

An analysis of the association between criminal behaviour and experience of maltreatment as a child in the Northern Territory

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EXECUTIVE SUMMARY

The aim of this paper is to explore the association between criminal offending and maltreatment as a child in the Northern Territory. The subject of this study is persons born in the Northern Territory between 1985 and 2003. This paper compares the criminal behaviours of children who were subject to one or more child protection orders (defined as maltreated) with those children who were not subject to such orders (defined as non-maltreated).

Based on the birth data and child protection order records of those born in the Northern Territory between 1985 and 2003, Indigenous children of either sex are approximately three times as likely as non-Indigenous to be maltreated. Males are 20% less likely to be maltreated than females for both Indigenous and non-Indigenous children.

The nature of traffic-related offences can hardly be classified as criminal; therefore, they have been excluded from the analyses.

Consistent with previous research conducted in other jurisdictions in Australia and overseas, maltreated children in the Northern Territory are more likely to offend as a youth compared with non-maltreated children. The youth offending rate for maltreated children is 154 per 1000 relevant population, almost five times the rate for non-maltreated children at 35 per 1000 relevant population.

The adult offending rate for individuals who were maltreated as children is 195 per 1000 relevant population, approximately 13% higher than the adult offending rate for those who were not maltreated as children, at 172 per 1000 relevant population. The difference is not statistically significant.

These results suggest that the experience of maltreatment as a child affects youth criminal behaviour far more so than subsequent adult criminal behaviour.

Surprisingly, those maltreated children who survive childhood without conviction as a youth have a much lower adult offending rate than their non-maltreated peers. The adult offending rate for maltreated children who do not have a prior youth offending record is 69 per 1000 relevant population, less than half of the rate for their non-maltreated peers at 139 per 1000 relevant population.

The overall offending rate (as youth and/or as adults) for maltreated children is 184 per 1000 relevant population, 72% higher than the offending rate for non-maltreated children of 107 per 1000 relevant population.

An analysis of population groups shows that maltreated children have a higher likelihood of offending compared with their non-maltreated peers for all groups except Indigenous males. The overall offending rate for maltreated Indigenous males is 5% lower than their non-maltreated peers.

Indigenous males who have been maltreated as children have a significantly higher offending rate for break-ins and theft compared with Indigenous males who were not

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maltreated. Both groups have similar offending rates for violent offences, but maltreated Indigenous males have a much lower offending rate for offences such as breach of domestic violence restraining order (DVOs) and illicit drug offences compared with Indigenous males who were not maltreated.

The offending rate for break-ins and theft (termed by criminologists as survival crime) for maltreated non-Indigenous males is only 27% lower than the rate for maltreated Indigenous males. This finding is unexpected given that the latest Northern Territory offending rate¹ for Indigenous males, 16 680 per 100 000 relevant population, is more than nine times the rate for non-Indigenous males, at 1737 per 100 000 relevant population. Additionally, the break-ins and theft offending rate for maltreated non-Indigenous females is higher than that of non-maltreated children in any population group except Indigenous males. Non-Indigenous females generally have a much lower offending rate than any other population group. These results indicate the significance of social inequality (in this case, maltreatment as a child) in explaining differences in criminal justice outcomes between Indigenous and non-Indigenous.

Maltreated children are much more likely to re-offend than non-maltreated children. Of those maltreated children who offended, 72% re-offended at least once and 25% re-offended five times or more. In comparison, of the non-maltreated children who offended, 48% re-offended at least once and 11% re-offended five times or more. Similar results were seen within individual population groups.

¹ ABS Recorded Crime - Offenders 2013-14

DEFINITIONS

The following definitions are used for the purposes of this document.

Adult – a person aged 18 or older

ANZSOC – Australian and New Zealand Standard Offence Classification (Australian Bureau of Statistics)

Child – a person aged under 18

Break-ins and theft – offences in ANZSOC Divisions 07 and 08

Maltreated – a person who received one or more court issued child protection order in the Northern Territory

Non-maltreated – a person who did not receive a child protection order in the Northern Territory

Offending rate – the rate at which a particular population group is proven guilty of committing a particular offence by the Northern Territory courts, expressed in offenders per 1000 relevant population

Traffic related offences – offences in ANZSOC Division 14 and Subdivision 041

Violent offences – offences in ANZSOC Division 01 to 06, excluding those in Subdivision 041

Youth – a person aged between 10 and 17

INTRODUCTION

Background

The link between child maltreatment and youth offending are well established by many research in Australia and overseas. This paper aims to produce Northern Territory-specific statistical evidence to inform the development of intervention initiatives that address the high offending rate in the Northern Territory. This study explores the association between maltreatment as a child in the Northern Territory and criminal offending as youth as well as adults.

In 2013-14, Indigenous children were 7.8 times as likely to be on care and protection orders as non-Indigenous children in the Northern Territory (AIHW, 2015). Over the same period, the offending rate for Indigenous young people (aged between 10 and 19) was approximately 5.8 times the rate for non-Indigenous young people in the Northern Territory (ABS, 2015). These statistics suggest a strong association between child maltreatment and youth offending in the Northern Territory.

Literature Review

Arguably the most comprehensive study on the association between maltreatment as a child and propensity to criminal offending is by Widom (1989) and an update of her study with co-author Maxfield in 2001. The study used 908 substantiated cases of child abuse and neglect processed by courts between 1967 and 1997, matched with 667 children who had no official record of abuse and neglect with control for sex, age, race and socioeconomic status. In her 1989 study she found that neglected children are 53% more likely to be arrested as youth and 38% more likely to be arrested as adults. The 2001 update of her study found that maltreated children are 59% more likely to be arrested as youth and 28% more likely to be arrested as adults. It also found that maltreated children were younger at their first arrest and were arrested more frequently.

Using data from the National Longitudinal Study of Adolescent Health, Currie and Tekin (2006) found that maltreated children have approximately double the probability of engaging in many types of crime, compared with non-maltreated children.

Stewart et al (2001) compared the offending behaviours of those children who were reported to the child protection services with concerns of maltreatment to those with no evidence of maltreatment after investigation. They found that 17% of maltreated children offended as youth compared with 10% of children for whom there was no substantiated maltreatment.

The research designs, subjects of studies and data sources used in the research quoted above are quite different and the time in which these researches were conducted span several decades, yet the findings are consistent in that maltreated children have a higher propensity of committing crime.

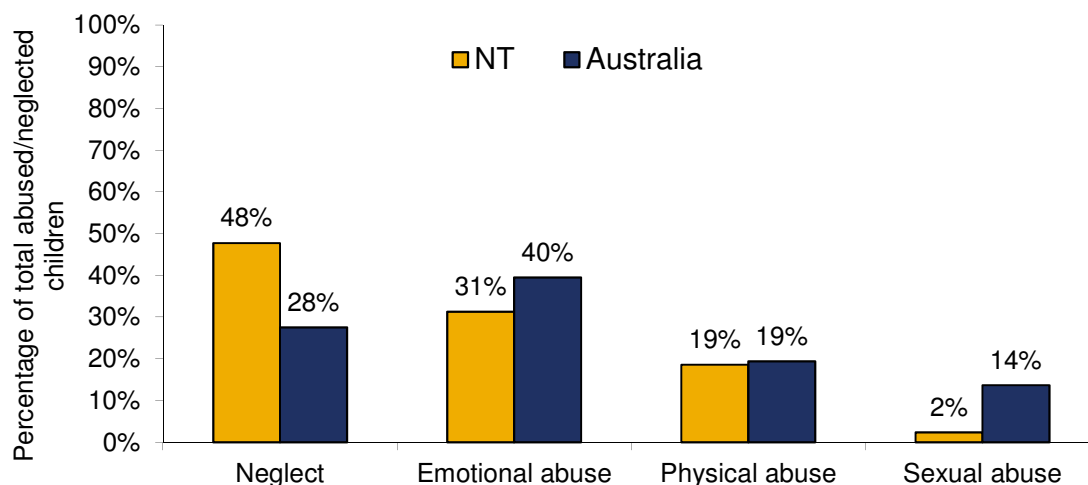
Child Protection in the Northern Territory

The Australian Institute of Health and Welfare collects child protection data from states and territories and publishes them annually. According to its report for the financial year 2013-14, there were 12 950 child protection notifications in the Northern Territory. Of these, 1634 were substantiated resulting in 370 children admitted to care and protection orders (AIHW, 2015).

