

VERBAL ABUSE, THREATS, AND ASSAULT ON PRISON STAFF

**Exploring Verbal Abuse, Threats, and Assault on Prison Staff**

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**Abi Astridge Clarke**



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### Abstract

Prison violence remains a significant issue worldwide due to its negative impact on correction staff's well-being. Prison officers regularly experience verbal abuse and threats in their day-to-day jobs. Prisoners can use these two verbal incidents to inflict harm or manipulate prison staff. Although prison staff often regard verbal abuse and threats as a regular part of managing prisoners, they may affect well-being and predict escalations of violence. Using an archival dataset of prisoner verbal incidents supplied by Ara Poutama Aotearoa, this research aims to understand verbal incidents better and examine whether they can predict physical violence from prisoners towards staff while controlling for covariates (e.g., security level). We<sup>1</sup> extracted a sample from the database ( $n = 361$ ) of men who have been in prison for 12 consecutive months and had a prior verbal incident towards staff. Cox regressions revealed no difference between the predictive ability of verbal abuse and threats but we did find the time to the verbal incident was predictive of physical assault on staff. This finding can help staff to identify aggressive individuals earlier in their imprisonment. Staff should also take verbal incidents seriously by reporting them and using active de-escalation strategies to prevent further violence.

*Keywords:* Verbal abuse, threats, physical assault, prisons

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<sup>1</sup> The present research conducted is my own. However, I conducted it in a lab setting and was supported by PhD students, master students, and fellow honours students. I was also supported and directed by my supervisor. Therefore, I use the term "we" throughout this dissertation to reflect those facts. Elsewhere, I use the word "we" to refer to what is known/unknown in the wider scientific community.



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## **Exploring Verbal Abuse, Threats, and Assault on Prison Staff**

### **Prison Violence**

Prisons are institutions where those convicted of a crime are placed and subjected to the supervision and authority of prison officers. A large number of prisoners are forcibly placed in correctional facilities in close proximity: with a small number of prison staff to supervise them. This proximity of prisoners fosters an environment where individuals can become vulnerable to victimisation and can increase the risk of an individual committing a crime towards other prisoners or staff. Working in prisons is acknowledged internationally as one of the most dangerous occupations (Steiner & Wooldredge, 2020). Correctional officers encounter verbal abuse and victimisation frequently in their day-to-day jobs. We know verbal abuse victimisation can be stressful for prison staff and may lead to burnout (Boudoukha et al., 2011). We also know that there are different types of verbal incidents, such as abuse and threats (Johnson et al., 2006; Meloy & Hoffman, 2014). However, we do not know if verbal abuse incidents could predict another serious workplace risk for correctional staff: physical assault. This gap points out that there is a need for further research on verbal incidents, to understand if they predict physical assault in a prison setting and if so, are different types of verbal abuse equally concerning; or, are threats of violence a stronger predictor of later physical assaults on staff than, say swearing at a prison officer?

### **Staff Safety and Victimisation**

Verbal abuse is a significant issue in the workplace due to the psychological distress it causes (Cashmore et al., 2012). Workplace violence is a significant health hazard due to the links between impaired health and mental disorder onset from stress and fear reactions (Henderson, 2003). Gates et al. (2006) reported that emergency department workers experiencing verbal



victimisation in their workplace had lower job satisfaction and perceived safety levels. Verbal abuse victimisation on prison staff is also related to high-stress levels and can result in burnout, emotional exhaustion, and depersonalisation (Boudoukha et al., 2011). Over time due to the potential increased stress, the persistence of these psychological effects can be debilitating and long-lasting (Ferns et al., 2007; Rowe & Sherlock, 2005). Although research has shown the impacts of verbal abuse, it remains overlooked in the workplace (Erkol et al., 2007). In a prison environment, verbal abuse is not considered important because of the frequency of exposure to verbal abuse, although it may indicate an increased risk of physical violence (Karakurt & Silver, 2013).

### **Predicting Prison Violence**

We know from previous research that several factors can predict or indicate an increased risk of violence in prisons. Prisoners with prison gang affiliations, previous violent histories, a prior prison sentence, and age are all predictors of violent misconduct (Cunningham & Sorensen, 2007). Prisoners affiliated with gangs have an increased risk of violent misconduct towards staff and other prisoners (Sorensen et al., 2011). Younger prisoners are more likely to be convicted of prison misconduct, including verbal and physical aggression. Moreover, one study found that individuals younger than 21 are three and a half times more likely to commit a violent act, such as threats towards staff or fights, than those over 30 years old (Cunningham & Sorensen, 2007). Steiner and Wooldredge (2017) uncovered several predictors of prison violence at the prisoner and prison level. Prisoner-level predictors of violence include age, ethnicity, low levels of education, security classification, and time served. At the prison level, contributors to violence are high-security levels and overcrowding. Offence type (e.g., sexual or property) is a predictor of prison violence, although unexpectedly, those with non-violent offences were more likely to

commit prison misconduct (Cunningham & Sorensen, 2007). We will specifically focus on gang affiliation, ethnicity, age, security level, offence type and RoC\*RoI score (risk assessment tool), as well as types of verbal incidents as predictors of prison violence.

### **Verbal Incident Types**

The terminology used to refer to violence is confusing in previous literature; “violence” is used as an umbrella term for aggression, physical assault, verbal abuse or witnessing any form of abuse (Ferns et al., 2007). These concepts, however, are not equivalent to each other. Wells and Bowers (2002) highlighted how the constant conflation of *violence* and *aggression* has made comparisons difficult. We will define the verbal incident types used in our study to overcome this confusion.

### **Verbal Abuse**

*Verbal abuse* is an utterance used to immediately insult or psychologically harm the listener (Johnson et al., 2006). This abuse occurs so frequently in the healthcare system that it is considered normal behaviour (Lybecker & Sofield, 2000). The attributions of high levels of verbal abuse are due to the constant contact staff have with stressed individuals, which can put staff in the position of being victims of verbal abuse (Rowe & Sherlock, 2005). Prisoners can put prison officers in similar positions of being victimised by regular abuse (Ellison et al., 2022). There are several reasons people become verbally abusive, varying from frustration to intending to cause distress or perhaps both simultaneously. Other verbal abuse triggers include; anger, feelings of injustice, lack of communication, confusion, or to assert or reinforce dominance (Brennan, 2003).

