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The Individual, Social & Environmental Factors related to Staff Assaults¹

This report examines the individual, social and environmental factors that are associated with assaults perpetrated against custodial staff. The analyses are based on all staff assault incidents (including serious assaults and other assaults) that occurred between 1 July 2010 and 30 June 2012 and align with the Report on Government Services (RoGS) coding rules.

Research paper

A thematic analysis of triggers to staff assaults suggests that most correctional centres have distinct triggers related to their prisoner and staff populations, and the centres' roles and functions. Evident across all centres was the reactive nature of most staff assaults, with many being acts of defiance, particularly to staff instruction.

Results also suggest that a small number of prisoners are responsible for a large proportion of staff assaults. A number of these prisoners resided in the Detention Unit (DU) or Maximum Security Unit (MSU), and perpetrated as premeditated assaults. In contrast, non-repeat staff assault perpetrators were more likely to commit spontaneous and reactive assaults. A significant overlap in the non-repeat staff assault perpetration population and prisoner-on-prisoner assault perpetration population was evident.

Results of the logistic regression analysis show that prisoners were significantly more likely to be a perpetrator of a staff assault if they had the following risk factors:

- Short-term sentence (≤12 months)
- Prisoner-on-prisoner assault perpetration during the same time period
- Self harm flag at least once in their custodial history
- Drug incident flag since admission to prison
- Escape risk flag
- History of violent offences
- Prior custodial episode
- Young age (24 yrs and under)
- Not having a current Court Ordered Parole suspension

Findings support empirical research which suggests that prisoner-on-staff assaults can be explained by a combination of individual, social and environmental risk factors.

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LITERATURE REVIEW

There are two theoretical approaches that are typically utilised to explain prison violence. The importational approach suggests violence is related to individual factors such as age, ethnicity, education level, substance abuse and correctional history. This approach supports the notion that prisoners bring attitudes and a subculture of violence and its use to prison (McCorkle, Miethe & Drass, 1995). The deprivation approach suggests violence is related to the deprivation experienced in the prison environment. This explains prison approach violence bv considering physical and social factors with the prison environment such as temperature, staff, location of incident, and the prison housing block (McCorkle, Miethe & Drass, 1995). More recently, the situational approach has been employed which considers the impact that situational factors have on offenders adjusting to the prison environment.

According to Jiang and Fisher-Giorlando situational and importational (2002),approaches are most suited to explaining prisoner-on-prisoner violence. whilst deprivation and situational approaches can explain prisoner-on-staff violence. These findings highlight that the issue of violence in prison is complicated. As stated by Cooke, Wozniak and Johnstone (2008) except in mental health cases, problematic prisoners only present as problems in certain contexts.

General explanations of prison violence are difficult to apply to prisoner-on-staff violence as the triggers and situational factors differ significantly. One of the most obvious what Bowker (1983) considerations is describes as 'the vast power difference between the keepers and the kept'. This authoritarian relationship can result in volatile situations. The large range of victimising behaviours frequently seen in prisoner-onprisoner violence are rarely used, with only the extreme behaviours usually being employed. These include prisoners psychologically manipulating staff, or on the other hand, impulsive physical violence, aimed at anyone in a position of authority 1983). Officers can also be (Bowker, unintended victims of violence when attempting to prevent or interrupt prisoner fights (Kratcoski, 1988).

According to Light (1990) and Specter (2006), violent prisoners are unavoidable. However Light (1990) suggests that factors external to the individual such as the prison environment and management practices determine the severity of the assault. As stated by Specter (2006, p126), the degree of violence 'is a direct product of prison conditions and how the state operates its prisons'.

Predictors of Staff Assaults

History of Violence

Sorensen *et al.* (2011) recently found that prisoners serving sentences for violent offences were significantly more likely than other prisoners to assault staff. In fact, results showed that prisoners with a history of violence were four times more likely than property offenders and other non-violent offenders to perpetrate serious assaults against staff. Such results support the theory of behavioural continuity from the community to prison (Sorensen & Davis, 2011).

Light's (1990) research found that over a one year period, 88% of prisoners who assaulted a staff member did so only once. This finding suggests that there is only a small number of prisoners who are involved extensively in violence against prison staff.

Age

Research suggests that age is one of the strongest predictors of prisoner-on-staff violence (Lahm, 2009). Prisoners aged 25 or younger are likely perpetrators of violence against staff (Kratcoski, 1988). More recently, Sorensen *et al.* (2011) have found that it is the 20-29 age group that are likely to perpetrate assaults against staff.

According to Light (1990), prisons with a high proportion of youth experience more serious assaults, committed not only by young prisoners, but prisoners of all ages, demonstrating the impact of the social environment on behaviour.