Child abuses are generally grouped into four categories with hierarchy of severity in the following orders: sexual abuse, physical abuse, emotional abuse and neglect. In cases where children subject to multiple forms of abuses, they are being reported against the highest hierarchy.

Figure 1 compares the distribution of types of abuse/neglect between the Northern Territory and Australia as a whole.

Figure 1: Distribution of abuse/neglect types, Northern Territory versus Australia



Ref: Child Protection Australia 2013-14, AIHW

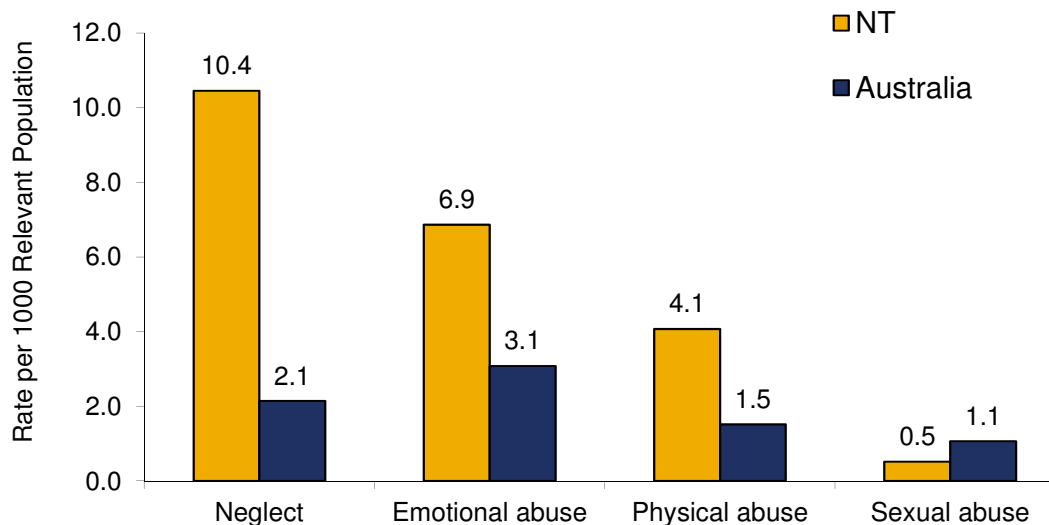
The distribution of abuse types experienced by Northern Territory children is quite different from that experienced in Australia as a whole. Almost half (48%) of the abuse in the Northern Territory fell into the category of neglect, compared with 28% nationally. The proportion of sexual abuse was 2% in the Northern Territory

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compared with 14% nationally. The report noted that sexual abuse in the Northern Territory has been under-reported due to some recording issues.

Figure 2 compares the rate of children subject to each type of abuse or neglect between the Northern Territory and Australia as a whole.

Figure 2: Rates of abuse/neglect, Northern Territory versus Australia



Ref: Derived from Child Protection Australia 2013-14, AIHW

The Northern Territory's neglect rate was almost five times the national average, more than double the national emotional abuse rate and physical abuse rate. Sexual abuse rate was lower in Northern Territory but it is primarily due to under-reporting.

METHODOLOGY

Data Sources

The targeted population of this study is persons born in the Northern Territory between 1985 and 2003. The birth and death data were supplied by the Births, Deaths and Marriages NT.

Child protection orders and conviction data were extracted from the Integrated Justice Information System (IJIS). IJIS is an operational system administered by the Department of the Attorney-General and Justice, Northern Territory Government.

A unique identification number is assigned to a person on his or her first formal contact with the justice system in the Northern Territory, whether as a child or an adult, a protected person or an offender. This number stays with the person for life. This feature of IJIS has enabled the link between persons who received child protection orders and any subsequent criminal behaviour, as the same identification number is used.

In this study, those who were subjects of court-issued child protection orders are regarded as maltreated children and the rest are regarded as non-maltreated. The criminal behaviours of these two groups are compared using the conviction data between 1 January 1995 and 31 March 2015 extracted from IJIS.

Limitations

1. The level of under-reporting of child maltreatment is not known, particularly in the remote communities of the Northern Territory.

Assuming the findings of previous studies on this topic are valid, under-reporting may inflate the offending rate of non-maltreated children. Given the size of the non-maltreated child population the impact on rates for non-maltreated children would be minimal. However, under-reporting could obviously result in underestimation of the offending rates for maltreated children.

2. The level of interstate migration may influence the result.

Unfortunately there is no data to track interstate movement of the in-scope population. Anecdotal evidence suggests that interstate movement amongst Indigenous people are minimal other than those reside in the Ngannytjarra Pitjantjatjara Yankunytjatjara (NPY) lands. However, it is a known fact that non-Indigenous people in Northern Territory are transient. Any in-scope individuals who moved interstate and were convicted in other jurisdictions would not appear in the analysis of offending behaviour. This may contribute to higher

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rates of criminal convictions for Indigenous individuals in the study, compared with non-Indigenous.

3. The types, severity and frequency of maltreatment were not separately analysed.

There is no data readily available to enable the analysis of maltreated children by type and severity of abuse. It would be useful if such data become available. This study uses the receipt of a child protection order as a proxy identifier for maltreatment. It is therefore assumed that the abuse belongs to the upper end of the severity scale.

4. Other factors that may influence a person's criminal behaviour such as socio-economic disadvantage, social isolation and disability are not considered in this research.

There are many other factors that could influence a person's criminal behaviours. Indeed some of the factors mentioned above are well established and proven to be strong predictors of criminal behaviour. However, the data are not readily available for the individuals in this study; hence, these factors are beyond the scope of this study.

Population

Data supplied by Births, Death and Marriages NT show that there were 83 531 persons born in the Northern Territory between 1985 and 2003. Of these, 1 276 individuals were maltreated² as a child, representing 1.5% of the population.

As shown in Table 1 the percentage of persons who were maltreated as children varies among population groups. Indigenous females were the highest at 2.9% followed by Indigenous males at 2.3%, non-Indigenous females at 1.0% and non-Indigenous male at 0.8%. Indigenous children, both males and females, were approximately three times as likely as non-Indigenous children to be maltreated, while males were 20% less likely to be maltreated than females for both Indigenous and non-Indigenous children.

