

6. Mental health

6.1 Psychological disorders

Mental health concerns are among the most prominent needs of young people in contact with the juvenile justice system, particularly those entering custody (Teplin et al., 2007; Vermeiren et al., 2006). Studies of detainees have consistently identified high rates of co-occurring disorders, and a high prevalence of attentional or behavioural and substance use disorders. While the substance use disorders have been shown to make the largest contribution to recidivism risk (Wasserman et al., 2010), screening and assessment to identify mental health disorders which warrant treatment or are important factors in the rehabilitation of offenders is also important.

Mental health disorders are the leading cause of disability among young Australians aged 15-24 years and account for 50% of the burden of disease in this age group (AIHW, 2008e). In 2007, the prevalence of mental disorders in the Australian population was estimated through the National Survey of Mental Health and Well-Being (NSMHWB), which surveyed approximately 8,800 people aged 16 to 65 years (ABS, 2008c). The survey found that 45% of Australian adults met criteria for a mental health disorder in their lifetime and 20% met criteria in the preceding 12 months. Survey participants who reported they had ever been in prison had a prevalence of a 12 month mental disorder more than twice (41% vs 19%) those who had never been in prison (ABS, 2008c). Among participants aged 16 to 24 years who participated in the child and adolescent component of the survey, 26% (30% of young women and 23% of young men) met diagnostic criteria for a mental disorder (primarily substance use disorders) in the past 12 months, the highest prevalence of all age groups (ABS, 2008c). Mental health disorder prevalence among 12-17 year olds from the 1997 NSMHWB was 8% for ADHD and 3% for conduct disorders (AIHW, 2007). For 18-24 year olds, the prevalence of any mental disorder was 27%, with 16% for substance use disorders, 11% for anxiety disorders and 7% for affective disorders (AIHW, 2007).

In 2004/05 in Australia, 10% of 15-19 year olds reported mental or behavioural problems, with mood disorders most common for females and problems of psychological development most common among males (AIHW, 2008e). The prevalence of mental and behavioural problems was 40% higher among Indigenous teenagers compared to non-Indigenous teenagers. In the 2007/08 NSW Health Child Survey, using the Strengths and Difficulty Questionnaire which asks parents to rate their children's mental health, it was reported that 12% of children aged 4 to 15 years were at risk of emotional symptoms, 9% were at risk of conduct problems, 11% were at risk of hyperactivity or inattention and 9% were

at risk of peer relationship problems (DOH, 2010c). In NSW, the rate of treatment for ADHD among children aged 2 to 17 years is 1%, with the highest rates occurring in children aged 10 to 13 years; treatment rates for boys were four times that of girls (DOH, 2010a). As at 1 December 2007 there were over 15,000 children under the age of 18 on ADHD medication in NSW (DOH, 2010a).

For the 2009 YPICHs, the Kiddie Schedule for Affective Disorders and Schizophrenia – Present and Lifetime Version (K-SADS-PL) 2009 Draft (Axelson et al., 2009) was used to assess mental health and behavioural disorders according to the Diagnostic and Statistical Manual of Mental Disorders – Fourth Edition Revised (DSM-IV) criteria (APA, 2000). Because a different screening tool was used, this report contains no comparison between the 2009 YPICHs data and the 2003 YPICHs (which used the Adolescent Psychopathology Scale; Reynolds, 1998) data in the area of mental disorders.

The 2009 YPICHs identified an average of 3.3 past and/or current psychological disorders for each participant. Young women had a significantly higher mean number of psychological diagnoses than young men (4.8 vs 3.1, $p < 0.001$). Similarly, Aboriginal young people had significantly higher numbers of diagnoses than non-Aboriginal young people (3.7 vs 3.0, $p < 0.03$).

Table 6.1.1 Mean number of lifetime psychological disorders

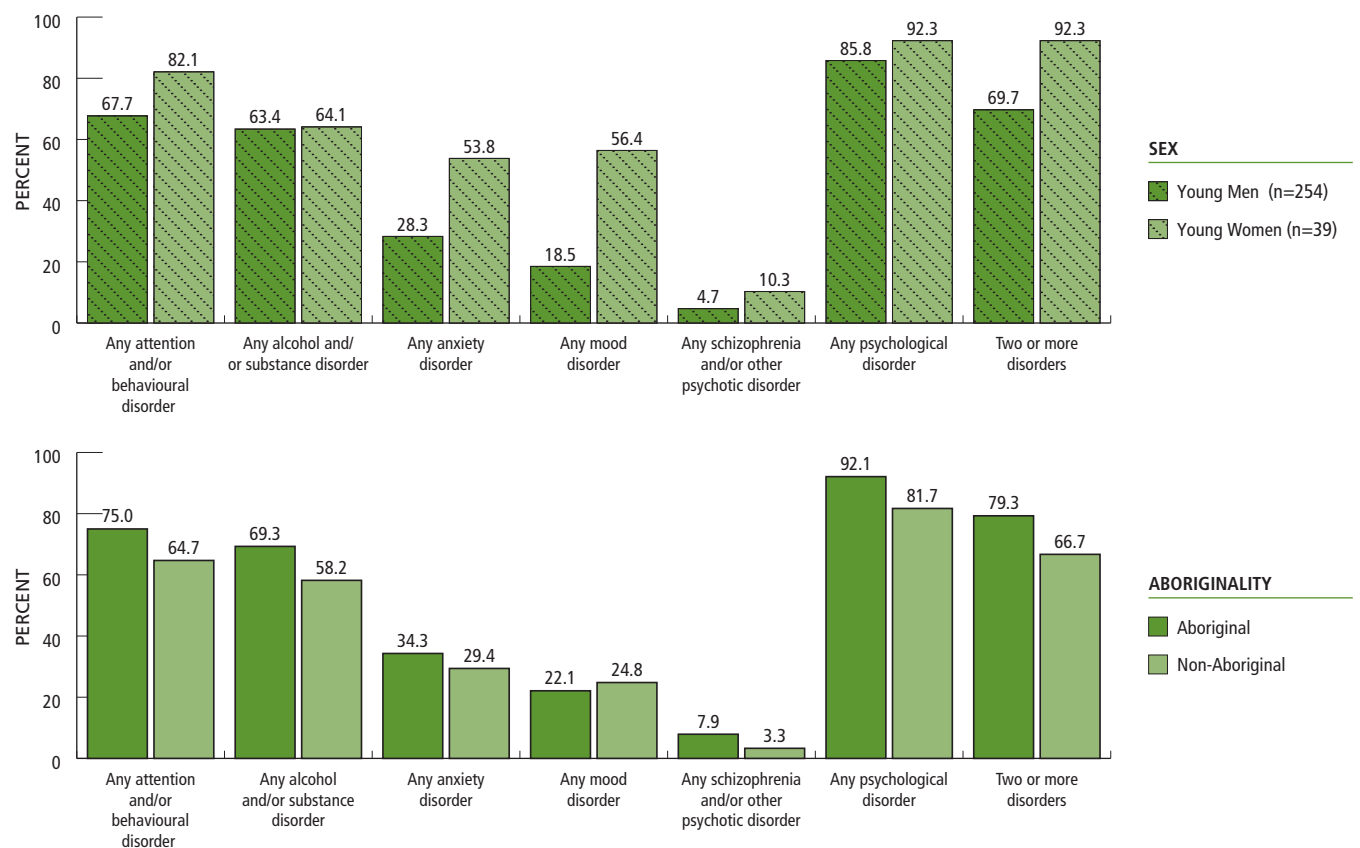
Any psychological disorder	Young Men (n=254)	Young Women (n=39)	Aboriginal (n=140)	Non-Aboriginal (n=153)	Total (n=293)
Mean	3.1	4.8	3.7	3.0	3.3
SD	2.3	2.7	2.3	2.5	2.4
Median	3.0	4.0	4.0	3.0	3.0
Range	0 to 11	0 to 10	0 to 10	0 to 11	0 to 11

Table 6.1.2 presents an overall summary of the prevalence of lifetime (current and past) mental health diagnoses among 2009 YPICHs participants, broken down by gender and Aboriginality. Participants were asked about symptoms in order to complete screening for evidence of past disorders, however, in many cases, were unable to clearly identify time frames for past symptoms. Furthermore, the K-SADS-PL does not describe relevant time frames to distinguish past and current diagnoses. Due to the inability to complete corroborative interviews as a part of the survey (as is allowed for in the K-SADS-PL testing schedule for parents and teachers), the survey team was unable to obtain detailed information on the full prevalence of past disorders. The majority of information presented on psychological disorders therefore relates to current diagnoses.

The majority (87%) of 2009 YPICHS participants were found to have at least one psychological disorder, with only 13% of the population having no psychological diagnosis present. Nearly three in four (73%) young people had two or more psychological disorders present. The two most common psychological disorders were attention or behavioural disorders (70%) and substance use disorders (64%).

There were no significant differences by gender for any substance use disorder or schizophrenia. However, a significantly higher proportion of young women than young men were found with the following disorders: mood disorders (56% vs 19%, $p < 0.001$), anxiety disorders (54% vs 28%, $p < 0.01$), and any attention or behavioural disorders (82% vs 68%, $p < 0.001$). There were no differences detected between Aboriginal and non-Aboriginal young people for prevalence of mood, anxiety, alcohol abuse or attention disorders. However, a higher proportion of Aboriginal than non-Aboriginal young people was found with any substance use disorder (69% vs 58%, $p < 0.03$) or an attention or behavioural disorder (75% vs 65%, $p < 0.01$).