In their study of prison misconduct predictors (including staff threats and assaults), Kuanliang, Sorensen and Cunningham (2008) showed that there is a strong inverse relationship between age and misconduct from age 15 onwards, lending support to the importational model. However, Bishop and Frazier (2000) explain that young prisoners have higher rule violation rates due to their developmental inability to cope with the deprivations experienced in prison.

Location within Prison

According to Kratcoski (1988), removing prisoners from detention units or high security units for transportation or recreation provided opportunities for serious assaults. Steinke's (1991) research on situational triggers to prison violence also found that prisoners residing in observation and detention were significantly more violent towards staff. Furthermore, the findings suggested that these types of assaults were generally typical of situations in which prisoners were out of their cell but not engaged in a structured activity.

Time of Day

Mixed findings on the impact of time of day have been found. According to Kratcoski (1988), violence against staff is most likely to occur during the day. In contrast, Steinke (1991) found time of day to be unrelated to violence against staff.

Management

Relaxed management regimes such as those that include informal prisoner-staff relations can be successful in minimum and medium security prisons. However, such governance in high security prisons can be disastrous, leading to (amongst other things) rapes, staff assaults, high staff turnover, frequent use of leave, and costly union contracts (Dilulio, 1987).

Unruly behaviour due to mis-management was observed in Illinois in the late 1980s and early 1990s. Following a series of staff murders, serious assaults against staff, and riots, the Illinois Department of Corrections restructured and opened a supermax prison which resulted in a reduction in the use of lockdown days, and the amount of assaults against staff (Sundt, Castellano & Briggs, 2008).

Similarly, the Scottish Prison Service experienced widespread prisoner unrest and violence in the late 1980s. A profile of problematic prisoners showed that many had an aggressive attitude towards authority, non-acceptance of their offences and sentence length, difficulty dealing with separation from loved ones, a history of drug use, personality disorders, refusal to follow rules, peer pressure from criminal associates, and difficulty dealing with the deprivation of the prison environment (Cooke, Wozniak & Johnstone, 2008). The Barlinnie Special Unit was created to deal with violent offenders. The unit was characterised by a communal atmosphere between prisoners and staff, prisoner autonomy, and a remunerative control model whereby prisoners were rewarded for good behaviour (e.g. unlimited visits from family). The unit focused on socialising prisoners into new behaviours and thought processes, and was successful in reducing violent behaviour (Bottoms, 1999).

Drug Use

According to Light (1990), prisons with high proportions of offenders that have a history of drug use experience more serious assaults against staff. An evaluation of the Pennsylvania Department of Corrections' drug reduction strategy found that a significant reduction in drug use coincided with a reduction in prisoner-on-prisoner assaults by 70%, and prisoner-on-staff assaults by 57% (Feucht & Keyser, 1999).

Programs

There is some evidence to suggest that educational and vocational education programs are a successful tool in promoting institutional order, and can reduce breach rates and levels of violence (Gerber & Fritsch, 1995). According to McCorkle, Miethe and Drass (1995), such programs can reduce rates of prisoner-on-prisoner violence as well as prisoner-on-staff violence.

Staffing

Lahm's (2009) study of the individual and contextual predictors of staff assaults indicated staff-prisoner ratio as being a strong predictor of staff assaults. In an earlier study by Kratcoski (1988), the protocol of handling prisoners in detention units and high security units was changed in response to staff assaults, and involved a requirement for more than one staff member to be present. Results showed that the presence of more than one officer did not deter instances of prisoner violence against staff in these high risk locations. Furthermore, the seriousness of assaults increased when more than one staff member was present.

Staff Inexperience

According to Kratcoski (1988), staff with one year or less work experience are significantly more likely to be victimised. These findings are supported by Munroe's research (1995, p245), which found that inexperienced prison officers are more likely to be assaulted by prisoners because they are perceived as 'ambiguous'. Further support for the relationship between staff inexperience and victimisation was found by Walters (1998), and Davies and Burgess (1988). In contrast, Steinke (1991) found no relationship between staff characteristics and the likelihood of assault.

Prevention Strategies

A number of successful strategies targeting factors related to staff assault perpetration have been discussed in this review. In addition, the strong relationship between age and staff assaults provides support for an increase in the heterogeneity of prisoner age distributions in prisons with large proportions of young offenders (Light, 1990). This violence reduction strategy is also suggested by Wortley (2002) as a promising strategy to reduce prisoner-staff assault. Other strategies discussed by Wortley include: functional units, eliminating blind spots, reducing crowding, increasing staff training and experience, supporting staff authority, security crackdowns and increasing prisoner access to programs and industries.

METHODS

This research aimed to explore the factors that are associated with staff assaults by responding to this specific research question:

"What individual, social and environmental factors are associated with the occurrence of staff assaults?"