Table 1: In-scope population

		<i>Maltreated</i>	<i>Not Maltreated</i>	<i>Total</i>
Female	Indigenous	443 (2.9%)	14 882	15 325
Female	Non-Indigenous	247 (1.0%)	25 104	25 351
Male	Indigenous	375 (2.3%)	15 787	16 162
Male	Non-Indigenous	211 (0.8%)	26 482	26 693
Total		1 276 (1.5%)	82 255	83 531

² Refer to definition

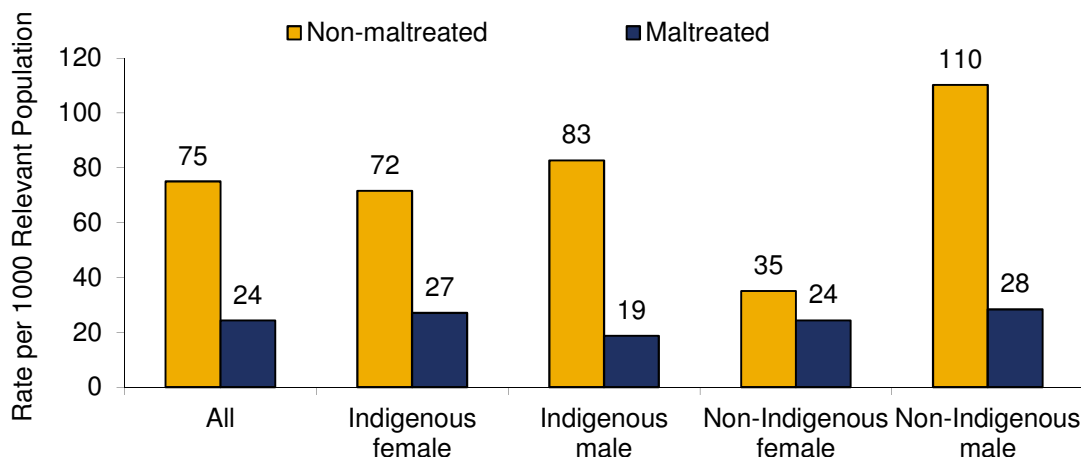
Of the 1276 maltreated children, 13 are known to have died, including nine Indigenous females, one non-Indigenous female and three Indigenous males. These 13 deceased people have been excluded from the calculation of offending rate.

Traffic Offences

Traffic-related offences represent the most serious offence for 43% of the in-scope population who offended.

Figure 3 shows the offending rate for traffic-related offences as the most serious offence between maltreated children and non-maltreated children.

Figure 3: Offending rate, offenders with traffic-related offences as the most serious offence, maltreated versus non-maltreated



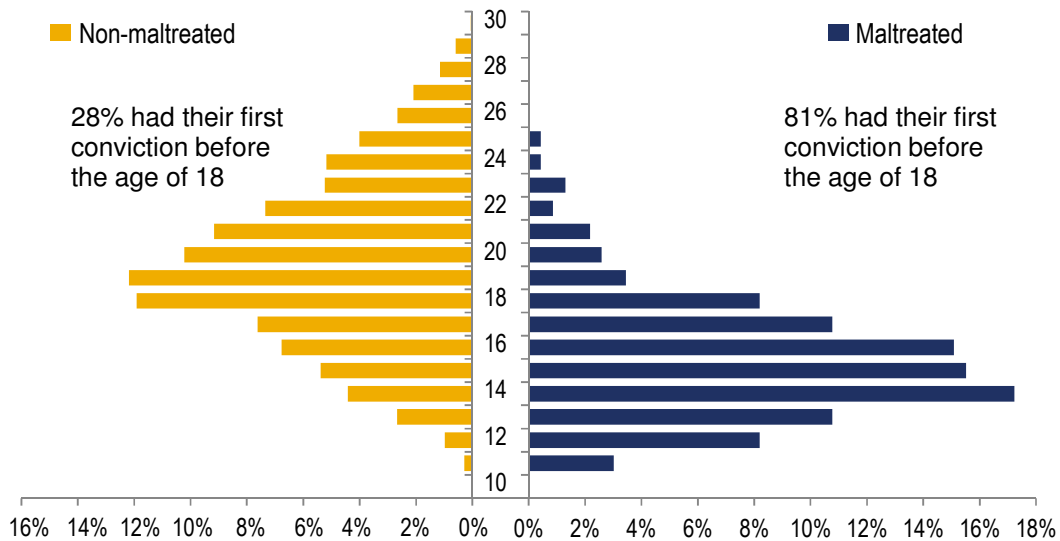
The offending rate for traffic-related offences as the most serious offence for non-maltreated children is significantly higher than that for maltreated children. The circumstances and motivations of committing traffic related offences are quite different from other offending behaviours. Losing concentration for a brief moment or making an error of judgement while driving could result in a generally law-abiding citizen receiving a traffic-related conviction. Behaviours of such nature are generally not considered in the same manner as offences against the person or against property. Given the nature of traffic-related offences, these offences have been excluded from consideration in the results of this study. Widom also excluded traffic offences from her 2001 study.

RESULTS

Overview of Offending

Figure 4 compares the distribution of age at first offending, maltreated versus non-maltreated.

Figure 4: Age at first offending, maltreated versus non-maltreated

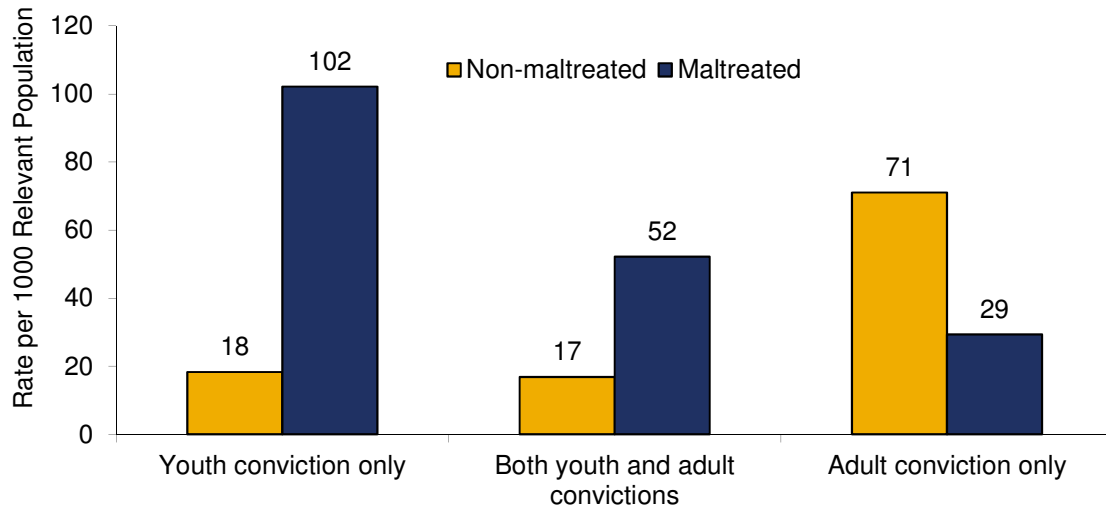


Maltreated children tend to commence offending at a much younger age than non-maltreated children. Of those who offended, 81% of maltreated children received their first conviction before they turned 18, compared with 28% of non-maltreated children.

The age distribution between maltreated children and non-maltreated children is slightly different. The age-standardised analysis of age at first offending shows that of those who offended, 74% of maltreated children had their first conviction before they turned 18, compared with 28% of non-maltreated children.

Figure 5 shows the comparative rates of offending as youth only, as both youth and as adults and as adults only for maltreated children and non-maltreated children.