Table/Fig 6.1.2 Any lifetime psychological disorder by type



(Multiple response)	Young Men (n=254)		Young Women (n=39)		Aboriginal (n=140)		Non-Aboriginal (n=153)		Total (n=293)	
	n	%	n	%	n	%	n	%	N	%
Any attention and/or behavioural disorder	172	67.7	32	82.1	105	75.0	99	64.7	204	69.6
Any alcohol and/or substance disorder	161	63.4	25	64.1	97	69.3	89	58.2	186	63.5
Any anxiety disorder	72	28.3	21	53.8	48	34.3	45	29.4	93	31.7
Any mood disorder	47	18.5	22	56.4	31	22.1	38	24.8	69	23.5
Any schizophrenia and/or other psychotic disorder	12	4.7	4	10.3	11	7.9	5	3.3	16	5.5
Any psychological disorder	218	85.8	36	92.3	129	92.1	125	81.7	254	86.7
Two or more disorders	177	69.7	36	92.3	111	79.3	102	66.7	213	72.7

Mood disorders

Approximately one-quarter (24%) of 2009 YPICHs participants was found to have a mood disorder using the DSM-IV Classification system. This mostly comprised major depression (found in 17% of the sample) and bipolar disorder I (found in 4% of the sample). Young women were significantly more likely to have a mood disorder than young men, including a higher proportion with major depression (36% vs 14%, $p < 0.001$) or bipolar disorders (13% vs 3%, $p < 0.001$). There was no significant difference by Aboriginality found in the prevalence of mood disorders. By comparison, among 2007 NSMHWB participants aged 16-24, 8.4% of young women and 4.3% of young men were found to have an affective disorder in the past year (ABS, 2008c). This indicates that young people in custody have a prevalence of mood disorder that is seven times higher for girls and four times higher for boys than found in the general community.

Only a small number of young people were found to have other mood disorders such as dysthymia (N=4), depression not otherwise specified (NOS) (N=3), bipolar disorder NOS (N=3), mania (N=2) or mixed episode mania/hypomania (N=1). Mixed episode (major depressive episode and mania), and bipolar disorder II were screened for, but not found in this sample.

Table 6.1.3 Mood disorders

(Multiple response)	Young Men (n=254)		Young Women (n=39)		Aboriginal (n=140)		Non-Aboriginal (n=153)		Total (n=293)	
	n	%	n	%	n	%	n	%	n	%
Major depression	35	13.8	14	35.9	22	15.7	27	17.6	49	16.7
Bipolar disorder I	8	3.2	5	12.8	6	4.3	7	4.6	13	4.4
Any mood disorder	47	18.5	22	56.4	31	22.1	38	24.8	69	23.5

Anxiety disorders

Nearly one-third (32%) of 2009 YPICHs participants was found to have an anxiety disorder using the DSM-IV classification system. The majority of these anxiety diagnoses were made for post-traumatic stress disorder (PTSD), which was found in 20% of the population, followed by generalised anxiety disorder (7%). Only two young people were found with the disorders of panic disorder and agoraphobia and one young person was diagnosed with acute stress disorder, none of which are shown in the table below. By comparison, among NSMHWB participants aged 16-24, 21.7% of young women and 9.3% of young men were found to have an anxiety disorder in the past year (ABS, 2008c).

The young women in the sample were significantly more likely to have the diagnosis of PTSD than young men (39% vs 17%, $p < 0.01$). They were also more likely to be diagnosed with an anxiety disorder NOS than young men (10% vs 2%, $p < 0.01$). Young women were significantly more likely to be diagnosed with any anxiety disorder than young men (54% vs 28%, $p < 0.01$). There was no significant difference found in the prevalence of anxiety disorders between Aboriginal and non-Aboriginal young people. The high prevalence of PTSD among young people in custody is associated with their experience of child abuse or trauma. It is also a significant factor relevant to the development of appropriate intervention and future treatment programs.

Table 6.1.4 Anxiety disorders

(Multiple response)	Young Men (n=254)		Young Women (n=39)		Aboriginal (n=140)		Non-Aboriginal (n=153)		Total (n=293)	
	n	%	n	%	n	%	n	%	n	%
PTSD	44	17.3	15	38.5	26	18.6	33	21.6	59	20.1
Generalised anxiety disorder	17	6.7	4	10.3	9	6.4	12	7.8	21	7.2
Social phobia	11	4.3	0	0.0	7	5.0	4	2.6	11	3.8
Anxiety disorder NOS	5	2.0	4	10.3	5	3.6	4	2.6	9	3.1
Obsessive compulsive disorder	5	2.0	3	7.3	3	2.1	5	3.3	8	2.7
Simple phobia	5	2.0	0	0.0	3	2.1	2	1.3	5	1.7
Any anxiety disorder	72	28.3	21	53.8	48	34.3	45	29.4	93	31.7

Note: NOS means "Not otherwise specified".

Substance-related disorders

Nearly two in three (64%) 2009 YPICHs participants were diagnosed with some form of alcohol or substance related disorder using the DSM-IV classification system. The specific drug types for the substance abuse and substance dependence disorders were not recorded, and are reported below as a generic substance category as per the DSM-IV classification.

Any abuse disorder is the number of young people in the sample who were diagnosed with at least one of the abuse disorders identified in the table below. Any dependence disorder is the number diagnosed with at least one of the dependence disorders identified in the table below. Any alcohol disorder is the number of young people in the sample who were diagnosed with either of the alcohol-related disorders. Similarly, any substance disorder is the number of young people in the sample who were diagnosed with either of the substance-related disorders identified in the table below. Finally, any alcohol and/or substance disorder is the number of participants who were diagnosed with any of the disorders listed below.

The two abuse disorders were more likely to occur than the two dependence disorders (62% vs 44.4%, $p < 0.001$). Substance abuse and substance dependence occurred more often than alcohol abuse and alcohol dependence respectively (51% vs 44%, $p < 0.001$).

Across the four disorders of alcohol abuse, substance abuse, alcohol dependence and substance dependence, no significant difference in prevalence was found between young men and young women. Significant differences were detected between Aboriginal and non-Aboriginal young people: Aboriginal young people were more likely to be diagnosed with a substance abuse disorder (58% vs 42%, $p < 0.02$) and also with a substance dependence disorder (47% vs 32%, $p < 0.04$). By comparison, among NSMHWB participants aged 16-24, 15.5% of young men and 9.8% of young women were found to have a substance use disorder in the past year (ABS, 2008c).

Further differences between the groups are found when disorders are combined. Aboriginal young people were more likely to be diagnosed with a substance disorder (either abuse and/or dependence) than non-Aboriginal young people (59% vs 43%, $p < 0.02$). Aboriginal young people were more likely to be diagnosed with a dependence disorder (either alcohol and/or substance) than non-Aboriginal young people (51% vs 38%, $p < 0.02$). Aboriginal young people were more likely to be diagnosed with a substance and/or alcohol disorder (either abuse and/or dependence) than non-Aboriginal young people (69% vs 58%; $p < 0.03$).

Table 6.1.5 Substance-related disorders

	Young Men (n=254)		Young Women (n=39)		Aboriginal (n=140)		Non-Aboriginal (n=153)		Total (n=293)	
	n	%	n	%	n	%	n	%	n	%
(Multiple response)										
Substance abuse	125	49.4	19	48.7	80	57.6	64	41.8	144	49.3
Alcohol abuse	106	41.9	21	53.9	63	45.3	64	41.8	127	43.5
Substance dependence	100	39.5	14	35.9	65	46.8	49	32.0	114	39.0
Alcohol dependence	53	20.9	13	33.3	30	21.4	36	23.5	66	22.5
Any abuse disorder	156	61.4	25	64.1	94	67.1	87	56.9	181	61.8
Any substance disorder	130	51.2	19	48.7	83	59.3	66	43.1	149	50.9
Any dependence disorder	113	44.5	17	43.6	72	51.4	58	37.9	130	44.4
Any alcohol disorder	109	49.2	21	53.8	64	45.7	66	43.1	130	44.4
Any alcohol and/or substance disorder	161	63.4	25	64.1	97	69.3	89	58.2	186	63.5

Schizophrenia and other psychotic disorders

One in twenty (6%) participants in the 2009 YPICHs had ever experienced schizophrenia or another psychotic disorder. Due to the small numbers detected with schizophrenia and brief psychotic disorder in the sample, caution is needed when interpreting these results. Only Aboriginal young people (N=7) were found to have a diagnosis of brief psychotic disorder. There were two young people diagnosed with substance induced psychotic disorder and one young person diagnosed with schizoaffective disorder-bipolar type. The diagnoses of cyclothymia, schizoaffective disorder- depression type, schizophreniform disorder and psychotic disorder NOS were screened for, but not detected in this sample. By comparison, the 2007 NSMHWB reported that 1% of the Australian population were found to have schizophrenia (ABS, 2008c).

Table 6.1.6 Schizophrenia and other psychotic disorders

	Young Men (n=254)		Young Women (n=39)		Aboriginal (n=140)		Non-Aboriginal (n=153)		Total (n=293)	
	n	%	n	%	n	%	n	%	n	%
(Multiple response)										
Schizophrenia	6	2.4	2	5.1	3	2.1	5	3.3	8	2.7
Brief psychotic disorder	6	2.4	1	2.6	7	5.0	0	0.0	7	2.4
Any schizophrenia or other psychotic disorder	12	4.7	4	10.3	11	7.9	5	3.3	16	5.5

Disorders usually first diagnosed in infancy, childhood or adolescence

Attention and behavioural disorders

Over two-thirds (70%) of 2009 YPICHs participants were found to have an attention or behavioural disorder, using the DSM-IV classification system. Any behavioural disorder is the number of young people who were diagnosed with a least one of the following: conduct disorder, oppositional defiant disorder; disruptive behavioural disorder NOS. Any attention disorder is the number of participants diagnosed with attention deficit hyperactivity disorder (ADHD) and ADHD NOS. Any attention or behavioural disorder is the number of participants with at least one diagnosis from the list below. All five attention and behavioural disorders in the K-SADS-PL were detected in this sample.

Fifty-nine per cent of young people surveyed were diagnosed with conduct disorder. There were significant differences within gender and Aboriginality for the diagnosis of conduct disorder. Young women were more likely to be diagnosed than young men (72% vs 57%, $p < 0.02$), and Aboriginal young people were more likely to have conduct disorder than non-Aboriginal young people (66% vs 53%, $p < 0.05$).