Data Collection

Incident dataset: data was extracted from Queensland Corrective Services' Integrated Offender Management System (IOMS) and recoded by staff in the Performance and Analysis Unit to align with RoGS reporting rules. The dataset included staff assaults (n =241) that occurred between 1 July 2010 and 30 June 2012 and were coded for RoGS reporting as 'serious assault', 'assault' or 'other assault.' Manual coding was conducted based on the text description of the incident, resulting in a 'trigger' and 'motivation' variable.

Perpetrator dataset: demographic and custodial history data on each perpetrator (n = 169) were extracted from IOMS and were linked to the staff assault incident date (e.g. age at the time of the staff assault). In the case of repeat perpetrators, information was linked to their most recent staff assault. Demographic variables included: age. gender, marital status, education level and Indigenous status. Custodial history variables included: number of prior custodial episodes, current sentence length, current Court Ordered Parole suspension, current escape risk flag, history of self harm in prison, history of drug incident(s) in prison, violent most serious offence (MSO) ever, and number of prisoner-on-prisoner prior assault perpetrations between 1 July 2010 and 30 June 2012.

baseline Baseline prisoner dataset: а prisoner population was extracted from IOMS to use as a comparative group in descriptive analyses. This population included all prisoners who had the opportunity to commit an assault against a custodial staff member during the examined time. Moreover, a data extraction from IOMS was conducted which included all offenders incarcerated in a Queensland custodial centre between 1 July 2010 and 30 June 2012, including those who were admitted to prison between these two dates (n = 16741). Whilst some offenders were incarcerated on a number of different occasions during this time period, they were only included in the dataset once. All baseline prisoner information was extracted as at the 1 July 2011 which was the mid-point in the time period analysed (1 July 2010 and 30 June 2012) . This allowed the baseline prisoner dataset to be comparable to the variables coded for the assault perpetrator dataset.

Data Analyses

Both quantitative and qualitative data analysis techniques were used to analyse the data from the various datasets. *Incident profile:* a thematic analysis was conducted by coding the free text description of staff assault incidents.

Assaults by centre: the distribution of staff assaults amongst perpetrators at each correctional centre has been represented using reverse j-curves. Perpetrators were primarily ranked according to the number of times they have perpetrated a staff assault, and secondarily ranked according to the number of prisoner assault perpetrations between 1 July 2010 and 30 June 2012.

Perpetrator profile: a logistic regression test was conducted in SPSS (Statistical Package for the Social Sciences) to identify which demographic and custodial history variables (independent variables) are risk factors to perpetrating a staff assault (dependent variable). The test statistically compared the independent variables of the assault population to those of the baseline high security population, to identify significant differences, where the significance level was $p \leq .05$. An odds ratio of '1' indicates no significant difference between the assault perpetrator population and the baseline prisoner population.

For this statistical analysis, a sub-sample of the baseline population was randomly selected through a random sample generator in SPSS. Wright (1995) suggests that for every independent variable included in a logistic regression analysis, there should be a minimum of 50 cases. As there were 13 independent variables, a minimum of 650 cases were required. To ensure this assumption was met, a sample size of 550 baseline offenders were randomly selected and combined in a dataset with the 169 staff assault perpetrators (n = 719).

Limitations

This research faced a number of limitations related to data collection and data analysis.

Measure of staff assaults: a count of staff assault perpetrators was used to measure staff assaults throughout this report. It was preferable in comparison to victim data as it can be used to provide a profile of staff assault perpetrators.

Drug use: the drug incident flag has been used as a measure of potential drug use. The

recording of drug-related incidents is dependent on a number of factors not measured in this study and reflects only those prisoners caught using or possessing drugs in prison.

Organisation culture of centres: this research does not investigate differences in organisational culture or management style across different custodial centres. It is expected that the culture is different between male and female prisons. Furthermore, reporting and management practices in relation to prisoner-on-staff and prisoner-onprisoner assaults may vary within and between centres.

No self-report data from prisoners: contextual information around the staff assault events is limited. No information on staff perceptions was gathered through surveys or interviews.

Prisoner mental health: mental health data collected on IOMS was not reliable enough to include in the perpetrator profile analysis. Furthermore, the variable on IOMS may reflect a number of mental health issues such as depression that are not necessarily related to violence. Reliable data on mental health is collected in medical in-confidence files held by Queensland Health and were not accessible.

