



**The Australian
National Epidemiological
Study of Self-Injury
(ANESSI)**



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OF QUEENSLAND**
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Glossary

The following definitions were sourced using <http://www.oxfordreference.com>. For more information about the specific sources for each term, please contact the authors. All terms in the glossary are written in **green text** throughout the document.

Aetiological	Causing
Alexithymia	A disturbance of affect and cognition indicated by difficulty in describing or recognising one's own emotions, and a reduced affective and fantasy life. [From Greek alexein to avert + thymos spirit + -ia indicating a condition or quality]
Attention Deficit Hyperactivity Disorder (ADHD)	A mental disorder of childhood, at least three times as common in boys as in girls, characterised by persistent inattention, hyperactivity, or impulsivity, with some of these signs and symptoms appearing before age 7, causing problems at school or work and in the home, and interfering significantly with social, academic, or occupational functioning.
Borderline Personality Disorder (BPD)	A personality disorder characterized by a pervasive pattern of impulsivity and unstable personal relationships, self-image, and affect, beginning in early childhood, and indicated by such signs and symptoms as frantic attempts to avoid real or imagined abandonment; intense and unstable personal relationships; continuously fluctuating self-image; impulsivity (in spending, unsafe sex, substance abuse, reckless driving, binge eating, and the like); recurrent suicidal or self-mutilating gestures or behaviour; emotional instability; chronic feelings of emptiness; intense and inappropriate anger (such as frequent outbursts of temper); and transient, stress-related paranoid ideation or dissociation .
Clinical Samples	Clinical : the observation and treatment of patients; sample : a subgroup of a population that is selected for study because it is regarded as representative of the population as a whole; ie, clinical samples : groups of people who are part of a study and who are receiving treatment for a disease
Cognitive Reappraisal	Cognitive: relating to the mental action or process of acquiring knowledge and understanding through thought, experience, and the senses. Reappraisal: to appraise or assess again or in a different way. Cognitive reappraisal: to appraise or asses in a different way using thought, experience and the senses.

Computer Assisted Telephone Interviewing (CATI)	A system in which a telephone interviewer conducts a sales or marketing interview, using a computer and a computerised questionnaire. This system reduces the number of errors as the interviewer keys in the respondent's answers as they are given and the computer follows a complex questionnaire routing efficiently, enabling the required statistics to be extracted automatically.
Confidence Interval (CI)	A range of values within which there is a specified probability that the true value of a population parameter is expected to lie, with a specified level of confidence. If the confidence interval for an odds ratio includes the value of 1.0, this means that there is probably an equal chance of the 'event' occurring in either of the two groups.
Construct	A psychological characteristic, such as intelligence or extraversion, on which people differ from each other.
Correlation	A causal, complementary, parallel, or reciprocal relationship.
Demographics	Statistics that describe the characteristics of a population, such as age, sex, race, family size, income, and location of residence.
Depersonalisation	A mental state in which one's thoughts and feelings seem unreal or not to belong to oneself, or in which one loses all sense of identity. A type of dissociation .
Derealisation	A feeling that one's surroundings are not real. A type of dissociation .
Dissociation	Partial or total disconnection between memories of the past, awareness of identity and of immediate sensations, and control of bodily movements, often resulting from traumatic experiences, intolerable problems, or disturbed relationships. Depersonalisation and derealisation are types of dissociation.
Epidemiological	Adjective of epidemiology: the branch of Medicine dealing with the incidence, distribution and possible control of diseases, and other factors relating to health.
Internal Consistency	Internal consistency estimates the reliability of grouping questions in a questionnaire that measure the same concept. For example, you could write two sets of three questions that measure the same concept (say class participation) and after collecting the responses, run a correlation between those two groups of three questions to determine if your instrument is reliably measuring that concept.
Lysergic Acid Diethylamide (LSD)	LSD (lysergic acid diethylamide) is a powerful hallucinogenic drug which can produce significant changes in perception, mood and thought. Only a very small amount is needed to cause visual hallucinations and distortions. These experiences are known as 'trips'.
Mean	Mathematical average. It is found by adding a group of numbers and dividing by the number of items in the group.
Median	The middle item in a group found by ranking the items from smallest to largest.
Methodology	The way a research study has been conducted.

Morbidity	The proportion of individuals in a population suffering from a particular disease or the state of being ill or diseased.
Mortality	The death rate or the condition of being mortal.
Non-Clinical Samples	Groups of people who are part of a study who are not receiving treatment for the disease (or construct of interest) of a study.
Odds Ratio (OR)	The ratio of the probability of an event or condition occurring in one group compared to another group. An odds ratio of 1.0 means that the event or condition will occur equally in both groups, >1 that it will occur more frequently in group one than group two, and <1 that it will occur less frequently in group one than group two.
Oversampling	The deliberate selection of individuals of a rare type in order to obtain reasonably precise estimates of the properties of this type. In a population which includes such a rare type, a random sample of the entire population might result in very few (or none) of these individuals being selected. Oversampling implies the deliberate sampling of a much higher proportion of this type than of the rest of the population.
Population Parameter	A quantity that describes a population mathematically, such as its mean or median .
Post Hoc	After the event; consequent(ly).
Post Traumatic Stress Disorder (PTSD)	A condition of persistent mental and emotional stress occurring as a result of injury or severe psychological shock, typically involving disturbance of sleep and constant vivid recall of the experience, with dulled responses to others and to the outside world.
Prevalence	The number of existing cases of a disorder or disease as a proportion of the total population at a specific time.
Probability	The extent to which something is likely to happen.
Random Sample	A sample of a population selected so that all people in the population are equally likely to be included.
Recall Bias	Error due to differences in accuracy or completeness of recall in memory of past events or experiences.
Reliability	The consistency of a measurement, or the degree to which an instrument measures the same way each time it is used under the same conditions with the same subjects.
Response Rate	The percentage of the total number of people sampled who respond to a survey or questionnaire.
Sample	Noun: A subgroup of a population that is selected for study because it is regarded as representative of the population as a whole. Verb: the activity of recruiting a subgroup of the population for a study.
Sampling Frame	A list of members of a population from which members of a sample are selected.
Stigma	A mark of difference, associated with a particular circumstance, quality, or person, which may lead to being treated differently, ignored, or

	perhaps vilified.
Validity	The strength or accuracy of research conclusions, inferences and propositions.
Weighting	A method of adjustment to allow for differences between a study population and a “standard” one, between two or more populations that are being compared.



EXECUTIVE SUMMARY

Self-injury is the **deliberate destruction or alteration of body tissue *without* suicidal intent**. However, in some circumstances, it may be a risk factor for suicide. Common methods include cutting, scratching, burning and hitting or punching the self. Common motivations for self-injury include emotion regulation and self-punishment.

Self-injury is stigmatised by society as an attention seeking and manipulative behaviour – which makes it difficult for sufferers to seek help. As self-injury is usually not of a severity that requires medical attention, most people do it in secret. Stigma and secrecy have made it difficult to get a true picture of the **prevalence** and nature of self-injury across the whole population of Australia.

The Australian National Epidemiological Study of Self-Injury (ANESSI), the largest self-injury study in the world, and the first to look at self-injury across the entire life span, was completed in order to improve our knowledge of self-injury in Australia. Specifically, the study aimed to establish the **prevalence** and nature of self-injury in Australia, and explore relationships between self-injury and suicidality, mental health factors, drugs and alcohol, and childhood maltreatment.

Data was collected from **12,006 Australians aged 10–100 years** in short telephone interviews. Parental consent was required for those under 18 years. Before respondents were interviewed, they received information in the mail about the study and their rights as a participant. Interviews were conducted in six different languages.

Results indicate **1.1% of the Australian population aged 10 and over self-injured in the four weeks before survey, corresponding to an estimated 200,000 Australians, a rate of 11 per 1000 people per month. The 12-month prevalence was 2.6%, corresponding to an estimated 520,000 Australians, a rate of 26 per 1000 people per year.** This can be compared to recent Australian 12-month **prevalence** figures for Panic Disorder, Obsessive Compulsive Disorder, Generalised Anxiety Disorder and Agoraphobia (National Mental Health Survey, 2007). Such a high prevalence is reason for us to take self-injury as seriously as we would take other mental health problems.

Rates of self-injury peaked for females at 18–24 years and for males at 10–17 years. Self-injury was more common among younger respondents, but also occurred among older adults. Oldest self-injurers were one female and one male aged 75–84 years. The oldest age of onset for males was 63 and for females 60. For the first time we have formal evidence that **self-injury occurs among older adults and can *begin* in older adulthood.**

In contrast to perceptions we may have gained from existing literature on ‘deliberate self-harm’ (an umbrella term that includes self-injury together with suicidal behaviours such as suicide attempts) **prevalence of self-injury was no greater in females compared to males.** Most common methods of self-injury for females were **cutting and scratching** while males were more likely to **hit a part of their body on a hard surface or punch, hit or slap themselves.** Either way the intent of these acts appeared to be the same. The four-week

frequency ranged from **1 to 50 times** (mean 7). Most self-injurers reported telling someone about their self-injury, but **fewer than half sought help**.

Only a small percentage of self-injurers sought medical care. However, when this occurred they were highly likely to be admitted to hospital. Despite small actual numbers, if we accept the study is representative of the Australian population, **an estimated 30,000 Australians could have sought medical help in the month prior to survey, and an estimated 4,000 could have been admitted to hospital.** If we assume an admission of only one single night, the cost to Australia may be immense.

Self-injurers were more likely to have a **mental health condition**, more likely to **misuse substances**, more likely to have experienced recent **suicidal ideation**, and more likely to have **attempted suicide** in the preceding 12-months. Overall, self-injurers were significantly more **psychologically distressed**.

In conclusion, the four-week prevalence of self-injury in Australia is substantial, and personal and financial costs may be high. Self-injury exists across the age range, and may begin at older ages than previously thought. People who self-injure rarely seek help even though they frequently suffer from psychological difficulties and suicidality.

Several recommendations for the identification and management of people who self-injure emerge from the ANESSI study. Self-injury is not restricted to young people; it can both continue into and first occur in older adulthood. Similarly, the prevalence is similar across the sexes, although the methods differ. Males are more likely to self-injure by self-battery, which may be less identifiable as a form of self-injury compared to cutting or scratching, which is more common among females.

Self-injury is not a suicide attempt, but can be a major risk factor for suicide; it is critical to understand this distinction. We should not jump to conclusions, but clearly it is important to assess suicide risk in people who have self-injured, and conversely assess people who have attempted suicide for a history of non-suicidal self-injury.

Self-injury is associated with a variety of clinical presentations of mental health problems: general psychological distress, certain mental health conditions (anxiety, mood disorders and **ADHD**), a wide range of specific psychological issues (poor coping, poor emotion regulation, dissociation, impulsivity, anger, and alexithymia) and childhood maltreatment. Despite this, none of these factors alone necessarily predict the presence of self-injury. However, given the hidden nature of self-injury, they should alert us to at least ask about self-injury. It is easy to hide self-injury and most people will not seek help or disclose their behaviour. Direct questioning is recommended when self-injury is suspected.

The ANESSI study produced a number of important findings. However, additional research is required to supplement and validate the data, especially among respondents who were underrepresented in our **sample**, for instance Indigenous Australians.



CHAPTER 1: INTRODUCTION

Self-Injury

*Note: all terms in **green text** throughout the document are contained in the glossary at the beginning of the document.*

For the purposes of this document, **self-injury** is defined as the deliberate destruction or alteration of body tissue without suicidal intent (Favazza, 1989). **Suicidal behaviours** are self-destructive acts accompanied by intent to die, and include completed suicide. **'Deliberate self-harm'** includes self-harm with and without suicidal intent, and therefore includes both self-injury and suicidal behaviours.

Although the majority of self-injury is not of a severe nature (Prinstein, 2008), under certain circumstances, it may be a risk factor for attempted and completed suicide (Conner et al., 2003; Gould et al., 1990; Hawton & James, 2005; Hawton et al., 2003; NHS Centre for Reviews and Dissemination, 1998), and is associated with psychopathology (Evans et al., 2005; Gratz et al., 2002; Herpertz et al., 1997; Zlotnick et al., 1999; Zweig-Frank, Paris, & Guzder, 1994a), family dysfunction (Turell & Armsworth, 2000), substance abuse (Hawton et al., 1997; Klonsky et al., 2003), and a history of childhood maltreatment (Evren, 2005; Darche, 1990; Brodsky, 1995; Briere, 1998; Zoroglu, 2003; Zweig-Frank et al., 1994a, 1994b; Windham, 2000; Dubo, 1997; Turell, 2000).

Methods of self-injury differ according to **sample** type, with cutting the most common method among **clinical samples** (Claes, Vandereycken, & Vertommen, 2003; Herpertz, 1995; Kleindienst et al., 2008; Osuch, Noll, & Putnam, 1999; Shearer, 1994) and scratching (Hasking, Momeni, Swannell, & Chia, 2008; Whitlock, Eckenrode, & Silverman, 2006) and self-battery (Klonsky & Olino, 2008) more common among **non-clinical samples**.