The same pattern is seen for the diagnosis of oppositional defiant disorder (ODD), which accounted for 12% of the sample. Young women were more likely to be found with ODD than young men (31% vs 9%, $p < 0.001$). Aboriginal young people are also more likely to be diagnosed with ODD than non-Aboriginal young people (18% vs 7%, $p < 0.01$). ADHD was found in 30% of the population, and again, young women were much more likely to be diagnosed with ADHD than young men (49% vs 27%; $p < 0.01$). Four young men were diagnosed with ADHD NOS and three young men were diagnosed with disruptive disorder NOS (these are not shown in the table below due to small numbers). By comparison, the prevalence of ADHD found in the 2007 NSMHWB was found to be 11%, with a higher prevalence in boys than in girls (ABS, 2008c). This suggests the prevalence of ADHD is between two and four times higher for young men and young women in custody than found in the general community.

Table 6.1.7 Attention and behavioural disorders

	Young Men (n=254)		Young Women (n=39)		Aboriginal (n=140)		Non-Aboriginal (n=153)		Total (n=293)	
	n	%	n	%	n	%	n	%	n	%
(Multiple response)										
Conduct disorder	145	57.1	28	71.8	92	65.7	81	52.9	173	59.0
ADHD	68	26.8	19	48.7	45	32.1	42	27.5	87	29.7
Oppositional defiant disorder	23	9.1	12	30.8	25	17.9	10	6.5	35	11.9
Any behavioural disorder	154	60.6	8	79.5	99	70.7	86	56.2	185	63.1
Any attention disorder	72	28.3	19	48.7	46	32.9	45	29.4	91	31.1
Any attention and/or behavioural disorder	172	67.7	32	82.1	105	75.0	99	64.7	204	69.6

Other mental disorders

The K-SADS-PL also screened for other mental disorders such as adjustment disorders, eating disorders, pervasive developmental disorders, tic disorders and elimination disorders. Ten young people (3%) were found to have a separation anxiety disorder, with no differences by gender (despite nine of them being young men) or Aboriginality. One young man was diagnosed with adjustment disorder with depressed mood. One young woman was diagnosed with bulimia (0.3% of the sample). Two young men were diagnosed with Asperger's disorder. There were no young people found with tic disorders or elimination disorders. Participants were embarrassed by the questions related to elimination disorders, and some refused to continue with the K-SADS-PL screening interview if further questions similar to these were asked. These questions were dropped from the K-SADS-PL screening interview after testing was completed at three centres, in order to facilitate the completion of this instrument.

Although methodological differences make comparisons between studies difficult, the prevalence rates for mental health disorders reported here are consistent with previous local and international surveys, and confirm that high levels of need exist in this population (Vermeiren et al., 2006). As found in previous surveys, gender differences exist for many disorders, with young women showing a greater number of psychiatric diagnoses, more psychiatric admissions, greater experience of abuse and neglect and higher rates of suicidal behaviour. Rates for suicidal and self-harming behaviour are also consistent with other studies of detainees and at risk groups (Abram et al., 2008; Chavira et al., 2010). The results have important implications for the delivery of services in custodial settings, for the management of transitions such as discharge from custodial to community settings, and for efforts to coordinate the work of agencies to meet the high level of needs so often found amongst detainees.

6.2 Psychiatric history

People with mental illness may access a range of service types including a specialist mental health service, general health service or care provided in a residential setting (ABS, 2008c). In 2006/07, there were 19,400 hospitalisations (973 per 100,000) for mental and behavioural disorders for 13-19 year olds, with a bed day rate of 5,819 per 100,000 population and females having twice the male bed day rate. The majority of mental health-related hospital admissions were for mood disorders (26%), followed by behavioural syndromes (22%), schizophrenia and related disorders (21%) and substance use related disorders (9%) (AIHW, 2008e).

Among 2009 YPICHS participants, less than one in ten (9%) young people had ever been admitted to a psychiatric unit, with significantly more young women reporting this than young men (28% vs 6%, $p < 0.001$). Aboriginal young people were also more likely than non-Aboriginal young people to report having ever been admitted to a psychiatric unit (11% vs 7%) but this was not statistically significant.

Table 6.2.1 Ever admitted to a psychiatric unit

	Young Men		Young Women		Aboriginal		Non-Aboriginal		Total	
	n	%	n	%	n	%	n	%	n	%
No	258	93.8	29	72.5	136	88.9	151	93.2	287	91.1
Yes	17	6.2	11	27.5	17	11.1	11	6.8	28	8.9
Total	275	100.0	40	100.0	153	100.0	162	100.0	315	100.0

Justice Health has expanded the number of Children's Courts attended by mental health nurses to divert young offenders with a mental illness into appropriate treatment and away from juvenile detention. Just under one in ten (9%) participants report having been seen by a mental health nurse

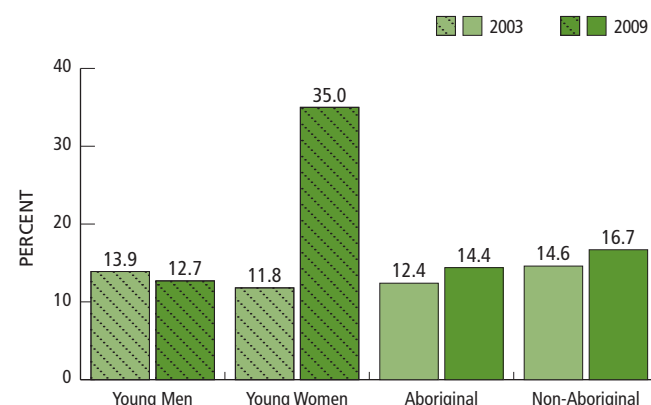
in the courts, with significantly more young women reporting this than young men (23% vs 7%, $p < 0.01$). In contrast to the greater number of Aboriginal young people reporting having ever been admitted to a psychiatric unit, more non-Aboriginal young people reported that they had been seen by a mental health nurse in the courts than Aboriginal young people (11% vs 8%), but the difference was not statistically significant. The 9% of young people who had seen a mental health nurse in the courts is an underestimate of the proportion of young people in court who saw a mental health nurse since young people successful diverted from court to treatment are not included in the custody-based sample.

Table 6.2.2 Ever seen by a mental health nurse in the courts

	Young Men		Young Women		Aboriginal		Non-Aboriginal		Total	
	n	%	n	%	n	%	n	%	n	%
Yes	20	7.3	9	22.5	12	7.8	17	10.5	29	9.2
No	250	90.9	31	77.5	139	90.9	142	87.7	281	89.2
Don't know	5	1.8	0	0.0	2	1.3	3	1.9	5	1.6
Total	275	100.0	40	100.0	153	100.0	162	100.0	315	100.0

Slightly more young people in 2009 reported that they currently had a mental health problem for which they were not receiving treatment than in 2003 (16% vs 14%). There was no difference between Aboriginal and non-Aboriginal young people regarding unmet mental health treatment needs, but significantly more young women reported that they required additional mental health treatment than young men (35% vs 13%, $p < 0.001$). Of the 49 participants who indicated they had untreated mental health problems, the majority (86% of young women, 71% of young men) indicated they wanted counselling in custody for these problems. Common reasons why young people did not access services for these problems included: not knowing who to go and see, being embarrassed and not thinking anyone could help them.

Table/Fig 6.2.3 Current mental health problems for which treatment not being received



	2003			2009		
	n	Total	%	n	Total	%
Young Men	28	202	13.9	35	275	12.7
Young Women	2	17	11.8	14	40	35.0
Aboriginal	11	89	12.4	22	153	14.4
Non-Aboriginal	19	130	14.6	27	162	16.7
Total	30	219	13.7	49	315	15.6

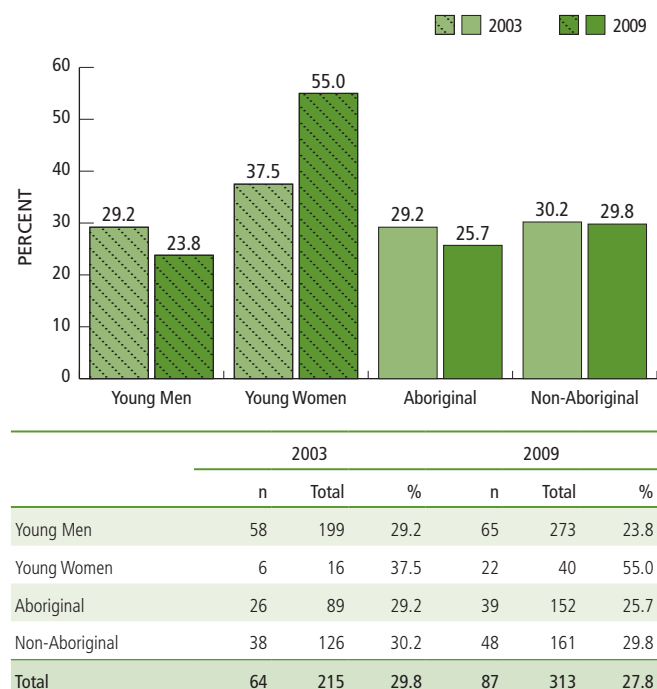
6.3 Psychological Distress

The Kessler Psychological Distress Scale (K10) (Kessler et al., 2002) is a simple measure of psychological distress. The tool is most often used to screen for psychological distress within the general adult population and has been widely used in population studies in Australia, such as the Population Health Surveys (Victorian Population Health Survey, 2001). The tool itself is a self-report questionnaire with ten questions about emotional states, each with a five-level response scale. The tool can be given to patients to complete, or alternatively the questions can be read to the patient by the practitioner. Each item is scored from one 'none of the time' to five 'all of the time'. Scores of the ten items are then summed, yielding a minimum score of 10 and a maximum score of 50. The creators of the K10 have not published details on scoring the scale and therefore various interpretations have been used. Research has revealed strong associations between high scores on the K10 and a current diagnosis of an affective or anxiety disorder, although there are weaker associations between K10 scores and other mental disorder categories (Andrews & Slade, 2001). Within general population samples it is widely accepted that low scores indicate low levels of psychological distress and high scores indicate high levels of psychological distress. It should be remembered that the K10 has not been validated in a clinical, offender or child and adolescent population. Interpretation of the scores within an incarcerated juvenile offender population should therefore be made with caution.

