia	10,347	78.0	74	0.8	ns
Overseas	2,919	22.0	27	1.0	
Language most often spoken at home					
English	12,576	94.8	88	0.7	***
Other	695	5.2	13	1.9	
Living with disability					
Yes	1,708	13.0	27	1.7	***
No	11,423	87.0	72	0.7	
Sexuality					
Heterosexual	12,019	91.5	92	0.8	ns
LGB+	1,112	8.5	9	0.8	
Relationship status					
Single	2,971	22.5	28	1.0	ns
Married/in a relationship	8,385	63.4	62	0.8	
Separated/divorced/widowed	1,862	14.1	11	0.6	
Living with children					
Yes	4,887	36.9	40	0.9	ns
No	8,357	63.1	61	0.8	

Chi-square significance: ***p<0.001, **p<0.01, *p<0.05, ns=p≥0.05

a: The demographic distributions *n* will not necessarily sum to 13,302 (the original sample size) due to missing data

b: The percentage intentionally viewing CSAM excludes those who responded with 'don't know' or 'prefer not to say' to the questions about whether they viewed CSAM in the past 12 months. This denominator will be different for each variable

Source: Survey of social and political attitudes in Australia, 2022 [computer file]

Differences in education, employment and income

Bivariate analyses also explored a range of education, employment and income variables (Table 2). There were no statistically significant differences in the proportion of respondents intentionally viewing CSAM in terms of education level, employment status or income level. However, there was a statistically significant difference based on military service. Those who were currently serving, or who had previously served, in the military were more likely to have intentionally viewed CSAM (2.8%) than those who had never served in the military (0.6%).

Table 2: Education, employment and income variable distribution of survey responses and prevalence of intentionally viewing CSAM (weighted *n*=13,302)

	Variable distribution		Prevalence of intentionally viewing CSAM		
	n[a]	%	*n*	%[b]	χ^2
Highest education level					
Below year 10	237	1.8	3	1.4	
Year 10/11/TAFE or equivalent	5,456	41.2	36	0.7	
Year 12	2,313	17.5	19	0.9	ns
Degree	5,203	39.2	42	0.9	
Other	49	0.4	0	0	
Employment					
Employed full-time	5,592	42.5	43	0.8	
Employed part-time/casual	2,757	21.0	22	0.8	ns
Not in the workforce	4,808	36.5	34	0.7	
Serving/served in the military					
Yes	1,202	9.1	31	2.8	***
No	12,055	90.9	69	0.6	
Income					
Less than $18,201	1,618	13.3	12	0.8	
$18,201–$45,000	3,222	26.5	24	0.8	
$45,001–$120,000	5,663	46.6	33	0.6	ns
$120,001–$180,000	1,207	9.9	14	1.3	
Over $180,000	446	3.7	6	1.3	

Chi-square significance: ***$p<0.001$, **$p<0.01$, *$p<0.05$, ns=$p\geq0.05$

a: The *n* for the education, employment and income distributions will not necessarily sum to 13,302 (the original sample size) due to missing data

b: The percentage intentionally viewing CSAM excludes those who responded with 'don't know' or 'prefer not to say' to the questions on whether they viewed CSAM in the past 12 months. This denominator will be different for each variable

Source: Survey of social and political attitudes in Australia, 2022 [computer file]

Criminal justice involvement

Criminal justice involvement was examined based on whether respondents had ever been arrested, charged, summonsed, convicted or had any findings of guilt for a criminal offence. Separate questions were asked about whether this had occurred under the age of 18 years (as a juvenile) or when they were 18 years or older (as an adult).

Table 3 shows there was a statistically significant difference between those who had criminal justice involvement as a juvenile compared with those who did not. While 2.4 percent of those with criminal justice involvement as a juvenile had intentionally viewed CSAM, 0.7 percent of respondents without such involvement had done so. Similar results were found for adult criminal justice involvement. While 1.6 percent of those with adult criminal justice involvement had intentionally viewed CSAM, 0.7 percent of those without adult criminal justice involvement had done so.