There is some evidence that self-injury methods differ according to sex. Among a **sample** of university students, males were more likely to hit or punch themselves and/or bang a part of their body against a solid object, whereas females were more likely to interfere with wound healing (Gollust, Eisenberg & Golberstein, 2008).

The most common motivation for self-injury, among both **clinical** and **non-clinical samples**, is to regulate emotion (Klonsky, 2007). Other frequent motivations include self-punishment, management of **dissociation**, communicating with or influencing others, avoiding suicide, sensation-seeking, and establishing interpersonal boundaries (Klonsky, 2007). There is mixed evidence that motivations differ according to sex. One study among a community **sample** of adolescents showed males were more likely to self-injure to make others angry and females were more likely to self-injure to punish the self (Lloyd-Richardson, Perrine, Dierker & Kelley, 2007). On the other hand, another study in a clinical adolescent **sample** did not show any differences in motivations according to sex (Kumar, Pepe, & Steer, 2004).

Frequency of self-injury varies greatly. Some self-injure on a daily basis, others self-injure a few times a year, others only engage in the behaviour once. It is likely self-injury increases

in frequency during distress or experience of a difficult life situation. There is consensus in the literature that self-injury most commonly starts between the ages of 12 and 15 (Kumar et al., 2004; Muehlenkamp & Gutierrez, 2004, 2007; Nixon, Cloutier, & Aggarwal, 2002; Nixon, Cloutier, & Jansson, 2008; Nock & Prinstein, 2004; Ross & Heath, 2003).

Although it is commonly believed that self-injury decreases into adulthood, this has been largely untested. One study of self-injury followed 299 patients aged 18–35 years with **Borderline Personality Disorder** over several years. At baseline, 81% reported engaging in self-injury within the previous two years, while only 26% reported engaging in self-injury at the six year follow-up (Zanarini, Frankenburg, Hennen, D. Bradford Reich, & Silk, 2005). This suggests that self-injury may decrease over time. However, results of this study cannot be generalised to patients without **Borderline Personality Disorder** or non-clinical populations.

Many self-injurers, especially those diagnosed with **Borderline Personality Disorder**, do not feel pain when they inflict damage on their bodies (Hilt, Cha, & Nolen-Hoeksema, 2008; Klonsky & Olino, 2008; Leibenluft, Gardner, & Cowdry, 1987; Nock, Joiner, Gordon, Lloyd-Richardson, & Prinstein, 2006; Nock & Prinstein, 2005; Russ et al., 1992; Russ, Shearin, Clarkin, Harrison, & Hull, 1993). This may be clinically important. Muehlenkamp and Gutierrez (2007) postulate that people who feel no pain during self-injury may be at higher risk of suicide than those who do feel physical pain, as those who are analgesic do not have a measure of physical damage. Joiner, Brown and Wingate (2005) proposed that individuals who attempt suicide are able to do so, in part, because they have habituated to pain associated with self-destructive acts through exposure to acts of deliberate self-harm.

Rationale and Aims of the Study

Self-injury may be a risk factor for attempted and completed suicide, causes distress for those who self-injure, their family and friends and carers, and when it escalates into serious harm, places considerable financial burden on the Australian health system. Further, many people who self-injure may be treated badly by professionals due to **stigma** associated with self-injury which portrays it as an attention seeking and manipulative behaviour.

The **Australian National Epidemiological Study of Self-Injury (ANESSI)** aimed to:

- 1) determine the **prevalence** of self-injury in the Australian community by age and sex;
- 2) describe the nature of self-injury in Australia (including methods, motivations, frequency, age of onset, experience of pain, help-seeking and medical treatment), and
- 3) explore the relationships between self-injury and suicidality, psychological factors, mental health conditions, drugs and alcohol, and experience of childhood maltreatment.



CHAPTER 2: METHODOLOGY

Survey

ANESSI was conducted by interviewing Australian residents over the telephone, using **Computer Assisted Telephone Interviewing (CATI)**. CATI is a telephone surveying technique where the interviewer follows a script provided by the researchers within a software application. The software customises the flow of the survey based on the answers provided and the information already known about the participant. CATI technology ensures immediate entry of data from the interviewer's screen to the computer database, precise ordering and timing of call backs, correct sequencing of questions, an enforced range of checks on each response, automatic rotation of response categories (if required), and a rapid completion of the data collection phase of the survey.

Designing the CATI survey was complex because many people dislike telephone interviews (Curtin, Presser & Singer, 2005), and asking personal and sensitive questions can increase this sense of resentment. In general, shorter surveys are better received, so we planned for our survey to last no longer than an average 10 minutes. This planned time constraint was challenging because so many factors are known to be associated with self-injury, resulting in many relevant variables to explore. Although **reliability** and **validity** are enhanced by using standardised questionnaires, it was not feasible to explore each variable with an entire questionnaire, given the importance of a short interview to maximise participation rates.

The end product was a compromise between the scope and **reliability/validity** of the collected information, and included only one entire standardised questionnaire (the General Health Questionnaire 12 item version – Goldberg et al., 1997). Other items were obtained from standardised questionnaires (i.e. Emotion Regulation Scale – Gross & John, 2003; The Brief Cope – Carver, 1997; Toronto **Alexithymia** Scale – Bagby, Parker & Taylor, 1994; Dissociative Experiences Scale – Bernstein & Putnam, 1986; and the Plutchick Impulsivity Scale – Plutchick, 1989). Items from these questionnaires were selected on the basis of their individual high **internal consistency** with each overall scale. Additional items were developed specifically for the study.

Ultimately the survey included questions on **demographics**, self-injury, suicide, mental health history, emotions and coping, substance abuse, child maltreatment and help seeking (see Appendix for a summary of the survey questions). Although originally planned for 10 minutes, interviews took an average of 13.6 minutes.

Procedure

Australian households were sent an Approach Letter, an Adult Participant Information Sheet, a Young People's Participant Information Sheet, and a Summary of the Survey Questions (see Appendix). A list of Mental Health and Indigenous Health Contacts were also included in the

package (for copies of the documents, please contact the Centre for Suicide Prevention Studies). The purpose of the Approach Letter was to alert householders to the possibility of an interviewer phoning the household and requesting an interview, explain why their particular household received a letter (random selection) and that the interview would be voluntary and confidential. The Approach Letter provided a free call number for potential respondents to enquire further about the project.

In the primary telephone call, the selected respondent was the person aged 10 years or over, last to have a birthday. Each household had potentially six call-backs before another household was selected. There was only one interview per household. Interviews were conducted in six languages: English, Italian, Greek, Vietnamese, Chinese, and Arabic.

Weighting was used *post hoc* to correct for the disproportionality of the sample with respect to structure of the Australian population by age, sex and state (as per the Australian Bureau of Statistics 2006 Census).

Participants

Sampling Frame and Response Rate

The sampling frame included 42,938 Australian households from all states and territories randomly derived from the Australian Electronic White Pages. Of these, 11,722 were ineligible due to disconnected phone lines, fax/modems, relocations, or not being a residential property, leaving 31,216 eligible households. Of these, 12,010 Australians participated in the survey (38.5% of the eligible sample). Only 0.6% of the sample (n=173) withdrew during the interview. Table 1 outlines the participant response rate and reasons for not taking part.

Table 1: Response Rate

	Count	%
Initial eligible sample	31,216	100
Refusals	14,032	45.0
Parental refusal	671	3.5
Unable to contact respondent after six attempts	2,341	7.5
Respondent unable to speak English, Italian, Greek, Vietnamese, Chinese, or Arabic	726	2.3
Incapacitated and unable to be interviewed (ie too ill, hearing impaired)	912	2.9
Terminated interviews	173	0.6
Respondent unavailable	351	1.1
Completed interviews	^a 12,010	38.5

^aFour respondents were excluded due to missing or irreconcilable data, leaving a total of 12,006 records for data analysis

Age and Sex Distribution before Weighting

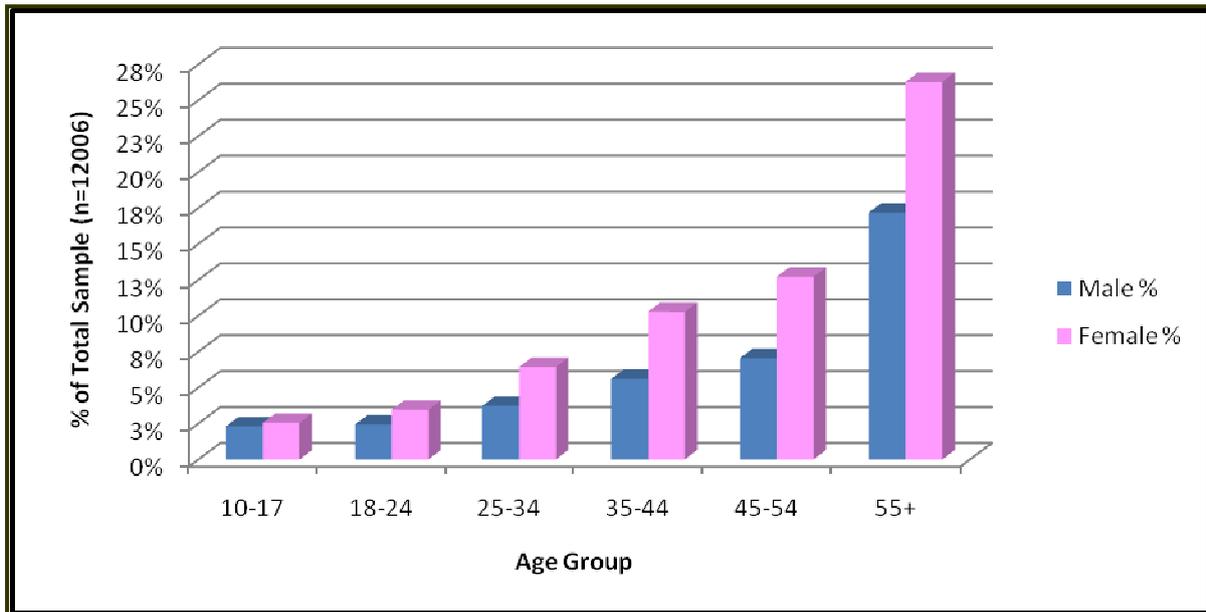
Of the entire **sample**, 38.3% were male (n=4,597) and 61.7% were female (n=7,409). In terms of age, 4.9% (n=583) were under 18 years. **Table 2** and **Figure 1** show the **sample** distribution by age and sex before **weighting**.

Table 2: Sample by Age and Sex (unweighted)

Age Groups	Males		Females		Persons	
	Count	%	Count	%	Count	%
10-17	277	2.3%	306	2.5%	583	4.9%
18-24	291	2.4%	415	3.5%	706	5.9%
25-34	448	3.7%	773	6.4%	1221	10.2%
35-44	673	5.6%	1234	10.3%	1907	15.9%
45-54	846	7.0%	1527	12.7%	2373	19.8%
55+	2062	17.2%	3154	26.3%	5216	43.4%
All age groups	4597	38.3%	7409	61.7%	12006	100.0%

% is of entire sample (n=12,006)

Figure 1: Sample Distribution by Age and Sex (unweighted)



As illustrated by **Figure 2** and **Figure 3**, the ANESSI **sample** distribution was not representative of the Australian population by age or sex. It comprised more females (**sample** – 61.7%; Australian population – 50.5%) and fewer males (**sample** – 38.3%; Australian population – 49.5%). There were more females in the older age categories (35–44, 45–54, and 55+), fewer females in the younger age categories (10–17, 18–24, and 25–34), more males in the oldest age category (55+), and fewer males in all other age categories compared to the Australian population. Due to these differences, the data was

weighted to reflect the distribution of the Australian population by age and sex for all statistical analyses.