In 2004/05 across Australia, among young people aged 18-24 years, 19% of females and 12% of males had high or very high psychological distress (AIHW, 2007). In the 2007 NSW Population Health Survey, 11% of males and 13% of females aged 16 years and older reported high or very high psychological distress, with slightly higher rates found for people aged 16 to 24 years (12% males and 15% of females) (DOH, 2010a). In the 2008 School Students Health Behaviours Survey, psychological distress was measured by a composite of three questions (not the K10) asking about whether the student in the past six months 1) felt unhappy, sad or depressed; 2) felt nervous, stressed or under pressure; and 3) was in trouble because of behaviour. If a student responded 'almost more than I can take' to one or more of these three questions, they were considered to have high psychological distress. Using these criteria, 13% of students experienced high psychological distress in the past six months, with females significantly more likely to have high psychological distress than males (DOH, 2008a).

For the total sample, there was little variation between the 2003 YPICHs (30%) and 2009 YPICHs (28%) in levels of high or very high psychological distress (K10>22). However, young men with high psychological distress decreased from 29% to 24% from 2003 to 2009, and young women with high psychological distress increased from 38% in 2003 to 55% in 2009. Young women were significantly more likely to experience high psychological distress than young men in 2009 (55% vs 24%, $p<0.001$). This finding is in keeping with data from other studies (Teplin et al., 2002; Singleton et al., 1998) that have shown increased numbers of female offenders presenting with psychiatric disorders and higher rates of self-harm, demonstrating the need for effective screening and provision of support for this vulnerable group.

Table/Fig 6.3.1 High psychological distress



Incarceration itself is a stressful event that is likely to impact negatively on the psychological well-being of many of the young people who find themselves in custody, and may be reflected in their responses to a measure such as the K10. In addition, stressful and damaging experiences prior to incarceration, such as parental neglect, family dissolution, substance abuse, physical or sexual abuse and disenfranchisement from societal institutions and structures are all likely to increase levels of psychological distress.

6.4 Suicide

A comparison of Australian Bureau of Statistics data from 2005 and 2008 indicates a falling suicide rate for adolescents. The suicide rate reported in 2005 (for 15 to 19 year olds) was 8.3 per 100,000. Data from 2008 indicate that suicide rates in NSW for young people aged 15 to 24 years have fallen to 5.9 per 100,000. This is significantly lower than in the other states and in the general population (10.1 per 100,000) (ABS, 2010b). In 2004 in Australia, 272 young people aged between 12-24 years committed suicide (a rate of 8 per 100,000 young people) (AIHW 2007). This accounted for 14% of all suicide deaths in Australia and 19% of all deaths for this age group in 2004. In NSW in 2006, the death rate from suicide was 7.1 per 100,000 (11.6 in males and 2.9 in females), a decrease from 15.1 per 100,000 in 1997 (DOH, 2010a).

Young Aboriginal men (15 to 19 years) have a suicide risk four times higher than the general population (Patton & Burns, 1997). In addition, the presence of a number of factors can increase the risk of a suicide attempt including depression, disruption to psychological, educational and social development, legal problems, strain on personal relationships and the hazardous use of alcohol and other drugs (Gould & Kramer, 2001; DOH, 1999; Stevens, et al., 2008).

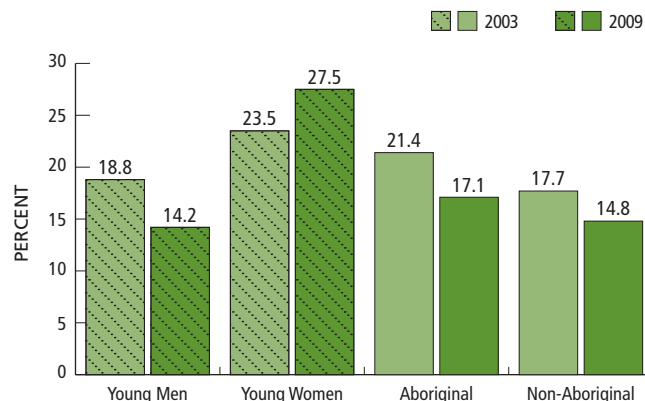
These risk factors are often found amongst young people involved in the criminal justice system. Indeed, the previous 2003 YPICHS and the Young People on Community Orders Health Survey (2006) indicated increased risk of suicide amongst this population of young people (Kenny & Nelson, 2008). In a follow-up study of the 2003 YPICHS, those young people with suicidal/self-harm ideation were found to have also reported more severe psychopathology, childhood trauma and current psychological distress. Emotional abuse was found to be a significant risk factor for suicidal ideation, whilst physical abuse was a significant risk factor for self-harm ideation (Kenny et al., 2008).

The 2009 YPICHS data indicate a continuing higher risk of suicide amongst this population. Despite the falling rates of suicide in the general population, there has been little significant change between 2003 and 2009 in self-reported suicidal behaviour amongst this custodial sample. This indicates the need to routinely assess suicide and self-harm risk on entry to a juvenile justice centre and for all staff to monitor young people for changes in adjustment while in custody.

Suicidal Ideation

There was a slight decrease in young people who had ever thought about suicide between 2003 (19%) and 2009 (16%). Significantly more young women had thought about suicide than young men (28% vs 14%, $p < 0.03$). Of the 50 participants who had ever thought about suicide, the majority (82% of young women, 54% of young men) had thought about it in the last year. More than half (64% of young women, 54% of young men) had ever made a plan about attempting suicide. Of the 28 participants who had made a suicide plan, the majority (86% of young women, 52% of young men) had done so in the last year. In the 2003 YPICHS, only 37% of young men who had ever thought about suicide had made a suicide plan in the last year.

Table/Fig 6.4.1 Ever thought about committing suicide



	2003			2009		
	n	Total	%	n	Total	%
Young Men	38	202	18.8	39	274	14.2
Young Women	4	17	23.5	11	40	27.5
Aboriginal	19	89	21.4	26	152	17.1
Non-Aboriginal	23	130	17.7	24	162	14.8
Total	42	219	19.2	50	314	15.9

The experience of coming into custody does not always impact on feelings about suicide in young people (40% reported no change). Of those participants who had considered suicide, 24% reported that coming into custody increased those feelings and 36% reported a decrease in those feelings. Results from the 2003 YPICHS showed 26% of young men reported an increase, whilst 50% reported a decrease in their suicidal feelings.

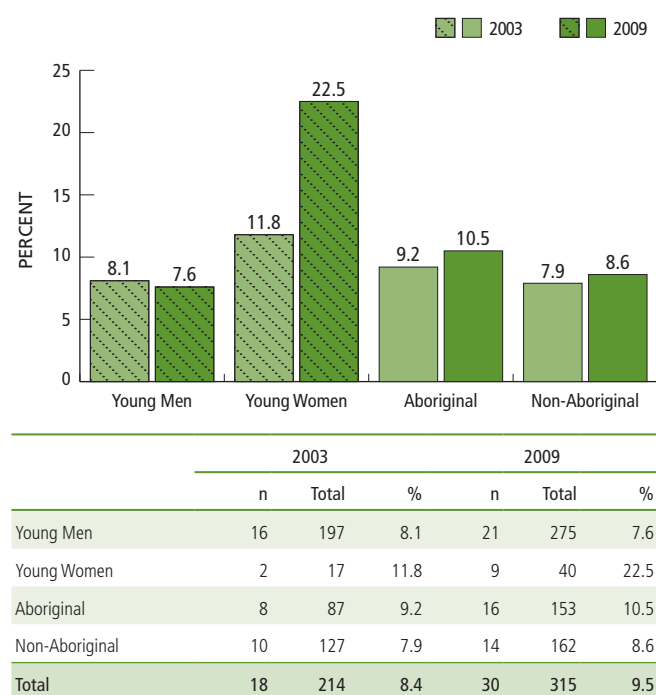
Table 6.4.2 Changes in feelings about committing suicide since being in custody (if any thoughts of suicide)

	Young Men		Young Women		Aboriginal		Non-Aboriginal		Total	
	n	%	n	%	n	%	n	%	n	%
Greatly decreased	12	30.8	2	18.2	7	26.9	7	29.2	14	28.0
Somewhat decreased	3	7.7	1	9.1	0	0.0	4	16.7	4	8.0
Stayed the same	15	38.5	5	45.5	12	46.2	8	33.3	20	40.0
Somewhat increased	5	12.8	1	9.1	4	15.4	2	8.3	6	12.0
Greatly increased	4	10.3	2	18.2	3	11.5	3	12.5	6	12.0
Total	39	100.0	11	100.0	26	100.0	24	100.0	50	100.0

Suicide attempts

The increased risk of suicide amongst young people in custody is clearly reflected in those who reported having ever attempted suicide. Overall, approximately one in ten (10%) participants had made at least one suicide attempt, with significantly more young women in 2009 reporting having attempted suicide than young men (23% vs 8%, $p < 0.01$). There were few differences between 2003 and 2009 for having ever attempted suicide, despite the time range of the question changing from "ever" to "in past year". It is possible that the participants did not distinguish clearly between the time ranges when reporting attempts at suicide.

Table/Fig 6.4.3 Ever attempted suicide



*Note for 2003, this question referred to suicide attempts in the past year, not ever.

Half (50%) of young people who had ever attempted suicide had done so in the past year, reflecting an annual prevalence rate of 5% among all 2009 YPICHS participants. Among these 15 young people who had attempted suicide in the past year, one-third (33%) attempted suicide only once, just under half (47%) had attempted suicide two to three times and the remaining 20% had attempted suicide four or more times in the past year.

Whilst the majority of suicide attempts occur when the young person is in the community (65%), over one-quarter (27%) had made attempts both in custody and in the community. Young women reported more suicide attempts in the community than the young men (78% vs 59%). Of those that had attempted suicide, over half (62%) reported fewer attempts whilst in custody.

Suicide methods

Of the 30 participants who attempted suicide, the most common method for attempting suicide was attempted hanging (53%), followed by attempted to cut-off oxygen (20%) and slashing wrists (20%). Young women who were attempting suicide were more likely to slash their wrists than young men (44% vs 5%) and young men were more likely than young women to attempt to hang themselves (67% vs 22%), though neither of these differences were statistically significant.