## Threats

A specific type of verbal abuse incident we aim to investigate is threats made by prisoners towards prison staff. For this study, we have chosen the following definition of a threat: a stated utterance that implies the intent to cause later physical or psychological harm (Meloy & Hoffmann, 2014). People can also use threats to cause harm through a bluff. A bluff or empty threat is a statement that is not carried out but communicates harmful intentions; rather, the recipient's perception of being harmed (Geurts et al., 2016). Verbal threats are used often in everyday life, such as on the sports field or when frustrated with a significant other or friend. Most such threats are mundane or humorous, perhaps occasionally unpleasant, but are not intended to signify that the threatened outcome will occur. These types of threats are used mostly by people to state frustration instead of causing the harm in which they mention (Meloy & Hoffmann, 2014). However, in some situations threats may signal more than just an expression of frustration and may be used as a warning behaviour. Warning behaviours are those which may indicate increased or escalation of risk (Meloy et al., 2012). Although difficult, assessing the risk related to threats is vital for prison staff. Making judgements about whether a threat is a bluff or a warning of further violence has significant risk management implications. Several factors can increase the risk of actualisation of a threat, including previous violence, mental health issues and hostile interactions (Geurts et al., 2016). However, determining which threats to take seriously can be difficult for prison officers with the high rates of threats they experience in their day-to-day jobs. When deciding whether to take a threat seriously, Scalora et al. (2008) stated in their threat assessment work on public figures that all threats should be taken seriously, as 42% of physical violence had an element of previous threatening behaviour.

### **Verbal Abuse and Threats Escalating to Physical Violence**

Verbal abuse can also signal an increased risk of physical violence. Emotional abuse, including verbal abuse and threats, is often a precursor to physical violence (Karakurt & Silver, 2013). This theme continues across different academic areas, including family and workplace violence. These areas state that verbal abuse and threats can escalate into physical assault (Altınbaş et al., 2011; Karakurt & Silver, 2013). These findings could mean that verbal abuse and threats could be considered predictors of prison violence.

### **General Aggression Model**

We may think verbal abuse can predict prison violence due to the general aggression model (GAM; Anderson & Bushman, 2001). The GAM is an integrative framework developed by adding existing sub-theories on human aggression into one unified model. In its most simplified form, the GAM focuses on three areas of concern in an aggressive episode. These areas are (a) inputs from personal and situational factors; (b) the three internal states in which the input variables have their impact: cognitive, affective and arousal; and (c) the appraisal and decision-making of the final behaviour. Personal and situational factors influence the final behavioural outcome via the present internal state of an individual. The three internal states recognised in the GAM are highly correlated as they influence and add to each other. The final decision-making process can be automatic or involve more control and reappraisal. In this model, the internal states have the most significant influence on automatic responses. For example, if someone is bumped into while thinking aggressively, they would regard the bump as an aggressive act. In comparison, a person thinking how crowded the room is may perceive the bump as an accident. The reappraisal process involves an individual searching for an alternative view of the situation (Anderson & Bushman, 2002). During violent interactions similar to those

seen in prison, when the perception of a bump is intentional, the person may respond aggressively and thoughtfully, leading to more deliberate actions and escalations of aggression (Dewall et al., 2011).

Alternatively, certain types of verbal abuse could be more predictive. A vast literature on threat assessment has stated that threats need to be considered as elements of escalation. In previous work on offenders and factors leading to criminal violence, during a verbal conflict, threats of violence would eventually lead to a physical attack on the victim (Felson & Steadman, 1983). More specifically, we need to consider threats as serious incidents that may lead to physical assault on staff.

### **Reporting Verbal Incidents in the Workplace**

Considering threats as serious workplace incidents means reporting them. However, reporting these incidents is relatively infrequent due to the perception of verbal abuse and threatening behaviours as normal in medical emergency departments. Other than being considered normal in stressful work environments, factors that influence staff not to report verbal abuse and threats are self-blame, fear of being seen as a victim, or incompetent, or management may not be supportive (Erkol et al., 2007). Under-reporting of verbal incidents in the workplace can be deemed problematic for several different reasons. For example, staff in correctional facilities state that the most common factor influencing the under-reporting of verbal incidents is because they are accepted in the workplace and considered not severe enough to report (Cashmore et al., 2012). Although, as we have already established, verbal abuse or threats can cause serious psychological distress and may indicate future physical violence or aggressive acts towards staff.

### **Aims of our Current Study**

Conclusions drawn from previous literature are that (a) verbal abuse and threats cause significant psychological distress; (b) threats may be more predictive of violence than general verbal abuse and; (c) neither are taken seriously in the workplace. However, limited research has been done on verbal abuse and threats towards staff in a prison environment or on separating verbal incidents into different categories. Therefore, this research raises the question: do prisoner verbal threats or abuse predict later assault towards prison staff while controlling for covariates (e.g., security level)?

Our sample consisted of 361 male prisoners from prisons in Aotearoa. In the sample provided to us, all prisoners had at least one incident of verbal abuse toward staff reported, with some having a subsequent episode of physical violence towards staff. Because everyone in the sample had a verbal abuse incident, for hypothesis 1, we used how quickly that incident occurred after the beginning of their time in prison as a predictor of physical violence rather than simply the presence of a verbal episode. In addition, within verbal abuse incidents, we were also interested in whether the type – specifically those that included threats – were more predictive of physical assault than verbal abuse incidents that did not contain threats (e.g., swearing). Finally, we also controlled for the association of common predictor variables (e.g., prisoner security level, age) with physical violence. Therefore, we tested two hypotheses.

Hypothesis 1: We predict that a shorter time from the beginning of imprisonment to the first verbal abuse incident of any type toward staff would predict later physical assault toward staff.

Hypothesis 2a: Based on the GAM, we predict that there would be no difference between verbal abuse with and without threats in predicting later physical assault.

Hypothesis 2b: Based on threat assessment research, we predict that verbal incidents containing threats would be better predictors of physical assault than verbal abuse incidents that do not contain threats.