Figure 2: Sample (unweighted) and Australian Population Distributions by Age – Females

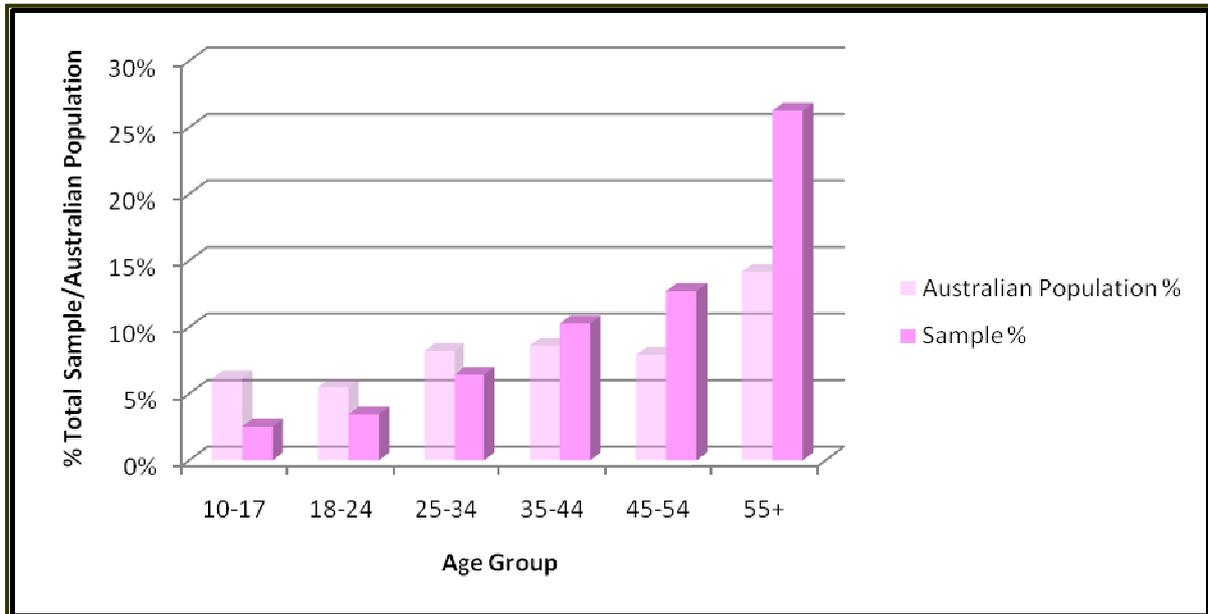
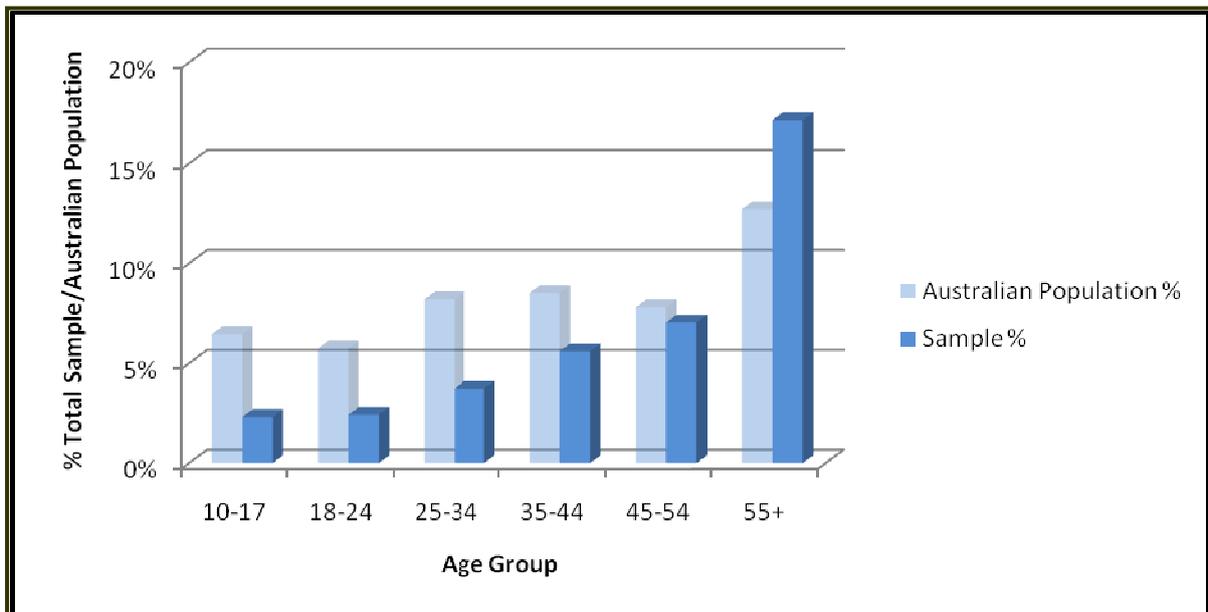


Figure 3: Sample (unweighted) and Australian Population Distributions by Age – Males



Geographical Location Distribution

The largest proportion of respondents (31.8%, n=3,816) was from New South Wales and the smallest proportion (0.4%, n=50) from the Northern Territory. These figures were very close to the actual geographical distribution of the Australian population. **Table 3** shows the **sample** and the Australian population distribution according to geographical location.

Table 3: Geographical Location Distribution - Sample (unweighted) and Australian Population

	Sample		^a Australian Population	
	Count	%	Count	%
New South Wales (NSW)	3816	31.8	7076500	32.5
Victoria (VIC)	2855	23.8	5402600	24.8
Queensland (QLD)	2513	20.9	4380400	20.1
Western Australia (WA)	1079	9.0	2224300	10.2
South Australia (SA)	1013	8.4	1618200	7.4
Tasmania (TAS)	394	3.3	501800	2.3
Australian Capital Territory (ACT)	286	2.4	349900	1.6
Northern Territory (NT)	50	.4	223100	1.0
Totals	12,006	100.0	21779100	100.0

^a3101.0 – Australian Demographic Statistics, Mar 2009

Indigenous Australians

Although Indigenous Australians are at higher risk of ‘deliberate self-harm’ compared to non-Indigenous Australians, our study did not focus on this population (i.e. did not use **oversampling**), due to the difficulty involved in accessing remote Indigenous populations by telephone, and the cultural inappropriateness of using direct questioning to gather information. According to the Indigenous Research Reform Agenda (2002) and the Aboriginal and Torres Strait Islander Studies Unit (ATSISU) at the University of Queensland, narrative and oral research approaches are more appropriate for Indigenous **samples**. Our decision not to focus on Indigenous populations was made after extensive liaison with ATSISU. Indigenous people were included in the survey as members of the Australian population.

Of the **sample**, 1.7% (n=156) (unweighted proportion) identified as Aboriginal or Torres Strait Islander, or both. This percentage was fewer than that (2.1%) found in the Australian 2006 Census of Population and Housing. The unweighted **sample** distribution was not representative of the Australian Indigenous population by sex or age; similar to the overall **sample**, the Indigenous **sample** comprised more females (**sample** – 63.5%; Australian population – 51.3%) and fewer males (**sample** – 36.5%; Australian population – 48.7%). The age distribution of the Indigenous **sample** was also different to that of the Australian Indigenous population, with fewer younger respondents (10–34 years) and more older

respondents (35+). **Table 4** and **Figure 4** show the age distribution of the Australian Indigenous **sample** and the Australian Indigenous population for males and **Table 5** and **Figure 5** show the age distribution of the Australian Indigenous **sample** and the Australian Indigenous population for females.

Table 4: Indigenous Males Age Distribution – Sample (unweighted) and Australian Population

Age Groups	Australian Indigenous Population		Australian Indigenous Sample	
	Count	%	Count	%
10-17	45,718	27.5	2	3.5
18-24	27,327	16.4	5	8.8
25-34	29,915	18.0	7	12.3
35-44	27,024	16.3	17	29.8
45-54	19,287	11.6	12	21.1
55+	16,912	10.2	14	24.6
All age groups	166,183	100.0	57	100.0

Figure 4: Indigenous Males Age Distribution – Sample (unweighted) and Australian Population

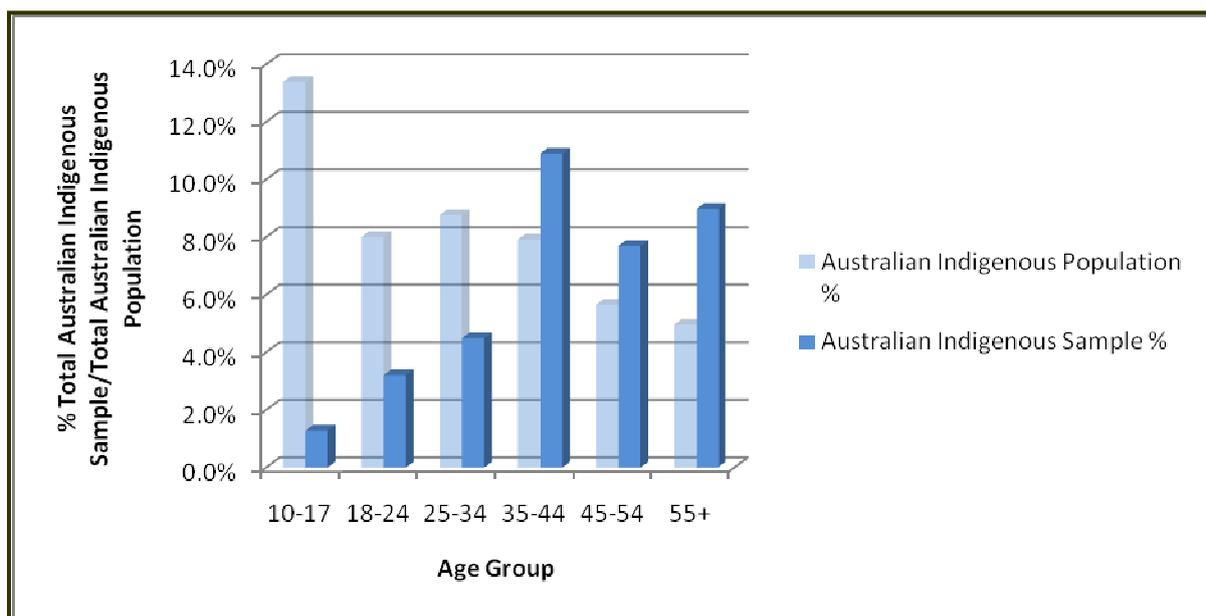
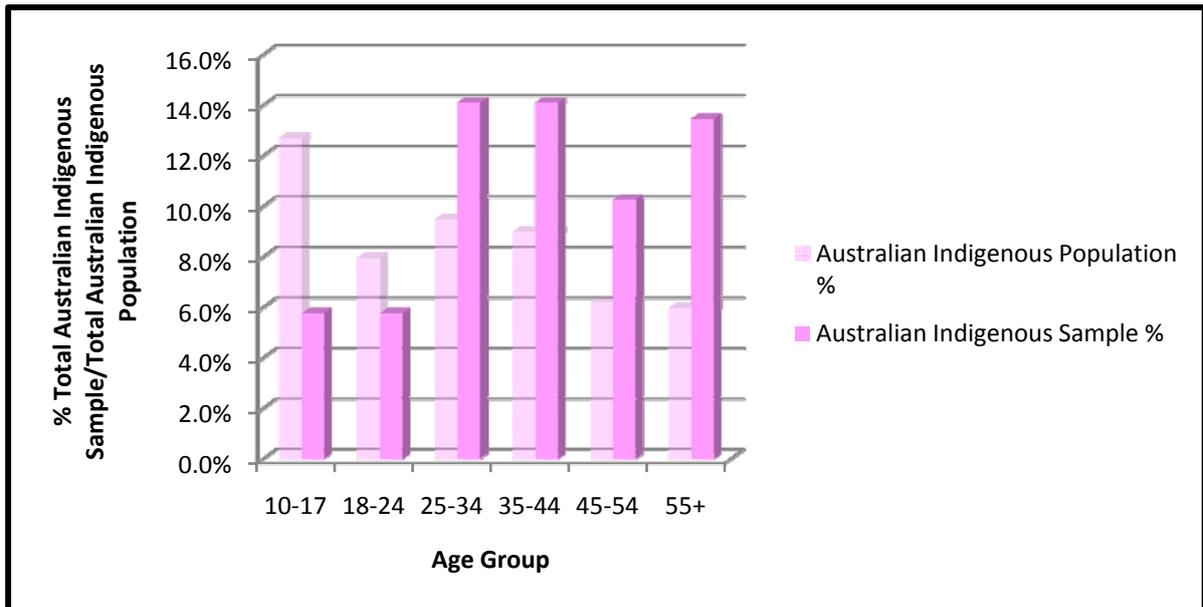


Table 5: Indigenous Females Age Distribution – Sample (unweighted) and Australian Population

Age Groups	Australian Indigenous Population		Australian Indigenous Sample	
	Count	%	Count	%
10-17	43,399	25.8	9	9.1
18-24	27,164	15.5	9	9.1
25-34	32,374	18.5	22	22.2
35-44	30,729	17.5	22	22.2
45-54	21,225	12.1	16	16.2
55+	20,399	11.6	21	21.2
All age groups	175,290	100.0	99	100.0

Figure 5: Indigenous Females Age Distribution – Sample (unweighted) and Australian Population