Table 3: Criminal justice involvement variable distribution of survey responses and prevalence of intentionally viewing CSAM (weighted *n*=13,302)

	Variable distribution		Prevalence of intentionally viewing CSAM		
	n[a]	%	*n*	%[b]	χ^2
Criminal justice involvement as a juvenile					
Yes	450	3.4	11	2.4	***
No	12,753	96.6	89	0.7	
Criminal justice involvement as an adult					
Yes	1,063	8.1	16	1.6	**
No	12,131	91.9	83	0.7	

Chi-square significance: ***p<0.001, **p<0.01, *p<0.05, ns=p≥0.05

a: The criminal justice involvement distributions *n* will not necessarily sum to 13,302 (the original sample size) due to missing data

b: The percentage intentionally viewing CSAM excludes those who responded with 'don't know' or 'prefer not to say' to the questions on whether they viewed CSAM in the past 12 months. This denominator will be different for each variable

Source: Survey of social and political attitudes in Australia, 2022 [computer file]

Multivariate analysis of factors related to intentionally viewing CSAM

The bivariate analysis so far has identified eight variables that would appear to be associated with intentionally viewing CSAM: gender, age, military service, Aboriginal and/or Torres Strait Islander status, language most often spoken at home, living with disability, criminal justice involvement as a juvenile and criminal justice involvement as an adult. To account for interactions among these variables, logistic regression modelling was undertaken to identify the strength of each factor in explaining intentional viewing of CSAM when controlling for each of the other factors.

The model presented in Table 4 identifies five variables that were associated with intentionally viewing CSAM. These were age, military service, Aboriginal and/or Torres Strait Islander status, language most often spoken at home and living with disability. Being aged 18–34 years, serving or having served in the military, being from an Aboriginal and/or Torres Strait Islander background, speaking a language other than English most often at home and living with disability each increased the likelihood of viewing CSAM intentionally, controlling for all other factors in the model. Given the relatively low prevalence of intentionally viewing CSAM, the analysis presented in Table 4 was repeated applying rare event logistic regression (King & Zeng 2001), using the relogit command in Stata 16.1. This approach identified the same set of five variables as statistically significant. The choice was made to use the standard logistic regression analysis (as shown in Table 4) as this allowed predictive probabilities to be calculated (see Figure 1) which was not possible using rare event analysis.

Table 4 also shows that gender and the two criminal justice involvement variables were not statistically significant when controlling for the other variables in the model. The lack of statistically significant differences by gender is interesting, given that males are typically found to be more likely to consume CSAM than females (Prat & Jonas 2012; Seigfried-Spellar 2013; Wolak, Finkelhor & Mitchell 2011), although it should be noted that the significance level only marginally falls outside the conventional $p<0.05$ threshold.

Table 4: Logistic regression model for variables associated with intentionally viewing CSAM (weighted *n*=12,346)

Independent variables	Coefficient	Significance	95% confidence interval
Gender—male (vs female)[a]	0.45	0.060	−0.02, 0.92
Age—18–34 years (vs 35+ years)	0.65	0.003	0.22, 1.08
Serving/served in the military (vs no military service)	1.09	<0.001	0.57, 1.60
Aboriginal and/or Torres Strait Islander (vs non-Aboriginal and/or Torres Strait Islander)	0.99	0.008	0.26, 1.73
Language most commonly spoken at home—Other (vs English)	1.01	0.001	0.40, 1.63
Living with disability (vs no disability)	0.77	0.003	0.26, 1.27
Criminal justice involvement as a juvenile (vs no criminal justice involvement as a juvenile)	0.49	0.310	−0.45, 1.42
Criminal justice involvement as an adult (vs no criminal justice involvement as an adult)	0.37	0.345	−0.40, 1.14
Constant	−5.85	<0.001	−6.24, −5.46

a: The non-binary/other gender category was removed from the analysis as it produced a coefficient of 0 (due to there being no observations of CSAM being intentionally viewed)

Note: Goodness of fit for binary response models: $F(9,12337)=0.58$, $p=0.8164$. Non-significant result suggests the model was a good fit