Figure 5: Offending rate as adults and youth, maltreated versus non-maltreated



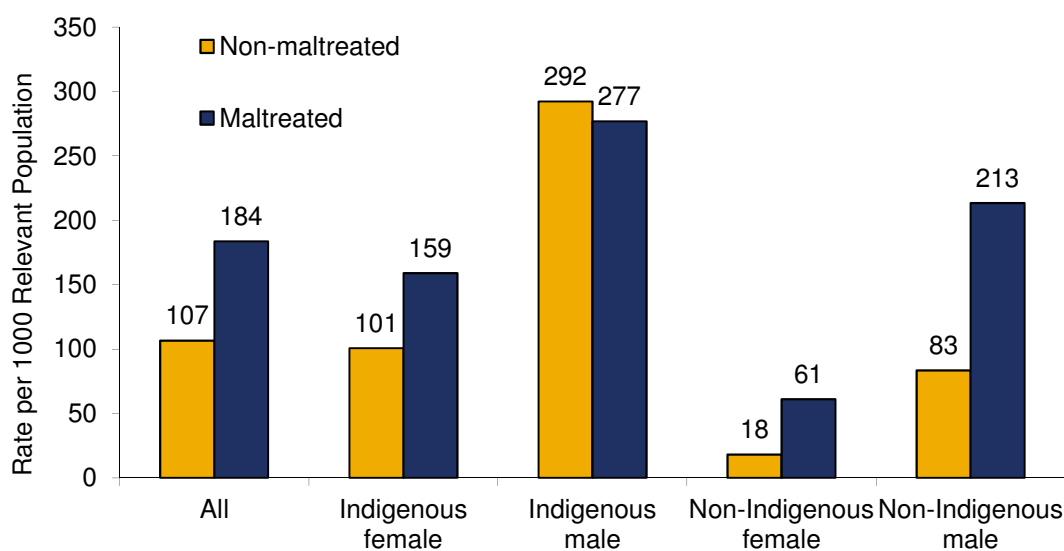
The offending rate for maltreated children who offend as youth only (those with no record of adult offending), at 102 per 1000 relevant population, is more than five times the rate for non-maltreated children at 18 per 1000 relevant population. The offending rate for maltreated children who offend as both youth and adults is also higher, at 52 per 1000 relevant population, compared with 17 per 1000 relevant population for non-maltreated children. However, the offending rate for maltreated children who offend as adults only (those with no record of offending as youth) is 29 per 1000 relevant population, much lower than the rate for non-maltreated children who offend as adults only (71 per 1000).

All Offending

This section compares the overall offending rate (i.e. including all offending regardless of whether the offence is committed as a youth or an adult) between maltreated and non-maltreated children.

Figure 6 shows the overall offending between maltreated and non-maltreated children by Indigenous status and sex.

Figure 6: Offending rate, all offences by Indigenous status and sex, maltreated versus non-maltreated



The overall offending rate for maltreated children is significantly (X^2 , $P>0.01$) higher than that of non-maltreated children, and this result holds in all population groups except Indigenous males. The overall offending rate for maltreated Indigenous males is 5% lower than that of non-maltreated Indigenous males although the difference is not statistically significant.

Indigenous Males

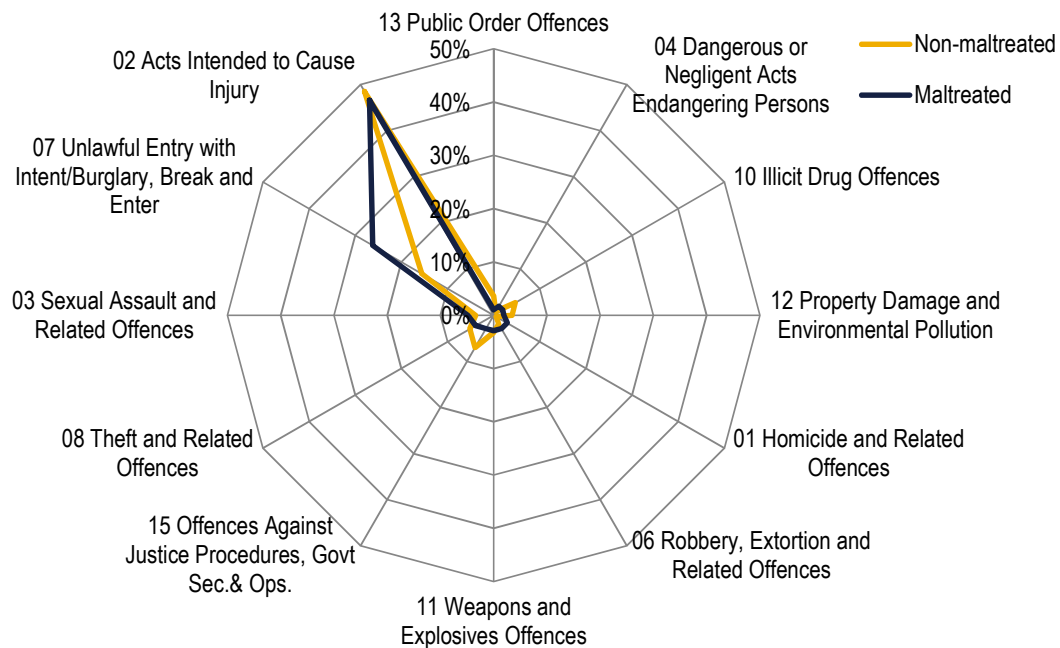
Indigenous males are the only population group in which maltreated children have a lower overall offending rate than non-maltreated children. Although the difference is not statistically significant, the result is unexpected and contradicts the findings from several decades of research on this topic in Australia and overseas.

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The offending rate for Indigenous males is much higher than that of any other population group for both maltreated and non-maltreated children. In order to understand the nature of their respective offending, comparisons of the distribution of their offences have been made.

Figure 7 compares the distribution of the most serious offences between the maltreated and non-maltreated Indigenous males.

Figure 7: Distribution of most serious offence of Indigenous males, maltreated versus non-maltreated

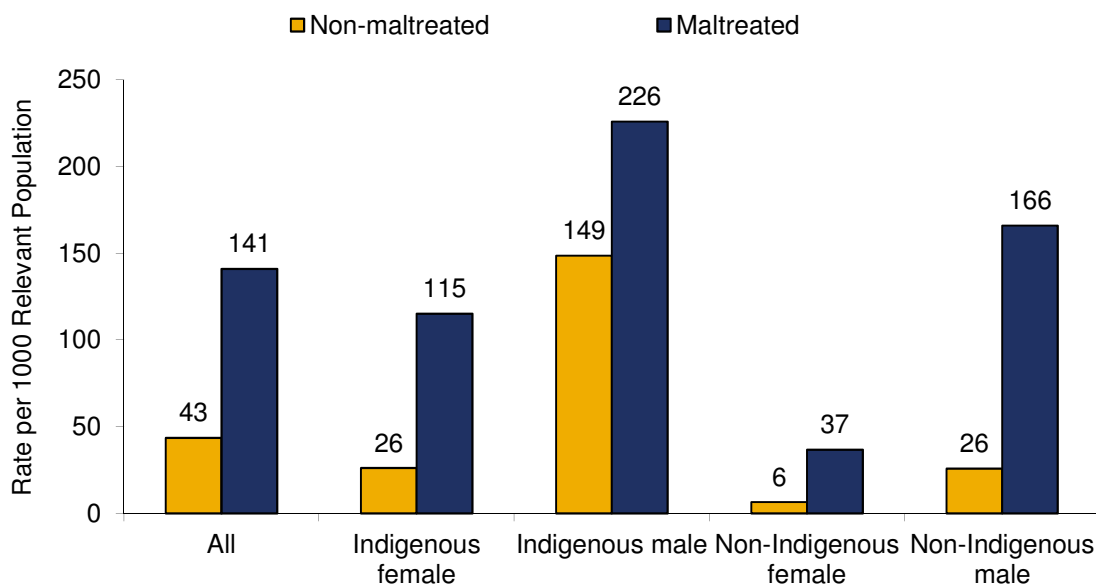


“Acts intended to cause injury” was the highest frequency most serious offence for both maltreated and non-maltreated Indigenous males. The percentage having “Unlawful Entry with Intent” as the most serious offence is much higher for maltreated Indigenous males at 26%, compared with 16% for non-maltreated Indigenous males. Non-maltreated Indigenous males have higher percentages in justice procedure offences (mainly breaches of domestic violence orders and other breaches) and illicit drug offences.

Break-in and Theft Offences

Figure 8 compares the offending rate for break-in and theft offences between maltreated and non-maltreated children as both youth and adults by Indigenous status and sex.