CHAPTER 3: KEY FINDINGS

All key findings are based on data weighted by age, sex and state/territory to reflect the structure of the Australian population ten years and over. Please note that throughout this chapter, **odds ratios (OR)** are used to describe the differences between two groups of participants (e.g. those who self-injured compared with those who didn't; males compared with females etc). **The OR is the ratio of the probability of an event or condition occurring in one group compared with the other group.** An **OR** of 1.0 means that the event or condition will occur equally in both groups, while an **OR** of greater than 1.0 means that it will occur more frequently in group one compared to group two, and an **OR** of less than 1.0 means that it will occur less frequently in group one compared to group two. A **95% Confidence Interval (CI)** is always reported along with the **OR**. **The 95% CI refers to the range of values within which we are 95% sure that the true OR lies.** If the **CI** includes the value of 1.0, this means there is probably an equal chance of the event or condition occurring in both groups. Similarly, with each **prevalence** figure, a **95% CI** is reported. **The 95% CI for prevalence refers to the range of values within which we are 95% sure that the true prevalence lies.**

Four Week Prevalence

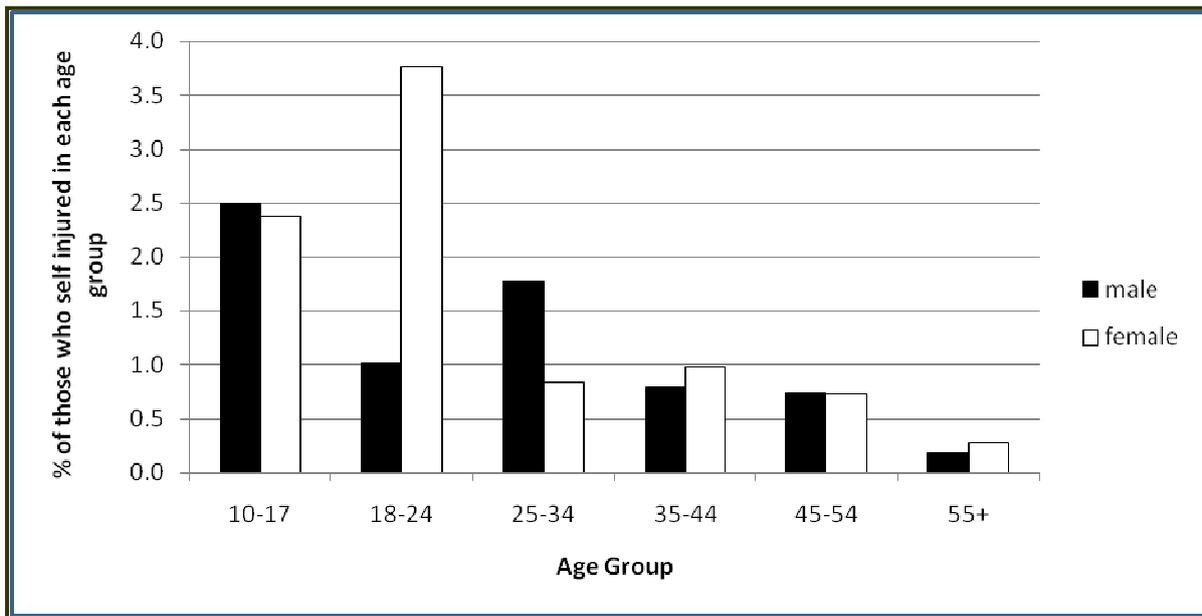
Respondents were asked whether they had self-injured in the four weeks before the survey. For the overall **sample** (n=12,006), the four week **prevalence** of self-injury was 1.1% (n=133, 95% **CI** 0.9–1.3) and was not significantly different between females (1.2%, n=72, 95% **CI** 1.0–1.4) and males (1.0%, n=61, 95% **CI** 0.9–1.2). For women, self-injury peaked in the age group 18–24 (3.8%, n=25) and for males self-injury peaked in the age group 10–17 (2.5%, n=19), after which the **prevalence** declined with age for both sexes. **Table 6** and **Figure 6** show the distribution of respondents by age and sex who reported self-injuring in the four weeks before the survey.

Table 6: Four Week Prevalence of Self-Injury by Age and Sex

Age Group	Males		Females		Persons	
	Count	%	Count	%	Count	%
10-17	19	2.5	17	2.4	36	2.4
18-24	7	1.0	25	3.8	32	2.4
25-34	17	1.8	8	0.8	25	1.3
35-44	8	0.8	10	1.0	18	0.9
45-54	7	0.7	7	0.7	14	0.7
55+	3	0.2	5	0.3	8	0.2
All age groups	61	1.0	72	1.2	133	1.1

Note: Percentages represented the proportion of respondents who reported self-injury in each age group, by sex.

Figure 6: Four Week Prevalence of Self-Injury by Age and Sex



Twelve Month Prevalence

Since routinely collected data and many other research studies report prevalence estimates over a 12-month period, the 12-month prevalence of self-injury was calculated in order to allow comparison with statistics from other sources. Respondents who had not self-injured in the four weeks before the survey were asked whether they had ever self-injured. The 12-month prevalence was calculated by including all respondents who had self-injured in the four weeks before the survey, plus those who reported a lifetime history of self-injury with a maximum recency of twelve months. For the overall sample, the 12-month prevalence of self-injury was 2.6% (n=315, 95% CI 2.3–2.9) and was similar between males (2.4%, n=144, 95% CI 2.2–2.7) and females (2.8%, n=171, 95% CI 2.5–3.1).

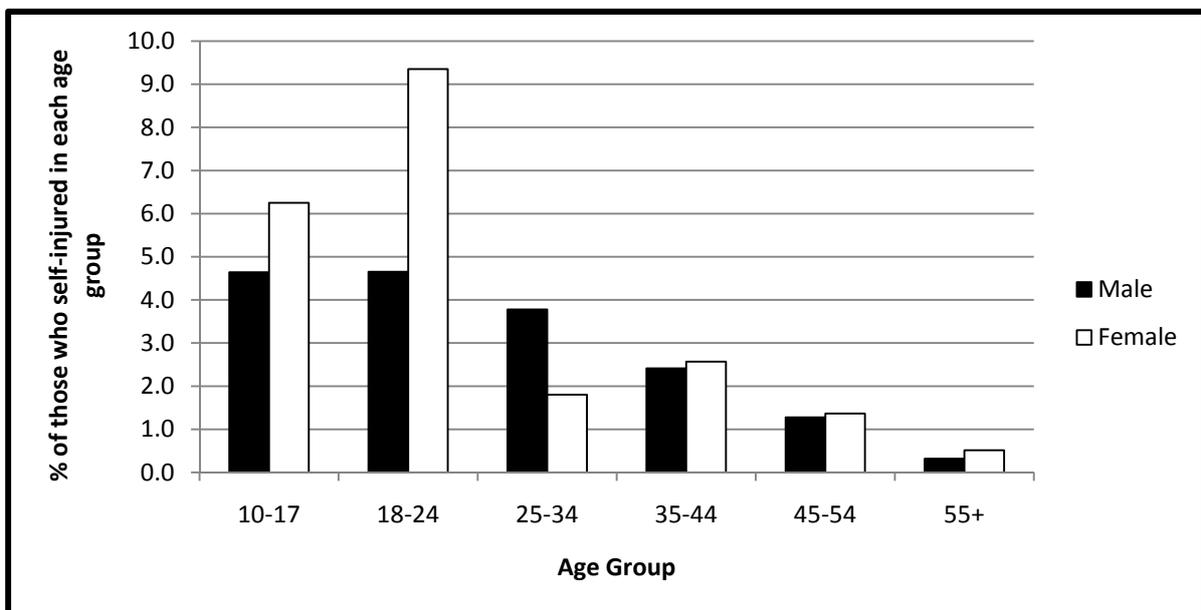
Sex differences varied by age group. In the 18–24 year age group, females were more likely to self-injure than males (OR 2.1, 95% CI 1.4–3.3), Whereas in the 25–34 year age group, males were more likely to self-injure than females (OR 2.1, 95% CI 1.2–3.9). There were no differences between the sexes within the other age groups.

Self-injury peaked in the age group 18–24 for females (9.4%, n=62) and 10–17 (4.6%, n=35) and 18–24 (4.7%, n=32) for males, after which the prevalence generally declined with age for both sexes. A considerable proportion (5.4%, n=79) of respondents in the youngest age group (10–17 years) reported self-injury. Although self-injury was more common among the younger age groups, it still occurred with moderate frequency among adults aged 25–54 years, particularly among males aged 25–34 years (3.8%, n=36). A further 2.5% (n=24) and 1.3% (n=12) aged 35–44 and 45–54 respectively, reported self-injury. No respondents aged 85–100 reported self-injury. Table 7 and Figure 7 show the distribution of respondents by age and sex who reported self-injuring in the twelve months before the survey.

Table 7: Twelve Month Prevalence of Self-Injury by Age and Sex

Age Group	Males		Females		Persons	
	Count	%	Count	%	Count	%
10-17	35	4.6	44	6.3	79	5.4
18-24	32	4.7	62	9.4	94	7.0
25-34	36	3.8	17	1.8	53	2.8
35-44	24	2.4	26	2.6	50	2.5
45-54	12	1.3	13	1.4	25	1.3
55+	5	0.3	9	0.5	14	0.4
All age groups	144	2.4	171	2.8	315	2.6

Figure 7: Twelve Month Prevalence of Self-Injury by Age and Sex



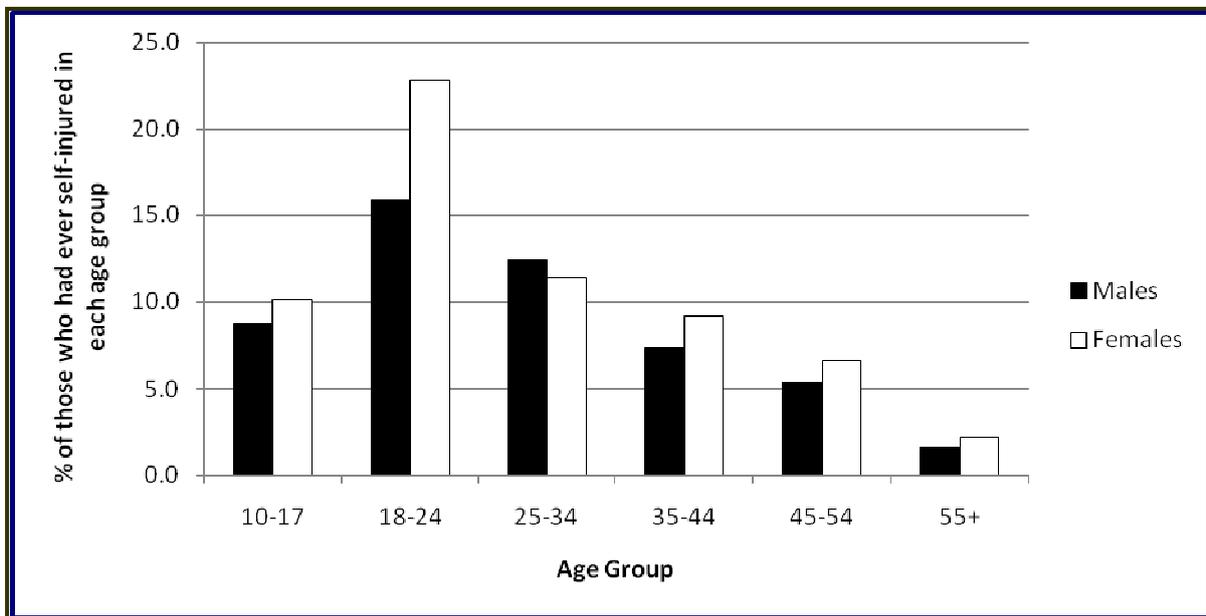
Lifetime Prevalence

The overall lifetime prevalence of self-injury (combination of four week and lifetime self-injury) was 8.1% (n=976, 95% CI 7.6–8.6), with a higher prevalence among females (8.7%, n=529; 95% CI 8.0–9.4) compared with males (7.5%, n=447; 95% CI 6.8–8.2). Self-injury peaked in the 18–24 age group for both sexes (females 22.8%, n=152; males 15.9%, n=110), followed by the 25–34 age group, after which the prevalence declined with age for both sexes. This may reflect a secular increase in self-injury with successive generations or may be accounted for by recall bias. Table 8 and Figure 8 show the distribution of respondents by age and sex who reported having ever self-injured.

Table 8: Lifetime Prevalence of Self-Injury by Age and Sex

Age Group	Males		Females		Persons	
	Count	%	Count	%	Count	%
10-17	67	8.8	72	10.1	139	9.4
18-24	110	15.9	152	22.8	262	19.3
25-34	119	12.4	108	11.4	227	11.9
35-44	74	7.4	94	9.2	168	8.3
45-54	51	5.4	64	6.7	115	6.0
55+	26	1.6	39	2.2	65	1.9
All age groups	447	7.5	529	8.7	976	8.1

Figure 8: Lifetime Prevalence of Self-Injury by Age and Sex



Indigenous Sample

Among the Indigenous **sample**, the 4-week **prevalence** was 2.1% (n=4; 95% CI 0.0–2.1), the 12-month **prevalence** was 4.8% (n=9; 95% CI 1.7–8.1) and the lifetime **prevalence** was 17.2% (n=31; 95% CI 11.6–39.7). The wide **confidence intervals** are due to the small **sample** size (n=183). **Figure 9** shows the prevalence figures for the Indigenous sample only.