RESULTS

Motivations & Triggers

Of all staff assaults in 2010-2012, 71% could be considered reactive. Most assaults were described as acts of defiance, triggered when authority was enforced on them. Of the remaining assaults, 15% were considered spontaneous, and 14% were considered premeditated. It was difficult to decipher between those that were spontaneous and those that were premeditated. Spontaneous assaults were more likely to have no specific trigger and may have involved the throwing of liauid water. tea or coffee). (e.g. Premeditated assaults were considered to be those that involved a weapon, the precollection of urine or faeces, and/or the request from a prisoner to see a staff member.

Many reactive assaults were instigated by a direction from an officer, being verbally

reprimanded, not receiving immediate gratification when they made a request, having unrealistic expectations of their entitlements in prison, accommodated in the DU or the MSU, or an escort (often to the DU or MSU), in which case the prisoner was already deemed problematic and/or violent. One in four assaults involved the prisoner refusing to follow a direction from an officer. The most likely directions were: to move, to stop a behaviour, remove articles covering cameras, remove a secreted item, or remove clothing. One in ten assaults were triggered by the perpetrator being involved in an altercation with another prisoner, resulting in one or both prisoners lashing out at officers while they were trying to control the incident. or during the escort following the altercation. One in ten assaults were triggered by the prisoner being denied an unreasonable request or not having a request processed immediately. These cases suggest an inflated sense of self-entitlement on the prisoner's behalf. A further one in ten assaults were triggered by the offender being escorted somewhere undesirable (i.e. DU, MSU or Medical Centre).

As Table 1 shows, key triggers differed across correctional centres. Borallon CC decommissioned), (now Southern Queensland CC, Wolston CC and Woodford CC showed no clear patterns. At Capricornia Maryborough CC and CC. Townsville Women's CC, prisoner-on-staff assaults were related to prisoner-on-prisoner assaults, with the most likely trigger being an altercation with another prisoner requiring staff intervention. Similarly, at Townsville Men's CC the main trigger was witnessing and disapproving of the management of another prisoner (e.g. witnessing use of force on a prisoner involved in a fight, and assaulting the officer in an attempt to free a restrained prisoner).

At Brisbane CC and Arthur Gorrie CC a number of staff assaults were perpetrated by prisoners who were in the DU or MSU, or were being escorted there, often for already exhibiting aggressive behaviour. Many of the assaults that occurred in the DU or MSU were premeditated, with no obvious trigger. Only 10% of premeditated assaults appear to be directed at a specific officer disliked by the perpetrator. In fact, the majority of officers who were victims of staff assaults were only a victim once in the two year period.

At Lotus Glen CC, refusing a direction, particularly to move, was the most prominent trigger to staff assaults. This was also one of the major triggers to violence against staff at Brisbane CC. At Brisbane Women's CC, refusing a direction regarding clothing (often clothing removal) was a key trigger, as was prisoners exhibiting irrational behaviour related to mental health problems.

Staff Assaults in the DU/MSU

There were 64 perpetrations of violence against staff in, or during escort to the DU or MSU between July 2010 and June 2012. These perpetrations were across 63 unique incidents (one incident involved two perpetrators), and 34 unique offenders. Therefore, a number of offenders in these locations perpetrated multiple staff assaults. Further analysis shows that ten prisoners were collectively responsible for 40 assault perpetrations in, or during escort to the DU and MSU.

Only three (4.7%) of the 64 perpetrations were coded (as per RoGS definition) as serious assaults, 19 (29.7%) were coded as assaults, and the remaining 42 (65.6%) were coded as other assaults. All but three perpetrations (95%) were committed by offenders with a violent most serious offence. Approximately one in four staff assaults associated with the DU or MSU occurred during escort, whilst a further one in four refused a direction, and a further one in four were premeditated with no clear trigger. The remaining 25% of perpetrations were a combination of triggers, such as not having a request immediately processed. The majority of staff assaults in the DU or MSU were viewed as reactive. DU/MSU perpetrators were on average, aged 30 years. Two thirds of these perpetrators had been in prison three or more times.

Triggers
Lockdown / Secured in cell / Restricted movement
Escort - including to DU / MSU
Altercation with other prisoner
Unknown (Premeditated - MSU/DU)
No clear patterns
Refused direction - including to move
Transferred cell / unit / centre
Unknown (Premeditated - MSU/DU)
Mental health
Refused direction to remove or put on clothing - potentially mental health related
Altercation with other prisoner
Refused direction - including to move
Altercation with other prisoner
No clear patterns
Witnessing & disapproving of management of another
Altercation with other prisoner
No clear patterns
No clear patterns

Table 1: Keys triggers at each Correctional Centre

Assaults by Correctional Centre

Results show that a small number of repeat assault perpetrators across all centres are responsible for a significant proportion of staff assaults. Moreover, 19% of staff assault perpetrators were responsible for 44% of all staff assaults. Figures 1 to 10 show that most repeat centres have staff assault perpetrators. These particularly problematic prisoners are most evident at Brisbane CC and Arthur Gorrie CC, the two reception centres (which also have MSUs), as well as Lotus Glen CC. Each of these centres had a high number of perpetrations with a minimum of 34 staff assaults over the two year period. At these centres at least one repeat perpetrator was responsible for six or more staff assaults.