Figure 8: Offending rate, break-ins and theft, maltreated versus non-maltreated



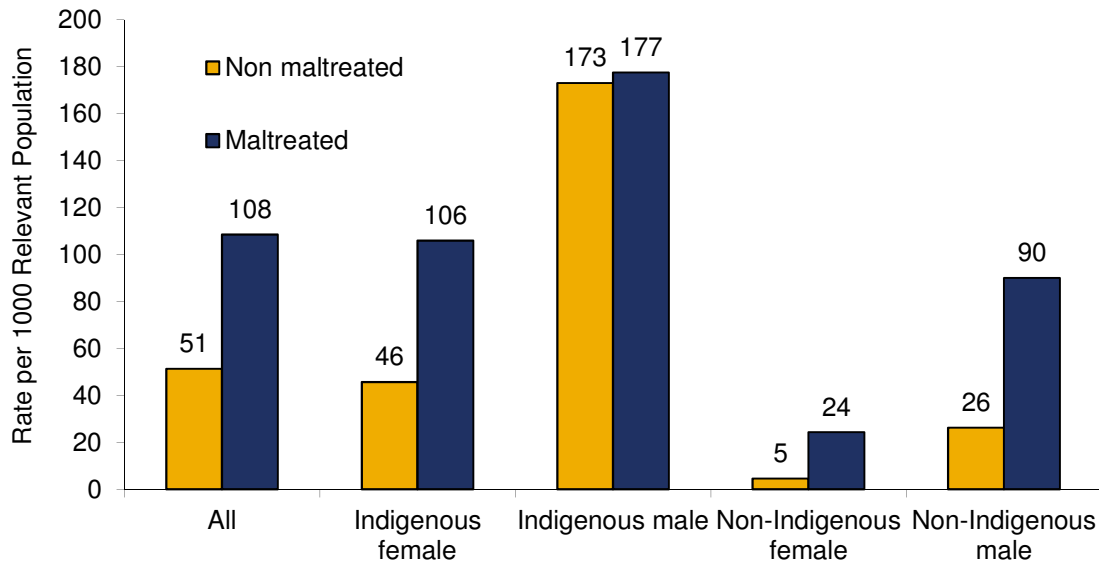
The offending rate for break-in and theft offences for maltreated children as both youth and adults is 141 per 1000 relevant population, more than three times the non-maltreated children rate of 43 per 1000 relevant population.

Maltreated children's offending rates for break-in and theft are higher than those for non-maltreated children in all population groups, albeit to varying degrees. Rates for maltreated non-Indigenous males and females are over six times higher than the rates for their non-maltreated counterparts; rates for Indigenous females are over four times higher and rates for Indigenous males are 52% higher than the rates for their non-maltreated peers.

Violent Offences

Figure 9 compares the violent offending rate between maltreated children and non-maltreated children by Indigenous status and sex (includes offences committed as either youth or adults).

Figure 9: Offending rate, violent offences, maltreated versus non-maltreated



The violent crime offending rate for maltreated children is 108 per 1000 relevant population, slightly more than double the rate for non-maltreated children.

The offending rate for maltreated children is higher than that of their non-maltreated counterparts in all population groups. The differences in offending rate are significant for all population groups except Indigenous males. The violent offending rate for maltreated Indigenous males is only 2% higher than that of their non-maltreated peers.

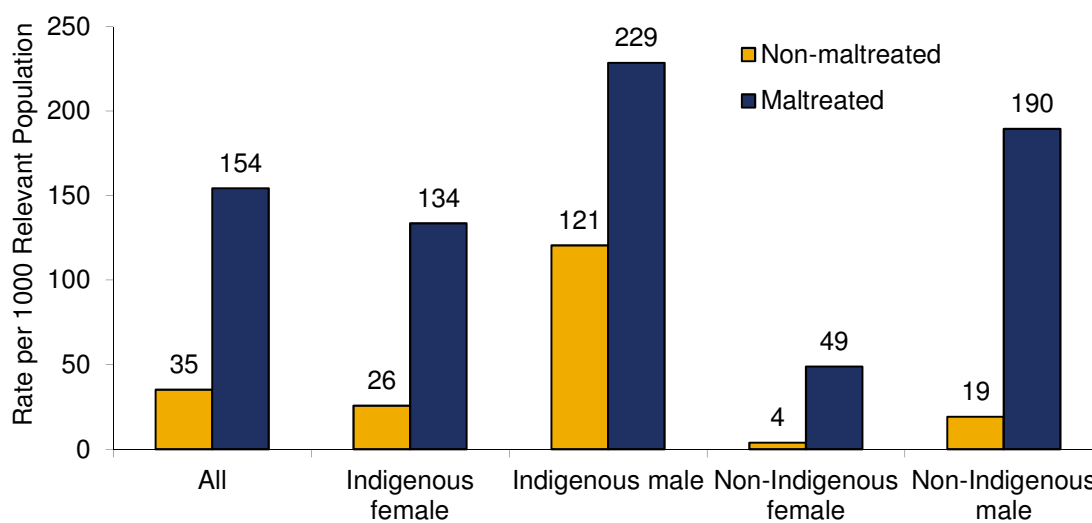
Youth Offending

This section compares the offending rate between maltreated and non-maltreated children as youth, regardless of whether they have any subsequent offending as adults or not.

All Offences

Figure 10 shows the overall youth offending rate (excluding traffic offences) per 1000 relevant population by Indigenous status and sex between maltreated and non-maltreated children.

Figure 10: Youth offending rate, all offences, maltreated versus non-maltreated



Consistent with the findings of extensive related research in Australia and overseas, maltreated children in this study have a much higher offending rate than non-maltreated children. At 154 per 1000 relevant population, the rate for maltreated children was almost five times the rate for non-maltreated children, at 35 per 1000 relevant population.

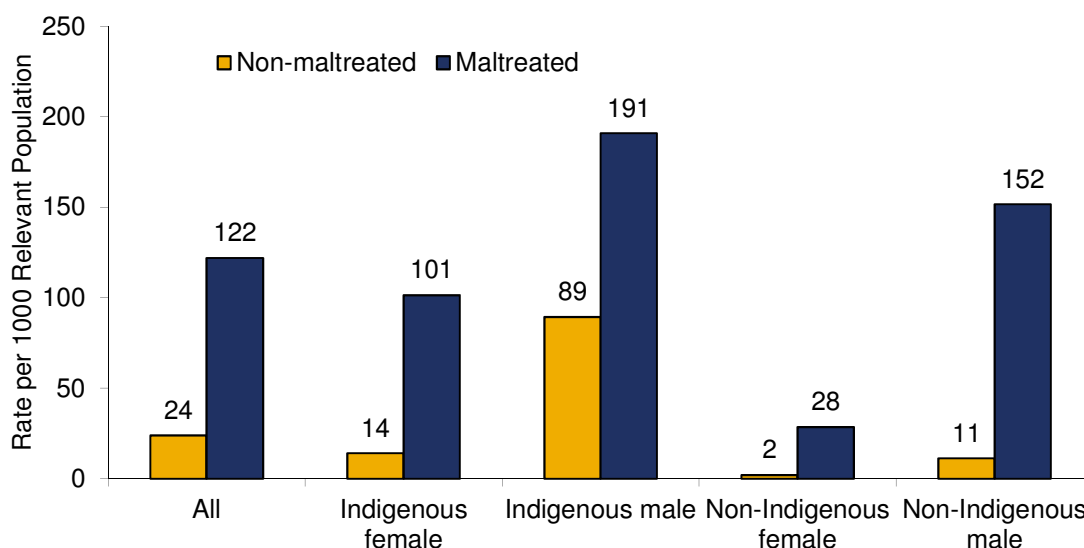
Maltreated children are more likely to offend than non-maltreated children as youth for all population groups, albeit to varying degrees. Non-Indigenous females recorded the biggest difference in offending rate between those maltreated and non-maltreated as a child (12 times), followed by non-Indigenous males (10 times), Indigenous females (5 times) and Indigenous males (less than double).

Break-in and Theft Offences

A high proportion of maltreated children in the Northern Territory belong to families of low socio-economic status. A study in New South Wales has found that youth participation in crime is positively correlated with social and economic stress, and that youth participation in property crime is significantly higher in postal code areas with high rates of child neglect and abuse (Weatherburn and Lind, 1997).