Although the prevalence of self-injury was quantitatively greater among the Indigenous **sample** compared to the non-Indigenous **sample** across all time frames (**Figure 10**), the difference was only statistically significant for the lifetime **prevalence** estimates, where the odds of Indigenous participants reporting self-injury were 2.2 times the odds of non-Indigenous participants reporting self-injury (**OR 2.2, 95% CI 1.5–3.3**).

Figure 9: Prevalence of Self-Injury among Indigenous Sample by Sex

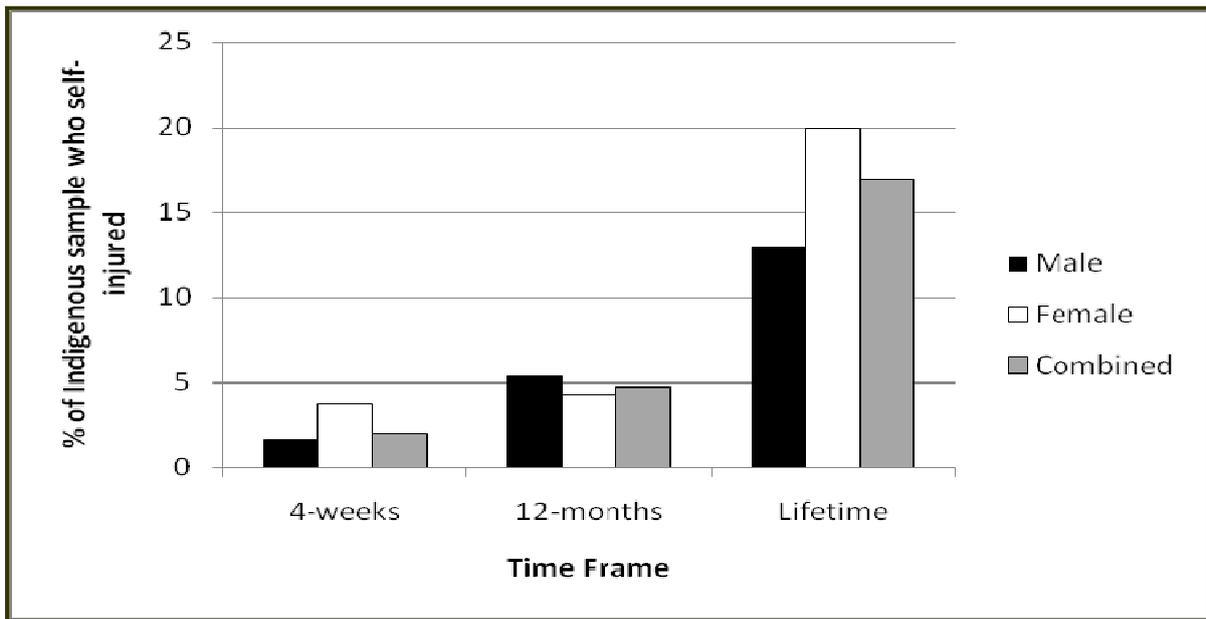
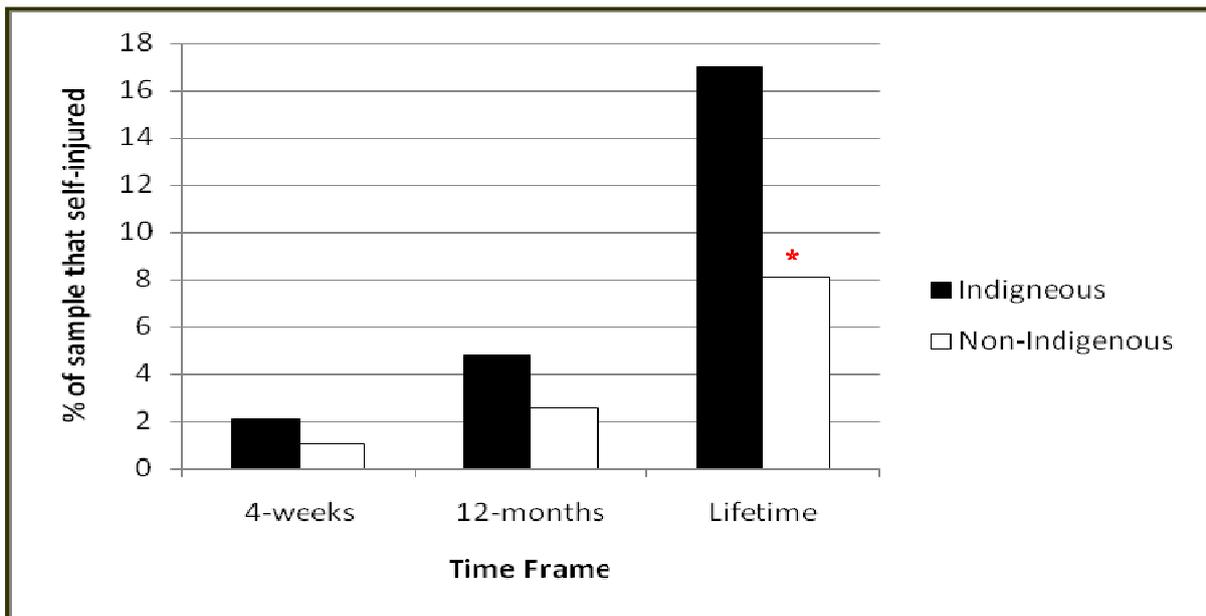


Figure 10: Prevalence of Self-Injury among Indigenous and Non-Indigenous Samples



* Indicates a significant difference between the Indigenous and Non-Indigenous samples

Nature of Self-Injury

Respondents were asked how many times they had self-injured, at what age they first self-injured, the methods they had used, their motivations for self-injury, if they felt pain during self-injury, whether they had received medical treatment, gone to an emergency department or stayed in hospital due to self-injury, and whether they had received any type of psychological or emotional support for self-injury.

Frequency and Age of Onset

The average frequency of self-injury over the four weeks before the survey was seven times (range 1 to 50 times). The average age of onset was 17.15 years (range 5 to 63 years).

Methods

Respondents who reported self-injury in the four weeks before the survey were asked whether they had engaged in scratching, cutting, hitting a part of the body on a hard surface, punching, hitting or slapping self, overdosing, burning or biting (or anything else). Although the interviewers were clear with respondents that the **construct** of interest was non-suicidal self-injury, after data collection overdosing was removed as a method of self-injury due to its predominant association with suicidality.

The most common methods of self-injury for females were cutting and scratching whereas males were more likely to hit a part of their body on a hard surface or punch, hit or slap themselves. **Table 9** shows the methods of self-injury by sex.

Table 9: Methods of Self-Injury in the Four Weeks before the Survey

	Males N=61		Females N=72		Persons N=133	
	Count	%	Count	%	Count	%
Cutting	17	27.3	37	51.8	54	40.6
Scratching	17	27.5	36	50.2	53	39.8
Hitting a part of the body on a hard surface	26	43.1	22	30.9	49	36.5
Punching, hitting or slapping self	26	42.5	19	25.9	45	33.5
Biting	7	12.0	13	18.1	20	15.3
Burning	13	21.3	7	9.1	20	14.7

Note: % is the proportion of all those reporting that particular method out of all of those who reported self-injury

Motivations

The most common motivation for self-injury for males and females was to manage emotions (57.2%), followed by self-punishment (24.7%). Over half also reported an “other” motivation for self-injury, including ‘habit’, ‘compulsion’, ‘distraction’, and ‘curiosity’. **Table 10** shows the motivations for self-injury by sex.

Table 10: Motivations for Self-Injury in the Four Weeks before the Survey

	Males N=50		Females N=68		Persons N=118	
	Count	%	Count	%	Count	%
Manage emotions	25	50.5	42	62.2	68	57.2
Punish myself	16	32.4	13	19.0	29	24.7
Don't know	3	6.6	6	9.0	9	8.0
Communicate to others	5	5.7	2	2.4	7	5.6
Remind self that he/she is alive	2	3.1	5	7.0	6	5.4
Influence others	3	5.5	2	2.9	5	4.0
Get a high	0	0.0	4	5.3	4	3.1
Refused	4	7.1	0	0.0	4	3.0
Scarification	1	3.0	1	0.9	2	1.8
Avoid suicide	0	0.0	1	3.0	1	1.7
Other	29	57.7	39	57.8	68	57.7

Note: N is the total number of respondents who reported any motivation; Count is the number of respondents reporting each motivation and therefore may add to more than the number of respondents; % is the proportion of all those reporting that particular motivation out of all of those who reported self-injury

Pain Perception

Almost one third (29.1%) of respondents reported never feeling pain when they self-injured. A further 27.1% reported feeling pain only some of the time, whereas 32.5% reported feeling pain always or most of the time.

Medical Treatment and Hospital Admission

Of those who had self-injured in the four weeks before the survey, 16.1% (n=19) had medical treatment and 2.3% (n=3) attended an emergency department; the same three were admitted to hospital overnight.

Help Seeking

In terms of psychological or emotional support, 51.4% of males and 58.6% of females had not sought help for their self-injury in the four weeks before the survey.

Self-Injury and Suicidality

Respondents were asked whether they had attempted suicide in the 12-months before the survey. Among those who had self-injured in the four weeks before the survey, 10.5% had a 12-month suicide attempt, whereas among those who didn't self-injure, 0.3% had a 12-month suicide attempt (Table 11). **The odds of self-injurers also attempting suicide was 41.6 times the odds of non self-injurers attempting suicide.**

Table 11: Self-Injury and Suicide Attempts

	12-month suicide attempt		No 12-month suicide attempt		Totals		OR (95% CI)
	Count	%	Count	%	Count	%	
Self-injury over past 4-weeks	13	10.5	111	89.5	124	100.0	41.6 (21.3–81.2)
No self-injury over past 4-weeks	33	0.3	11722	99.7	11755	100.0	

Almost half (48.4%) of those who had self-injured in the four weeks before survey also experienced suicidal ideation in the few weeks before to the survey. Conversely, 7.7% of those who had not self-injured also experienced suicidal ideation. **The odds of self-injurers experiencing suicidal ideation were 11.3 times the odds of non self-injurers experiencing suicidal ideation (Table 12).**

Table 12: Self-Injury and Suicidal Ideation

	Suicidal Ideation		No suicidal ideation		Totals		OR (95% CI)
	Count	%	Count	%	Count	%	
Self-injury over past 4-weeks	61	48.4	65	51.6	126	100.0	11.3 (7.9 – 16.1)
No self-injury over past 4-weeks	906	7.7	10,864	92.3	11,770	100.0	

Self-Injury and Psychological Variables

General Mental Health

Respondents were asked 12 questions pertaining to their general mental health (the 12-item General Health Questionnaire; GHQ-12). The GHQ-12 was developed to detect mental health problems in the community. Of those who self-injured in the four weeks before the survey, 73.7% reported mental health problems. Of those who had not self-injured in the four weeks before to the survey, 33.9% reported mental health problems. **The odds of self-injurers having mental health problems were 5.5 times higher than the odds of non self-injurers having mental health problems (Table 13).**

Table 13: Self-Injury and General Mental Health

	^a Mental Health Problems		^b No Mental Health Problems		Totals		OR (95% CI)
	Count	%	Count	%	Count	%	
Self-injury over past 4-weeks	98	73.7	35	26.3	133	100.0	5.5 (3.7 – 8.1)
No self-injury over past 4-weeks	4,005	33.9	7,820	66.1	11,825	100.0	

^ascore of 2 through 12 on the General Health Questionnaire (12 item version)

^bscore of 0 or 1 on the General Health Questionnaire (12 item version)

Impulsivity

Respondents were asked if, in everyday life, they considered themselves to be impulsive. Of those who had self-injured in the four weeks before the survey, 36.4% reported being impulsive “very often” or “often”. Of those who had not self-injured, 15.4% claimed to be impulsive “very often” or “often”. **The odds of self-injurers being impulsive were 3.1 times the odds of non self-injurers being impulsive (Table 14).**

Table 14: Self-Injury and Impulsivity

	^a Impulsive		^b Not impulsive		Totals		OR (95% CI)
	Count	%	Count	%	Count	%	
Self-injury over past 4-weeks	48	36.4	84	63.6	132	100.0	3.1 (2.2 – 4.5)
No self-injury over past 4-weeks	1,811	15.4	9,959	84.6	11,770	100.0	

^aRespondents who reported they were impulsive “very often” or “often”; ^bRespondents who reported they were impulsive “sometimes” or “never”

Anger

Respondents were asked how frequently they lost their temper. Of those who had self-injured in the four weeks before the survey, 27.1% reported losing their temper “very often” or “often”. Of those who had not self-injured, 9.4% reported losing their temper “very often” or “often.” **The odds of self-injurers losing their temper were 3.6 times the odds of non self-injurers losing their temper (Table 15).**