### **Method**

Our research was an archival study that used part of a large database of incidents from all New Zealand prisons between 2015 and 2020. The incidents are official reports recorded by correctional officers in a computer-based incident reporting system. The database used in our study was extracted by Ara Poutama Aotearoa (Department of Corrections) research staff for use in a series of subprojects as part of Ngā Tūmanakotanga, an MBIE Endeavour Fund research project into prison violence. The database has not previously been examined for this purpose. The database contained reports of each incident: information about where and when the incident occurred, a summary of the incident, a follow-up report and demographic information about the prisoners involved.

### **Sample Selection**

From the archives, we identified a sample of 361 prisoners. Our sample was extracted based on period of imprisonment; we selected men imprisoned for at least 12 consecutive months between 2015 and 2020. All those selected had at least one verbally abusive incident towards staff during their imprisonment.

### **Sample Characteristics**

Table 1 documents the demographic information of our sample. All prisoners were male, and the average age was 29 at entry to prison. Over half (56%) of the sample was Māori, and a quarter was European (26%), with other ethnicities being the minority (e.g., Asian and Pacifica). A large portion of the sample had a remand status, with just under half being in the remand

accused category. The offence type shows that almost half of prisoners, including those in remand facilities, were convicted or accused of a violent offence (45.4%; e.g., murder or sex offence). The average RoC\*RoI score for the men in our sample was 0.45. This score shows that, on average, the likelihood of reoffending and returning to prison in the following five years is predicted to be 45%.

**Table 1**

*Descriptive Statistics of Sample (n = 361)*

Characteristic	N	M (SD) or %
Age		29.55 (10.81)
Ethnicity		
European	95	26%
Māori	203	56%
Pacifica	46	13%
Other	16	4%
Not recorded		
Gang affiliation	120	33%
Security level/ remand status		
Remand accused	164	45.4
Remand convicted	83	23
Minimum	10	2.8
Low	25	6.9
Low-medium	35	9.7
High	41	11.4
Unclassified	3	0.8
Offence type		
Violence	169	46.8
Sexual	44	12.2
Traffic	9	2.5
Burglary	56	15.5
Drugs	26	7.2
Weapon	4	1.1
Property	12	3.3
Dishonesty	21	5.8
Breaches	3	0.8



Other	12	3.3
Not recorded	5	1.4
Prison		
Auckland South Corrections Facility	13	3.6
Auckland Prison	14	3.9
Christchurch Prison	43	11.9
Hawkes Bay Prison	31	8.6
Invercargill Prison	8	2.2
Manawatu Prison	16	4.4
Mt Eden Corrections Facility	89	24.7
Northland Regional Corrections Facility	20	5.5
Otago Corrections Facility	17	4.7
Rimutaka Prison	25	6.9
Rolleston Prison	3	0.8
Spring Hill Corrections Facility	42	11.6
Tongariro Prison	2	0.6
Waikeria Prison	25	6.9
Whanganui Prison	13	3.6
RoC*RoI		
Low	50	13.9
Medium	199	55.1
High	63	17.5
Not recorded	49	13.6

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## Variables

The variables we selected came from two sources. The first source was the database itself. The following variables were taken from the database; in all cases this information was documented from the first month that the person was in prison. See Table 1 above.

### *Age*

This variable captured the age of each prisoner.

***Ethnicity***

Ethnicity is the measure of cultural identity. Our sample documented five ethnic groups; European, Māori, Pacifica, other and not recorded.

***Gang Affiliation***

The gang affiliation variable is if a prisoner is associated with any gang (1 = yes and 0 = no).

***Security Level/Remand Status***

Prisons use security classifications to determine the level of supervision a prisoner requires. Security classification assesses both the internal (e.g., risk of a prisoner inside the prison) and external (e.g., risk a prisoner would have on the community if they escaped) risks (Department of Corrections, 2016). The security level variable has five levels: minimum, low, low-medium, high, or unclassified; each category is mutually exclusive. The remand status includes two stages; remand accused and remand convicted. *Remand accused* is when an individual is accused of a crime and awaiting trial in prison. *Remand convicted* is once an individual has been convicted of a crime and is awaiting sentencing (Department of Corrections, 2004). Once sentenced, the person gets a security classification. We combined security classification and remand status into a single variable, proxying for the likely management level needed by a prisoner at that time.

***Lead Offence***

The lead offence is the offence that resulted in the longest current prison sentence. Table 1 presents a list of offences and each frequency in the sample.

***RoC\*RoI***

The RoC\*RoI (Bakker et al., 1999) is an actuarial risk assessment tool used by the New Zealand Department of Corrections. The development of the RoC\*RoI used a sample of 24,000 offenders and was cross-validated using an additional sample of 24,000 offenders. Reported as a probability, scores range between 0 and 1 to estimate the risk of serious reconviction resulting in reimprisonment over the following five years. Its predictive validity has been validated with research confirming high levels of accuracy at 36-month follow-ups (Nadesu, 2007). The scores can be separated into bands; low is 0.49 and below; the medium band includes scores between 0.50 and 0.69, and high is scores above 0.70 (Wilson, 2004).

The second source of variables came from coding the incident narratives. These variables are described below in the procedure.

## **Procedure**

### ***Development of Coding Scheme and Inter-rater Reliability***

From the initial large database supplied for the analysis, I randomly selected a sample for individual coding. In some of these incidents, the prisoner also had a later physical assault on a staff member. However, to ensure a high enough base rate of subsequent physical assault to adequately power the analysis, a member of the Ngā Tūmanakotanga research team (Devon Polaschek) randomly selected from the same large database an additional smaller sample of cases where the prisoner had a recorded physical assault that occurred after the first threat or verbal abuse incident during the same sentence period. The two samples were combined for analysis, and I remained blind to whether a case with a threat or verbal abuse incident also had a physical assault until after I had completed coding. Next, I worked through this dataset of threat and verbal abuse incidents toward staff, beginning the coding process by selecting incidents that contained sufficient information to enable us to code the specific details of what the prisoner said

to staff (i.e., rather than those that contained only generic information such as “and then he verbally abused the staff member”). Next, we selected variables based on scanning the narrative in the incident report forms. Then, we extracted the following variables: verbal abuse, threats and two more exploratory variables: intimidating behaviour and threw something/damaged property. We developed a coding scheme outlining each variable’s definition and requirement. This process included drafting a data dictionary with detailed definitions and examples for each variable (see Appendix B). The final variables definitions were:

### ***Verbal Abuse***

This variable is defined as spoken words used to insult or manipulate the listener. For example, verbal abuse includes abusive language such as swearing, name-calling and nasty comments (e.g., “He told them to shut the fuck up.”).