Figure 11 shows the youth offending rate for break-ins and theft offences by Indigenous status and sex between maltreated and non-maltreated children.

Figure 11: Youth offending rate, break-in and theft offences, maltreated versus non-maltreated



The youth offending rate for break-in and theft offences for maltreated children is 122 per 1000 relevant population, more than five times the rate for non-maltreated children at 24 per 1000 relevant population. This result was observed for all population groups.

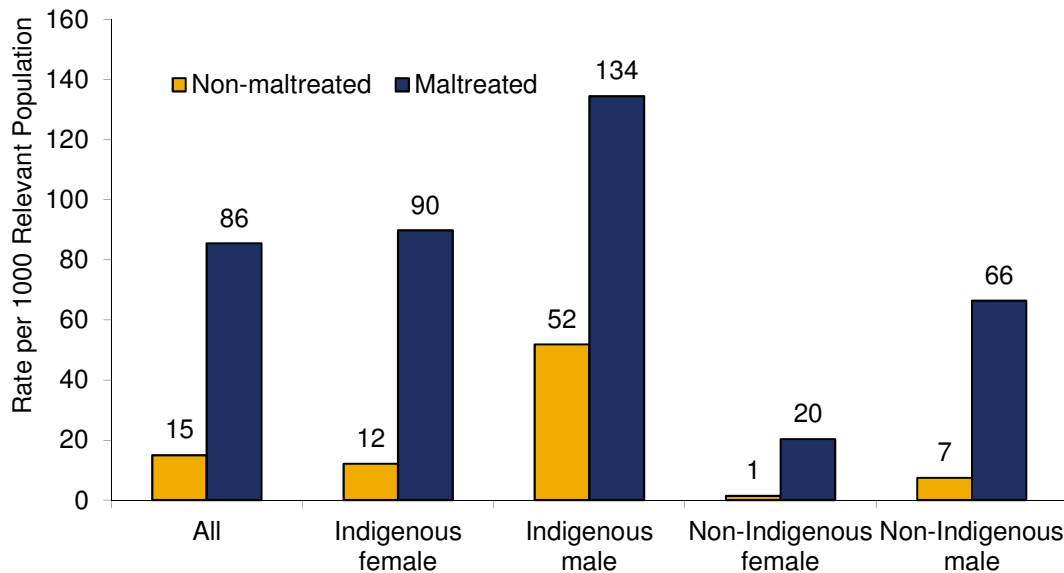
It is worth noting that maltreated non-Indigenous females' youth offending rate for break-in and theft is double the rate of non-maltreated Indigenous females and two and a half times the rate of non-maltreated non-Indigenous males. Given that non-Indigenous females generally are underrepresented in all forms of contact with the Northern Territory criminal justice system, the results illustrate the substantial difference in youth offending rate between maltreated and non-maltreated children for break-ins and theft offences.

Violent Offences

Violent offences constitute a significant proportion of the offences for which people are convicted in the Northern Territory. Research has found that a high proportion of maltreated children suffer from post-traumatic stress syndrome (Claussen and Crittenden, 1991 and Deblinger et al., 1989) and stress may result in the development of aggressive behaviour in youth (Widom, 1994).

Figure 12 shows the youth offending rate for violent offences by Indigenous status and sex between maltreated and non-maltreated children.

Figure 12: Youth offending rate, violent offences, maltreated versus non-maltreated



The violent crime youth offending rate for maltreated children is 86 per 1000 relevant population, more than five times the rate for their non-maltreated peers at 15 per 1000 relevant population. Similar results were observed in all population groups. The smallest difference in violent offending rate is between maltreated and non-maltreated Indigenous males.

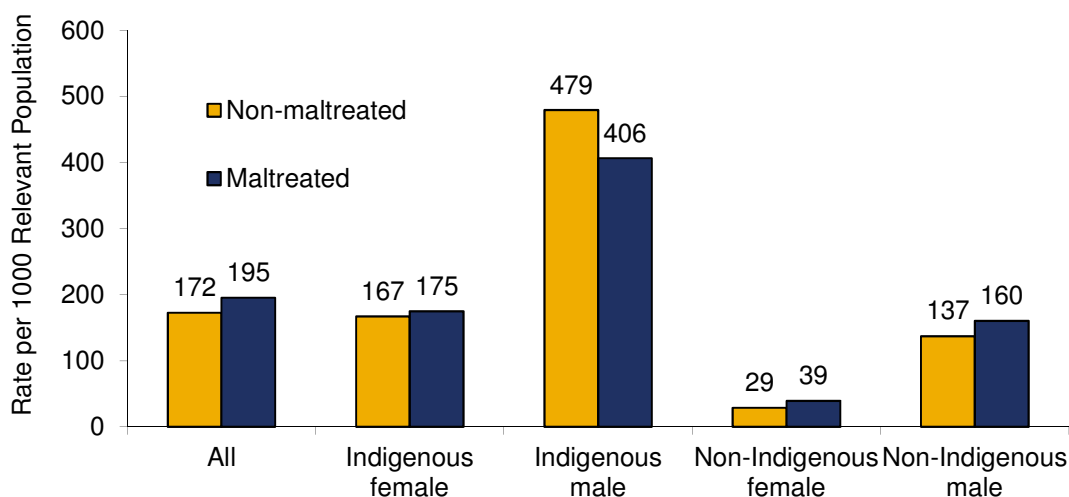
Adult Offending

The analyses in this section include only those persons born between 1985 and 1996 in the Northern Territory, as the youngest of this cohort would have turned 18 in January 2014. This section has two parts: adult offending regardless of prior youth offending, and adult offending with no prior youth offending.

Adult Offending Regardless of Prior Youth Offending

Figure 13 compares the overall adult offending rate (excluding traffic related offences) between maltreated and non-maltreated children by Indigenous and sex between maltreated and non-maltreated children.

Figure 13: Adult offending rate, all offences, maltreated versus non-maltreated



The overall adult offending rate of maltreated children, regardless of whether they have prior youth convictions or not, is 195 per 1000 relevant population. This is 13% higher than the adult offending rate for non-maltreated children at 172 per 1000 relevant population. The difference is not statistically significant. Widom (1989) found that maltreated children are 38% more likely to be arrested as adults compared to non-maltreated children. Her subsequent update of the same research in 2001 found that a difference of 28%. The 13% difference in this study falls well below the range of the two studies by Widom (1989 and 2001).

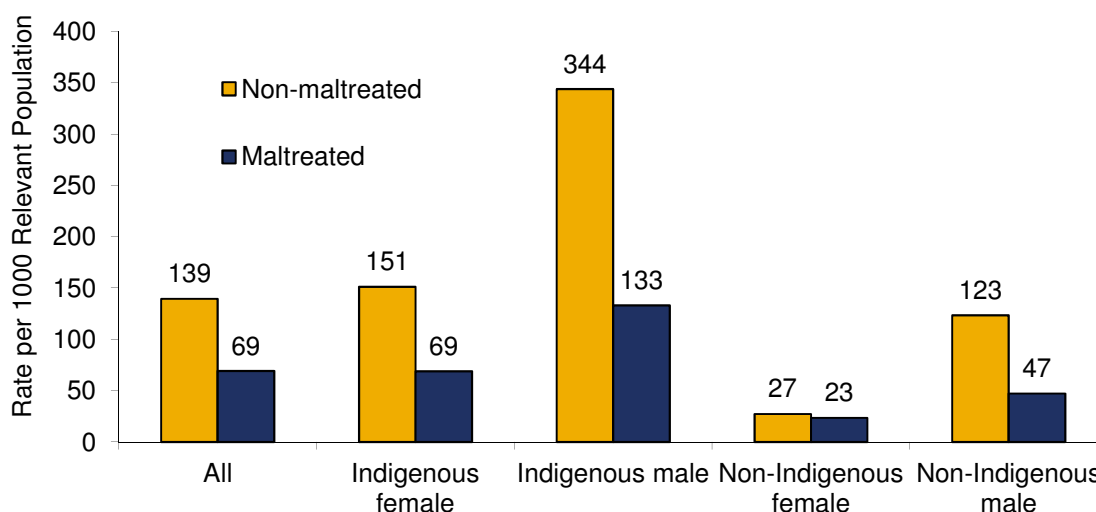
The differences in offending rate as adults between maltreated and non-maltreated children are not statistically significant for all population groups. Maltreated non-Indigenous males, non-Indigenous females and Indigenous females have a higher rate than their non-maltreated peers but maltreated Indigenous males have a

lower offending rate as adults than their non-maltreated peers. The unexpected result of maltreated Indigenous males having a lower adult offending rate than their non-maltreated peers is the main reason the Northern Territory result falls below the two studies by Widom (1989, 2001).