Table 15: Self-Injury and Anger

	Loses temper frequently ^a		Does not lose temper frequently ^b		Totals		OR (95% CI)
	Count	%	Count	%	Count	%	
Self-injury over past 4-weeks	36	27.1	97	72.9	133	100.0	3.6 (2.4 - 5.3)
No self-injury over past 4-weeks	1,111	9.4	10,707	90.6	11,818	100.0	

^aRespondents who reported they lost their temper “very often” / “often”; ^bRespondents who reported they lost their temper “sometimes” / “never”

Emotion Regulation

Respondents were asked two questions pertaining to emotion regulation; whether they controlled their emotions by keeping emotions to themselves (emotional suppression) or whether they were able to change the way they felt by changing their thoughts (**cognitive reappraisal**). There were no differences between self-injurers and non self-injurers on emotional suppression. In contrast, there were differences between self-injurers and non self-injurers on **cognitive reappraisal**. Of those who had self-injured in the four weeks before the survey, 56.5% reported they were “occasionally or never” able to change the way they felt about something by trying to change the way they thought about it. Of those who did not self-injure, 28.1% reported “occasionally or never” being able to change the way they

felt about something by trying to change the way they thought about it. **The odds of self-injurers having difficulty with cognitive reappraisal were 3.3 times the odds of non self-injurers having difficulty with cognitive reappraisal (Table 16).**

Table 16: Self-Injury and Emotion Regulation – Cognitive Reappraisal

	^a Difficulty with Cognitive Reappraisal		^b Effective Cognitive Reappraisal		Totals		OR (95% CI)
	Count	%	Count	%	Count	%	
Self-injury over past 4-weeks	74	56.5	57	43.5	131	100.0	3.3 (2.4 – 4.7)
No self-injury over past 4-weeks	3,253	28.1	8,336	71.9	11,589	100.0	

^aDifficulty with Cognitive Reappraisal – ‘occasionally/never’ able to change feelings by changing thinking

^bEffective Cognitive Reappraisal - ‘mostly/always’ able to change feelings by changing thinking

Alexithymia

Respondents were asked how often they had trouble finding words for their feelings. Of those who had self-injured in the four weeks before the survey, 50.0% reported finding it difficult to find the right words for their feelings “always” or “most of the time.” Of those who did not self-injure, 25.8% reported finding it difficult to find the right words for their feelings “always” or “most of the time.” **The odds of self-injurers having difficulty finding words for their feelings were 2.9 times the odds of non self-injurers having difficulty finding words for their feelings (Table 17).**

Table 17: Self-Injury and Alexithymia

	^b Alexithymic		^c Not alexithymic		Totals		OR (95% CI)
	Count	%	Count	%	Count	%	
Self-injury over past 4-weeks	65	50.0	65	50.0	130	100.0	2.9 (2.0 – 4.1)
No self-injury over past 4-weeks	3,035	25.8	8,741	74.2	11,776	100.0	

^bRespondents who said they found it difficult to find the right words for their feelings ‘always’ or ‘most of the time’

^c Respondents who said they found it difficult to find the right words for their feelings ‘occasionally’ or ‘never’

Coping

Respondents were asked how often they coped with stress by distracting themselves, blaming themselves and turning to their family for support. There were no differences between self-injurers and non self-injurers on their frequency of using distraction to cope with stress.

On the other hand, blaming the self in times of stress was more frequent among those who self-injured. Of those who had self-injured in the four weeks before the survey, 69.7% reported blaming themselves “always” or “most of the time” when they were very stressed. Of those who did not self-injure, 21.5% reported blaming themselves “always” or “most of

the time” when they were very stressed. **The odds of self-injurers blaming themselves when stressed were 8.4 time the odds of non self-injurers blaming themselves when stressed (Table 18).**

Table 18: Self-Injury and Coping with Stress by Blaming the Self

	^a Blames self		^b Does not blame self		Totals		OR (95% CI)
	Count	%	Count	%	Count	%	
Self-injury over past 4-weeks	92	69.7	40	30.3	132	100.0	8.4 (5.8 – 12.2)
No self-injury over past 4-weeks	2,503	21.5	9,112	78.5	11,615	100.0	

^aRespondents who reported blaming themselves when very stressed ‘always’ or ‘most of the time’

^bRespondents who reported blaming themselves when very stressed ‘occasionally’ or ‘never’

There were also differences between self-injurers and non self-injurers in regards to turning to their family for support in times of stress. People who had self-injured in the four weeks before the survey were much less likely to turn to their family for support. More than 70% reported “occasionally” or “never” turning to their family for support when they were very stressed. Of those who did not self-injure, 47.0% reported “occasionally” or “never” turning to their family for support when they were very stressed. **The odds of self-injurers not turning to family for support were 2.7 times the odds of non self-injurers not turning to family for support (Table 19).**

Table 19: Self-Injury and Coping with Stress by Turning to Family for Support

	^a Does not turn to family for support		^b Turns to family for support		Totals		OR (95% CI)
	Count	%	Count	%	Count	%	
Self-injury over past 4-weeks	93	70.5	39	29.5	132	100.0	2.7 (1.8 – 3.9)
No self-injury over past 4-weeks	5,488	47.0	6,196	53.0	11,684	100.0	

^aRespondents who reported ‘occasionally’ or ‘never’ turning to their family for support when very stressed

^bRespondents who reported ‘always’ or ‘most of the time’ turning to their family for support when very stressed

Dissociation

Respondents were asked how often they felt that other people, objects, and the world around them were not real (**derealisation**), and how often they felt that their body was not real or did not belong to them (**depersonalisation**). Of those who had self-injured in the four weeks before the survey, 15.3% reported experiencing **derealisation** “always” or “most of the time.” Of those who did not self-injure, 1.8% reported experiencing **derealisation** “always” or “most of the time.” **The odds of self-injurers experiencing derealisation were 10.0 times the odds of non self-injurers experiencing derealisation (Table 20).**

Table 20: Self-Injury and Dissociation – Derealisation

	^b Experiences derealisation		^c Does not experience derealisation		Totals		OR (95% CI)
	Count	%	Count	%	Count	%	
Self-injury over past 4-weeks	20	15.3	111	84.7	131	100.0	10.0 (6.1 – 16.4)
No self-injury over past 4-weeks	208	1.8	11,507	98.2	11,715	100.0	

^brespondents who experienced derealisation ‘always’ or ‘most of the time’

^crespondents who experienced derealisation ‘occasionally’ or ‘never’

Of those who had self-injured in the four weeks before survey, 7.9% reported experiencing **depersonalisation** “always” or “most of the time.” Of those who did not self-injure, 1.4% reported experiencing **depersonalisation** “always” or “most of the time.” **The odds of self-injurers experiencing depersonalisation were 6.1 times the odds of non self-injurers experiencing depersonalisation (Table 21).**

Table 21: Self-Injury and Dissociation – Depersonalisation

	^b Experiences depersonalisation		^c Does not experience depersonalisation		Totals		OR (95% CI)
	Count	%	Count	%	Count	%	
Self-injury over past 4-weeks	10	7.9	117	92.1	127	100.0	6.1 (3.1–11.8)
No self-injury over past 4-weeks	162	1.4	11,558	98.6	11,720	100.0	

^brespondents who experienced depersonalisation ‘always’ or ‘most of the time’

^crespondents who experienced depersonalisation ‘occasionally’ or ‘never’ Psychiatric Diagnoses

Self-Injury and Mental Health Conditions

Respondents were asked whether, in the previous 12-months, they had been told by a doctor that they had various mental health conditions. Results are based on respondents’ self-report. Only respondents aged 18+ are reported here due to the unreliability of information gained from young people.

Respondents Aged 18+ Years

Anxiety

Of those who self-injured in the four weeks before the survey, 57.7% reported being told they had anxiety. Of those who didn’t self-injure, 15.1% reported being told they had anxiety. **The odds of self-injurers reporting anxiety were 7.7 times the odds of non self-injurers reporting anxiety (Table 22).**

Table 22: Self-Injury and Anxiety (Age 18+)

	Anxiety		No Anxiety		Totals		OR (95% CI)
	Count	%	Count	%	Count	%	
Self-injury over past 4-weeks	56	57.7	41	42.3	97	100.0	7.7 (5.1 – 11.5)
No self-injury over past 4-weeks	1,570	15.1	8,823	84.9	10,393	100.0	

Mood Disorder

Of those who self-injured in the four weeks before the survey, 61.2% reported being told they had a mood disorder. Of those who didn't self-injure, 19.3% reported being told they had a mood disorder. **The odds of self-injurers reporting a mood disorder were 6.6 times the odds of non self-injurers reporting a mood disorder (Table 23).**

Table 23: Self-Injury and Mood Disorder (Age 18+)

	Mood Disorder		No Mood Disorder		Totals		OR (95% CI)
	Count	%	Count	%	Count	%	
Self-injury over past 4-weeks	60	61.2	38	38.8	98	100.0	6.6 (4.4 – 9.9)
No self-injury over past 4-weeks	2,006	19.3	8,387	80.7	10,393	100.0	

Attention Deficit Hyperactivity Disorder (ADHD)

Of those who self-injured in the four weeks before the survey, 11.3% reported being told they had ADHD. Of those who didn't self-injure, 1.4% reported being told they had ADHD. **The odds of self-injurers reporting ADHD were 9.2 times the odds of non self-injurers reporting ADHD (Table 24).**

Table 24: Self-Injury and Attention Deficit Hyperactivity Disorder (ADHD) (Age 18+)

	ADHD		No ADHD		Totals		OR (95% CI)
	Count	%	Count	%	Count	%	
Self-injury over past 4-weeks	11	11.3	86	88.7	97	100.0	9.2 (4.8 – 17.7)
No self-injury over past 4-weeks	142	1.4	10,251	98.6	10,393	100.0	

Self-Injury, Tobacco Smoking and Drinking to get Drunk

Respondents were asked whether they smoked tobacco and how often they drank alcohol specifically to get drunk. Among those who had self-injured in the four weeks before the survey, 43.5% were current tobacco smokers compared to 18.8% of people who had not self-injured. **The odds of self-injurers being current tobacco smokers were 3.3 times the odds of non self-injurers being current tobacco smokers (Table 25).**

Table 25: Self-Injury and Tobacco Smoking

	Current Smoker		Not a current smoker		Totals		OR (95% CI)
	Count	%	Count	%	Count	%	
Self-injury over past 4-weeks	54	43.5	70	56.5	124	100.0	3.3 (2.3 – 4.8)
No self-injury over past 4-weeks	2,061	18.8	8,884	81.2	10,945	100.0	

Among those who had self-injured in the four weeks before the survey, 60.4% reported drinking to get drunk (weekly, monthly or yearly) compared to 26.8% of people who had not self-injured. **The odds of self-injurers drinking to get drunk were 4.2 times the odds of non self-injurers drinking to get drunk (Table 26).**

Table 26: Self-Injury and Drinking to Get Drunk

	Drinking to get drunk at least yearly		Never drinking to get drunk		Totals		OR (95% CI)
	Count	%	Count	%	Count	%	
Self-injury over past 4-weeks	55	60.4	36	39.6	91	100	4.2 (2.7 – 6.4)
No self-injury over past 4-weeks	2,386	26.8	6,503	73.2	8,889	100	

Self-Injury and Illicit Drug Use

Respondents were asked whether they had ever used a range of illicit drugs. **The odds of self-injurers having ever used opioids, inhalants, stimulants, hallucinogens and marijuana were between 2.1 and 6.0 times the odds of non self-injurers having ever used these drugs (Tables 27, 28, 29, 30 and 31).**

Table 27: Self-Injury and Opioids

	Opioid Use		No Opioid Use		Totals		OR (95% CI)
	Count	%	Count	%	Count	%	
Self-injury over past 4-weeks	11	8.3	122	91.7	133	100.0	6.0 (3.2 – 11.4)
No self-injury over past 4-weeks	174	1.5	11,632	98.5	11,806	100.0	

Table 28: Self-Injury and Inhalants

	Inhalant Use		No Inhalant Use		Totals		OR (95% CI)
	Count	%	Count	%	Count	%	
Self-injury over past 4-weeks	8	6.0	125	94.0	133	100.0	3.4 (1.6 – 7.0)
No self-injury over past 4-weeks	220	1.9	11,587	98.1	11,807	100.0	

Table 29: Self-Injury and Stimulants

	Stimulant Use		No Stimulant Use		Totals		OR (95% CI)
	Count	%	Count	%	Count	%	
Self-injury over past 4-weeks	41	30.8	92	69.2	133	100.0	3.1 (2.1 – 4.5)
No self-injury over past 4-weeks	1,485	12.6	10,340	87.4	11,826	100.0	

Table 30: Self-Injury and Hallucinogens

	Hallucinogen Use		No Hallucinogen Use		Totals		OR (95% CI)
	Count	%	Count	%	Count	%	
Self-injury over past 4-weeks	24	18.2	108	81.8	132	100.0	2.9 (1.8 – 4.5)
No self-injury over past 4-weeks	848	7.2	10,978	92.8	11,826	100.0	

Table 31: Self-Injury and Marijuana

	Marijuana Use		No Marijuana Use		Totals		OR (95% CI)
	Count	%	Count	%	Count	%	
Self-injury over past 4-weeks	69	52.3	63	47.7	132	100.0	2.1 (1.5 – 3.0)
No self-injury over past 4-weeks	3,984	33.8	7,805	92.8	11,789	100.0	

Self-Injury and Childhood Maltreatment

Respondents were asked if, as children, they had ever experienced childhood maltreatment (neglect, physical abuse and sexual abuse) from one or more parents. Because children and adolescents are less likely to disclose childhood maltreatment (for a variety of reasons, including being reliant upon parental figures for survival and therefore not wanting to risk retribution, or not completely understanding what constitutes childhood maltreatment), responses from children and adolescents might be biased towards underreporting. Therefore, only responses from adults aged 18+ are reported here.