In contrast, graphs for Borallon CC, Maryborough CC and Wolston CC suggest that staff assaults were likely random events, and any fluctuations in staff assault rates over time were unlikely related to individual prisoners.

Figures 1 to 10 also illustrate that each centre has a group of staff assault perpetrators who have been involved in assaults against other prisoners over the same time period. Offenders who engaged in assaults against both staff and other prisoners were usually those who had the opportunity to do so, residing in secure cells rather than the DU, MSU or Medical Centre.

The locations of some repeat perpetrators have been labelled on the graphs.

Figure 1: Unique Perpetrators by no. of Staff Assault (blue) and Prisoner Assault (red) Perpetrations at Arthur Gorrie CC, July 2010 - June 2012



Figure 2: Unique Perpetrators by no. of Staff Assault (blue) and Prisoner Assault (red) Perpetrations at Borallon CC, July 2010 - June 2012



Figure 3: Unique Perpetrators by no. of Staff Assault (blue) and Prisoner Assault (red) Perpetrations at Brisbane Women's CC, July 2010 - June 2012



Figure 4: Unique Perpetrators by no. of Staff Assault (blue) and Prisoner Assault (red) Perpetrations at Brisbane CC, July 2010 - June 2012



Figure 5: Unique Perpetrators by no. of Staff Assault and Prisoner Assault Perpetrations at Lotus Glen CC, July 2010 - June 2012



Figure 6: Unique Perpetrators by no. of Staff Assault (blue) and Prisoner Assault (red) Perpetrations at Maryborough CC, July 2010 - June 2012



Figure 7: Unique Perpetrators by no. of Staff Assault (blue) and Prisoner Assault (red) Perpetrations at Townsville Men's CC, July 2010 - June 2012



Figure 8: Unique Perpetrators by no. of Staff Assault (blue) and Prisoner Assault (red) Perpetrations at Townsville Women's CC, July 2010 - June 2012



Figure 9: Unique Perpetrators by no. of Staff Assault (blue) and Prisoner Assault (red) Perpetrations at Wolston CC, July 2010 - June 2012



Figure 10: Unique Perpetrators by no. of Staff Assault (blue) and Prisoner Assault (red) Perpetrations at Woodford CC, July 2010 - June 2012



Perpetrator Profile

Most serious offence ever. Offences were coded in accordance with the Australian National Classification of Offences (ANCO) guidelines. Figures in Table 2 suggest that the staff assault perpetrators have a history of violence with 87.6% having a most serious offence that is against the person compared to 63.6% of the baseline population. Furthermore, 5.3% of the assault perpetrators have a most serious offence of robbery or extortion compared to 4.9% of the baseline population. Combining these figures, 92.9% of staff assault perpetrators and 68.5% of the baseline offenders have a history of violence.

Of the assault perpetrators with a history of violence, more than half have a most serious offence of common assault, other assault or assault occasioning bodily harm. It is also worth noting that 10% of the assault population had most serious sentences of murder, attempted murder and manslaughter, compared to 5% of the baseline population. There are some missing baseline cases due to a number of offenders not being allocated a most serious offence ever on IOMS (possibly due to having no sentence calculation at the time of data extraction).

Escape risk: Table 3 shows that more than one in three staff assault perpetrators were considered an escape risk. This was significantly high when compared to the baseline population of which only one in ten prisoners were considered an escape risk.

Table	2 :	MSO	for	assault	and	baseline
populat	tions	betwee	n Jul	y 2010 an	nd June	e 2012

ANCO code	Assault	Baseline
Offence against person	87.6%	63.4 %
Robbery & extortion	5.3%	4.9%
Theft & fraud	4.1%	20.4%
Property damage/enviro	1.2%	1.0%
Good order	0.6%	3.8%
Drug offences	0.6%	3.9%
Motor vehicle & traffic	0%	1.8%
Other	0.6%	0.7%
Total no.	169	16494

Table 3: Escape risk flag for assault and baseline populations between July 2010 and June 2012

Escape risk flag	Assault	Baseline
No	62.7%	89.3%
Yes	37.3%	10.7%
Total no.	169	16572

Drug incident: Table 4 shows that 30% or almost one third of staff assault perpetrators were also perpetrators of at least one drug incident since admission to prison. The comparative figure for the baseline population is significantly lower, at only 9%.