Source: Survey of social and political attitudes in Australia, 2022 [computer file]

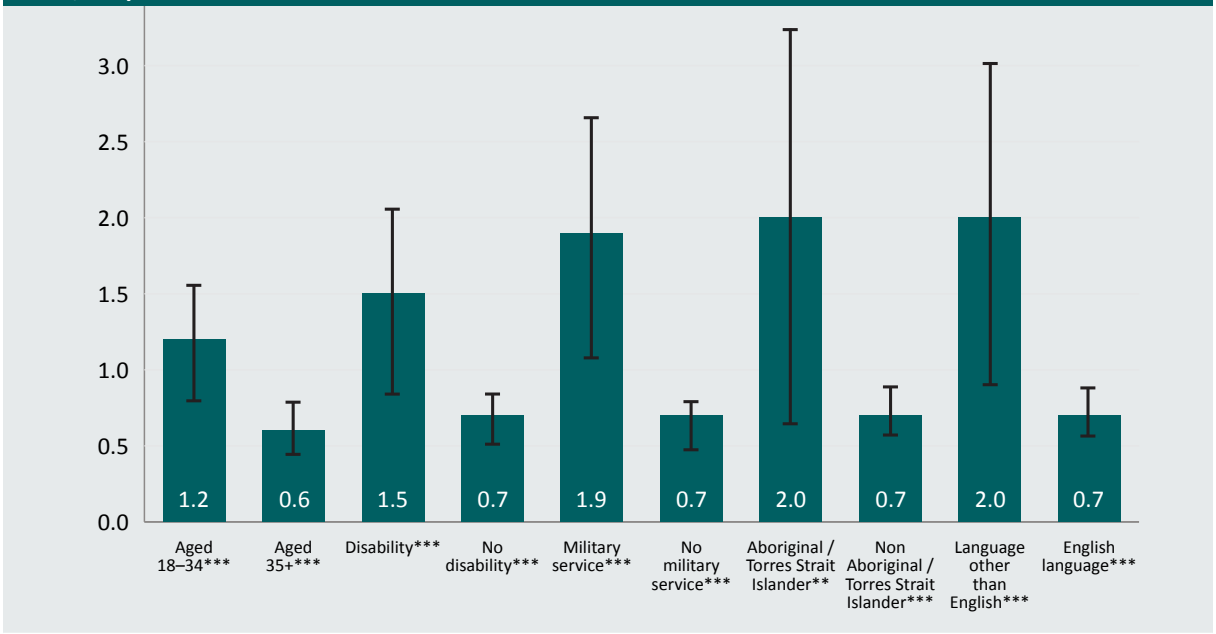
One possible explanation for this finding could be that males who viewed CSAM were more likely to answer 'don't know' or 'prefer not say', thereby being excluded from the analysis presented in Table 4. Analysis of adjusted residuals in bivariate analyses when 'don't know' or 'prefer not say' were included showed that these answers were more likely for those who were male, who were aged 18–34 years, who were gay/lesbian, who were single, who were serving or had served in the military, who were from an Aboriginal and/or Torres Strait Islander background, who most often spoke a language other than English at home and who had criminal justice involvement as an adult. However, further multivariate analysis (using logistic regression) to determine which variables influenced whether respondents answered 'don't know' or 'prefer not to say' to either of the CSAM questions indicated that just two variables were relevant. Gender (particularly being male) and relationship status (particularly being single) were associated with 'don't know'/'prefer not to say' responses. Given that both being male and being single are frequently identified in the literature as being associated with CSAM consumption, this may suggest (although it cannot be confirmed from the data available) that respondents falling into these demographic groups were more likely to respond 'don't know'/'prefer not to say' when they had in fact intentionally viewed CSAM.