Suicide amongst people known to the young person

One in eight (13%) participants had known someone in their school to have committed suicide. Young men were significantly more likely to have known someone at school who had committed suicide than young women (14% vs 8%, $p = 0.001$).

Table 6.4.4 Anyone in your school committed suicide

	Young Men		Young Women		Aboriginal		Non-Aboriginal		Total	
	n	%	n	%	n	%	n	%	n	%
No, never	230	84.6	32	80.0	127	84.7	135	83.3	262	84.0
Yes, in the last year	7	2.6	1	2.5	5	3.3	3	1.9	8	2.6
Yes, more than a year ago	31	11.4	2	5.0	14	9.3	19	11.7	33	10.6
Don't know	4	1.5	5	12.5	4	2.7	5	3.1	9	2.9
Total	272	100.0	40	100.0	150	100.0	162	100.0	312	100.0

One in seven (15%) participants had known someone who had committed suicide. This was approximately half of the proportion of participants in the 2003 YPICHS (32%). Moreover, more Aboriginal young people reported having known someone who committed suicide.

Table 6.4.5 Anyone you know personally committed suicide

	Young Men		Young Women		Aboriginal		Non-Aboriginal		Total	
	n	%	n	%	n	%	n	%	n	%
No, never	207	76.1	29	72.5	107	71.3	129	79.6	236	75.6
Yes, in the last year	28	10.3	3	7.5	16	10.7	15	9.3	31	9.9
Yes, more than a year ago	36	13.2	7	17.5	26	17.3	17	10.5	43	13.8
Don't know	1	0.4	1	2.5	1	0.7	1	0.6	2	0.6
Total	272	100.0	40	100.0	150	100.0	162	100.0	312	100.0

6.5 Self harm

Self-harm and suicidal ideation reflect differing levels of intention about hurting or killing oneself. Both self-harm and suicide attempts can predict future suicidal behaviour (Kenny & Nelson, 2008; Kenny et al., 2008). In 2004/05, there were 7,874 hospital separations for intentional self-harm among young people aged 12-24 years, a rate of 218 separations per 100,000 young people (AIHW, 2007). Nearly three-quarters (71%) of these hospitalisations were for females, who had a rate 2.5 times that for young males. Hospitalisations in NSW for intentional self-harm have increased for all persons aged 15 years and over from 53 per 100,000 in 1989/90 to 153 per 100,000 in 2006/07. Women have had consistently higher prevalence of hospitalisations for self harm, with 50% more presentations in 2006/07 than males (185 vs 122 per 100,000) (DOH, 2010a). The highest prevalence of self harm is found among young people aged 15 to 24 years, who have a rate of 315 per 100,000, with young women aged 15 to 24 years having the highest rate (436 per 100,000) (DOH, 2010a). However it is likely that only a minority of young people who self-harm will seek medical treatment (survey data suggest only 10%) (De Leo & Heller, 2004). A 2002 survey of Year 10 and Year 11 students in Queensland found 12% had ever self-harmed and 6% self-harmed in the past year (De Leo & Heller, 2004).

Self-harm ideation

Over one in five (21%) participants had ever thought about hurting or injuring themselves (without suicidal intent). As found with reported suicide attempts, significantly more young women than young men had thoughts about self-harm (35% vs 19%, $p < 0.02$). Of the 65 participants who had ever considered self-harm, most (71% of young women, 51% of young men) had considered self-harm in the past year. Of these 36 participants who had considered self-harm in the past year, 56% of young women and 44% of young men had made a plan for self-harm in the past year. These results are similar to those in the 2003 YPICHS.

Table/Fig 6.5.1 Ever thought about hurting or injuring self



	2003			2009		
	n	Total	%	n	Total	%
Young Men	37	203	18.2	51	274	18.6
Young Women	3	17	17.7	14	40	35.0
Aboriginal	20	89	22.5	31	152	20.4
Non-Aboriginal	20	131	15.3	34	162	21.0
Total	40	220	18.2	65	314	20.7

Similar to thoughts about suicide, thoughts about self-harm did not change in 31% of young people after they entered custody. Of those who had thoughts about self-harm, 44% reported a decrease (45% in the 2003 YPICHS) in feelings about self-harm but 25% (30% in the 2003 YPICHS) reported an increase in those feelings since coming into custody.

Table 6.5.2 Changes in feelings about self-harm since being in custody (if any thoughts of self-harm)

	Young Men		Young Women		Aboriginal		Non-Aboriginal		Total	
	n	%	n	%	n	%	n	%	n	%
Greatly decreased	15	30.0	3	21.4	8	25.8	10	30.3	18	28.1
Somewhat decreased	6	12.0	4	28.6	5	16.1	5	15.2	10	15.6
Stayed the same	15	30.0	5	35.7	11	35.5	9	27.3	20	31.3
Somewhat increased	8	16.0	1	7.1	4	12.9	5	15.2	9	14.1
Greatly increased	6	12.0	1	7.1	3	9.7	4	12.1	7	10.9
Total	50	100.0	14	100.0	31	100.0	33	100.0	64	100.0

Self-harm attempts

Overall, 16% of participants reported that they had intentionally self-harmed at least once in their lifetime, the majority of whom had self-harmed in the past year. Young women were significantly more likely to have intentionally hurt or injured themselves than young men (35% vs 14%, $p < 0.001$). A slightly higher proportion (18%) of Aboriginal young people had harmed themselves than non-Aboriginal young people (15%), but this was not statistically significant.

Table 6.5.3 Intentionally hurt or injured self

	Young Men		Young Women		Aboriginal		Non-Aboriginal		Total	
	n	%	n	%	n	%	n	%	n	%
No	238	86.5	26	65.0	126	82.3	138	85.2	264	83.8
Yes, in last 12 months	25	9.1	11	27.5	19	12.4	17	10.5	36	11.4
Yes, not in last 12 months	12	4.4	3	7.5	8	5.2	7	4.3	15	4.8
Total	275	100.0	40	100.0	153	100.0	162	100.0	315	100.0

The data indicate that when young people do intentionally self-harm, they are likely to do so repeatedly. Of the 36 participants that reported intentional self-harm in the past year, 92% had done so two or more times in the past year. All of the young women and 88% of the young men had done so two or more times in the past year. In the 2003 YPICHs, of those young men who had self-harmed, significantly fewer (48%) had done so two or more times.

Among participants who have ever self-harmed, fewer reported self-harm incidents in the community (29%) than in custody (45%), whilst 26% had self-harmed both in custody and in the community. In the 2003 YPICHs, 55% of participants reported they had self-harmed whilst in custody during the previous year. Of those participants who reported intentional self-harm, young men (33%) were more likely than young women (18%) to self-harm in the community, whilst more young women (53%) than young men (42%) reported self-harm whilst in custody, but none of these differences were significant.

Self-harm methods

The most frequent reported self-harm method was slashing/cutting the body (71%), with young women reporting this self-harm method more often than young men (91% vs 61%), though this was not statistically significant. Other frequent methods reported were banging the head against a wall (32%) and repeated punching/kicking (29%). Of the 34 participants who had self-harmed in the past year, less than half (48% of young men, 45% of young women) had told anyone they were thinking of hurting or injuring themselves before they did so. The

care of a health professional was sought by 22% of young men and 18% of young women who self-harmed in the past year.

Just over half (52%) of participants who had self-harmed reported a decrease in self-harm behaviour after entering custody (52%), whilst 14% reported an increase. Non-Aboriginal young people (55%) reported a decrease more often than Aboriginal young people (48%). Young men were more likely than young women to report a change (either an increase or a decrease) in self-harm after entering custody.

6.6 Intellectual ability

Intellectual ability was measured in the 2009 YPICHs using full-scale versions of the Wechsler scales. A short form measure of ability, the Wechsler Abbreviated Scale of Intelligence (WASI) was used in the 2003 YPICHs (Wechsler, 1999). Full scale measures were chosen in order to better characterise the ability profiles of participants, and to judge more accurately the need to complete adaptive functioning assessments for those who scored in the range of intellectual disability. Wechsler scales incorporate a hierarchical model of intelligence in which general measured ability is based on four underlying factors: fluid intelligence, crystallised intelligence, working memory and processing speed.

Wechsler Scales are amongst the most widely used psychometric measures, and the current editions of both the child and adult forms are strongly based in current research regarding child and adult development (Flanagan & Kaufman, 2009; Lichtenberger & Kaufman, 2009). Both tests have been adapted to Australian English, and the children's version is accompanied by Australian norms. Furthermore, with the publication of Wechsler Adult Intelligence Scale (WAIS-IV), both tests now include the same five measures of intelligence – four composite indices which measure specific intellectual abilities (i.e., Verbal Comprehension, Perceptual Reasoning, Working Memory and Processing Speed) and a fifth score that represents general intellectual ability (i.e., Full Scale IQ). In the 2003 ABS Survey of Disability, Ageing and Carers, it was found that 4.3% of children aged 14 years or younger had an intellectual disability, which was more prevalent among boys (5.5%) (AIHW, 2009c).

One in seven (14%) 2009 YPICHs participants obtained a Full Scale IQ (FSIQ) score in the extremely low range (below 70), indicating the possible presence of an intellectual disability. This was a slight decrease from the 2003 YPICHs, in which 17% of participants obtained an extremely low FSIQ using the WASI. A WASI score in this range indicates the potential of a disability, and requires further investigation, including an assessment of adaptive functioning in order to confirm or rule out the presence of an intellectual disability. Adaptive functioning assessment was not undertaken in the 2003 YPICHs.

In the 2009 YPICHS, a higher proportion of young men had an extremely low FSIQ than young women (15% vs 5%) though this difference was not statistically significant. This was in contrast to the 2003 YPICHS, when more young women had a low FSIQ than young men (22% vs 17%). A greater proportion of Aboriginal young people had a low FSIQ than non-Aboriginal young people across both 2003 (26% vs 11%) and 2009 samples (20% vs 7%, $p < 0.001$).