### ***Verbal Threat***

The verbal threat variable is a spoken utterance that explicitly implies the intent to cause harm or punish the listener (e.g., “He threatened to knock them out”). This variable includes threats to damage property (e.g., “I’m gonna smash that window”). It also includes complaint threats that imply a prisoner will hurt the listener’s professional reputation (e.g., “I’ll write you up”; i.e., make a complaint against a staff member).

### ***Intimidating Behaviour***

This variable is characterised as the use of body language or other means of behaviour that are nonverbal to scare or intimidate the listener. For example, this variable includes using nasty gestures or looks to make themselves appear scary, as well as flipping the bird (e.g., “They clenched their fist.”).

### ***Threw Something/Damaged Property***

This variable is defined as throwing any object at, near or towards an officer or member of staff (e.g., “He picked up a bottle and threw it at a wall near an officer”). Damage to property includes any form of breaking, damaging or intending to break/damage an object (e.g., “He smashed the cell window”; “He was kicking the chair, but I intervened before it broke”).

In this study, verbal incidents collectively refer to verbal abuse and threats to avoid confusion. Therefore, where we are referring to the variables we defined above, we will refer to them as we named them: verbal abuse or verbal threat.

A PhD student experienced in coding helped with the inter-rater reliability analysis. The two of us coded a sample of 30 cases independently and compared scores systematically for each variable. Inconsistencies were flagged for discussion until we reached an agreement. Most of the inconsistencies were due to the raters making inferences instead of using the data dictionary. The coding scheme and data dictionary were modified to increase objectivity. We then coded a different sample of 30 cases and compared consistencies in SPSS version 26. Consistency was measured using the intraclass correlation coefficient (ICC) analysis based on the selected absolute agreement, 2-way random-effect model. The criterion for the ICC results was based on Koo and Li (2016). They outlined coefficients less than 0.50 meant poor interrater reliability, coefficients between 0.50 and 0.74 indicated moderate reliability, values between 0.74 and 0.90 indicated good interrater reliability. Coefficients greater than 0.90 were classed as excellent reliability. The ICCs for each variable were excellent, except intimidating behaviour was moderate. The intimidating behaviour variable was discussed until a consensus on coding and defining it was reached.

After two rounds of inter-rater reliability analysis, we gained good ICCs for each variable (see Table 2 for ICC and confidence intervals). We then began to code the main sample for

analysis. First, we coded each case by reading through the incident report and finding descriptions of the incident, including details about what the prisoner said. Then I copied and pasted what the prisoner said into the respective categories based on the data dictionary definitions. If there was no mention of specific spoken dialogue (e.g., the prisoner was verbally abusive towards me), we read through the summary note following the same steps. We screened out cases if there was no mention of specific dialogue or insufficient information.

**Table 2**

*Intraclass Coefficients and 95% Confidence Intervals for Coded Variables*

Variable	ICC	95% CI
Verbal threat	1	
Verbal abuse	.93	0.84, 0.97
Intimidating behaviour	.73	0.33, 0.89
Threw something/ damage property	1	

*Note.*  $n = 30$ . ICC = intraclass coefficients

**Data Analysis Plan**

All data were analysed using SPSS IBM V.26. We ran preliminary analyses to calculate descriptive statistics of the sample and inter-rater reliability statistics of our coding scheme. For the analysis we recoded the lead offence variable to be dichotomous as a violent offence or not. This recoding allowed for the comparison of violent offences against other lead offences. We also used the continuous variable of the actual RoC\*RoI scores as opposed to the bands defined earlier; this variable provided us with more information about the scores. The variables we developed in our coding scheme were verbal abuse and verbal threat; after we finished coding, we noticed several cases involving both a threat and a verbal abuse. We then made an additional third verbal variable that included cases where both a verbal abuse and threat occurred. Next, we made an additional three-level variable which included all three verbal categories: verbal abuse, verbal threat and both. Firstly, we ran Pearson’s correlations to analyse the associations between

the predictor variables and the outcome. Pearson's correlations are useful for identifying the strength of the relationships between the variables and as a preliminary check for potential multicollinearity. In addition, this correlation allowed us to make preliminary investigations into the suitability of the selected variables in further analysis.

We used Cox regressions to investigate the relationship between threats, verbal abuse and physical assault. Cox regression is a statistical technique that accommodates for right censored data and where time-to-event is analysed (Tabachnick & Fidell, 2013). A hazard ratio indicates the risk of an event occurring during that time. Hazard ratios above 1.0 indicate that exposure to predictors increases the hazard of the outcome, and ratios less than 1.0 mean exposure to predictors decreases the hazard of the outcome. To test hypothesis 1, we ran a Cox regression using the time to first prisoner verbal incident towards staff as the predictor for the occurrence of physical assault. We entered the covariates (gang affiliation, ethnicity, age, security level, offence type and RoC\*RoI score) in block one and the days to prisoner verbal incident variable was entered into block two. Next, we ran a second Cox regression to test our second hypothesis, with the three-level variable of different types of verbal incidents (as defined in the coding scheme: verbal abuse, verbal threat or both abuse and threat) entered in block two.

## **Results**

### **Description of Coded Variables**

Of the three verbal abuse incident variables, the verbal abuse variable (i.e., verbal abuse without threats) was the most common ( $n = 250$ , 69.3%), then the variable where both verbal abuse and threats occurred ( $n = 58$ , 16.1%), with verbal threats being the least common ( $n = 53$ , 14.7%). The mean days between the start of a prison sentence and a verbal incident was 347 days (1698). Only a small number of participants ( $n = 68$ , 18.8%) had a physical assault incident. Of

those who had a physical assault incident, the mean days after entering prison until the assault occurred was 384 (1442). The average number of days between a threat or verbal abuse incident and a physical incident was 74.02.