Adult Offending With No Prior Youth Offending

Figure 14 compares the adult offending rates of maltreated and non-maltreated children who do not have prior youth offending records.

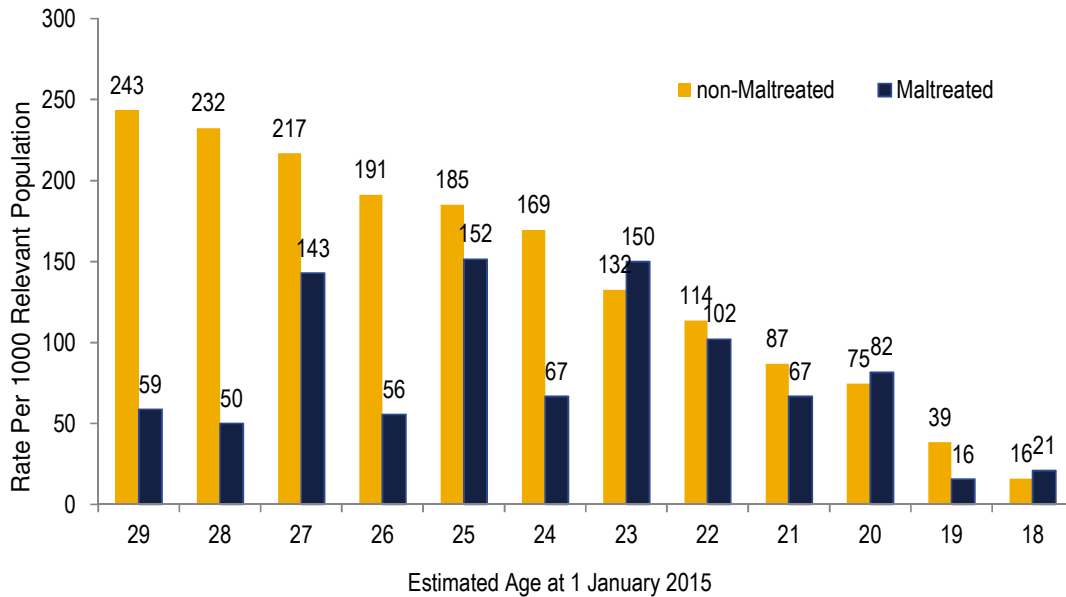
Figure 14: Adult offending rate, adults with no prior youth conviction, all offences, maltreated versus non-maltreated



The adult offending rate for maltreated children who do not have a prior youth offending record is 69 per 1000 relevant population, less than half of the rate for their non-maltreated peers at 139 per 1000 relevant population. The differences between maltreated and non-maltreated children are similar for all population groups, with the difference being the smallest for non-Indigenous females. This is hardly surprising given the low offending rate of non-Indigenous females in the general population.

The comparisons in Figure 14 have not accounted for the differences in the age distribution between maltreated and non-maltreated children. Figure 15 shows a comparison of adult offending rates of maltreated and non-maltreated children who do not have prior youth offending records by single year of age.

Figure 15: Adult offending rate, adults with no prior youth conviction by single year of age, all offences, maltreated versus non-maltreated



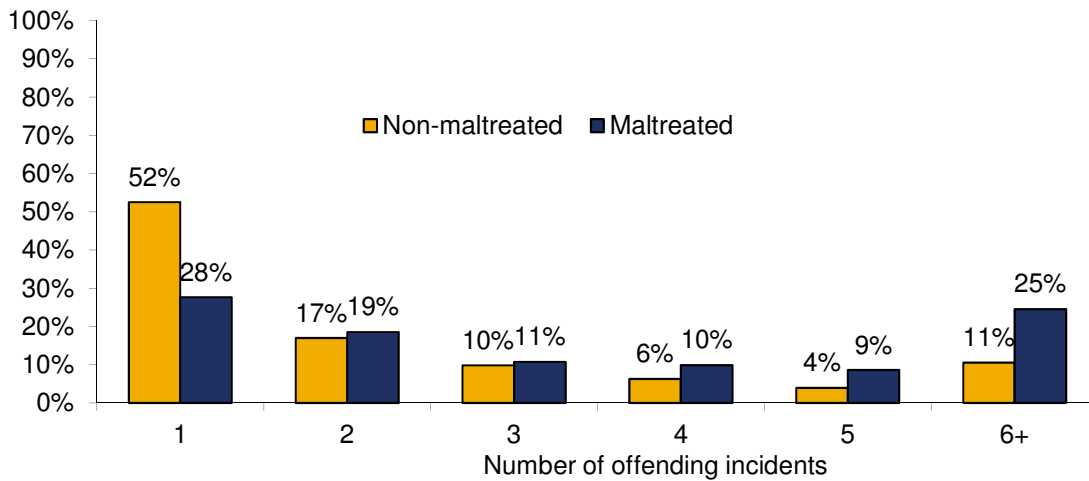
The finding that those children taken into care who are able to stay out of the youth offending system are less likely than the general population to offend as adults appears to be a unique finding in the literature examining the effects of child abuse on future offending behaviour. Owing to the limitations of this study, this finding should be viewed as preliminary. More research is needed to explore potential reasons for this finding.

Repeat Offending

Repeat offending or recidivism is an important measure of criminal offending behaviours. Widom (2001) found that maltreated children were arrested more frequently compared to their non-maltreated peers. In this study, repeat offending considered convictions for all types of offences (except traffic), whether or not the new offence represented an increase or decrease in severity.

Figure 16 compares the percentage of individuals by number of offending incidents for all offences (excluding traffic) between maltreated and non-maltreated children.

Figure 16: Percentage of individuals by number of offending incidents, maltreated versus non-maltreated

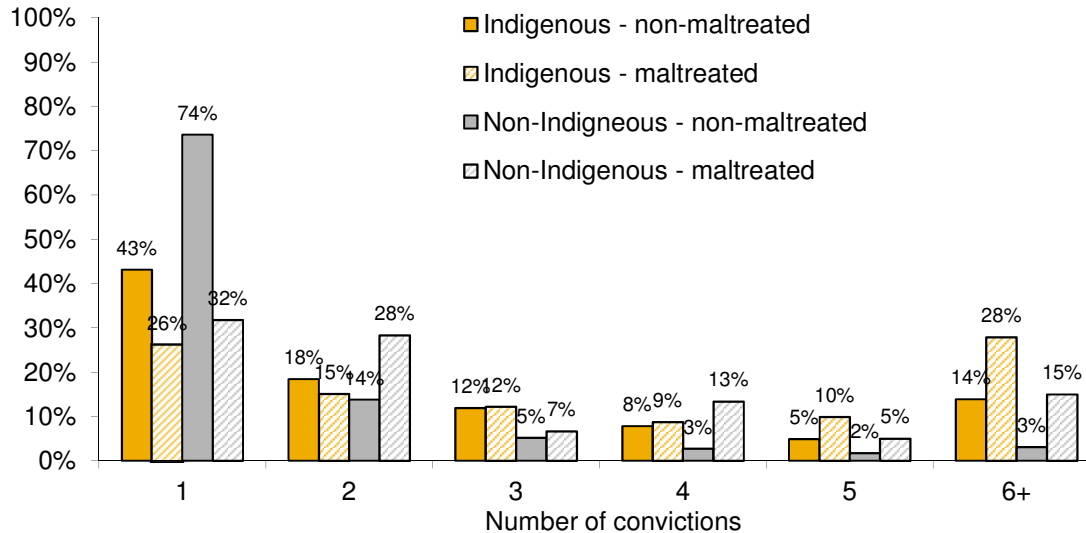


Maltreated children are much more likely to re-offend compared with non-maltreated children. Of those maltreated children who offended, 72% re-offended at least once and 25% re-offended five times or more. In comparison, of those non-maltreated children who offended, 48% re-offended at least once and 11% re-offended five times or more.