Caution is needed, however, when comparing the 2003 and 2009 IQ data, as the 2003 YPICHS utilised the Wechsler Abbreviated Scale of Intelligence (WASI) (Wechsler, 1999). The WASI comprises only four subtests, and provides an estimate of overall intellectual ability which is less robust than one based on the full range of sub-tests found in the WISC-IV and WAIS-IV (Axelrod, 2002).

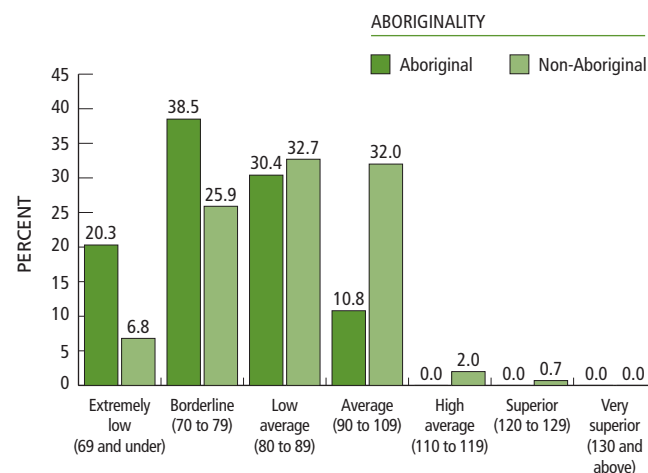
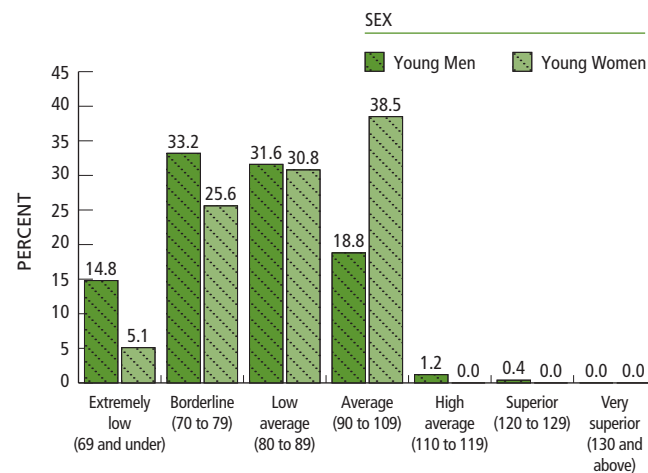
Table/Fig 6.6.1 Extremely low (<70) FSIQ Score



	2003			2009		
	n	Total	%	n	Total	%
Young Men	36	211	17.1	38	256	14.8
Young Women	4	19	21.5	2	39	5.1
Aboriginal	25	98	25.5	30	148	20.3
Non-Aboriginal	15	132	11.4	10	147	6.8
Total	40	230	17.4	40	295	13.6

The majority of the 2009 YPICHS (77%) scored in the low average range or below. Only four young people (1.3%) scored in the high average range or above. This sample shows a skewed distribution of FSIQ scores that is markedly different from the normative standardisation community sample of the Wechsler scales. The table below shows the expected normal distribution of test scores, along with the FSIQ scores obtained in the 2003 and 2009 YPICHS. Aboriginal young people were significantly more likely to have a low average or lower FSIQ score than non-Aboriginal young people (89% vs 65%, $p < 0.001$).

Table/Fig 6.6.2 Full Scale IQ (FSIQ) Scores

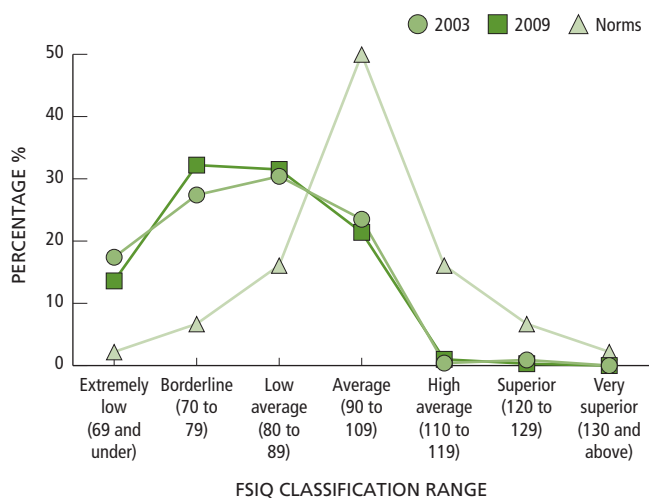


FSIQ qualitative range	Young				Non-Aboriginal				Total	
	Young Men	Women	Aboriginal	Non-Aboriginal	Aboriginal	Non-Aboriginal	Aboriginal	Non-Aboriginal	n	%
Extremely low (69 and under)	38	14.8	2	5.1	30	20.3	10	6.8	40	13.6
Borderline (70 to 79)	85	33.2	10	25.6	57	38.5	38	25.9	95	32.2
Low average (80 to 89)	81	31.6	12	30.8	45	30.4	48	32.7	93	31.5
Average (90 to 109)	48	18.8	15	38.5	16	10.8	47	32.0	63	21.4
High average (110 to 119)	3	1.2	0	0.0	0	0.0	3	2.0	3	1.0
Superior (120 to 129)	1	0.4	0	0.0	0	0.0	1	0.7	1	0.3
Very superior (130 and above)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total	256	100.0	39	100.0	148	100.0	147	100.0	295	100.0

FSIQ score: ATSI: $p < 0.001$

In both the 2003 and 2009 YPICHs, there was a similar distribution of scores, with the majority of the sample obtaining a FSIQ below the average range. In 2009, 77% of young people scored 89 or below in the FSIQ. In 2003, the comparable figure was 75%. Based on the normative standardisation sample, only 25% of the population is expected to score in this range.

Table/Fig 6.6.3 2003 and 2009 YPICHs FSIQ scores compared to normative samples



FSIQ classification range	2003	2009	Norms
Extremely low (69 and under)	17.4	13.6	2.2
Borderline (70 to 79)	27.4	32.2	6.7
Low average (80 to 89)	30.4	31.5	16.1
Average (90 to 109)	23.5	21.4	50
High average (110 to 119)	0.4	1	16.1
Superior (120 to 129)	0.9	0.3	6.7
Very superior (130 and above)	0	0	2.2

The composite indices are made up of groups of related subtests of the WISC-IV and WAIS-IV. They results obtained provide further evidence that the majority of the juvenile justice custodial population are functioning well below their same aged peers in a range of areas, especially in verbal comprehension. The FSIQ is generally considered the most reliable measure of overall intellectual ability, and comprises four composite indices as detailed below. The mean score for the WAIS-IV and WISC-IV scales is 100 (SD: 15).

The mean overall FSIQ score for the 2009 YPICHs was 81.4, which falls in the low average range of ability. Young women had a higher mean FSIQ than young men (85.6 vs 80.8; $p < 0.02$) and non-Aboriginal young people had a higher mean FSIQ than Aboriginal young people (85.4 vs 77.5; $p < 0.001$).

With the exception of FSIQs, comparisons with the 2003 YPICHs data cannot be readily made due to the different subscales and composite indices which the tests contain. However comparing FSIQs, the mean score was 82 (SD: 13; range 52 to 125) among 2003 YPICHs participants. This is in contrast to a normative group of age peers, half of whose scores would be expected to fall in the average range (scores between 90 and 109).

Table 6.6.4 Mean Index FSIQ Scores

Index	Young Men		Young Women		Aboriginal		Non-Aboriginal		Total	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Verbal Comprehension Index (VCI)	78.0	12.4	82.7	10.9	74.7	11.0	82.6	12.3	78.6	12.3
	Range: 50-114		Range: 63-100		Range: 50-110		Range: 53-114		Range: 50-114	
Perceptual Reasoning Index (PRI)	88.3	12.9	89.6	10.6	85.7	11.1	91.3	13.4	88.5	12.6
	Range: 51-121		Range: 67-105		Range: 51-111		Range: 57-121		Range: 51-121	
Working Memory Index (WMI)	86.2	13.3	89.6	14.0	83.7	11.8	89.6	14.4	86.7	13.4
	Range: 50-138		Range: 62-126		Range: 50-114		Range: 54-138		Range: 50-138	
Processing Speed Index (PSI)	86.2	13.0	94.1	12.3	84.4	12.3	90.1	13.4	87.2	13.2
	Range: 50-133		Range: 70-122		Range: 50-122		Range: 56-133		Range: 50-133	
Full Scale IQ Score (FSIQ)	80.8	12.3	85.6	10.3	77.5	10.7	85.4	12.2	81.4	12.1
	Range: 47-126		Range: 61-108		Range: 47-104		Range: 48-126		Range: 47-126	
Total	256	100	39	100	148	100	147	100	295	100

The Verbal Comprehension Index (VCI) is composed of subtests that measure verbal abilities requiring reasoning, comprehension and verbal concept formation. In the 2009 sample, significant differences were evident in the mean VCI scores by gender and Aboriginality. Young women had a higher mean VCI score than young men (82.7 vs 78.0, $p < 0.03$). Non-Aboriginal young people were found to have a higher mean VCI score than Aboriginal young people (82.6 vs 74.7, $p < 0.001$). This result must be considered with caution in light of issues discussed previously regarding the impact of cultural factors and educational disadvantage on standardised ability measures, especially those demanding formal language skills.

The Perceptual Reasoning Index (PRI) measures nonverbal reasoning and perceptual organisation. Differences were not detected between genders on this index score. However, non-Aboriginal young people had a higher average score than Aboriginal young people (91.3 vs 85.7, $p < 0.001$).

The Working Memory Index (WMI) measures the working memory (specifically simultaneous and sequential processing), attention, and concentration. Again, no differences were found with respect to gender. Non-Aboriginal young people were found to have a higher mean WMI score than Aboriginal young people (89.6 vs 83.7, $p < 0.001$).

The Processing Speed Index (PSI) measures speed of mental and graphomotor processing. Young women were found to have a higher mean PSI score than their young men counterparts (94.1 vs 86.2, $p < 0.001$). Non-Aboriginal young people had a higher PSI mean score than Aboriginal young people (90.1 vs 84.4, $p < 0.001$).