### **Exploring Associations between Dependent and Independent Variables**

We ran a Pearson's correlation to explore the relationships between the variables, shown in Table 3. We were mostly interested in the correlations between predictor variables (days to prisoner verbal incident on staff and threat or verbal abuse incidents) and the outcome variables (occurrence of physical assault). Significant associations were found only between days to verbal incident and occurrence of physical assault ( $r = -.261, p < .000$ ); occurrence of physical assault and age ( $r = -.213, p < .000$ ); days to verbal incident and age ( $r = .133, p < .000$ ). For all correlations check Appendix C.

### **Predictions of Physical Assault from Verbal Abuse**

We conducted two stepwise Cox regressions. We entered the covariates (age, RoC\*RoI score, gang affiliation, ethnicity, whether the lead offence was violent or not, and security classification/remand status) in step 1 for each regression (Model 1). In the second step, we added either type of verbal incident (verbal abuse, verbal threat or both; model 2) or time from starting imprisonment to the occurrence of the first verbal incident (model 3). Table 4 represents Cox regressions that modelled the hazard of physical assault on staff. The model included a status variable indicating whether a physical assault occurred or not. We used a time variable of the days from the start of a prison sentence until the physical assault occurred; where a physical incident did not occur, we used the length of time in prison during the data extraction window.

In model 1, we analysed the covariates to assess their ability to predict physical assault, resulting in a significant model ( $X^2(14) = 24.674, p = .038$ ). Age was the only significant



predictor ( $p < .001$ ); as age increased, the risk of a prisoner assault on staff decreased. In model 2 (Table 4), we modelled a Cox regression with the same independent variables in step one and the different types of verbal incidents added in step 2. We tested if different types of verbal incidents (verbal threat, verbal abuse or a combination of both) were predictive of the occurrence of physical assault on staff. This step in the model was not significant  $X^2(4) = 4.83, p = .305$ , as these different types of verbal incidents did not predict any increased risk of physical assault. There was a very small increase in the chi-square between models 1 and 2 ( $X^2 = 4.83$ ). The non-significant result of this step in the model means that after adding the different categories of verbal incidents, there was no increase in the risk of a physical assault occurring.

Model 3 in Table 4 added a second block containing days till a threat or verbal abuse incident from a prisoner towards a staff member. Our model found that fewer days between the start of the sentence and the verbal incident predicted an increased hazard of physical assault on staff  $X^2(1) = 37.55, p < .001$ . Both block 2 on its own ( $p = .006$ ) and the model containing block 1 and 2 ( $p < .001$ ) were significant. There was a moderately large increase in chi-square between the first and second models ( $X^2 = 37.554$ ), suggesting that this model is a slightly better fit. This change indicates that adding time to the first verbal incident from prisoners towards staff significantly predicted an increased hazard of the outcome variable.

# VERBAL ABUSE, THREATS, AND ASSAULT ON PRISON STAFF

**Table 4**

*Stepwise Cox Regressions: Prisoner Verbal Incidents Predicting Physical Assault on Staff*

Variables	Model 1				Model 2				Model 3			
	Hazard ratio [95% CI]	$\beta$	SE	$p$	Hazard ratio [95% CI]	$\beta$	SE	$p$	Hazard ratio [95% CI]	$\beta$	SE	$p$
Age	0.937 [0.906, 0.97]	-0.065	0.018	<0.001	0.939 [0.91, 0.97]	-0.063	0.018	0.001	0.945 [0.91, 0.98]	-0.057	0.017	0.001
RoC*RoI score	1.304 [0.49, 3.478]	0.266	0.5%	0.59	1.246 [0.46, 3.4]	0.22	0.512	0.668	0.967 [0.38, 2.49]	-0.034	0.483	0.944
Ethnic group												
European*				0.519				0.605				0.328
Māori	1.639 [0.81, 3.31]	0.494	0.358	0.168	1.583 [0.78, 3.22]	0.46	0.362	0.204	1.665 [0.82, 3.39]	0.51	0.362	0.159
Not Recorded	0	-11.01	793.65	0.989	0	-10.97	811.28	0.989	0	-11.42	868.16	0.99
Other	1.131 [0.24, 5.34]	0.123	0.792	0.876	1.136 [0.24, 5.38]	0.128	0.793	0.872	1.133 [0.24, 5.37]	0.125	0.794	0.875
Pacifica	2.138 [0.89, 5.1]	0.76	0.443	0.086	2.013 [0.84, 4.82]	0.7	0.445	0.116	2.571 [1.06, 6.23]	0.944	0.451	0.036
Security class												
Remand Accused*	0.831 [0.35, 1.98]	-0.186	0.442	0.674	0.825 [0.35, 1.97]	-0.193	0.443	0.19	0.699 [0.30, 1.65]	-0.358	0.439	0.415
Remand Convicted	1.153 [0.47, 2.83]	0.143	0.458	0.755	1.202 [0.49, 2.97]	0.184	0.462	0.159	1.074 [0.44, 2.62]	0.071	0.455	0.876
Minimum	0.737 [0.09, 6.02]	-0.305	1.071	0.776	0.753 [0.09, 6.26]	-0.283	1.08	0.069	0.566 [0.07, 4.65]	-0.57	1.075	0.596
Low	0.675 [0.19, 2.37]	-0.394	0.64	0.539	0.684 [0.20, 3.39]	-0.38	0.64	0.353	0.56 [0.16, 1.96]	-0.58	0.639	0.364
Low Medium	0.8 [0.27, 2.42]	-0.223	0.564	0.693	0.865 [0.28, 2.68]	-0.145	0.577	0.063	0.872 [0.29, 2.64]	-0.137	0.564	0.808
High				0.928				2.179				0.792
Unclassified	0 [0, 4.046E+225]	-10.8	270.56	0.968	0 [0, 3.13E+229]	-10.61	275.03	0.001	0 [0, 101E+243]	-11.3	291.25	0.969
Gang affiliation*	1.304 [0.49, 3.48]	0.192	0.265	0.469	1.161 [0.69, 1.97]	0.15	0.269	0.578	0.983 [0.58, 1.66]	-0.017	0.266	0.95
Violent offence*	0.842 [0.50, 1.40]	-0.172	0.261	0.508	0.821 [4.9, 1.39]	-0.197	0.268	0.462	0.904 [0.54, 1.51]	-0.101	0.261	
Types of verbal incidents												
Abuse*					0.811 [0.40, 1.62]	-0.209	0.355	0.555				
Threat					1.-63 [0.47, 2.41]	0.061	0.418	0.884				
Abuse and threat								0.646				
Intimidating behaviour					0.585 [0.23, 1.49]	-0.537	0.476	0.26				
Threw something or Days till prisoner verbal incident on staff					1.622 [0.85, 3.09]	0.484	0.329	0.141				
									0.996 [0.995, 0.998]	-0.004	0.001	<0.001
$\chi^2$ change								0.305				0.006
$\chi^2$ overall		24.674		0.038		30.449		0.033		50.616		<0.001