The most likely offender type to be the perpetrator of a drug incident in prison is not those with a most serious offence that is a drug offence, but those whose most serious offence is robbery or extortion, followed by those whose most serious offence was against the person. These offenders may in fact have been convicted of drug offences, but offences against the person and robbery/extortion are more serious for offence coding and offender management purposes.

Sentence length: Figure 11 shows staff assault perpetrators to be significantly more likely to have shorter sentences than the baseline population. This is particularly the case with sentences less than six months, representing one third of the staff assault perpetrator population.

The graph also shows that staff assault perpetrators are much less likely than the baseline to have a sentence over two years, except in the case of indefinite or life sentences. This is not surprising considering the higher proportion of offenders convicted of homicide related offences in the staff assault perpetrator population.

Self harm: Table 5 show that more than half of all staff assault perpetrators had self-harmed at least once in their custodial history. This was significantly higher than that of the baseline population, in which only one in five prisoners had a history of self-harm.

Violence against other prisoners: Table 6 shows that of the assault perpetrators, 44% also perpetrated at least one assault against another prisoner over the same time period (July 2010 to June 2012). Approximately one third of these prisoner-on-prisoner assault perpetrators were repeat prisoner-on-prisoner assault perpetrators. In comparison, only 8% of the baseline population who had assaulted staff also assaulted another prisoner on at least one occasion between July 2010 and June 2012.

Table 4: Drug incident since prison admission

 for assault and baseline populations

Drug incident	Assault	Baseline
No	69.8%	91.5%
Yes	30.2%	8.5%
Total no.	169	16572

Figure 11: Sentence length for assault and baseline populations between July 2010 and June 2012



Table 5: Self harm flag for assault and baselinepopulations between July 2010 and June 2012

Self harm flag	Assault	Baseline
No	41.4%	80.1%
Yes	58.6%	19.9%
Total no.	169	16572

Table 6: Assault against prisoner for assault and baseline populations between July 2010 and June 2012

Prisoner on Prisoner assault perpetration	Assault	Baseline
No	55.6%	92.0%
Yes	44.4%	8.0%
Total no.	169	16572

Education level: Figure 12 shows limited differences in the spread of both the staff assault and baseline populations across the different levels of education. The staff assault perpetrators are slightly more likely to have completed schooling at grade 10 or less (80.3%), compared to the baseline prisoner population (68.0%). The graph also shows that baseline prisoners are slightly more likely to have completed senior schooling and gone on to further training or tertiary studies.

Figure 12: Sentence length for assault and baseline populations between July 2010 and June 2012



Table 7: Indigenous status for assault and
baseline populations between July 2010 and
June 2012

Indigenous status	Assault	Baseline
No	60.4%	70.7%
Yes	39.6%	29.3%
Total no.	169	16572

Table 8: Court Ordered Parole suspension forassault and baseline populations between July2010 and June 2012

COP suspension	Assault	Baseline
No	89.3%	76.5%
Yes	10.7%	23.5%
Total no.	169	16572

Table 9: Gender for assault and baselinepopulations between July 2010 and June 2012

Gender	Assault	Baseline
Female	13.0%	10.5%
Male	87.0%	89.5%
Total no.	169	16572

Indigenous status: Figures in Table 7 show that approximately 40% of staff assault perpetrators identify as being Aboriginal or Torres Strait Islander. This is slightly higher than that of the baseline prisoner population, in which prisoners who identify as being Aboriginal or Torres Strait Islander represent approximately 30% of this population.

Court Ordered Parole suspension: Figures in that staff Table 8 suggest assault perpetrators are less likely to be in prison as a result of a Court Ordered Parole suspension than the average prisoner. Moreover. one in ten staff assault perpetrators are incarcerated due to a Court Ordered Parole suspension compared to almost one in four baseline prisoners.

Gender: Table 9 shows that there are similar proportions of males and females in both the staff assault perpetrator population and the baseline prisoner population. Females represent 13% of the assault perpetrator population compared to 10.5% of the baseline, whilst males represent 89% of the staff assault population compared to 87.0% of the baseline.

Prior custodial episode: Figure 13 shows that baseline prisoners are significantly less likely to have had a prior custodial episode compared to staff assault perpetrators. More specifically, almost 50% of all staff assault perpetrators have previously been in custody in a separate episode compared to approximately 30% of the baseline prisoner population.

Differences between the two groups were minimal when considering one prior custodial episode. However, the proportion of staff assault perpetrators with multiple prior custodial episodes (i.e. two or more) was significantly higher than that of the baseline prisoner group, representing 48% compared to 33% respectively.