Adaptive Functioning

For those 40 young people who scored 70 or below on their FSIQ, an adaptive functioning assessment was required to ascertain whether deficits were also present in two or more areas of adaptive functioning, in order to investigate whether criteria for intellectual disability are met. The measure was the Adaptive Behaviour Assessment System – Second Edition (ABAS-II; Harrison & Oakland, 2003), which is frequently used in Juvenile Justice and other agencies in NSW. The measure contains questions on nine areas of functioning, including communication, self-care, home living, community use, functional academics, leisure, self-direction, social, health and safety.

Permission was granted by the NSW Department of Education for the survey team to request the assistance of teaching staff employed in the Education and Training Units co-located in seven of the Juvenile Justice Centres and one Juvenile Correctional Centre. ABAS-II forms were provided to each of the schools to be used for rating young people whose scores fell in the extremely low range of intellectual ability. Teachers were asked to complete the forms for the young people they taught. Forms were sent out for 40 young people.

The ABAS forms were unable to be completed for nine young people, as they were discharged from custody and had not returned at the time of follow up attempts to have this assessment completed. Forms were completed for 32 young men; six forms were not returned (four young men and two young women). The results from the ABAS are not included in this report.

6.7 Childhood abuse and neglect

The experience of childhood abuse, trauma and neglect can have an impact on psychological health over the entire life course. Trauma, abuse and neglect victims are known to suffer disorders in adolescence and adulthood including depression, post traumatic stress disorder, sexual dysfunction, suicidality, substance abuse and dependence, and multiple pathways between trauma and delinquency have been identified (Kerig et al., 2009; Malinosky-Rummell & Hansen, 1993; Maschi et al., 2008). Evidence also suggests a relationship between childhood trauma and psychotic disorders (Bendall et al., 2008); childhood trauma is also thought to have an impact on the development of antisocial and aggressive behaviour in adulthood, especially in men (Krischer & Sevecke, 2008). A substantial proportion of cases are unreported and the impact of these experiences, if untreated, may be serious. Accurate, non-invasive measures are therefore valuable aids in providing appropriate treatment.

In NSW in 2008/09, there were 34,078 notifications of child abuse or neglect for children aged 17 years or younger, for physical abuse (19%), sexual abuse (12%), emotional abuse (39%) or neglect (31%) (AIHW, 2010a). These notifications involved 14,052 children, 27% of whom were of Indigenous origin (AIHW, 2010a). Child protection substantiations had a rate of 7 per 1,000 children aged 0 to 17 years, with a lower rate among 13 to 17 year olds (4 per 1,000) (AIHW, 2008e). Indigenous children had five times the child protection substantiation rate as non-Indigenous children.

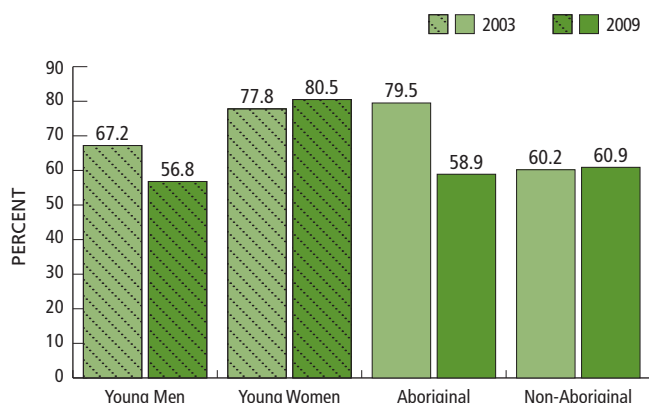
Endorsement of the minimisation and denial scale of the Childhood Trauma Questionnaire (CTQ) gives an estimate of the likelihood that abuse and neglect are being under-reported. Results across both the 2003 and 2009 sample are fairly consistent, and suggested that approximately 55% of young people in the sample were under-reporting their experiences. Young men were more likely than young women to under-report their experience of trauma (59% vs 37%, $p < 0.01$). No significant difference was found between Aboriginal and non-Aboriginal young people with respect to minimisation and denial of trauma.

Table 6.7.1 Under-reporting of childhood abuse and neglect experiences

	2003			2009		
	n	Total	%	n	Total	%
Young Men	110	198	55.6	156	266	58.7
Young Women	7	18	38.9	15	41	36.6
Aboriginal	45	88	51.1	87	151	57.6
Non-Aboriginal	72	128	56.2	84	156	53.9
Total	117	216	54.2	171	307	55.7

Overall, 60% of young people in the 2009 YPICHS reported experiencing at least one form of childhood abuse or neglect. This is a slight decrease from the 68% found in the 2003 YPICHS. Young women were significantly more likely than young men to have experienced any childhood abuse or neglect (81% vs 57%, $p < 0.001$). There was no difference by Aboriginality with regard to experience of childhood abuse or neglect.

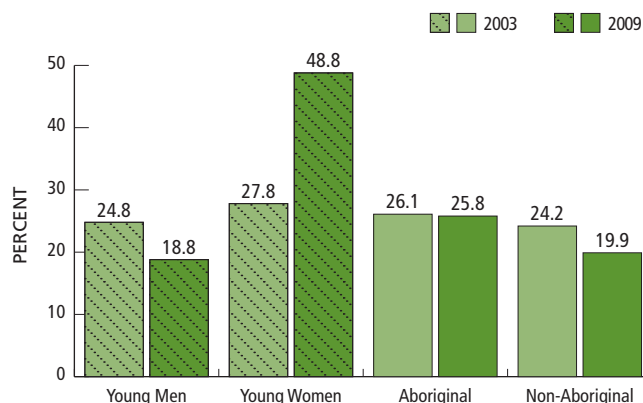
Table/Fig 6.7.2 Any childhood abuse or neglect (scores above 'none to low')



	2003			2009		
	n	Total	%	n	Total	%
Young Men	133	198	67.2	151	266	56.8
Young Women	14	18	77.8	33	41	80.5
Aboriginal	70	88	79.5	89	151	58.9
Non-Aboriginal	77	128	60.2	95	156	60.9
Total	147	216	68.1	184	307	59.9

Nearly one-quarter (23%) of participants in the 2009 YPICHS experienced some form of severe childhood abuse or neglect. In the 2003 YPICHS sample, experience of severe childhood abuse or neglect did not vary much by gender or Aboriginality, all rates falling in the 24% to 28% range. By contrast, in 2009, significantly more young women experienced severe childhood abuse or neglect than young men (49% vs 19%, $p < 0.001$). Aboriginal young people were also slightly more likely to experience childhood abuse or neglect than non-Aboriginal young people but this difference was not significant (26% vs 20%).

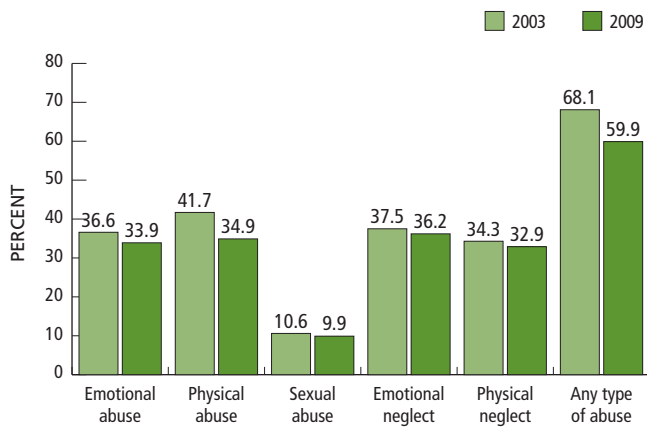
Table/Fig 6.7.3 Any severe childhood abuse or neglect



	2003			2009		
	n	Total	%	n	Total	%
Young Men	49	198	24.8	50	266	18.8
Young Women	5	18	27.8	20	41	48.8
Aboriginal	23	88	26.1	39	151	25.8
Non-Aboriginal	31	128	24.2	31	156	19.9
Total	54	216	25.0	70	307	22.8

The types of childhood abuse and neglect have been broken down to enable a comparison between the 2003 and 2009 YPICHS findings. Though self-reported overall abuse was higher in 2003, the proportion for most abuse types was fairly consistent across both surveys. The main decrease was for physical abuse, which declined from 42% in 2003 to 35% in 2009. In both 2003 and 2009, at least a third of the sample reported that they experienced at least one form of physical abuse, emotional abuse, physical neglect or emotional neglect. The proportion of young people who reported that they experienced sexual abuse remained at approximately 10%.

Table/Fig 6.7.4 Any childhood abuse or neglect by year (scores above 'none to low')



	2003		2009	
	n	%	n	%
Emotional abuse	79	36.6	104	33.9
Physical abuse	90	41.7	107	34.9
Sexual abuse	23	10.6	30	9.9
Emotional neglect	81	37.5	111	36.2
Physical neglect	74	34.3	101	32.9
Any type of abuse	147	68.1	184	59.9
Total	216	100.0	307	100.0

It is difficult to compare the findings from both surveys to rates within the Australian community, as few studies focus solely on the experiences of abuse and neglect of young people. The Australian Institute of Family Studies has provided a summary of the known recent rates of abuse and neglect across the Australian population (Price-Robertson et al., 2010). They cite methodological issues that plague measurement in this area, and provide prevalence estimates for the wider Australian community. Acknowledging the limitations of the data, the following comparisons with the YPICHS are useful:

- Child physical abuse rates are between 5% and 10% within the Australian community, making the YPICHS prevalence rates of 42% in 2003 and 35% in 2009 extremely high in comparison.
- Sexual abuse rates are estimated to be 4% to 16% for males and 7% to 36% for females within the Australian community. The variation here is large, due to different definitions of sexual assault. Although the data obtained from both YPICHS surveys are not strictly comparable with other reporting categories for sexual assault, it appears that the rates reported here are within the wide range reported for the general population.