The lack of statistical significance associated with the criminal justice involvement variables is more difficult to explain. There would appear to be an interaction effect between serving or having served in the military and prior criminal justice involvement, with statistically significant bivariate associations for both juvenile and adult criminal justice variables. When an interaction between juvenile criminal justice involvement and military service was included in the logistic regression model and these results were compared with those from the original model shown in Table 4 (using a likelihood ratio test) no statistically significant difference was shown between the models. However, including an interaction between adult criminal justice involvement and military service improved the model to a level approaching statistical significance (p=0.07). The lack of significance for criminal justice involvement variables shown in Table 4 may therefore be partly explained by military service being a stronger explanatory variable.

Predicted probabilities

Predicted probabilities provide a means to estimate the likelihood of an outcome in one group compared with another (Muller & MacLehose 2014). They can be calculated following a logistic regression model and they control for other variables in the model. As the scores are standardised between 0 and 1, these can be interpreted in a similar way to percentages. Figure 1 shows the predicted probability of intentionally viewing CSAM for each of the five variables found to be statistically significant in Table 4.

Figure 1: Predicted probability of intentionally viewing CSAM by selected variables (%) (weighted *n*=12,346)



Note: Includes 95% level confidence intervals

Source: Survey of social and political attitudes in Australia, 2022 [computer file]

Where age was concerned, 1.2 percent of those aged 18–34 years were predicted to have intentionally viewed CSAM compared with 0.6 percent of those aged 35+ years. Among respondents living with disability, 1.5 percent were predicted to have intentionally viewed CSAM compared with 0.7 percent of those with no disability.

The next highest predicted probability related to those with military service, with 1.9 percent predicted to have intentionally viewed CSAM compared with 0.7 percent of those that had not served in the military. The next highest predicted probability was associated with those who identified as Aboriginal and/or Torres Strait Islander, 2.0 percent of whom were predicted to have intentionally viewed CSAM compared with 0.7 percent for respondents who did not identify as Aboriginal and/or Torres Strait Islanders. The final (and equal highest) predicted probability was associated with individuals who most often spoke a language other than English at home, 2.0 percent of whom were predicted to have intentionally viewed CSAM. This compared with a predicted probability of 0.7 percent of those who mostly spoke English at home. It should be noted that the results for respondents who identified as Aboriginal and/or Torres Strait Islanders and those who mostly spoke a language other than English at home need to be treated with caution due to the relatively large confidence intervals shown in Figure 1. The confidence intervals for those identifying as Aboriginal and/or Torres Strait Islanders overlap with the confidence intervals for those from other backgrounds; this means one cannot be entirely certain that the predicted probabilities between these two groups are in fact different. This variable was therefore excluded from further discussion below.

Examining the percentage point difference between each set of predicted probabilities shows that the greatest difference was for those who mostly spoke a language other than English at home (1.3 percentage point difference). This was followed by serving/having served in the military (1.2 percentage point difference). These percentage point differences equate to their predicted probabilities being more than double those of others not represented in those groups. Individuals living with disability were 0.8 percentage points more likely to intentionally view CSAM than those with no disability (also reflecting a predicted probability more than double that of people without disability). The margin was smallest for age, with a 0.6 percentage point difference between those aged 18–34 years and those aged 35+ years (although even here the predicted probability for those aged 18–34 years was almost double that of their older counterparts).

Conclusion

This study examined the prevalence of viewing CSAM in a large sample of respondents to a survey on the diversity of political and social beliefs in Australia. CSAM consumption was measured in response to two questions: the first asked about whether the respondents had in the previous year accessed material of a sexual nature involving individuals who appeared to be under the age of 18; the second question asked whether this material had been viewed by mistake. The results indicate that intentionally viewing CSAM (as defined in this study) is relatively rare. Overall, 4.7 percent of respondents had encountered CSAM in the previous year. Just 0.8 percent of respondents had intentionally viewed CSAM. These rates of CSAM consumption are lower than those found in previous studies, which have ranged from 2.2 percent to 4.6 percent. This disparity will partially be a result of the temporal framing of the questions asked, with previous studies focusing on ever having viewed CSAM, while this study asked about viewing CSAM in the past year. The focus on intentionality of CSAM viewing will also have contributed to a lower estimate in the current study.