Note. N = 361. CI = Confidence interval; \* = reference category

### **Discussion**

Our study utilised an archival dataset of incident reports from New Zealand prisons to explore the ability of prisoner verbal abuse and threats toward staff to predict physical assault. We aimed to test two hypotheses regarding the relationship between verbal abuse and threats with physical assault on prison staff while controlling for covariates (age, ethnicity, RoC\*RoI score, gang affiliation and violent offence). In hypothesis 1, we predicted that the sooner a prisoner was verbally abusive into their imprisonment, the increased likelihood of later physical assault towards staff. However, hypothesis 2 was in conflict between the general aggression model (GAM) and threat assessment research. Therefore, we had two versions; hypothesis 2a predicted that based on the GAM, there would be no difference between verbal abuse with and without threats in predicting later physical assault. Whereas hypothesis 2b predicted threats would be better predictors of physical assault based on threat assessment research.

### **Verbal Threats and Abuse as Predictors of Physical Assault**

Overall, we found that days between starting imprisonment and a verbal incident were predictive of physical assault, supporting hypothesis 1. Prisoners who were verbally abusive or threatening sooner into their imprisonment had an increased risk of physically assaulting staff in the future. We analysed the different types of verbal incidents (verbal abuse and threats) to understand their relationship with physical assault. On the one hand, the GAM states that aggressive acts (including verbal abuse and threats) may signal an increased risk of another aggressive act, such as physical assault (Anderson & Bushman, 2002). On the other hand, threat assessment literature would imply an opposite point of view, that threats can be a direct predictor of escalation into violence (Meloy & Hoffmann, 2014). These different findings resulted in our second hypothesis being opposed. Our findings support hypothesis 2a as we found no difference

between the predictive ability of verbal abuse and threats. We also found that the explanatory variables we defined and coded (intimidating behaviour and threw something or damaged property) were not significant predictors of physical assault.

Our most important finding was that fewer days to a prisoner's verbal abuse or threat was predictive of later physical assault on staff. As proposed in hypothesis 1, the sooner a verbal incident from prisoners towards staff occurs, the more risk for future violence. This finding suggests that those verbally abusive and threatening sooner into their imprisonment may indicate that such individuals are more aggressive, as proposed in the GAM (Anderson & Bushman, 2002). The GAM states that during a social encounter, an individual will decide on or automatically produce an outcome based on their current internal state (e.g., cognition, emotions, feelings, and arousal), emphasising the personal and situational factors present. Personal factors brought to a social encounter include sex and traits such as a predisposition to high levels of aggression. Certain personal traits can result in a person being predisposed to increased aggression levels; for example, threats to an individual's self-image or self-esteem, can increase aggression. Life in prison generally includes limited autonomy and few privileges (Kratcoski, 1988), which may result in increased levels of anger among male prisoners who prefer to use direct types of aggression (e.g., threats and assault): in contrast to women who prefer indirect types such as exclusion (Vaillancourt, 2013). The GAM also emphasises the role of the environment in an aggressive episode, as the environment may increase the likelihood of decisions that result in aggressive behaviours (Anderson & Bushman, 2002). The deprivation model (a vastly used model for understanding prison environments and misconduct) also emphasises the role of the environment, stating that prisoners act according to the experiences of their environment and the conditions they are in (Steiner & Wooldredge, 2017). The environment

may contain situational factors such as provocation or aggressive cues that ultimately increase aggression (Anderson & Bushman, 2002). It is common in a prison setting to be provoked, frustrated or encounter an aggressive cue (Pare & Logan, 2011). The GAM could explain our finding that the sooner a verbally aggressive incident occurs, the more the environment supports aggressive behaviour, and prisoners act accordingly to their current situations (Anderson & Bushman, 2002). We routinely class aggressive cues and provocations as hostile attribution biases (Barker et al., 2016), where an individual is more likely to identify hostility where it does not exist (Ireland, 2011). As shown in the GAM, cognition plays a role in the current internal state of an individual during a social encounter (Anderson & Bushman, 2002). We recognise these hostile attribution biases as factors that explain the relationship between cognition and aggression (Barker et al., 2016); if an individual is prone to have a more aggressive way of thinking, it could result in increased aggression during social encounters. For example, suppose an individual is in a situation that provokes aggression, and their internal state involves hostile thoughts. In that case, they are more likely to use aggressive acts (e.g., verbal abuse or physical assault) than someone in the same situation whose internal states involve non-hostile thoughts (Anderson & Bushman, 2002). Suggesting that the shorter the time between starting imprisonment and a verbal incident, the more the prisoner's personal characteristics support aggressive behaviours. This links directly to the importation model that states prisoners bring specific characteristics, such as predispositions to high aggression levels, into prison (Steiner & Wooldredge, 2020). If we place an already aggressive individual into an environment that fosters increased aggression due to certain situations, they are more likely to engage in aggressive acts. Such situations may include being denied privileges like phone calls, exploitation and isolation (Laws, 2018). This research shows that our findings support the GAM in that verbal abuse,

threats, and physical assault are products of a prisoner's personal and environmental characteristics, emphasising that the same factors influence aggressive acts. Therefore, the previous occurrence of any or all types of verbal abuse would increase the likelihood of a subsequent act of physical violence.

Another interesting finding is the null result of our explanatory variables (intimidating behaviour and throwing something or damaging property) in predicting physical assault. We were surprised by this finding, as according to the GAM, aggressive behaviour predicts other aggressive behaviour; this would lead us to think that aggressive acts such as intimidating behaviours and property damage would be predictive.