- The prevalence of physical neglect is approximately 12% in the Australian community, which is substantially lower than that experienced in both YPICHS samples.
- The best available evidence indicates that the prevalence of emotional neglect in Australia is around 11%. As found with the physical abuse and physical neglect results, young people in custody reported a much higher prevalence, at least three times greater than found in the general community.

Significant differences were found by gender for all forms of abuse in the 2009 sample. Overall, young women were nearly twice as likely to have experienced any form of abuse as young men (81% vs 43%, $p < 0.001$).

Table 6.7.5 Childhood abuse or neglect by gender (scores above 'none to low')

	2003				2009			
	Young Men		Young Women		Young Men		Young Women	
	n	%	n	%	n	%	n	%
Emotional abuse	70	35.4	9	50.0	81	30.5	23	56.1
Physical abuse	80	40.4	10	55.6	82	30.8	25	61.0
Sexual abuse	16	8.1	7	38.9	14	5.3	16	39.0
Emotional neglect	75	37.9	6	33.3	85	32.0	26	63.4
Physical neglect	70	35.4	4	22.2	81	30.5	20	48.8
Any type of abuse	133	67.2	14	77.8	151	58.9	33	80.5
Total	198	100.0	18	100.0	266	100.0	41	100.0

No significant difference was found in the experience of abuse and neglect between Aboriginal and non-Aboriginal young people in custody in 2009. Aboriginal young people experienced similar levels of abuse overall as non-Aboriginal young people (59% vs 61%), but reported slightly higher rates of emotional and physical neglect and sexual abuse. The rates of emotional abuse and physical abuse were slightly lower for Aboriginal young people.

Table 6.7.6 Childhood abuse or neglect by Aboriginality (scores above 'none to low')

	2003				2009			
	Aboriginal		Non-Aboriginal		Aboriginal		Non-Aboriginal	
	n	%	n	%	n	%	n	%
Emotional abuse	32	36.4	47	36.7	48	31.8	56	35.9
Physical abuse	38	43.2	52	40.6	50	33.1	57	36.5
Sexual abuse	13	14.8	10	7.8	16	10.6	14	9.0
Emotional neglect	39	44.3	42	32.8	58	38.4	53	34.0
Physical neglect	35	39.8	39	30.5	52	34.4	49	31.4
Any type of abuse	70	79.5	77	60.2	89	58.9	95	60.9
Total	88	100.0	128	100.0	151	100.0	156	100.0

Emotional abuse is defined by Bernstein & Fink (1998) as the experience of verbal assaults on sense of worth or well-being, or any humiliating, demeaning or threatening behaviour directed towards a child. Over one-third (34%) of the 2009 sample experienced some form of emotional abuse. Of these 104 young people, 46% had experienced moderate or severe forms of emotional abuse. Young women experienced more emotional abuse than young men (56% vs 31%, $p < 0.001$). No significant differences were found between Aboriginal and non-Aboriginal young people in the experience of childhood emotional abuse.

Table 6.7.7 Emotional abuse scale

	Young Men		Young Women		Aboriginal		Non-Aboriginal		Total	
	n	%	n	%	n	%	n	%	n	%
None to low	185	69.5	18	43.9	103	68.2	100	64.1	203	66.1
Low to moderate	48	18.1	8	19.5	25	16.6	31	19.9	56	18.2
Moderate to severe	19	7.1	3	7.3	9	6.0	13	8.3	22	7.2
Severe to extreme	14	5.3	12	29.3	14	9.3	12	7.7	26	8.5
Total	266	100.0	41	100.0	151	100.0	156	100.0	307	100.0

The physical abuse scale on the CTQ reflects bodily assaults on a child that result in, or pose a threat of, injury (Bernstein & Fink, 1998). Similar to other forms of reported abuse, approximately one third (35%) of the 2009 sample had experienced some form of physical abuse. Of these 107 young people, 66% had experienced moderate or severe forms of physical abuse. Again, young women reported a higher proportion of physical abuse than young men (61% vs 31%, $p < 0.001$). No significant difference was found between Aboriginal and non-Aboriginal young people in the experience of childhood physical abuse.

Table 6.7.8 Physical abuse scale

	Young Men		Young Women		Aboriginal		Non-Aboriginal		Total	
	n	%	n	%	n	%	n	%	n	%
None to low	184	69.2	16	39.0	101	66.9	99	63.5	200	65.1
Low to moderate	33	12.4	3	7.3	18	11.9	18	11.5	36	17.4
Moderate to severe	21	7.9	5	12.2	10	6.6	16	10.3	26	8.5
Severe to extreme	28	10.5	17	41.5	22	14.6	23	14.7	45	14.7
Total	266	100.0	41	100.0	151	100.0	156	100.0	307	100.0

The CTQ sexual abuse scale refers to the experience of sexual contact or conduct between a child and an older person that may contain explicit coercion (Bernstein & Fink, 1998). The proportion of young people reporting an experience of sexual abuse is much lower than all other abuse or neglect reported here, and was found in only 10% of the sample population. Consideration must be given here, as with all scales reported, to the probability of under-reporting, as indicated by the 55% endorsement of the CTQ's minimisation/denial scale. A significantly higher proportion of young women reported sexual abuse than young men (39% vs 5%, $p < 0.001$). No significant difference was found between Aboriginal and non-Aboriginal young people in the experience of childhood sexual abuse.

Table 6.7.9 Sexual abuse scale

	Young Men		Young Women		Aboriginal		Non-Aboriginal		Total	
	n	%	n	%	n	%	n	%	n	%
None to low	252	94.7	25	61.0	135	89.4	142	91.0	277	90.1
Low to moderate	5	1.9	2	4.9	3	2.0	4	2.6	7	2.3
Moderate to severe	6	2.3	4	9.8	7	4.6	3	1.9	10	3.3
Severe to extreme	3	1.1	10	24.4	6	4.0	7	4.5	13	4.2
Total	266	100.0	41	100.0	151	100.0	156	100.0	307	100.0

Bernstein & Fink (1998) define Emotional Neglect to include circumstances such as the failure of caregivers to provide for a child's basic psychological and emotional needs, such as love, encouragement, belonging and support. Over one-third (36%) of 2009 YPICHS participants experienced some form of childhood emotional neglect. Of these 111 young people, 46% had experienced moderate or severe emotional neglect. Young women were significantly more likely to experience emotional neglect than young men (63% vs 32%, $p < 0.001$). No significant difference was found between Aboriginal and non-Aboriginal young people in the experience of childhood emotional neglect.

Table 6.7.10 Emotional neglect scale

	Young Men		Young Women		Aboriginal		Non-Aboriginal		Total	
	n	%	n	%	n	%	n	%	n	%
None to low	181	68.0	15	36.6	93	61.6	103	66.0	196	63.8
Low to moderate	46	17.3	14	34.1	32	21.2	28	17.9	60	19.5
Moderate to severe	27	10.2	6	14.6	19	12.6	14	9.0	33	10.7
Severe to extreme	12	4.5	6	14.6	7	4.6	11	7.1	18	5.9
Total	266	100.0	41	100.0	151	100.0	156	100.0	307	100.0

The CTQ physical neglect scale refers to the failure of caregivers to provide for a child's basic physical needs, including food, shelter, safety, health and supervision (Bernstein & Fink, 1998). One-third (33%) of the 2009 YPICHS population experienced some form of childhood physical neglect. Of these 101 young people, 68% had experienced moderate or severe physical neglect. Young women were more likely to experience physical neglect than young men (49% vs 31%, $p < 0.005$). No significant difference was found between Aboriginal and non-Aboriginal young people in the experience of childhood physical neglect.

Table 6.7.11 Physical neglect scale

	Young Men		Young Women		Aboriginal		Non-Aboriginal		Total	
	n	%	n	%	n	%	n	%	n	%
None to low	185	69.5	21	51.2	99	65.6	107	68.6	206	67.1
Low to moderate	25	9.4	7	17.1	14	9.3	18	11.5	32	10.4
Moderate to severe	33	12.4	3	7.3	18	11.9	18	11.5	36	11.7
Severe to extreme	23	8.6	10	24.4	20	13.2	13	8.3	33	10.7
Total	266	100.0	41	100.0	151	100.0	156	100.0	307	100.0

Chapter Summary

High rates of mental illness and intellectual disability were observed among 2009 YPICHS participants, with the most common diagnoses found for conduct disorder, alcohol or substance abuse and ADHD. Of particular note is the prevalence of mood disorders among young people in custody is seven times higher for young women and four times higher for young men than found in the general community. Also higher in custody was the prevalence of ADHD, which was found to be twice as prevalent among young women than in young men, and between two and four times higher than found in the general community. The majority of young people were found to have at least one psychological disorder with an average of 3.3 past and/or current psychological disorders for each participant.

Justice Health has expanded the number of Children's Courts attended by mental health nurses to divert young offenders with a mental illness into appropriate treatment and away from juvenile detention. Some young people reported having been seen by a mental health nurse in the courts, with significantly more young women reporting this than young men. Despite higher numbers of Aboriginal young people reporting having been admitted to a psychiatric unit, more non-Aboriginal young people reported that they had been seen by a mental health nurse in the courts. This may indicate the need for more targeted efforts to reach Aboriginal young people through the Children's Courts.

A number of young people reported that they currently had a mental health problem for which they were not receiving treatment and this was reported more frequently by young women. Most young people who indicated they had untreated mental health problems stated that they wanted counselling in custody for these problems. The 2009 YPICHS data indicate a continued higher risk of suicide amongst this population despite the falling rates of suicide in the general population. This confirms the continued need to routinely assess and monitor suicide and self-harm risk in Juvenile Justice Centres.

Intellectual ability in the range indicating possible intellectual disability was found to be high among Aboriginal young people with one in five having a full scale IQ score of less than 70, significantly higher than found for non-Aboriginal young people. When compared with the community norms, 2009 YPICHS participants were found to be functioning well below their same aged peers in all areas, and especially in verbal comprehension. This has implications for education and communication more generally in juvenile detention centres. Over half of young people in the 2009 YPICHS reported experiencing at least one form of childhood abuse or neglect. Significantly more young women experienced severe childhood abuse or neglect than young men and overall were nearly twice as likely to have experienced any form of abuse as young men.