Neglect

Among adults who had self-injured in the four weeks before the survey, 40.2% reported a history of parental neglect compared to 14.8% of adults who did not self-injure. **The odds of self-injurers reporting neglect were 3.9 times the odds of non self-injurers reporting neglect (Table 32).**

Table 32: Self-Injury and Neglect (Age 18+)

	Neglect		No Neglect		Totals		OR (95% CI)
	Count	%	Count	%	Count	%	
Self-injury over past 4-weeks	39	40.2	58	59.8	97	100.0	3.9 (2.6 – 5.8)
No self-injury over past 4-weeks	1,530	14.8	8,802	85.2	10,332	100.0	

Physical Abuse

Respondents were asked if, as children, they had ever been physically abused, attacked or assaulted. Among adults who had self-injured in the four weeks before the survey, 52.6% reported a history of physical abuse compared to 16.0% of adults who did not self-injure. **The odds of self-injurers reporting physical abuse were 5.8 times the odds of non self-injurers reporting physical abuse (Table 33).**

Table 33: Self-Injury and Physical Abuse (Age 18+)

	Physical Abuse		No Physical Abuse		Totals		OR (95% CI)
	Count	%	Count	%	Count	%	
Self-injury over past 4-weeks	51	52.6	46	47.4	97	100.0	5.8 (3.9 – 8.7)
No self-injury over past 4-weeks	1,653	16.0	8,688	84.0	10,341	100.0	

Sexual Abuse

Respondents were asked if, as children, they had ever been sexually abused or assaulted. Among adults who had self-injured in the four weeks before the survey, 37.9% reported a history of sexual abuse compared to 9.3% of adults who did not self-injure. **The odds of self-injurers reporting sexual abuse were 5.9 times the odds of non self-injurers reporting sexual abuse (Table 34).**

Table 34: Self-Injury and Sexual Abuse (Age 18+)

	Sexual Abuse		No Sexual Abuse		Totals		OR (95% CI)
	Count	%	Count	%	Count	%	
Self-injury over past 4-weeks	36	37.9	59	62.1	95	100.0	5.9 (3.9 – 9.0)
No self-injury over past 4-weeks	965	9.3	9,358	90.7	10,323	100.0	



CHAPTER 4: SUMMARY AND RECOMMENDATIONS

Summary

The Australian National Epidemiological Study of Self-Injury (ANESSI) is the largest study in the world to examine self-injury in the community and the first to study it across the age span. The innovative method of data collection (telephone surveys) allowed us to determine the **prevalence** and nature of a behaviour which has historically been very difficult to verify. Our results indicate that self-injury is a prevalent problem.

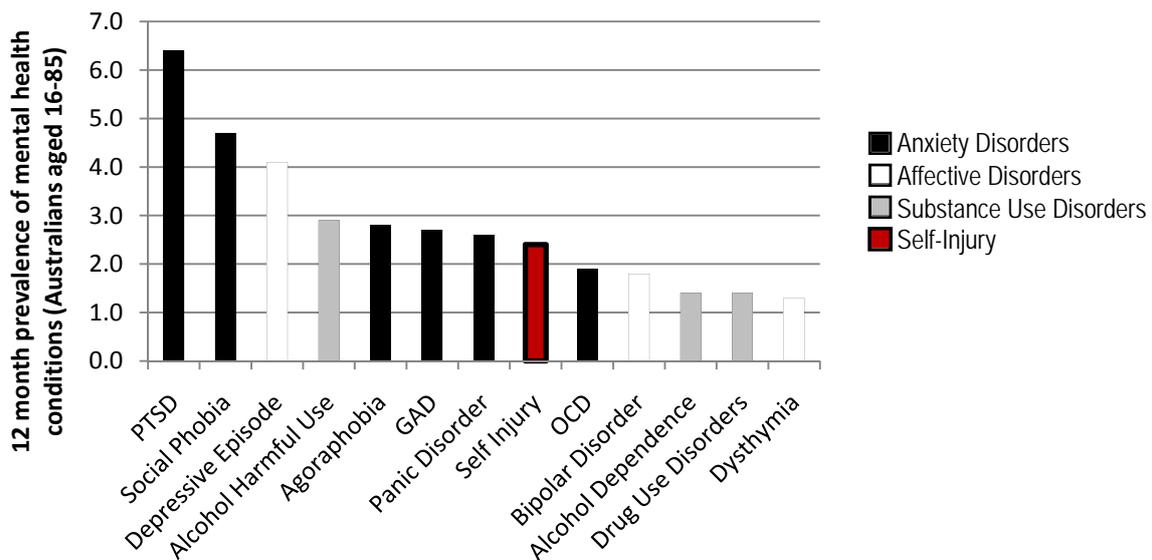
According to our study, the 4-week **prevalence** of self-injury for those 10 years and over in Australia is 1.1%. This corresponds to an estimated 220,000 Australians, or a rate of 11 per 1000 people 10 years and over per month. The overall 4-week **prevalence** did not differ according to sex, although it peaked at different age groups across sexes; although self-injury was highest among males aged 10–17, it was more prevalent among females aged 18–24.

We found a 12-month **prevalence** of 2.6%, again, similar between males and females. This figure corresponds to an estimated 520,000 Australians aged 10 years and over, or a rate of 26 per 1000 people per year. Like the 4-week data, self-injury was most prevalent among females aged 18–24. However unlike the 4-week data, for males, self-injury was equally prevalent in the 10–17 and 18–24 age groups.

If we compare these results to outcomes from the National Survey of Mental Health and Wellbeing, conducted by the Australian Bureau of Statistics (ABS, 2007), we can see that self-injury occurs as frequently as Panic Disorder, Obsessive Compulsive Disorder, Generalised Anxiety Disorder and Agoraphobia (**Figure 11**).

It may be problematic to compare rates of self-injury with rates of psychiatric conditions, given self-injury is an isolated behaviour whereas psychiatric conditions are ongoing patterns of behaviours, cognitions and emotions. However, it is useful to compare the extent of self-injury with other mental health concerns, given the public attention and funding given to psychiatric conditions, but not to self-injury. That self-injury occurs as frequently as other mental health conditions, but is not understood nearly as well as these other mental health conditions, indicates it should be given more attention and importance in mental health care planning and policy. Further, given the known association between chronic or more severe self-injury and suicidal behaviours, acknowledging the needs of self-injuring people may be one way of continuing to reduce suicidal behaviour and suicide rates in Australia.

Figure 11: Twelve Month Prevalence of Mental Health Conditions



Notes: The self-injury statistic includes only respondents aged 16–85, since this was the age range sampled by the ABS for the National Survey of Mental Health and Wellbeing; the ABS surveyed 8,841 households across Australia; PTSD = Post Traumatic Stress Disorder; GAD = Generalised Anxiety Disorder; OCD = Obsessive Compulsive Disorder.

For lifetime data, the overall prevalence of self-injury was 8.1%, with a higher prevalence in females (8.7%) than males (7.5%). Although overall lifetime prevalence has limited meaning given the sample includes people with variable lengths of lifetime, the figures again support the fact that self-injury is a relatively common experience.

In our sample, the mean age of onset for self-injury was 17 years, slightly higher than that found in other studies (e.g. Kumar et al., 2004). The four most common methods of self-injury were cutting (40.6%), scratching (39.8%), hitting the body or a part of the body on a hard surface (36.5%), and punching or hitting the body (33.5%). Consistent with previous research (Gollust, Eisenberg & Golberstein, 2008), males were more likely than females to hit/punch themselves and bang a part of their body against a solid object. Over half of those who reported self-injury claimed to be motivated by a desire to manage their emotions (57.2%), and almost one quarter self-injured to punish the self (24.7%). These results again are consistent with previous research (Klonsky, 2007), and refute the idea that people primarily self-injure to get attention and manipulate others. There were no statistically significant differences in motivations according to sex, however males tended to self-injure to punish themselves more so than females. Again, consistent with previous research (e.g. Hilt, Cha, & Nolen-Hoeksema, 2008), almost one third (29.1%) reported never feeling pain during self-injury. Further analysis regarding any differences between those who did and did not feel pain on suicidality and mental health conditions is planned.

The majority of respondents (83.9%) who self-injured in the 4-weeks before the survey did not receive medical attention, most likely because their injuries were not of a severe nature. Only a very small proportion attended an emergency department due to their injuries (2.3%); the same three individuals were admitted to hospital (overnight). More than half of the sample of self-injurers did not seek psychological or emotional support (51.4% of males and

58.6% of females). The lack of help-seeking reflects the secrecy of the behaviour and suggests that it will remain hidden in society unless considerable effort is made to educate the general public and professionals about the serious potential for long term mental health difficulties.

Self-injury was strongly associated with suicide attempts. Odds of self-injurers attempting suicide in the 12-months before the survey were 41.6 times those of people who didn't self-injure, despite rather small numbers. Also robust was the association between suicidal ideation and self-injury, with the odds of self-injurers experiencing suicidal ideation 11.3 times those of people who did not self-injure.

People who self-injured in the 4-weeks before the survey were more likely to report mental health problems in general, as well as specific mental health conditions (anxiety, mood disorders, and **attention deficit hyperactivity disorder**). They reported greater levels of impulsivity, aggression, and **dissociation** and more problems with emotion regulation and coping. They were more likely to be current smokers, to drink to get drunk and have used a range of illicit drugs. Respondents who self-injured in the 4-weeks before the survey were more likely to report a history of childhood neglect, physical abuse and sexual abuse. Although there was a stronger association between abuse and self-injury than neglect and self-injury, further data analysis is needed to extricate the separate contributions of each type of maltreatment, since a large proportion of individuals reported more than one type.

Respondents who reported self-injury are, in many ways, a troubled group at higher risk of psychological **morbidity** and **mortality** by suicide compared to the general population. The proportion of self-injury among males and females was similar; perhaps challenging the traditional view that self-injury is more prevalent in females. That females were slightly less likely to seek help for their self-injury compared to males was unexpected, considering females are typically more likely to seek help for mental health problems (Judd, Komiti & Jackson, 2008).

In the four weeks before the survey, three respondents were admitted to hospital due to their self-injury (2.3% of those who self-injured and 0.02% of the entire sample). Despite this small number, if we accept the ANESSI sample as representative of the Australian population, this equates to an estimated 4000 Australians admitted to hospital over a 4-week period due to self-injury (0.2% of 20,000,000). According to the Australian Institute of Health and Welfare (2008), one hospital separation¹ in the public system costs

¹ A hospital separation is an episode of care for an admitted patient, which can be a total hospital stay (from admission to discharge, transfer or death), or a portion of a hospital stay beginning or ending in a change of type of care (for example, from acute to rehabilitation). Separation also means the process by which an admitted patient completes an episode of care either by being discharged, dying, transferring to another hospital or changing type of care (AIHW, 2008, page 370 in the above document).

approximately \$3,542. **A rough estimate of the cost of self-injury to the Australian health system according to hospitalisation *alone* is \$14,168,000 over a 4-week period.**

Limitations

Sampling

As with most population-based studies, our study suffers from several sources of bias. Only households with a landline *and* with their number publicly listed could be contacted. This sampling method ruled out the 15% of Australians who only use a mobile phone (Pennay, 2009), the majority of whom are aged 16–24 and live in capital cities. However, recent research shows that people who use only mobiles and those who have only a landline / have a landline and mobile phone do not differ significantly from their same age peers on many attitudes and behaviours (Pennay, 2009). The sample was also biased towards older people, who are generally home more often and therefore more available to participate in telephone surveys. However, as the ANESSI data was weighted by age and geographical location, the results drawn from our data should not be biased by these factors.

Our sampling method also ruled out people with unlisted numbers. This group might differ from people with listed numbers in important ways, such as being more suspicious about others obtaining their contact details. It is unknown whether there are differences between those with unlisted and listed numbers on the variables explored in our study.