Hypothesis 2b, based on threat assessment work, was not supported. This null finding was relatively surprising as we expected that threats of violence might be a stronger predictor of violence than verbally abusive episodes, such as swearing at a prison officer. Threat assessment literature states that verbal threats have a statistically significant independent ability to predict the likelihood of increased physical violence (Brewster, 2000). Specifically, prior research has mentioned that threats are the most important predictor of aggression; Ryan (1995) found that both verbal abuse and threats are significant predictors of aggression and violence, with threats of violence accounting for most of the variance. Another explanation for our null finding could be the spontaneous nature of aggression. In other work, impulsivity has been proven to have a direct link with verbal aggression (Wang & Diamond, 1999), which could indicate that those who use verbal aggression do not necessarily think about what they say before they say it.

Verbal abuse (i.e., threats were not said) was the most common form of verbal aggression in our study; this could be due to verbal abuse, such as swearing and name-calling being used to vent frustration or anger (Brennan, 2003). Verbal abuse can be used for many reasons apart from

being destructive towards the listener, such as frustrations, poor emotional regulation, mental illness or high stress. Other verbal abuse triggers can include anger, confusion, unfair treatment, lack of communication skills, or to gain domination. These triggers could explain the frequency of verbal abuse compared to threats in our study, as prisoners can use verbal abuse for several different reasons and may not intend to inflict harm on staff.

One interesting finding in our study was that of the covariates we controlled for; age was the only significant predictor on its own. As age increased, the hazard risk for physical assault on staff decreased. Model 1 in table 4 illustrates these findings. The relationship between age and prison misconduct is well-established throughout prison violence literature; many studies have confirmed that being younger predicts a significantly increased risk of prison violence towards staff and other prisoners (DeLisi, 2003; Wooldredge et al., 2001; Wooldredge, 2012). Younger prisoners are disproportionately more violent and more likely to engage in delinquent behaviour during their imprisonment (DeLisi, 2003). Suggesting this finding aligns with prior empirical research done on prison violence.

### **Implications**

*Theoretical.* Theoretically, this research expands our knowledge within the literature regarding predictors of physical assault towards prison staff. Unpacking verbal abuse and threats from prisoners to see if they are predictive of physical assault on staff has not been done to our knowledge before in prison violence literature, contributing to the importance of our findings. The present study can help support staff in identifying violent and aggressive individuals earlier in their prison sentences, as the GAM predicts that violence is related to the course of an individual's aggressive personality (Anderson & Bushman, 2002). More aggressive individuals are susceptible to higher levels of violence, and helping staff identify such individuals will

ultimately reduce prison violence. This research is important due to the already-known consequences of verbal abuse and threats on staff in the workplace. Verbal abuse victimisation and threatening behaviour cause significant psychological distress with repercussions such as burnout, absenteeism, emotional exhaustion and job dissatisfaction (Boudoukha et al., 2011). We now also know that the time to verbal abuse or threat may indicate an increased risk of violent perpetrations towards staff.

***Practical.*** Practically, our results indicate that it may be effective for staff to use more active de-escalation strategies with verbal abuse and threats -instead of considering these incidents as normal behaviour- to reduce potential risk of physical violence. Previous research has highlighted this aspect of increasing and improving prison staff training programs to help reduce assaults, including more interpersonal and defence training, as well as recognition of symptoms of disturbed mental states that may result in aggression (Kratcoski, 1988). Picking up on aggressive or violent cues and environmental or situational factors that increase violence will ultimately protect staff from physical assault. It may also mediate positive relationships between staff and prisoners. This research also highlights the importance of verbal abuse and threats in the workplace. It encourages staff to take them more seriously and report all verbal incidents.

### **Limitations**

Our study was not without limitations. The main limitation of our work is that the data was limited to reports documented by prison staff. These reports did not capture the perspective of the incident from the prisoner's point of view, potentially resulting in one-sided data or missed information. In addition, the staff may not have reported every aspect of the incident resulting in limitations to the data. For example, the reports did not capture what occurred before the incident or potential triggers. Another limitation to note is that the covariates we controlled for were



captured at reception when a prisoner first came into prison; this resulted in a large portion of the sample being in remand facilities. Capturing the current covariate information at the time of the incident may provide grounds for future work. Lastly, our sample size was relatively small, although large enough to generate statistical power; in future work, a larger sample would be beneficial to increase validity.

Our research differs from previous work on prison violence as we focused on violence specifically towards staff. Furthermore, controlling for previously proven predictors of violence (covariates) allowed our findings to be above and beyond the predictions made by the covariates: adding to the robustness of our results.

### **Future Direction**

One potential area for future research based on our findings could be to investigate the impact of counts of verbal incidents in predicting physical assault. This study did not examine the number of verbal incidents each prisoner had. It may be beneficial to explore whether prisoners with more verbal incidents are at an increased risk of future physical assault on prison staff. In addition, looking at the relationships between types of verbal abuse and other explanatory variables, such as intimidating behaviour, to see if they occur more frequently together may help to unpack aggression among prisoners to a higher level.

### **Conclusion**

Our study has highlighted that when predicting physical assault from prisoners toward prison staff from verbal abuse and threats, it is not the type of incident that is important but the time to the incident is. Therefore, prisoners who use verbal abuse or threats or both sooner into their imprisonment are at an increased risk of physically assaulting prison staff in the future. Theoretically, this could further our understanding of aggressive acts that predict physical assault

on prison staff to lower rates of psychological distress and practically benefit staff to take verbal abuse and threats more seriously by documenting and reporting all of them. The present study is the first step in exploring the relationship between verbal abuse, threats and assault on prison staff. We now know that the quicker a verbal incident occurs from a prisoner when they start their sentence, the more it increases the risk of physical assault on prison staff in the future.

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**Appendix A**

**Preregistration**

*‘Exploring verbal abuse on prison officers.’*

**(AsPredicted #99609)**

**Authors(s)**

Abi Astridge Clarke

Devon Polaschek (supervisor)

**Have data been collected for this study already?**

This is an archival study. The study will use part of a very large database of incidents for all New Zealand prisoners between 2010 and 2020. The database is being used for a series of related projects but has not been examined for this purpose previously.

**What’s the main question being asked or hypothesis being tested in this study?**

Do prisoner verbal threats or abuse predict later physical assault towards prison staff? It is hypothesised that both verbal threats and abuse from a prisoner will predict later physical assault towards staff. With this question we have the following objectives for this study; (a) examine which categories of verbal incidents predict later assaults and (b) investigate whether other characteristics are likely to predict later physical assault. This will aim to prevent prison violence by understanding predictors of violence in a prison setting.