Age: Figure 14 shows that the staff assault perpetrators are distinctly younger than the baseline prisoner population. This is most evident when examining the 24 years and under age bracket and the 35 years and over age bracket. Of the staff assault perpetrators, 35% were aged 24 years or under compared to 23% of the baseline group. Only 29% of the staff assault perpetrators were aged 35 years and over compared to 42% of the baseline group.

Marital status: Figure 15 clearly shows that staff assault perpetrators were less likely to have ever been married than prisoners in the baseline population, representing 71.3% compared to 56.0% respectively. Staff assault perpetrators were also less likely to be in a married, defacto or permanent relationship, representing 25% compared to 33% of all baseline prisoners. Baseline prisoners were slightly more likely to have been separated, divorced or widowed than the staff assault population, representing 11% compared to 4% respectively. These results are likely due to the significant age difference observed between the two groups.





Figure 14: Age for assault and baseline populations between July 2010 and June 2012







Key risk factors for assault perpetrators

The statistical significance of the above observations between independent variables and staff assault perpetration was tested in a logistic regression analysis. All variables included in the analysis were recoded into binary variables with coding being 'yes' or 'no.' In the case of continuous variables such as age and sentence length, a cut off value was determined to create two groups – above or below the cut-off. For age, this was 24 years, and for sentence length, the cut off was 12 months.

The original model included the following independent variables: Indigenous status, gender, marital status, education level. prisoner-on-prisoner assault flag. short sentence (≤12 months), self harm flag, escape risk flag, drug incident flag, Court Ordered Parole suspension, young age (24 years and under), prior custodial supervision, and a history of violence (MSO ever). As Indigenous status, gender, marital status, education level were found to have no significant relationship with assault perpetration, these variables were removed and the model was then re-run with the variables in Table 10.

Results of the overall model show that it could accurately predict 87.1% of all cases. More specifically, the model could accurately predict that 94.4% of baseline prisoners were in fact part of the baseline population. The model was less accurate at predicting assault perpetration population membership, with accuracy at 63.3%.

Findings presented in Table 10 show that the three most significant risk factors to perpetrating an assault against staff are: a short sentence (≤12 months), having perpetrated at least one assault against another prisoner, and having a history of self harm in prison.

Each of these factors increase the risk of a staff assault between six and seven fold. Other risk factors of lesser significance that increase the risk of staff assault perpetration between 2 and 4 fold include: having a drug incident in prison, an escape risk flag, a history of violent offending, prior custodial supervision and being young. Having a Court Ordered Parole suspension appears to be a protective factor as this variable was found to be more strongly related to the baseline population rather than the assault population. Moreover, not having a court ordered parole suspension increases the risk of staff assault perpetration by minimal odds (0.31).

Key risk factors	<i>p</i> - Significance (95% confidence level)	Odds ratio
Short term (≤12 mth sentence)	.000	7.06
Offender on offender assault perpetration	.000	6.93
Self harm	.000	6.22
Drug incident	.003	3.98
Escape risk	.004	3.55
History of violent offence(s)	.001	3.41
Prior custodial supervision episode	.001	2.70
Young age (24 years and under)	.011	1.98
Court Ordered Parole suspension (-)	.003	0.31

Table 10: Key risk factors for staff assault perpetration

DISCUSSION & CONCLUSION

The individual, social and environmental factors related to staff assaults were analysed using incident descriptions and IOMS data on prisoner demographics and custodial history. These datasets allowed for the development of centre specific triggers, a perpetrator profile, and a better understanding of the distribution of staff assaults across perpetrators at each centre.

Motivations and triggers

Whilst motivations and triggers differed slightly across centres there were a number of key themes. These included: having an altercation with another prisoner, mental health (particularly for women) and refusing a direction (to move or remove clothing), or being escorted or transferred, often to a DU or MSU. These themes support both the importational and deprivational explanations of prison violence.

Assaults by correctional centre

An analysis of events by centre showed that Brisbane CC, Arthur Gorrie CC and Lotus Glen CC, had a significant number of staff assaults. This finding can be explained by the deprivation approach. Newly admitted prisoners may lash out as they struggle to of the prison accept the conditions environment. Both Brisbane CC and Arthur Gorrie CC also have a MSU. Findings showed that a small number of prisoners were responsible for a significant proportion of assaults at these centres. Most of these repeat assault perpetrators were already deemed problematic and were isolated in the MSU. Similarly at Lotus Glen, their most problematic staff assault perpetrator was isolated in the DU where he committed most of these assaults against staff.

Offender profile

Results of the logistic regression show that staff assault perpetrators have a similar profile to that of prisoner assault perpetrators (see QCS Research Report No.2). In fact, these findings suggest that there is a significant overlap in these populations. This analysis showed that many of these offenders engaged in violence outside of prison and inside prison, with both staff and other prisoners. The significance of a history of violence prior to prison supports the findings of Sorensen *et al.* (2011) and Sorensen and Davis (2011), as well as the importational approach in general.