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Figure 17 compares the percentage of individuals by number of offending incidents for all offences (excluding traffic) between maltreated and non-maltreated children by Indigenous status.

Figure 17: Percentage of individuals by number of offending incidents by Indigenous status, maltreated versus non-maltreated



Indigenous are more much more likely to re-offend than their non-Indigenous counterparts for both maltreated and non-maltreated children. The re-offending rate for maltreated Indigenous children is 74% compared with 68% for maltreated non-Indigenous children. For non-maltreated children, Indigenous re-offending rate is 57% compared with 26% for non-Indigenous.

In the Northern Territory, the recidivism rate for Indigenous offenders is much higher than non-Indigenous offenders in the general population. An interesting result from this analysis is that the re-offending rate for maltreated non-Indigenous children at 68% is considerably higher than non-maltreated Indigenous children at 57%. This demonstrates that the experience of maltreatment as a child may be an important determinant of repeat offending.

Separate analyses on repeat offending between maltreated and non-maltreated children for specific offences such break-ins and theft and violent crime were conducted. The results are fairly similar to that of all offences (excluding traffic).

DISCUSSION

This paper uses system administrative data to compare the criminal behaviours of maltreated children to their non-maltreated peers. The data are therefore comprehensive and free from sampling errors. Owing to the comprehensiveness of the data, this paper is able to analyse the criminal behaviour of maltreated children both as youth and adults.

It found that maltreated children are much more likely to offend as youth compared with their non-maltreated peers. This also applies to all population groups although with varying degree of differences. The differences are all statistically significant (X^2 , $P>0.01$). The offending rate as adults for maltreated children is only marginally higher than that for non-maltreated children and the difference is not statistically significant. The results are similar for all population groups except Indigenous males. The adult offending for maltreated Indigenous males is 5% lower than non-maltreated Indigenous males although it is also not statistically significant. It appears that experience maltreatment as a child affects the criminal behaviours as youth but much less so as adults.

An unexpected result showing maltreated children who survived adolescent years (10-17) without a conviction has a much lower adult offending rate than their non-maltreated peers and this also applies to all population groups. Those maltreated children who managed to avoid contact with the justice system during their youth appear to be more resilient to resist committing crime than those non-maltreated children after becoming adults or they might have learned the skills of not being caught. More research of this kind is needed to confirm this finding.

The overall offending rate (both as youth and adults) for maltreated children is significantly higher than that of non-maltreated children. The results are similar for Indigenous females, non-Indigenous males and non-Indigenous females. However, the overall offending rate for maltreated Indigenous males is lower than their non-maltreated peers although it is not statistically significant. This is a surprising result as no known population group in which maltreated children have lower offending rate than their non-maltreated peers.

Further Research

This analysis is subject to several limitations, including the lack of ability to track interstate migration flow of the in-scope population; no data to take into account of other influential factors such as socio-economic disadvantage; and the inability to separately analyse varying levels of severity and frequency of abuse or neglect. Addressing these issues could shed light on the reasons particular results were observed, or help explain results that have not been observed in other research.

A large proportion of Indigenous males in the Northern Territory suffer from multiple disadvantages that make them more prone to committing crimes, and their offending rate is multiple times higher than that of other population groups. This paper found no significant difference in offending rates of maltreated and non-maltreated Indigenous males, while for all other population groups, the offending rate for maltreated children was significantly higher than that of non-maltreated children. Research into the circumstances and factors that contribute to Indigenous male offending would help in understanding the high offending rate in the Northern Territory.

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REFERENCES

- Aalders, R. 2015. *Developing a linked data collection to report on the relationships between child protection and youth justice supervision*. Australian Institute of Health and Welfare, Data Linkage Series No. 20.
<http://aihw.gov.au/WorkArea/DownloadAsset.aspx?id=60129553376>. Retrieved 12 June 2015.
- Australian Bureau of Statistics. 2015. Recorded Crime – Offenders, 2013-14. Catalogue Number 4519.0.
<http://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/4519.02013-14?OpenDocument>. Retrieved 25 February 2015.
- Australian Institute of Health and Welfare. 2015. Child Protection Australia 2013-14, Child Welfare Series No.61.
<http://www.aihw.gov.au/WorkArea/DownloadAsset.aspx?id=60129554513>. Retrieved 20 August 2015.
- Claussen, A, & Crittenden, P. 1991. *Physical and Psychological Maltreatment: Relationship Among Types and Maltreatment*, Child Abuse and Neglect, 15.
<http://aihw.gov.au/WorkArea/DownloadAsset.aspx?id=60129553376>. Retrieved 16 October 2015.
- Currie, J, & Tekin, E. 2006. *Does Child Abuse Cause Crime?* National Bureau of Economic Research, Working Paper 12171. <http://www.nber.org/papers/w12171.pdf>. Retrieved 16 October 2015.
- Deblinger, E, McLeer, S, Atkins, M, Ralphe, D & Foa. E. 1989. *Post-traumatic stress in sexually abused, physically abused, and nonabused children*. Child Abuse and Neglect, Volume 13, Issue 3, page 403-408.
<http://www.sciencedirect.com/science/journal/01452134/13/3>. Retrieved 16 October 2015.
- Gold, J, Sullivan, M, & Lewis, M. 2011. *The relationship between abuse and violent delinquency: The conversion of shame to blame in juvenile offenders*.
<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3763505/pdf/nihms-301256.pdf>.
- Stewart, A, Livingston, M, & Dennison, S. 2007. *Transitions and turning points: Examining the links between child maltreatment and juvenile offending*.
https://www.researchgate.net/profile/Anna_Stewart4/publication/5765591_Transitions_and_turning_points_examining_the_links_between_child_maltreatment_and_juvenile_offending/links/0a85e530b133208ceb000000.pdf. Retrieved 12 June 2015.

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Weatherburn, D, & Lind, B. 1997. *Social and Economic Stress, Child Neglect and Juvenile Delinquency*. NSW Bureau of Crime Statistics and Research. <http://crg.aic.gov.au/reports/17-95-6.pdf>. Retrieved 12 January 2016.

Widom, C. 1989. *The Cycle of Violence*, Science, 244. http://www.columbia.edu/cu/psychology/courses/3615/Readings/Science_1989_Widom_160_6.pdf. Retrieved 16 December 2015.

Widom, C, & Maxfield, M. 2001. *An Update on the "Cycle of Violence"*. National Institute of Justice, Research Brief. <https://www.ncjrs.gov/pdffiles1/nij/184894.pdf>. Retrieved 16 December 2015.

Widom, C, Lamb(Ed), M, & Ketterlinus(ED), R. 1994. *Childhood Victimization and Risk for Adolescent Problem Behaviors*, Adolescent problem behaviours: Issues and Research. <http://psycnet.apa.org/psycinfo/1994-98181-008>. Retrieved 16 December 2015.