Certain groups were more likely to have viewed CSAM intentionally in the past year. These included individuals who mostly spoke a language other than English at home (predicted probability of 2.0%), those who were serving or had served in the military (predicted probability of 1.9%), individuals living with disability (predicted probability of 1.5%) and those aged 18–34 years (predicted probability of 1.2%).

The finding that those who spoke a language other than English at home were more likely to view CSAM would appear to be contrary to previous studies, although this is subject to definitional differences. Previous studies have been more concerned with race/ethnicity, and have found that individuals from white/Caucasian backgrounds were more likely to view CSAM in societies that were also predominantly white/Caucasian. This suggests further investigation is required to understand why this pattern may differ in Australia.

Regarding the findings about individuals living with disability, there is evidence to suggest that individuals with neurodevelopmental conditions such as autism spectrum disorder (which would be covered by the disability definition used in this study) may be more likely to view CSAM (Marinos & Whittingham 2020; Sugrue 2017). Possible reasons for this include a desire to connect with individuals on a similar emotional or intellectual level, difficulty correctly estimating the age of individuals in material of a sexual nature, and difficulty recognising facial expressions such as fear or pain (Allely, Kennedy & Warren 2019).

Viewing of CSAM by those serving or having served in the military has not previously been addressed in prevalence studies of this kind. However, a qualitative study of pornography use noted that CSAM consumption may have resulted from the prolific availability of adult pornography in the military (Garman 2021).

The findings support previous research that has shown CSAM offenders tend to be relatively young, or at least younger than other sexual offenders (Aslan & Edelmann 2014; Babchishin, Hanson & VanZuylen 2015; Seto & Eke 2005). However, of all the significant findings, being aged between 18 and 34 years did not increase the predicted likelihood of CSAM consumption as much as other factors.

Equivocal results were found for those identifying as Aboriginal and/or Torres Strait Islanders. While this factor was found to be significantly related to CSAM consumption in the logistic regression modelling, the wide confidence intervals associated with the predicted probabilities (where overlap existed between those who did and did not identify as Aboriginal and/or Torres Strait Islanders) mean these findings need to be treated with caution.

While previous studies have found differences in employment status and educational level between CSAM offenders and other child sexual offenders, this study found no statistically significant difference in these characteristics based on bivariate analyses. Similarly, no differences were found between those on different income levels.

Previous research has also shown that men and those who are single are more likely to view CSAM, yet neither were found to be statistically significant in this study. There were indications that this could have been due to respondents failing to answer the questions truthfully, preferring instead to answer with ‘don’t know’ or ‘prefer not to say’ when asked about CSAM. This remains conjecture but it is nevertheless an important consideration for the way these questions are asked in future studies.

Although some previous studies have suggested that CSAM offenders are heterogeneous, the current study clearly identifies differences across a number of demographic variables. However, it remains unclear to what extent this may reflect differences in online behaviours. Indeed, it is possible that those most likely to encounter CSAM intentionally visit different kinds of websites to others, or are more likely to have distorted cognition that justifies CSAM consumption (Babchishin et al. 2018). This highlights the need for further analysis of these potentially important factors to understand the reasons why some people consume CSAM while most do not. There may also be important differences between those who intentionally view CSAM on one occasion and those who do so repeatedly. This study was unable to differentiate these groups, and this highlights an area for further investigation.

These findings also identify opportunities for targeting and tailoring interventions to address the viewing of CSAM. From an institutional perspective, there may be benefit in exploring prevention and treatment interventions aimed at military service personnel and veterans. This could, for example, include the use of website blocking and pop-up messages used on organisational IT systems (Hunn et al. 2023).

It may also be possible to tailor online treatment programs to address CSAM viewing (Gannoni et al. 2023) to specific ethnic groups, including making material available in multiple languages. Ultimately, the viewing of CSAM will be tackled most effectively by preventing its distribution in the first instance. The significant increases in reported CSAM observed in recent years will need to be addressed primarily through an increased and sustained effort by electronic service providers to prevent the uploading and distribution of such material held on their servers. This would have a universal impact, regardless of which demographic groups are most vulnerable to CSAM consumption.

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