We were unable to sample people who had no telephone at all (i.e. people residing in very remote areas, boarding accommodation, and the homeless). Considering homeless youth in Australia have extremely high rates of psychological distress, psychiatric disorders, and risk of developing self-injurious behaviour (Kamieniecki, 2001), just on this issue our study may have underestimated the degree of psychological morbidity and self-injury in Australia.

Future studies should use a range of methods to contact respondents (i.e. landlines, mobile phones, the internet, email, and door-to-door).

Non-response

Our overall **response rate** was 38.5%. The majority of non-responses (48.5%) were due to refusals (primary and parental). This low 'agreement to interview' is consistent with trends of declining telephone interview **response rates** worldwide. It is difficult to determine the extent to which the high number of non-responses biased the results because data was not collected about non-respondents. A critical component of what determines the magnitude of bias is the size of the difference in key survey measures between respondents and non-respondents. For variables on which respondents are not different than non-respondents, surveys with lower response rates will be as accurate as those with higher response rates. The difficult part is knowing when this is the case because researchers often do not have data on non-respondents.

We believe a major reason for the high number of refusals was the sensitive and personal nature of the study topic. Given the hidden nature of self-injury and mental health problems, as well as the potential for stigma, few people feel comfortable discussing such

things with a stranger. The ethical responsibilities of the project, which required us to post potential respondents large amounts of information in the mail, may have increased this sense of discomfort by needlessly overwhelming and alarming potential respondents. This situation is unlikely to change given the ethical rights of participants must be maintained at all costs.

Recall and Response Bias

All interview-based, self-report data are vulnerable to **recall bias** (not remembering correctly) and response bias (answering questions in the way the respondent thinks the interviewer wants them to answer rather than truthfully). This might be overcome in future studies by gathering self-report data in conjunction with third party reports.

Clinical Recommendations

We believe that the results of this study can be translated into valuable recommendations to assist in the identification, assessment, management and treatment of people who self-injure. Although anyone can be faced with a person who self-injures, a range of professionals encounter self-injury on a more regular basis, including mental health nurses, psychologists, psychiatrists, emergency workers, teachers, social workers and school guidance counsellors.

Although self-injury most frequently occurs among children, adolescents and young adults, it is possible for it to continue into older adulthood, and indeed to first occur in older adulthood. Automatically assuming that a person would not self-injure based on their older age is inappropriate. Similarly, self-injury occurs equally among males and females, but the methods differ. Males are more likely to self-injure by hitting a part of their body on a hard surface or punching, hitting or slapping themselves, which is easier to explain as an accidental injury. If self-injury is suspected, it should not be dismissed because the person is male or has not self-injured in the traditional way (cutting).

Of particular importance is the link between self-injury and suicide. Self-injury is not a suicide attempt, but people who self-injure may be more likely to experience suicidal ideation and may have attempted suicide in the past. Communicating understanding about this distinction to the person who has self-injured is important, as is assessing for acute suicide risk. Similarly, individuals who have recently attempted suicide should be assessed for a history of non-suicidal self-injury.

Although self-injury is associated with general psychological distress, its presence does not automatically predict distress: 26% of self-injurers reported no psychological distress as measured by the General Health Questionnaire. Similarly, although certain mental health conditions (anxiety, mood disorders and **ADHD**) were associated with self-injury, only a small percentage of respondents who reported those conditions also self-injured (3–7%). Professionals must be aware that self-injury is associated with a variety of presentations.

It is easy to hide self-injury and most people will not seek help or disclose their behaviour. Considering the strong association with suicidal ideation and suicide attempt, this is a dangerous situation. If any of the specific psychological correlates of self-injury are noted in

an individual, such as poor coping, poor emotion regulation, dissociation, impulsivity, anger, and alexithymia, it is worthwhile to explore whether the individual is engaging in self-injury.

Childhood maltreatment is commonly associated with self-injury but is not a necessary **aetiological** factor. People who self-injure have not necessarily experienced childhood maltreatment. However, special consideration for this possibility should be given when taking a history, and developing management or intervention plans.

Given the associations between self-injury and poor coping, poor emotion regulation, dissociation, impulsivity, anger, and alexithymia, a strong argument could be made for treatment programs to be based in cognitive psychology. Recent Cognitive Behavioural Therapy (CBT) work in adolescents has not shown good results (Hazell et al., 2009) However, Dialectical Behaviour Therapy (DBT; Linehan, 1993) has been shown consistently (in randomized controlled trials) to have efficacy for self-injuring clients. DBT combines standard cognitive-behavioural techniques for coping skills, emotion regulation and reality-testing with concepts of mindful awareness, distress tolerance, and acceptance largely derived from Buddhist meditative practice. It should be noted, however, that Linehan's original DBT program is very time and resource intensive, and few professionals are in a position to deliver the program in its entirety. In addition encouragement and support (from professionals, family or friends) for self-injurers embarking on the program may have to be maintained throughout the program. As long as the integrity of the program is maintained, delivering adaptations of the program to people who self-injure may be a possibility for the future.

Research Recommendations

The ANESSI study produced a number of important findings, but additional research is required to supplement and validate the data. The **prevalence** and nature of self-injury among respondents who were unrepresented or underrepresented in our **sample**, such as those with only mobile phones and those with no access to a landline, should be explored. In order to explore self-injury among Indigenous Australians, studies using culturally appropriate surveys and methodologies should be devised. It would be valuable to establish the extent to which hospital admissions data of self-harm correspond to the population based ANESSI data. Finally, the ANESSI findings could be refined by conducting longitudinal studies of self-injury over time. Prospective studies are the best way to elucidate causal, mediating and moderating factors of self-injury.



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APPENDIX: SUMMARY OF SURVEY QUESTIONS

Introduction and Consent

The survey begins with an introduction and the interviewer will ask whether you consent to doing the interview. If you say yes, the interviewer will tell you that you can refuse to answer any question and/or stop the interview at any time.

A. Initial Demographics

- A.1 What is your date of birth?
- A.2 What is your gender?
- A.3 What is your postcode?

B. Mental Wellbeing

Over the past few weeks...

- B.1 ...have you been able to concentrate on what you're doing?
- B.2 ...have you lost much sleep over worry?
- B.3 ...have you felt you were playing a useful part in things?
- B.4 ...have you felt capable of making decisions about things?
- B.5 ...have you felt constantly stressed?
- B.6 ...have you felt you couldn't overcome your difficulties?
- B.7 ...have you been able to enjoy your normal day to day activities?
- B.8 ...have you been able to face up to your problems?
- B.9 ...have you been feeling unhappy and depressed?
- B.10 ...have you been losing confidence in yourself?
- B.11 ...have you been thinking of yourself as a worthless person?
- B.12 ...have you been feeling reasonably happy, all things considered?
- B.13 Are you able to change the way you feel about something by trying to change the way you think about it?
- B.14 Do you control your emotions by keeping them to yourself?
- B.15 Do you find it difficult to find the right words for your feelings?

When you are very stressed how often do you...

- B.16 ...do other things to take your mind off things?
- B.17 ...blame yourself for things that happened?
- B.18 ...turn to your family for support?
- B.19 Sometimes people feel that other people, objects, and the world around them are not real. How often does this happen to you?

B.20 Sometimes people feel that their body does not belong to them. How often does this happen to you?

In everyday life...

- B.21 ...do you lose your temper?
- B.22 ...are you impulsive?

C. Self-Injury

The following questions are about self-injury. Self-injury means deliberately hurting yourself or any part of your body without meaning to kill yourself. Remember that if you feel uncomfortable you can decline to answer these questions.

- C.1 Over the past 4-weeks have you self-injured? If no, go to question C.19. If yes, ask:
- C.2 I'm going to read out a list of ways that people self-injure. After each one, please say 'yes' if you have done this in the last 4-weeks or 'no' if you haven't [interviewer reads out list]
- C.3 Do you feel pain when you self-injure?

C.4 How many times or sessions of self-injury did you have over the past 4-weeks?

C.5 In your opinion, what would be the main reason why you self-injure?

C.6 How old were you the first time you self-injured?

C.7 Do any family members or friends know about your self-injury?

C.8 Over the past 4-weeks have you asked anyone for help with your self-injury?

If yes, ask:

C.9 Who have you asked for help with your self-injury?

C.10 Over the past 4-weeks did you have medical treatment because of your self-injuries?

If yes, ask:

C.11 Over the past 4-weeks have you attended an emergency department because of any of your self-injuries?

C.12 Over the past 4-weeks have you had to be admitted to hospital because of any of your self-injuries?

If yes, ask:

C.13 How many days in total have you stayed in hospital as a result of your self-injuries over the past 4-weeks?

C.14 Have you ever tried to reduce or stop self-injuring?

If yes, ask:

C.15 Were you successful in reducing or stopping?

If yes, ask:

C.16 What helped you to reduce or stop?

C.17 Right now do you want to stop self-injuring?

C.18 What might be some reasons for not getting help with self-injury?

If no self-injury in the past 4-weeks, ask:

C.19 Have you ever, in your lifetime, self-injured?

If yes, ask:

C.20 I'm going to read out a list of ways that people self-injure. After each one, please say 'yes' if you have ever done this or 'no' if you haven't [interviewer reads out list]

C.21 How old were you the first time you self-injured?

C.22 When was the last time you self-injured?

C.23 What helped you stop self-injury?

D. Suicide

Now I'm going to ask you some questions about when life may not be worth living. Over the past few weeks have you...

D.1 ...felt that life isn't worth living?

D.2 ...thought of the possibility that you might do away with yourself?

D.3 ...found yourself wishing you were dead and away from it all?

D.4 ...found the idea of taking your own life kept coming into your mind?

D.5 Have you ever tried to kill yourself?

If yes, ask:

D.6 How many times have you tried to kill yourself?

D.7 How old were you when you [first] tried to kill yourself?

For those reporting more than one attempt:

D.8 How old were you when you [first] tried to kill yourself?

D.9 When did you attempt to kill yourself most recently?

D.10 At the time did you actually want to die?

D.11 Are you now glad you survived?

D.12 How did you attempt to kill yourself - what did you actually do?

D.13 Did an ambulance come because of the attempt?

D.14 Did you go to an emergency department?

D.15 Did you stay in hospital overnight?

If yes, ask:

D.16 How many nights did you stay in hospital?

E. Psychiatric History

This section is answered by the parent on behalf of young people aged 10-17 years.

E.1 In the last 12-months have you been told by a doctor that you have anxiety, depression, Attention Deficit Hyperactivity Disorder (ADHD), Post Traumatic Stress Disorder (PTSD) or any other mental health problem?

If yes, ask:

E.2 Do you still have this mental health problem?

E.3 Are you currently receiving treatment for this mental health problem?

F. Sexual Orientation

This section is not asked of respondents aged less than 14 years.

F.1 Which of the following best describes you?

- Heterosexual (straight)
- Homosexual (gay/lesbian)
- Bisexual (bi)
- Other
- Don't know/unsure

G. Trauma

Now I would like to ask you about stressful or upsetting events that sometimes happen to people. Remember that if you feel uncomfortable you can decline to answer these questions.

G.1 Did you ever experience neglect from one or more parents?

G.2 During your childhood, were you ever physically abused, attacked or assaulted?

If yes, ask:

G.3 Who physically abused, attacked or assaulted you?

G.4 During your childhood, were you ever sexually abused or assaulted?

If yes, ask:

G.5 Who sexually abused or assaulted you?

H. Service Use

H.1 Have you ever used a telephone help line to help with your mental health?

If yes, ask:

H.2 Which telephone help line did you used most recently?

H.3 How much did the telephone line help?

H.4 Have you ever used the internet to access mental health websites?

If yes, ask:

H.5 Which mental health website did you use most recently?

H.6 How much did the website help?

I. Substance Use

I.1 Do you smoke?

If yes, ask:

I.2 On average how many cigarettes do you smoke per day or each week?

I.3 How often do you usually drink alcohol?

If respondent drinks alcohol, ask:

I.4 On a day or night when you drink, how many standard drinks, on average, would you have?

I.5 How often do you drink specifically to get drunk?

I.6 Have you ever used marijuana, amphetamines, ecstasy, inhalants, heroin, cocaine, LSD or any other illegal drugs?

If yes for any, ask:

I.7 How many times?

Demographics

Z.1 What country were you born in?

If Australia, ask:

Z.2 Are you Aboriginal or Torres Strait Islander?

Z.3 What is the main language spoken in your home?

Z.4 to Z.6 not answered for respondents aged 10–17

Z.4 What is your current marital status?

Z.5 What is the highest qualification that you have obtained?

Z.6 What is your work status?

End of Interview

The interviewer will thank you for your time, answer your questions and give you the contact numbers of Lifeline (13 11 14), Kids Help Line (1800 55 1800), the ANESSI Information Line (1800 700 954) and the ANESSI Information Email anessi@uq.edu.au.

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