The destructive nature of staff assault perpetrators is also reflected in their tendency towards self harm behaviour and drug use (or possession which is highly associated with use). The profile also suggests that many staff assault perpetrators are young and have a problematic background, having been under custodial supervision multiple times. Defiance towards authority is not only reflected in their propensity to behave in a manner that results in breaches whilst in custody, but is also reflected in their likelihood of being viewed as a threat to escape prison.

Identification of particularly problematic prisoners, situations that can instigate staff assaults, and the types of prisoners that are likely to be perpetrators of staff assaults can aid in the development of prevention strategies and policy.

REFERENCES

Bishop, D. & Frazier, C. (2000) Consequences of transfer. In J, Fagan & F.E. Zimring (Eds.), *The Changing Borders of Juvenile Justice: Transfer of Adolescence to the Criminal Court* (pp227-276). University of Chicago Press: Chicago.

Bottoms, A.E., Hay, W. & Sparks, R. (1995) Situational and social approaches to the prevention of disorder in long-term prisons. In T.J. Flanagan (Ed) *Long-Term Imprisonment: Policy, Science, and Correctional Practice,* Sage, California.

Bowker, L.H. (1983) An essay on prison violence, *The Prison Journal, 63* (24): 24-31.

Cooke, D.J., Wozniak, E. & Johnstone, L. (2008) Casting light on prison violence in Scotland: Evaluating the impact of situational risk factors, *Criminal Justice and Behavior, 33* (8), 1065-1078.

Davies, W. & Burgress (1988) Prison officers' experience as a predictor of risk of attack: An analysis within the British prison system, *Medicine, Science and the Law, 28*: 135-138.

Dilulio, J.J. (1989) Governing prisons, *Society, 82*, July-August: 81-83.

Gerber, J. & Fritsch. E.J. (1995) Adult academic and vocational correctional programs: A review of recent research, *Journal of Offender Rehabilitation, 22* (1-2): 119-142.

Jiang, S. & Fisher-Giorlando, M.F. (2002) Inmate misconduct: A test of the deprivation, importation, and situational models, *The Prison Journal, 82*: 335-358.

Kratcoski, P.C. (1988) The implications of research explaining prison violence and disruption, *Federal Probation, 52*: 27-32.

Kuanliang, A., Sorensen, J.R. & Cunningham, M.D. (2008) Juvenile inmates in an adult prison system: Rates of disciplinary misconduct and violence, *Criminal Justice and Behavior, 35:* 1186-1201.

Lahm, K.F. (2009) Inmate assaults on prison staff: A multilevel examination of an overlooked form of prison violence, *The Prison Journal, 89 (2)*: 131-150. Light, S.C. (1990) The severity of assaults of prison officers: A contextual study, *Social Science Quarterly*, *71* (2): 267-284.

McCorkle, R.C., Miethe, T.D. & Drass, K.A. (1995) The roots of prison violence: A test of the deprivation, management, and "not-so-total" institution models, *Crime and Delinquency*, *41*: 317-331.

Munro, F.M. (1995) Social skills differences in aggressive and non-aggressive male young offenders within an unfamiliar social situation, *Medicine Science and the Law, 35* (3): 245-248.

Sorensen, J.R., Cunningham, M.D., Vigen, M.P. & Woods, S.O. (2011) Serious assaults on prison staff: A descriptive analysis, *Journal of Criminal Justice*, *39*: 143-150.

Sorensen, J.R. & Davis, J. (2011) Violent criminals locked up: Examining the effect of incarceration on behavioural continuity, *Journal of Criminal Justice, 29*: 151-158.

Specter, D. (2006) Making prisons safe: Strategies for reducing violence, *Journal of Law and Policy*, 22: 125-134.

Steinke, P. (1991) Using situational factors to predict types of prison violence, *Journal of Offender Rehabilitation*, *17* (1-2): 119-132.

Sundt, J.L., Castellano, T.C. & Briggs, C.S. (2008) The sociopolitical context of prison violence and its control: A case study of supermax and its effect in Illinois, *The Prison Journal, 88*: 94-122.

Walters, G.D. (1998) Time series and correlation analysis of inmate-initiated assaultive incidents in a large correctional system, *International Journal of Offender Therapy and Comparative Criminology, 42*: 124-132.

Wortley, R. (2002) *Situational prison control : crime prevention in correctional institutions.* Cambridge University Press, Cambridge.

Wright, R.E. (1995) Logistic regression. In L.G. Grimm & P.R. Yarnold (Eds) *Reading and Understanding Multivariate Statistics*, 217-244, American Psychological Association, Washington, D.C.