**Describe the key dependent variable(s) specifying how they will be measured?**

Physical assault on staff

**How many and which conditions will participants be assigned to?**

There is no experimental manipulation in this study. But participants will be prisoners with either a previous verbally abusive incident (e.g., offensive language) or a previous threatening incident towards staff. They will be allocated to one group or the other.

(There may or may not be a third group of prisoners with neither of these in their recent history).

**Specify exactly which analysis you will conduct to examine the main questions/ hypothesis.**

In the data preparation stage, we will develop a coding scheme to reliably code a sample of verbal abuse incidents from the larger incident database. Initially, the content of incident narratives will be analysed to form categories based on content. A coding scheme will be created to categorise the data, which will be tested for interrater reliability. Data will be sorted into two categories (abuse or threat), additional contextual and incident characteristics will also be coded to add to the analysis. Then the data will be used for quantitative analysis. This analysis will be the examination of whether verbal incidents (e.g., verbal abuse vs. threats) predict later physical violence. Investigation of other characteristics (e.g., security level of unit or age) already provided in the data and whether they are predictors of later physical assault on staff. We are likely to use types of regression for these analyses.

**Describe exactly how outliers will be defined and handled, and your precise rule(s) for excluding observations.**

The sample contains offender that were imprisoned for at least 12 months between 2016-2020, with a previous threat or assault towards staff. All other cases will be excluded.

**How many observations will be collected or what will determine sample size?**

The database contains a sample of 11,792 which we will be extracting a sample of 6817 to analyse in our research. The sample contains offender that were imprisoned for at least 12 months between 2016-2020.

**Anything else you would like to pre-register?**

This is an archival study. The study will use part of a very large database of incidents for all New Zealand prisoners between 2010 and 2019. The database is being used for a series of related projects but has not been examined for this purpose previously.

**Appendix B**

*Verbal Incidents Coding Scheme*

For all variables it does not include behaviours where physical contact with a staff member occurs.

<p>Threat</p>	<p>A threat is defined as an utterance that explicitly implies the intent to cause harm or punish the listener or themselves. This includes threats to damage property. Threats can also include statements used that suggest later harm may be caused in the form of prisoner using personal information about the staff’s family or that they will get them on the ‘outside’.</p> <p>A threat also includes an utterance used to imply a threat to the listeners professional reputation.</p> <p><u>Note:</u> Try not make inferences about possible threats due to it potentially having the intent to harm (E.g., “you know I have a short temper”, this could be interpreted that it means if this prisoner is made angry, they will harm someone, however it is just a nasty comment and should be coded as abuse”)</p>	<p>E.g., “He threatened to knock them out” E.g., “You think you’re safe, wait till I get out”  E.g., “I’ll write you up”</p>
<p>Abuse</p>	<p>Abuse is defined as spoken words used to insult or manipulate the listener.</p> <p>This includes but not limited to abusive language such as swearing, name calling and nasty comments. Abuse also includes challenging language such as ‘one outs?’ or ‘you want to go’.</p>	<p>E.g., “He told them to Shut the fuck up” E.g., “Fuck off, your jut a fat bitch”</p>
<p><i>When verbal abuse and threat occur in the same sentence separate the sentence stings into the different variables. E.g., “Fuck you, I’m gonna knock you out.” Separate the verbal abuse (“Fuck you,”) and the verbal threat (“I’m gonna knock you out”) into their different variables.</i></p>		
<p>Intimidating behaviour</p>	<p>The use of body language or other means of behaviour that are nonverbal in the attempt to scare or intimidate the listener. Use of nasty gestures or looks to make self-appear scary. This includes the middle finger.</p>	<p>E.g., “He puffed up his chest and got very close to me.”  E.g., “They clench their fist.”</p>

<p>Officer fear/concern</p>	<p>When an officer or member of staff mentions being concerned for their safety or the safety of others. This includes physical displays of fear by staff.</p>	<p>E.g., “We immediately left the room, due to concerns for safety.”</p> <p>E.g., “I did not want to re-enter, so I asked someone else to do it for me.”</p> <p>E.g., “the victim’s hands were shaking”</p>
<p>Threw something/ damage property</p>	<p>The act of throwing an object of any kind at, near or towards an officer or member of staff.</p> <p>Throwing something in a random direction to appear scary or angry.</p> <p>Damage to property includes any form of breaking, damaging or intending to break/damage an object. This could be in the form of kicking or punching walls or objects or slamming doors.</p>	<p>E.g., “He picked up a bottle and threw it at a wall near an officer.”</p> <p>E.g., “They were continuously throwing toilet paper at me.”</p> <p>E.g., “He smashed the cell window” “He was kicking and punching the door”</p>

**Coding process**

Read through the information report and look for specific verbal dialogue (e.g., He then said, “get fucked”) or the staff mentioning what was said, copy and paste the specific dialogue into the “to be coded columns”, as well as any other words that represent the other variables. If there are no examples of what was said, and it just states something like “he then became verbally abusive” then read through the summary note looking for specific examples of verbal dialogue. If there are no specific examples, put a note for possible exclusion - even if there are examples of the other variables.

VERBAL ABUSE, THREATS, AND ASSAULT ON PRISON STAFF

Appendix C

Table 3

Variable	1	2	3	4	5	6	7	8
1. Physical assault occurrence								
2. Days to prisoner threat or verbal abuse incident	-.261**							
3. Age	-.213**	.133*						
4. RoC*RoI score	0.048	-0.054	-0.048					
5. Gang affiliation	0.081	-0.097	-0.103	.151**				
6. Intimidating behaviour	-0.075	0.044	-0.022	0.032	0.001			
7. Threw something/ Damaged property	0.083	0.016	0.005	-0.040	0.035	-0.098		
8. Violent offence	0.102	-0.083	-.161**	-0.060	0.080	-0.001	0.041	

\*p < .05 (2-tailed), \*\*p < .01 (2-tailed).

*Pearson Correlations Between Coded Variables and Covariates and Descriptive Statistics*

VERBAL ABUSE, THREATS, AND ASSAULT ON PRISON STAFF